04 University of Plymouth Research Theses

01 Research Theses Main Collection

2012

# An Empirical Study into UK Customer Expectations of Dining Out in Relation to Meal Cost

Westhead, Christina

http://hdl.handle.net/10026.1/1963

http://dx.doi.org/10.24382/4031 University of Plymouth

All content in PEARL is protected by copyright law. Author manuscripts are made available in accordance with publisher policies. Please cite only the published version using the details provided on the item record or document. In the absence of an open licence (e.g. Creative Commons), permissions for further reuse of content should be sought from the publisher or author.

# Copyright Statement

This copy of the thesis has been supplied on condition that anyone who consults it is understood to recognise that its Copyright rests with its author and that no quotation from the thesis and no information derived from it may be published without the author's prior consent.

# An Empirical Study into UK Customer Expectations of Dining Out in Relation to Meal Cost

By

# Christina R. E. Westhead

A thesis submitted to the University of Plymouth in partial fulfilment for the degree of

# **Doctor of Philosophy**

School of Tourism and Hospitality
Plymouth Business School

# An Empirical Study into UK Customer Expectations of Dining Out in Relation to Meal Cost

Christina R. E. Westhead

#### **Abstract**

The continued growth of the UK dining out industry, and the unceasing trend in popularity for customers to spend time and money eating outside the home, has led to an increase in the number of dining out establishments, and competition between businesses.

Although there have been studies examining aspects of the restaurant industry and food consumption outside the home, very little research has looked specifically at customer expectations. Therefore, this thesis examines customer expectations associated with the meal experience in relation to the varying costs of dining out opportunities. In addition, the study reflects on customers' socio-economic characteristics combined with their perception of differing anticipated costs in order to provide customer typologies, each with varying expectations of the dining out experience. It is intended that by focussing on and amalgamating the areas of expectation, cost and socio-economic factors, the conclusions obtained will contribute to a new understanding relating to customer expectations. The study invited e-subscribers of Delicious Magazine's national website, to participate in quantitative research regarding both expectations of dining out and social factors. By examining the data from a large cohort study (2200 participants) evidence of behavioural patterns and opinions has emerged. The research established that there are four types of customer that can be identified through their initial choice of restaurant owing to the restaurant's perceived cost classification. Each customer group identified, not only has overarching expectations of the dining out experience, but through identifying socio-economic characteristics of each group, it is also possible to have insight into their collective behaviours. The original contribution outputs that have been generated from the research are a practical typology and a theoretical model.

Although dining out establishments are facing pressure from the emergence of increasing numbers of competitors and the current economic climate, it has been established, through the research, that, in particular, restaurants often bestow little attention on customer requirements, instead 'food', 'aesthetics' and 'staff' often take precedence. However, aspects relating directly to customers, such as, 'repeat business' and 'positive word of mouth' are core components to a hospitality organisation's success. Understanding customers further can only enhance and provide structure and direction for restaurant businesses. Therefore, implementing the practical customer typology could focus a restaurant business on considering their customer group and their anticipated requirements.

This research is a foundation into an original combined study area and has induced further research concepts that may also encourage other academics to embark on this area of study. This research may then develop as a subject field and cascade into understandings that could be beneficial to the hospitality industry.

### **Contents**

1	Intr	oduction	19
	1.1	Socio-economic Impacts	22
	1.2	Related Theories	24
	1.3	Household Expenditure	31
	1.4	The Meal Experience and Customer Expectations	32
	1.4.	Rationalising the Meal Experience	33
	1.4.	Restaurant Image	34
	1.5	Customer Circumstances	35
	1.6	Research Aims and Objectives	37
	1.7	Aims and Objectives Motivation	39
	1.8	Theoretical Orientation and Structure of the Thesis	39
2	Lite	rature Review	43
	2.1	The Restaurant Sector	44
	2.1.	Food	46
	2.2	Service Aspects	53
	2.2.	Service	53
	2.2.	Customer Service Measures	55
	2.3	The Meal Experience	62
	2.4	Restaurant Environment	63
	2.5	Semiotics	71
	2.6	Customer Satisfaction	79
	2.7	Customer Expectations	86
	2.7.	Customer Acceptance	89
	2.7.	Expectation Formation	91
	2.8	Literature Review Conclusions and Rationale for Study	98
3	Res	earch Design and Methodology	103
	3.1	The Research Philosophy	103
	3.1.	The Paradigm	104
	3.1.	Research Perspectives	106
	3.1.	The Paradigms and Methodology for Behavioural Enquiry	106
	3.1.	One Mode of Inquiry Rationale	108
	3.1.	Research Design	111
	3.2	Ouestionnaire Survey	112

	3.2.1	Distribution Method	112
	3.2.2	Delicious Magazine Website	113
	3.2.3	Sampling Strategy	116
	3.2.4	Sampling Frame and Response Encouragement	120
	3.2.5	Questionnaire Design	122
	3.2.6	Questionnaire Content	125
	3.3	Ethical Considerations	127
	3.4	Chapter Summary	129
4	Discu	ussion of Quantitative Data	131
	4.1	Cohort Synopsis	132
	4.1.1	Gender	132
	4.1.2	Age	132
	4.1.3	Household	133
	4.1.4	Occupation	134
	4.1.5	Household Income	136
	4.1.6	Location	139
	4.1.7	Area	140
	4.2	Dining Out Behaviours	141
	4.2.1	Frequency of Eating out	141
	4.2.2	Cost of Dining Out	143
	4.2.3	Dining Away from Home	143
	4.2.4	First Time Restaurant Visits	148
	4.3	Customer Expectations when Dining Out	149
	4.3.1	Inexpensive Dining	149
	4.3.2	Mid-priced Dining	154
	4.3.3	Expensive Dining	160
	4.4	Cohort Personalities	167
	4.4.1	Personality and Insights	167
	4.4.2	Newspapers	170
	4.4.3	Spare Time Activities	172
	4.4.4	Television Viewing	174
	4.4.5	Further participation	175
	4.5	Income Impacts Analysis	176
	4.5.1	Visits to Food Establishments.	177
	4.5.2	Income and Cost of Meal Expectations.	177
	4.5.3	Reasons to Dine Away from the Home linked to Income	177

4.5.4		4 Hobbies and Income	. 178
4.5.5		Newspapers Read Compared with Income	. 179
4.5.6 4.5.7		Number of Pubs, Cafes and Restaurants within a 10 Minute Walk of Home	. 179
		7 Income and TV Hours watched	. 179
	4.5.	8 Dining Away from Home	. 180
	4.6	Summary and Research Direction	. 180
5	Ana	alysis of Quantitative Data – Statistical Analysis	. 183
	5.1	Chi-square Tests	. 183
	5.2	Factor Analysis	. 183
	5.2.	1 Correlated Relationships between Variables	. 184
	5.3	Factor Analysis Process	. 188
	5.4	Reliability of Groups Used for Factor Analysis	. 190
	5.4.	1 Linear Regression	. 193
	5.5	Factor Analysis – Creating Customer Cohorts	. 195
	5.5.	1 Factor Analysis Route	. 197
	5.6	Variable Tests	. 198
	5.6.	1 Correlation	. 198
	5.6.	2 T-test for independent samples.	. 199
	5.6.	3 ANOVA Tests (Analysis of Variance)	. 203
	5.7	Summary	. 206
6	Тур	oology Development	. 207
	6.1	Typology	. 208
	6.1.	1 Factor Group 1 (FG1)	. 211
	6.1.	Factor Group 2 (FG2)	. 212
	6.1.	Factor group 3 (FG3)	. 213
	6.1.	Factor group 4 (FG4)	. 215
	6.2	Typology Summary and Conclusions	. 216
7	Disc	cussion	. 217
	7.1	Review of Study Rationale and Aims	. 217
	7.2	Expectations Research	. 219
	7.3	Aim 1	. 221
	7.3.	1 Customer Related Models	. 224
	7.3.	2 Section Summary - Aim 1	. 226

	7.4	Aim 2	226
	7.4.	1 Section Summary - Aim 2	230
	7.5	Aim 3	230
	7.5.	1 Section Summary - Aim 3	234
	7.6	Aim 4	234
	7.6.	1 Section Summary - Aim 4.	238
	7.7	Aim 5	239
	7.7.	1 Section Summary - Aim 5	244
	7.8	Aim 6	245
	7.8.	Practical Typology	245
	7.8.2	2 Theoretical Model	248
	7.8.3	3 Fledglings	251
	7.8.	4 Occupied	252
	7.8.	5 Frenetic	254
	7.8.0	6 Established	255
	7.8.	7 Theoretical Model Further Considerations	257
	7.8.3	8 Personality Traits	257
	7.8.9	9 Section Summary - Aim 6	258
	7.9	Discussion Chapter Summary	259
	7.9.	1 Further Contributions to Knowledge	260
8	Con	nclusion	263
	8.1	Original Contribution to Knowledge – Practical Typology	265
	8.2	Original Contribution to Knowledge – Theoretical Model	266
	8.3	Study Conclusions	268
	8.4	Application of Research	271
	8.5	Limitations	273
	8.6	Further Research Direction	274
	8.7	Customer Dining Out Expectations in Relation to Meal Cost – F	inal Notes277
9	Ref	erences	279
Aj	ppendi	ix 1 - Questionnaire	295
Aj	ppendi	ix 2 – Pre-questionnaire Information	309
Aj	ppendi	ix 3 –Pilot Questionniares	311
A	ppendi	ix 4 – Quantitative Data Analysis	333

# Figures

Figure 1-1: Expectations Management Model	23
Figure 1-2: Howard Sheth Model	27
Figure 1-4: The Nicosia Model	29
Figure 2-1: Disconfirmation Model of Customer Satisfaction	57
Figure 2-2: Model of Customer Response to Product Form	78
Figure 3-1: Data Collection Outline	111
Figure 4-1: Age Distribution of Questionnaire Respondents	132
Figure 4-2: Number of Respondents Not Eaten Out Within Last 6 Months	142
Figure 5-1: Scree Plot for Inexpensive Variables Factor Analysis	188
Figure 5-2: Scree Plot Mid-priced Variables Factor Analysis	188
Figure 5-3: Scree Plot Factor Analysis Expensive Variables	189
Figure 6-1: Factor Group Behaviours and Characteristics	210
Figure 7-1: Theoretical Model	250
Figure 7-2: Theoretical Model - Fledglings	252
Figure 7-3:Theoretical Model - Occupied	254
Figure 7-4: Theoretical Model - Frenetic	255
Figure 7-5: Theoretical Model - Established	256
Tables	
Table 1-1: Customer Response Methods	24
Table 1-2: Key Chapter Findings	37
Table 2-1: Overall Key Themes from Literature	
Table 2-2: Themes for Research Combined with Aims	
Table 3-1: Paradigms and Frameworks	
Table 3-2: The Outcomes of Research Design Choice	
Table 3-3: Different Outcomes to Situations Due to Research Design Choice)	
Table 3-4: Research Activities Reflecting a Quantitative Approach	
Table 3-5: Actions of Email Recipients	
Table 3-6: Email Facts	
Table 3-7: Research Influence on Questionnaire	
Table 4-1: Comparative Age Table	
Table 4-2: Statistics of Respondents Living Situation	
Table 4-3: Age and Occupation of Respondents.	
Table 4-4: Occupation Categories of the Main Wage Earner 2009	
Table 4-5: Annual Household Income	
Table 4-6: Location of Respondents	
Table 4-8: Considerations of Cost when Dining Outside the Home	
Table 4-9: What is Important when Dining Out in Decreasing Order of Results	
Table 4-10: Response Interpretation Information	
Table 4-11: Customer Ratings of Expectations within an Inexpensive Restaurant	
Table 4-12: Customer Ratings of Expectations within a Mid-priced Restaurant	
Table 4-13: Customers Ratings of Expectations within an Expensive Restaurant	
Table 4-14: Measures of Personality Characteristics	
Table 4-15: Newspaper Choices	
Table 4-16: Activities and Pastimes	

Table 4-17: Age and Television Watching Hours Per Week	175
Table 4-18: Further Participation Interest	175
Table 4-19: HM Revenue and Customs Tax Bands	176
Table 4-20: Income Bracket Labels Related to Questionnaire Responses	176
Table 5-1: Expectation Variables	184
Table 5-2: Factor Analysis for Inexpensive Dining	185
Table 5-3: Inexpensive Factor Analysis Outcomes	185
Table 5-4: Factor Analysis for Mid-priced Dining	186
Table 5-5: Mid-priced Factor Analysis Outcomes	186
Table 5-6: Factor Analysis Expensive Dining	187
Table 5-7: Expensive Factor Analysis Outcomes	187
Table 5-8: Inexpensive Reliability Calculations	192
Table 5-9: Mid-priced Reliability Calculations	192
Table 5-10: Expensive Variable Reliability Calculations	193
Table 5-11: Inexpensive Variables	194
Table 5-12: Mid-priced Variables	194
Table 5-13: Expensive Variables	195
Table 5-14: Rotated Component Matrix	196
Table 5-15: Correlation for Television Watching Hours by Factor Group	199
Table 5-16: Newspapers Read by Groups	201
Table 5-17: Activities Undertaken by Groups	202
Table 5-18: Descriptives Section for ANOVA Test	204
Table 5-19: ANOVA for Numbers Living in the Household	204
Table 5-20: Scheffe Output	
Table 6-1: Important Expectations to FG1	212
Table 6-2: Important Expectations to FG2	213
Table 6-3: Important Expectations to FG3	214
Table 6-4: Important Expectations to FG4	216
Table 7-1: Framework for the Discussion Chapter and Proposed Models	218
Table 7-2: Key Literature and Study Findings	224
Table 7-3: Costs for Dining Out	
Table 7-4: In Order of Importance, Why Customers' Dine Somewhere for the First Time	235
Table 7-5: General Expectations Pre-factor Analysis	
Table 7-6: Expectation Variables in Order of Importance	
Table 7-7: Practical Typology	
Table 8-1: Study Aims and Objectives	264

#### **ACKNOWLEDGEMENTS**

Undertaking this study has been a challenging and informative experience, which has involved the efforts and contributions of many people. I would particularly like to express my sincere gratitude to:

- ◆ Professor Paul Brunt (Director of Studies) for his continued academic guidance, assurance and support throughout the study.
- ◆ Mr Derek Shepherd (Second Supervisor) for his advice and encouragement throughout the study.
- Dr Sarah Keast for her on-going support and patience.
- Dr Natalie Semley for all her words of encouragement.
- Jackie Palmer and Rob Giles for their assistance with the Perseus programme.
- Delicious Magazine for their cooperation in allowing their website to be utilised as the portal for data acquisition.
- Becca Bailey (Delicious Magazine) for liaising with me and implementing the questionnaire on the e-subscribers site.
- ♦ Centre for Excellence in Teaching and Learning for the funding that was used to partially pay for the questionnaire distribution.
- ♦ Individuals who kindly gave their time to participate in the quantitative study.
- Chris Burns for all her encouragement and kindness.
- Leanne Mace for her help and confidence in me.
- ♦ Louise Cleary and Lindsay Worley for being good friends.
- Stephen Kelly for his love and continued support.
- Importantly, a very special thank you to my brother, Stephen Westhead, for so much over the years and always being there for me.

This thesis is dedicated to my Mum, Elizabeth Westhead – Missed and still loved very much.

#### **AUTHOR'S DECLARATION**

At no time during the registration for the debeen registered for any other University awa	- ·
The study was financed by the School of Ho	ospitality and Tourism, Plymouth University
The following post-graduate courses have be	een attended:
Getting Started with Quantitative Research Quantitative Research II Excel 2010 Essential Features Word Structuring the thesis Rapid Reading EndNote Preparing for the Viva	
Word count of main body of thesis: 65,173	
	Signed
	30 July 2012

#### 1 Introduction

The main purpose of this study is to ascertain and understand customer<sup>1</sup> expectations<sup>2</sup> of dining out experiences and how these expectations are influenced by the customer's circumstances. Furthermore, the study also aims to establish that not all restaurants<sup>3</sup> are perceived in the same way by different customers and that customer expectations can change when being projected onto differing dining establishments.

To understand customer expectations thoroughly, it is necessary to recognise that expectations impact upon decisions being taken by customers in many different "consumptions settings" (Oliver and Winer, 1987). As Oliver and Winer (1987) discuss, expectation formation falls into the fields of consumer psychology, economics and behavioural decision theory, however, the concept of expectations is a largely neglected area in consumer behaviour research and no endorsed expectations framework exists.

There are a number of differing opinions (see amongst others, Schmalensee, (1976); Macht, Meininger and Roth, (2005); Clow, Kurtz, Ozment and Ongs, (1997); Cardello (1995) with regard to what constitutes 'expectations' and authors from different contexts of research, such as, economics and psychology (who have different study outcomes to address) modify what expectations are and how they are created. Furthermore, how much 'content' expectations include also differs with some authors (see amongst others; Oliver and Burke, (1999); Teboul, (1991); Olson and Dover,

1

<sup>&</sup>lt;sup>1</sup> The word customer(s) "a person who purchases a commodity or service" (Allen, 2002) has been used throughout the thesis instead of the word 'consumer(s)' to maintain consistency. However, the word 'consumer(s)' has been maintained in quotations and when discussing established theories.

<sup>&</sup>lt;sup>2</sup> "Expectations are viewed as predictors made by consumers about what is likely to happen during an impending transaction or exchange" (Parasuraman, Zeithaml and Berry, 1988:17).

<sup>&</sup>lt;sup>3</sup> The word 'restaurant' is used along with 'dining out establishment' throughout the text as they are interchangeable. Although, 'restaurant' may have a stereotypical image, in fact, the word restaurant refers to any establishment which prepares and serves food and drink for consumption on the premises by customers in return for money (Allen, 2002).

(1976) who combine choice, post-purchase evaluations, brand choice and satisfaction as part of expectation theory. Additionally, Fishbein and Ajzens (1975); Bettman (1979) and Tolman's (1932) work considers how expectations are formed, for example from experiences, the environment, observations and so on. Subsequently, as a starting point, it is necessary to define the parameters of 'expectations' within this thesis being set within the framework of 'customer behaviour'.

As dining out increases in the UK and potentially follows the same pattern as the USA, where 47% of food is eaten outside of the home (Binkley, 2006), it is necessary for the hospitality industry to develop a thorough understanding of restaurant customers. Although a large body of work exists covering the more 'traditional' aspects of dining out, such as, the food, the service and so on (see amongst others work by Bitner, 1990, 1992; Mehrabian and Russell, 1974) little has been established about what customers' are actually seeking from their dining out experiences — their expectations. The 'expectation' sits prior to the experience and the satisfaction, or dissatisfaction with the dining out event. However, in order to provide a satisfying experience the presumptions by restaurateurs about customer expectations needs to be removed and instead replaced with evidenced and recognised criteria. In an increasingly competitive marketplace where customers have choice and routes to voice their opinions openly, such as, internet forums, understanding the customer has become essential. Adding new information and a practical typology and a theoretical model to the area of customer research, with specific reference to dining out, is how this research has been positioned.

The Introduction Chapter (Chapter 1) aims to identify what is missing from the existing published research relating to customer expectations of dining out. As will be seen from the subsequent Literature Review Chapter (Chapter 2) there is extensive research

already in circulation regarding quality, service, the environment and intangibles all relating to the restaurant industry. In addition to these topics, there is research available on aspects linked to expectations, such as, satisfaction (as an outcome of expectations). However, what is missing from the research arena is information on what customer expectations are, in terms of who expects 'what' and 'why' when dining out. Soriano (2002: 1058) suggests that new research is required to "delve into the sources of expectations". Research areas, such as, customers, restaurant style, food and so on (see amongst others see Bitner, 1990; Cardello, 1995; Clow *et al* 1997; Pedraja and Yague, 2001; Tse and Wilton, 1998) already exist and many of these factors are ultimately communicated, or reflected in the meal cost. Therefore, determining customer expectations based on meal cost provides an approach that encapsulates the customers' requirement, as well as, the restaurant offering.

The Methodology Chapter follows on from the Introduction Chapter (Chapter 1, relating to Aim 1) and the Literature Review Chapter (Chapter 2, relating to Aim 1). The Methodology Chapter (Chapter 3) discusses the research considerations required to complete a quantitative investigation that provides information from a large (in comparison to much previous hospitality research) cohort. The Methodology Chapter is designed to provide a sound foundation for the research, as well as, being connected with Aim 2.

Aims and objectives 3b, 4c, 5d and 5e are related to the data analysis outcomes following on from the quantitative investigation (Appendix 1). Clarifying meal cost (aim and objective 3a), customer expectations (aim and objective 4b) and the impacts of socio-economic factors (aim and objectives 5c and 5d) are initially analysed through both a discussion of the data (Chapter 4) and statistical analysis (Chapter 5).

Aim 6 of the study is to create a practical typology and a theoretical model of restaurant customers with relation to expectations, meal cost and socio-economic factors, as well as, understanding the characteristics that are typical for each of the customer groups. The practical typology and the theoretical model and their original contribution to new knowledge is the content of Chapter 6.

All of the findings are discussed in Chapter 7 in combination with existing theory. Chapter 7 explores the findings in the context of the aims and objectives for this study (Chapter 1). Conclusions regarding the outcomes and their impacts for both research and industrial avenues are presented in the final chapter, Chapter 8. The following sections of Chapter 1 explore the gaps that exist in current research with regard to customer expectations and deciphers many of the characteristics of customers that may influence expectations and bring evidence and rationale to the typology.

#### 1.1 Socio-economic Impacts

What is evident from looking at models, such as, Robeldo's (2001) Expectations Management Model (Figure 1-1) is that although price is a contributor, there is no evidence of consideration of the factors that are affected by the customer's disposable monetary levels. Additionally, customers' living standards are affected in many ways by their personal wealth (see numerous reports, one example being, Office for National Statistics, 2006), which in turn could impact upon their outlook and their expectations. Although there are studies that show that the more affluent do eat out more (Mintel, 2004; Binkley, 2006) dining out is not, however, exclusive to this particular category of customer. Work by authors such as Binkley, (2006); Byrne, Capps Jr, and Saha (1998);

Kim and Geistfield (2003) has looked into sociological factors related to dining out and discussed aspects about dining outside the home in relation house size, age and the presence of children but all of the studies were focussed on American customers and in relation to deciding where to choose to eat instead of the expectations, or cost of the meal.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

Other customer factors also need to be enquired about in order to understand how lifestyle and varying combinations of factors can link to create specific groups (typologies) with similar expectations, that are applicable to each various cost sector of the restaurant industry. As Soloman (2009) notes (Table 1-1), satisfaction is important if a business is to avoid three potential courses of customer action, and if satisfaction is an outcome of meeting expectations this adds credence to the necessity for understanding customer expectations.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

With customer websites and forums being so popular, the third point within Table 1-1 could be a significant industry concern. Negative comments and complaints are often a result of customers trying to release their frustration, gain control of a situation, or even gain some sympathy (Evans, Jamal and Foxall, 2006). Ultimately customers need to release their cognitive dissonance. This is why avoiding causing upset to customers is important for businesses because it is natural for customers to react in some negative way towards the perpetrator of an incident.

#### 1.2 Related Theories

'Expectation' is looked at by many research areas, such as, economics and management. Many theories at first glance may appear to be relating to expectations, however, some of these theories are not applicable to consumer behaviour in a dining out context. An example of this is Vrooms (1964) Expectancy Theory which claims that a person will decide to behave in a certain way because they are motivated in that manner due to the expected outcome. The motivation to behave in a certain way is driven by the desirability of the expected outcome (although the outcome is not the only factor that drives a person's behaviour). Although the principal of the theory would fit with customers who dine out, in fact, Expectancy Theory is tied to organizational behaviour

and motivation theories, not customer behaviour. Ultimately, Vrooms theory relates to motivation/performance and reward and is a management theory.

In fact there is no distinguishable theory that purely captures what dining out customers are expecting from their experience. What does exist extensively is considering expectations within the realms of service quality. Two paradigms exist - The disconfirmation paradigm (see amongst others: Bitner, (1990); Bolton and Drew (1991); Parasuraman, (1985) and the perception paradigm (see amongst others: Cronin and Taylor, 1992). Disconfirmation relates to customers evaluating service by comparing the service received against their expectations. Conversely, the perception paradigm considers that customers do not require expectations in order to evaluate perceived quality. However, Robledo (2001) highlights authors, such as, Oliver, (1980); Brown and Swartz, (1989); and Parasuraman, Berry and Zeithaml (1990) amongst others who recognise that "most researchers acknowledge that customers' have expectations and that they play a certain role as standards, or reference points used by consumers to evaluate the performance..." (Robledo, 2001:23). Much disconfirmation work is based on the Parasuraman, Zeithaml and Berry (1985) SERVQUAL model. Over time many researchers have adapted the model for their research, such as Knutson, Stevens and Patton (1995) who developed DINESERV from the original SERVQUAL model (even Parasuraman, et al (1990) refined their original model). Furthermore, as Robledo (2001) highlights, as expectations can be stable over short periods of time, it is not always, therefore, necessary for researchers to gather new expectations data to base new study evaluations on. Subsequently, existing models, or data are often used within developing research, as opposed to, incorporating new inputs.

Looking to general customer behaviour and buyer behaviour research produces a number of models and theories that will assist with understanding customer expectations specifically within a dining out context. The purpose of a model is to provide a framework, or "a theoretical construction of phenomena that are thought to be interrelated and significant in influencing the outcome of a specific situational problem" (Chisnall, 1995: 191). Chisnall (1995) recognised that two types of buying behaviour models exist, with both being based on different principles. 'Monadic' models have a very simplistic rationale where the customer acts rationally and with understanding of all the options when purchasing. These types of theories, for example, the 'Perceived Risk Model' developed by Bauer and Cox in the 1960s, or 'Black Box' models (Mitchell, 1999), or decision process models as highlighted by Kotler's (1973) model do not consider, or accommodate how complex buying behaviours can be along with the multitude of influences that impact upon customers buying intentions.

Building on monadic models are those that Chisnall (1995: 202) describes as "multivariable models of buying behaviour". What distinguishes models of this nature is that they account for different sources of influence, such as, economic, socio-cultural and psychological impacts upon consumers, along with, whether the outcome will be to purchase (immediately or delayed), or reject what is being bought. Some of the most well-known models of buying behaviour are those developed by leading academics; Howard and Ostlund, Engel-Kollat-Blackwell, Nicosia and Andreasan. All of their models vary in complexity, however, each provides insight into the influencing elements of buying behaviours.

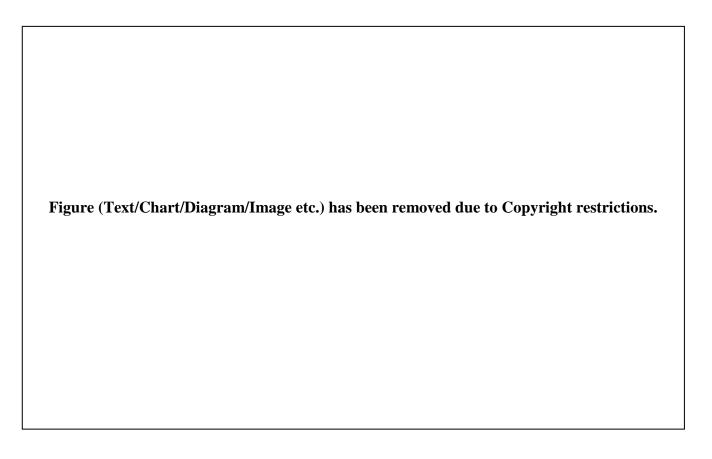
Howard and Ostlunds model was first developed in the 1960s but was then expanded and refined by Howard and Sheth (1969) and then amended again by Howard and Ostlund in 1973 (Chishall, 1995). Both the Howard and Sheth model and the later Howard and Ostlund model can be found extensively in related literature. The Howard Sheth theory of buyer behaviour explains consumer behaviour in terms of cognitive

functioning by considering the various social, psychological and marketing influences on consumer choice. The theory of buyer behaviour model is extensive (Figure 1-2) with regard to what is encompassed by the model.

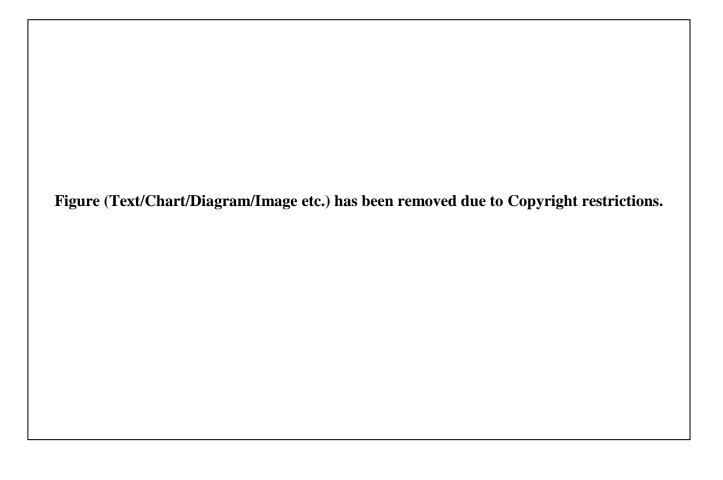
Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

As Jackson (2005: 23) discusses, with reference to the Howard Sheth model, in order for any model to be usable models need to focus "a (relatively) limited number of specific relationships between key variables. Beyond a certain degree of complexity, it becomes virtually impossible to establish meaningful correlations between variables or to identify causal influences of choice".

The Engel-Kollat-Blackwell model (Figure 1-3) incorporates many items which influence customer decision making (Abdallat and El-Emam, 2007). The Engal-Kollat-Blackwell model (Figure 3) was finalised in the 1970s (Chishall, 1995) and encompasses aspects related to motivation which will impact upon the decision process. Furthermore, it includes what many other models lack, in terms of 'internalised environmental influences' and unanticipated circumstances. Nevertheless, even this model has had criticisms levied at it, not least, from those who consider understanding 'situation' to be important and necessary to define (Abdallat and El-Emam, 2007).



The Nicosia model (Figure 1-4) focuses on the relationship between a business and its potential customers. The business communicates with consumers through marketing messages, for example, advertising. The anticipated response is that consumers will react to these messages by purchasing from the business (A&M, 2001). There is a forward and backward effect reflected in the model because as much as the business may influence the customer through marketing strategies, the customer, in turn, influences the business through purchase.



The Andreasan model was one of the first models relating to customer behaviour and the construction of the model is based on two considerations; that marketers 1] segment the market and 2] differentiate between products. This is not a regularly cited model in comparison to other well-known customer behaviour models, nevertheless, attitude formation and change brought about through marketing behaviours are important for understanding customer behaviours. However, what is noted about the Andreasan model is that it is assumed within the model that influence is unidirectional (Chisnall, 1995) and furthermore, attitudes and behaviour are not simplistic.

Monadic models do not suit the understanding of expectations of customers within the restaurant industry because of their lack of consideration for extended influences, which many authors, who write about restaurants and their impacts on customers consider to be core elements (See amongst others Auty 1992; Meiselman, Johnson, Reeve and Crouch 2000; Balzas, 2002). The multi-variable models that have been contemplated

in this section are of importance to this study as they are recognised as predictors and interpreters of buyer behaviour.

A more specific model that has been developed by Kalwani, Yim, Rinne and Sugita (1990) is a model that considers price from a customers' perspective. Ultimately the model does not look at expectations, however, it does provide some insight into customers perception of cost and generating expected prices. The purpose of the model was to understand how customers' choose alternatives within frequently purchased product categories. The authors found that price expectations are not a function of past prices but are also influenced by contextual variables. Influencers of price, such as, promotional activity, vouchers and so on, are very common place within the hospitality industry, and could certainly impact upon a customers' opinion and subsequently this is an area that Kalwani, Yim, Rinnie and Sugita (1990) recommend requires more investigation. Again, this demonstrates that although theories and models do exist with regard to expectations and price, no model, or concepts directly relate to breaking up price categories and defining specific customer expectations.

Considering generic customer behaviour models, there have been past studies that looked at the different models and authors, for example Erasmus, Boshoff and Rousseau (2001) have considered the merits and disadvantages of such models. Within their study, they quote Burns and Gentry (1990) who comment that 'general' customer decision-making models will not reflect accurate customer decisions. This is for a number of reasons as Erasmus *et al* (2001) discuss, such as, the inclusions and generalisations that the models incorporate. Additionally, adapting models that are buyer-behaviour models and using them for use within the consumer sciences, as

opposed to where Erasmus *et al* (2001) believe they should fit, that is, within marketing, is further taking the models out of context.

Although work into expectations does exist, it is predominantly tied in with service quality (see all disconfirmation studies) and the expectation element is sought within such research as a factor (along with perceptions) in order to provide a point of reference to produce a 'gap' (Robledo, 2001). What does not exist is any research, or models related to customers and/or purchasing that provide insight and understanding of customers, as segmented by their expectations and cost, in a dining out context.

#### **1.3** Household Expenditure

The various groups contained within the UK Government socio-economic listings (Office for National Statistics, 2005c) are categorised through the use of the occupation of the highest earning member of the household. The occupation and the income are in many cases relative, which would account for a number of trends. For example, those in higher social classes eat out the most regularly of all the socio-economic groups (Mintel, 2004). Of those who eat out the most, those in younger age brackets, singles and people aged over 65, are the categories of people who form a significant part of regular diners (Mintel, 2004). Patterns of dining out relating to the group who eat out regularly show over a period of a month, 44% of the time a restaurant was chosen, 36% of the time a pub and the remainder were cafés and fast food outlets. The venue choice came down to a number of intentions - it was found that restaurants provided a meal to celebrate, socialise with friends, or have a special meal with a partner. Eating in pubs was cited as being a good place to socialise but, unlike restaurants, could provide better value for money, although not such a special setting. Cafés were seen as a place to meet

friends but with the distinct difference of being mainly a daytime venue, as well as, offering a faster service option. Fast food outlets provide quick meals like cafés but with a reduced socialising aspect (Mintel, 2004).

Customers clearly distinguish between different eating out venues. The main reasons different establishments are chosen is dependent upon customers reasons for visiting a certain restaurant, for example, a quick meal, or a celebration (Mintel, 2004). Ways in which many eating out establishments have been distinguished before has been through the nature of the service that they provide. This then indicates other factors, such as, the length of time a meal will take, and subsequently the time input from the customer, all of which can allude to the possible reasons that the customer may have initially chosen that type of eating establishment. However, what is not factored into the categorisation of eating out establishments are the variations of cost between them within the same eating out category. This is most prolific within the restaurant sector. Cost is linked to customer expectations (Oh, 1999), however, there are no findings of how expectations change with variations in cost and no answers to how expectations change when customers 'trade up or down' from their usual eating out budget.

#### 1.4 The Meal Experience and Customer Expectations

It has been established that there is a relationship between the eating environment and how highly a meal is perceived. In the work of Meiselman, *et al* (2000) it was established that an eating environment that was evidentially impressive, subsequently influenced customers into rating the food more positively. When the same meal was produced for customers in a white table restaurant and a refectory, those eating the meal in the white table cloth restaurant, rated the meal more highly. Therefore, this would

indicate that it is important to have a high standard preconceived image conveyed to customers, because it appears that either little notice of the food is taken during eating, or other expectations form such a large part of judging the meal that they cannot be overcome by the food alone. However, from the research of Meiselman *et al* (2000) it was also shown that surpassing expectations has little effect on customer ratings of the meal experience.

From this, two issues are apparent: the food alone cannot overcome negative initial thoughts and a positive image of the eating establishment being conveyed pre-meal experience is crucial. This, however, would indicate that no customer would be happy with their meal experience unless they were eating at a very highly regarded restaurant. Conversely, fast food restaurants actually provide one of the highest meal satisfaction levels as well as serving vast quantities of customers (Moskowitz, 1995). Ryu and Jang (2007) show through their work that some types of dining experiences and purchases, such as, fast food can be seen as a function driven by the customer which means it will be assessed differently by the customer in comparison to upscale dining experiences. This, therefore, would build on the work of Meiselman *et al* (2000) that indicates that customers could potentially be rating eating establishments within categories and accepting meals if they fit the purpose, for example, particular timescales, or localities.

#### 1.4.1 Rationalising the Meal Experience

With regard to customer opinions of food consumption, many authors, such as Cardello (1995) have surmised that this is a complicated area to judge, due to the physiological impacts of, for example, individuals tastes. Furthermore, how customers evaluate their meal experience is made up of components, such as, reason for visit, time input and so on. The existence of links between customer perceptions associated with service, value,

repurchase, word of mouth and intention have also been recognised (Oh, 1999). All of these elements impact on customers dining out experiences but have mainly only been measured previously through attribute-value theory, or expectancy disconfirmation theory, where the experience may confirm or disconfirm the expectation (Wakabayashi, 2003).

It is apparent that some research has been conducted into the impact of different recognised factors that need to be aligned, or surpassed positively for confirmation of expectations to occur. However, what has not been investigated is how the factors impact upon each other (Oh, 1999). Furthermore, within the restaurant environment there are endless factors that are detected by customers but which are so extensive they have not featured in perception research to date.

#### 1.4.2 Restaurant Image

Expectations need to stem from some form of information whether it is visual, word of mouth, or a description, such as a menu. It has been established that advertising is not what portrays an image (Clow *et al*, 1997). Therefore, this would mean that advertising brings about awareness but does not create the expectation in customers' minds. Authors, such as, Wakefield and Blodgett (1994) have established that there is a relationship between the type of restaurant being chosen and how susceptible the customer is to factors, such as those making up the environmental aspects. This is due to the purpose of the visit; if a visit to an eating establishment is sought for pleasure, or an experience, it is considered to be providing an hedonistic experience and customers are more influenced by the environment.

Restaurant visit intention can be seen as part of customer behaviour and there are a number of theories (for example, customer models, see section 1.2) that try to decipher customer decision making and incorporate social and psychological factors. However, although these models exist they are not specific to the restaurant industry but instead focus on general customer behaviour practices. What is noted however, is

.... "as society becomes increasingly affluent, as discretionary income allows this heterogeneity to be more fully expressed, the problem of determining useful typologies of consumption patterns has attained paramount importance for marketers" (Myers and Nicosia, 1968: 182).

Although other fields of research consider aspects, such as, sociology, and some authors believe this should be more prevalent (Nicosia and Mayer, 1976), in hospitality, the main considerations are primarily regarding the decision making process and the outcomes of this, for example, satisfaction (Jones and Sasser Jr., 1995; Namkung and Jang, 2007; Oliver, 1980; Cardozo, 1965; Pieters, Koelemeijer and Roest, 1995; Arora and Singer, 2006; Oliver and Burke, 1999). The wider context of decision making is often missing from customer research within the field of hospitality and the many environmental aspects that impact upon the decision making process, yet no models exist which account for these features.

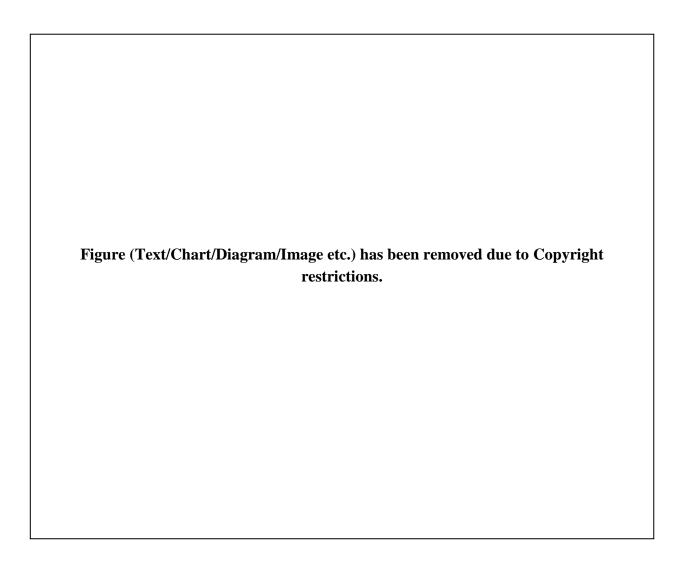
#### 1.5 Customer Circumstances

A report carried out by Study Perspectives (2012), noted how the disposable income of customers was being eroded away through increasing energy and food costs, along with the value of Sterling falling. Factors, such as inflation, affect customers but no models exist to which social patterns can be applied and considered in order to establish outcomes of customer behaviour when choosing restaurants. Customer sociology is obviously an extensive area and not all aspects could be incorporated into a customer

behaviour model for dining out. However, some of the highly regarded influencing, yet rudimentary factors, such as income, family size and customer age have, as yet, not been collated into any models in order to try to predict outcomes, or understand customer behaviours when dining out in the UK. Many socio-economic factors are not necessarily equal in their influence, they cannot be isolated and they interact differently. However, in an area where customer research is the focus of the business (advertising) it has been noted that "one of the pressing needs of advertising research is to reconstruct the total picture, to put together the various parts of the economic, psychological, and social mechanisms that govern observable behaviour" (Nicosia, 1968: 30). In more recent years this has been to an extent acted upon and aspects, such as, age (Cullen, 2004), or gender (Warde and Marten, 2000) and, where media plays a strong influencing role, authors, such as, Muller (1999) have looked at how issues, for example branding, impacts upon customers. Again, what can be noted is these factors are looked at in isolation and not attributed to designated groups of customers who are likely to have similar patterns of behaviour.

What can be seen, which is where this study stems from, is that within the field of hospitality, the combination of socio-economic factors that affect customers and the their impact upon their decisions and choices, have largely been neglected when considering dining out expectations. Moreover, there is no research looking at how such socio-economic factors *directly* influence expectation generation in a dining out context.

The purpose of this chapter was to highlight areas that have yet to be researched and fully understood (see Table 1-2). By understanding and exploring such issues this provides the basis to understand in more depth customer expectations of dining out.



# 1.6 Research Aims and Objectives

It has been established that customers do not act as one population group; instead, aspects from customers' lives influence their choices. It is these influences that will determine their customer group profile. This will subsequently indicate particular behaviours and expectations. To meet the challenge of understanding the emerging research area of what expectations customers have of different restaurants, based on meal cost and the customers' socio-economic factors, the following research aims and objectives become principal aspects of the study:

Six aims (1 to 6) and six objectives (a to f) form this investigation:

- 1 To analyse and synthesise the body of knowledge related to customer expectations of dining out.
- 2 To undertake a substantial data collection exercise to enable an evaluation of customer expectations of dining out.

## 3 To clarify and derive meal costs from a customer perspective.

a. Evaluate what customers determine as the cost brackets for inexpensive, mid-priced and expensive restaurants based on meal cost.

# 4 To assess how customer expectations vary between different restaurant types.

b. Classify customer expectations of different restaurants as determined by cost categories.

## 5 To evaluate what influences customer expectations of dining out.

- c. Analyse the influence of socio-economic characteristics on customer expectations.
- d. Assess the extent to which expectations are consistent amongst the different socioeconomic groups.

# 6 To make an original contribution to knowledge through the development of the study findings in the context of customer expectations of the dining out experience.

- e. Develop a practical typology in relation to restaurant customer expectations that combines the factors of meal cost and socio-economic characteristics.
- f. Develop a theoretical model in relation to restaurant customer expectations that combines the factors of meal cost and socio-economic characteristics.

# 1.7 Aims and Objectives Motivation

Through undertaking the necessary research to attain the aims and objectives, this thesis will be able to contribute to the emerging study area of customer expectations of dining out in relation to meal cost. Furthermore, there will be both theoretical and industrial implications of new knowledge that will have potential for both practical application and academic consideration. The research areas established from chapters 1 and 2 (see Table 2-2) present issues that the existing available body of information has identified, or actions from previous research that could be improved upon. This information has been accumulated into Table 2-2 as 'Rationales for Research' and the applicable aims and objectives have been aligned to these rationales. The intention of Table 2-2 is to demonstrate the cohesiveness between the identified insufficiencies within the research area, or issues arising from the existing relevant research and this study's purpose and direction.

#### 1.8 Theoretical Orientation and Structure of the Thesis

The theoretical approach adopted by the study will be primarily related to customer expectations. However, there is a focus upon customer behaviour within the dining out environment and the rationale for specifying this area is to maintain the link with customer behaviour research as 'expectations' can also, as a research area, fall into the domain of economics and psychology (Oliver and Winer, 1987). Finally, the drivers of the customer expectations, that are socio-economic factors, will be further investigated and will also underpin the development of a practical typology of customer expectations of dining out in relation to meal cost and a theoretical customer behaviour model.

The thesis will be structured to ensure that the information builds logically and orderly and will develop through discussion and research chapters. The first of these, Chapter 1, The Introduction, has highlighted what theory is missing from the existing body of relevant research. The resulting framework (Table 1-2) defines the rationale for the research and highlights where the ensuing outcomes from the study would be incorporated amongst the established and published theories.

Chapter 2, a literature review, draws together established information whilst also filtering the topics so that only the relevant aspects relating to the study context are included. The purpose of the literature review is to inform, which subsequently provides a background, as well, as reinforcing the information contained within Chapter 1.

The framework for the study is explained in the Research Aims and Objectives section of Chapter (Chapter 1). The six aims and six objectives underpin the study, providing guidance, with the consequence of achieving the aims and objectives by the conclusion of the study.

Moving into the Research Design and Methodology Chapter (Chapter 3), this concentrates on the research philosophies that underpin the context of the research, as well as, the design and rationale for the how the research was conducted and analysed. Furthermore, the information in this chapter supports the justifications for the nature of the study and why the specific characteristics of the research were adopted.

Chapter 4 is the first of the two chapters that outline and analyse the findings. Chapter 4 interprets and presents the findings from the questionnaires and illuminates the data

collected through discussion of the information. Chapter 5 discusses the findings in a statistical analysis context through the application of factor analysis, T-tests, ANOVA and Chi-square tests. This begins the process of adding to the existing body of knowledge because the information deduced from the quantitative analysis provides the information for the proposed practical typology and theoretical model, as set out within the objectives of the study.

The following chapter, Chapter 6, deduces the statistically generated outcomes through presentation of the new typology development for customer expectations of dining out based on meal cost. The penultimate chapter, Chapter 7, discusses and concludes the study's findings in relation to the practical typology and theoretical model, the aims and objectives and the existing literature. Finally, Chapter 8 discloses what would be the most relevant next steps for the continuation of research in this specific field, as well as, the potential application opportunities for the hospitality industry.

# 2 Literature Review

This chapter will examine the body of literature that surrounds the research area of customer expectations. As the specific field of UK customer expectations of dining out in relation to meal cost is a newly emerging field of research, there is a lack of theory and information that exists specifically to the area. Therefore, many of the topics looked at are those that contribute to the study area, that is dining out, as opposed to being directly related, but will nevertheless support and inform the research direction. Consideration and understanding of existing themes and theories are also important so that this research can be compared with the established research literature. This chapter will review all of the aspects that impact upon customers' expectations when dining out, because although expectations are used to predetermine what an experience should be like from the customers' point of view, expectations are actually based on prior experiences (Tolman, 1932). Systematic and effective discussion of the key influences and theories will therefore be the basis for the literature review and this will ultimately create a platform with which to centre and associate the proposed research.

Expectation research is broad and multi-disciplinary, furthermore, the restaurant environment and eating is not a simplistic study area, because as Macht, *et al* (2005) suggested various stimuli, including features of the physical environment and social factors, will all impact upon the meal experience. They also comment that a customers' internal conditions, such as, motivational, cognitive and behavioural factors will further influence how a meal is experienced by the customer.

The themes of customer expectations and dining out establishments are explored through looking at the topics of the restaurant sector, food, service, the meal experience,

the restaurant environment, semiotics, customer satisfaction, customer expectations, customer acceptance and expectation formation. By designing the chapter in this way there is an explainable movement from the tangible, to the intangible and then into expectation theory, building up the rationale that comes together to form the specific background to the study.

## 2.1 The Restaurant Sector

Statistically eating/drinking, working, sleeping and watching TV are the main activities of an average UK adult (Office for National Statistics, 2005b). As socio-economic and demographic changes take place there are consequential changes to customer eating habits. Eating out has become part of everyday life within the UK due to new social and cultural characteristics encouraging people to eat away from the home (Finkelstein, 1989; Warde and Martens, 2000). The average proportion of household expenditure that is spent on food outside the home is at 22% and the average customer will spend £663 per year on food consumed outside the home (EatOut, 2011). An increase in women working, a rise in two income families, one-adult households, the impact of advertising and more people in the age group of 25-44 who are inclined to eat out more often (Putnam and Van Dress, 1984), are just some of the reasons suggested as contributing to an increase in eating outside the home, and are clearly of considerable importance for the restaurant industry.

With the variety and number of food outlets growing in-line with public demand and with more restaurants opening in an already competitive market, trading has become fierce, although the effect on choice and price are of benefit to customers (Mintel, 2004). Lifestyle changes and increased customer affluence have been the driving forces

behind the widening of eating out options. Specifically, the restaurant sector has seen the value in takings of the 262,134 UK restaurant outlets (CatererSearch, 2010) rise to over £30bn in 2011 (EatOut, 2011) and in 2008 it was estimated 8.5 billion meals were served (CatererSearch, 2010). Among some of the lifestyle changes has been the effect of people choosing to eat out for convenience, rather than for one-off occasions. The choice that customers have has led to restaurateurs becoming aware of how much more demanding and sophisticated customers are and their focus on service has become more important in order to satisfy customers and maintain profits (CatererSearch, 2005). The driving forces behind customers choosing to eat out are linked with what Olsen, Warde and Martens (2000: 186) describe as "expressing group belonging" linked to age, education, class and income. Although many restaurants gain customers through promotion of their restaurants by appealing to certain 'population groups', there is little overt promotion of restaurants aimed specifically at class, age, or income as this does not fit well in today's society (Riley, 1994).

A number of factors have been considered within recent research looking at customer groups to try to understand their perceptions of the eating out experience. In a study by Binkley and Eales (1998) it was shown that although a number of other researchers had focussed on customer demographics, they found that demographic and income differences have less of an effect upon demand for food than cultural aspects. For example, they showed how fast food demand was found to be driven not by income or demographics but by the population *density*, of metropolitan areas. Additionally, Bowen (1998: 289) suggested that geodemographic characteristics (individual households that share the same characteristics), which were used to define customer groups and their behaviour are in fact only secondary aspects compared with issues, such as, attitude and behaviour patterns. Subsequently, trying to assess both the

geodemographics together with psychographic measures often caused confusion of the segments which in turn created misunderstanding in the assessment process. When looking at trying to decipher how customers viewed their meal experience Riley (1994) suggested that due to the conclusion of no apparent consensus as to what customers could consider a good experience, the actual customer measures used to judge an experience should be the restaurant's instant subjective impact, or the experience had during time at the restaurant.

#### 2.1.1 Food

Valuing a restaurant is complicated for customers because the intangible components can be difficult to assess and furthermore, what is tangible, such as, the food offering is often cooked to order and subsequently may not be repeatedly available. Such factors can make it difficult to even make comparisons week on week of the same establishment (Naipaul and Parsa, 2001). Bitner, (1992) Mehrabian and Russell (1974) Meiselman, *et al* (2000) and Russell and Snodgrass (1987) believe that customers play a role in the interpretation of their meal experience not just because of their personalities, or their reasons for being at a restaurant but also due to the influence of the eating environment and whether the food is in-line with their expectations determined by their choice of eating environment. Auty (1992) comments that the relative importance of attributes may change with each dining occasion. For example, the image aspects of the restaurant become more important to the customer if eating out is centred around a celebration.

Saint-Paul (1997: 119) demonstrated the importance of additional factors of the meal by using the scenario of a foreigner being invited to a party but not understanding the etiquette correctly, emphasising the point that "what matters after all is less about what

we share as a meal (the actual food items), than the perception we get while being involved in the activity of the meal".

Taking the situational variables one stage further to demonstrate how these can impact upon the food experience, authors such as Milliman (1986) and Bell, Meiselman, Pierson and Reeve (1994) have demonstrated how changing a variable can influence how food is both perceived, chosen and consumed. This indicates that although some authors disagree with seeing the meal experience as being more than just the food and demonstrate (if limitedly) that food is always at the top of customers list when describing what is important when dining out, how the food is perceived by customers, is actually influenced by other variables. Meiselman (2002, in King, Weber, Meiselman and Lv, 2004) suggests there are four major aspects that can alter the perception of food during consumption: the foods function within the whole meal; social interaction; the environment of the meal; and freedom of food choice.

Cardello, (1995) researched the expectation of food and concluded that customers rated food acceptance in-line with their expectations of the choice of venue. The study highlighted participant opinions between a student cafeteria and training restaurant where the expectation that the food would be better in the training restaurant, despite higher costs and less choice, was then confirmed after the food had been consumed. Therefore, from this study it can be seen that customers who rate the food often demonstrate 'assimilation' between the food and the eating environment. Although, it is worth noting that expectation is a "preconceived, often subconscious standard" (Hubbert, Sehorn and Brown, 1993). This pre-determined expectation is typical of how customers differentiate between restaurants and choose one that matches their anticipation, despite advertising claims by every restaurant of 'fine food' (Lewis, 1981).

There have been a number studies that have suggested that customers choose restaurants due to the quality of food and this has been established through the investigation of the reasons why customers return to restaurants. In Clark and Woods study (1998), which used the findings of June and Smith (1987) and Auty (1992) as a basis for their study, it was consistently found, throughout three eating contexts social, celebration, and convenience that the quality of food and the range of food were the most important factors for choice and had influenced customers to return to a specific restaurant. Aspects, such as the atmosphere and staff friendliness were slightly lower on the rankings, although the study in question did not take into account what would happen to customer return rates if the atmosphere was lacking or if staff were rude.

The study had predetermined variables as its options for customers to choose from price, quality and range were the variables linked to the food and then the other variables were somewhat random including, for example 'wash room facilities', 'parking' and 'opening hours'. This could have led participating customers to rate variables that they had not even considered, which could have led to obvious factors, such as the food, being identified as the most important aspect of the meal experience. Additionally, there was no mention as to how the ten variables were decided upon, which further adds to questions relative to the validity of the variables selected. Therefore, although this study leans towards dispelling work that maintains it is the whole meal experience that matters to customers (Johns, 1999; Pine and Gilmore, 1999) it cannot be seen as conclusive, as the research carried out concentrated on the provision of good food but the removal of other criteria was not undertaken. Thus it must be questioned whether this research provides conclusive evidence that, all that counts for a good restaurant experience, is the food.

An interesting study is that of Lewis (1981) which looked at the reasons why people visit restaurants. Although the study indicated that food quality was always the most important factor in what customers expected, the other variables tested (menu variety, price, atmosphere and convenience) differed in their rankings between different restaurant types (family/popular, atmosphere and gourmet). This led Lewis to conclude that "it is the initial choice of restaurant type by the customer that distinguishes the benefits sought" (Lewis, 1981: 73). Percy's (1976) work also noted that there is often not an overall answer to market demands but that "some (customers) are much better prospects than others; and a knowledge of which factors are important to and influence particular segments in the population can be invaluable" (Percy, 1976: 21).

Riley (1994), whose work focussed on customer experiences, suggested that, when trying to conclude which aspects were the most important for customers, when eating out 'quality of the food' and 'variety' were prominent for the majority of respondents. However, Riley believed that although it is these standard factors that customers comment upon it was actually the 'holistic' and 'intangible', such as, atmosphere and environment which were the genuine influences over the dining experience.

It is widely recognised that the environment portrayed by the interior aspects of a restaurant can have an impact on the overall restaurant experience (Johns and Pine, 2002; Auty, 1992; Finkelstein, 1989) and that the right design is crucial to achieving a positive reaction from guests and ultimately plays a role in creating a successful business (Hamaker, 2000). The impact of the environment on the restaurant experience is deemed as a major component of the whole experience and so is subsequently important when assessing the meal experience. Ryu and Jang (2007) believed the environment does affect customer opinions of their restaurant experience, they discuss

how the environment and aesthetics actually affect human psychology and behaviour, which in turn may impact on the experience. Thus, the décor/environment/aesthetics play an integral role in customer interpretation of the meal experience.

Ryu and Jang (2007) explained their theory further by categorising restaurants. Those restaurants that are at the higher end of the market are, according to Ryu and Jang (2007); Wakefield and Blodgett (1994) targeted by customers who are actively looking for an hedonistic experience. This, therefore, makes them more susceptible to influences, such as, the environment as opposed to memorable factors, for example, service factors alone and so it is very difficult to define what elements which are not on the dinner plate still influence the customers' perception of the meal. As Meiselman, *et al* (2000) discussed, it is taken for granted by restaurant patrons that a particular standard of restaurant will deliver the expected food quality, service, price, décor and fellow customers befitting of that restaurant. All of these factors are unavoidably present in a restaurant and although not directly related to the meal itself, they nevertheless affect the meal.

As Meiselman, et al (2000) demonstrated in their study, the more impressive the eating environment is perceived to be, the more customers like the food, as well as, rating the food more highly. Their studies have shown that when exactly the same food was served to customers in different environments those environments where more emphasis was put on the dining experience, for example, a white cloth restaurant as opposed to a canteen, the food was perceived to be better and rated more highly. The attribution of higher or lower food ratings would therefore be in-line with customer's preconceived expectations of each environment. So, features such as, service aspects, facilities and

ambience do have an overall effect on the customer's visit even though they are not directly linked to how a customer would view the food.

The Meiselman, et al (2000) study used a restaurant, refectory, training restaurant, food science lab and cafeteria as the different environments to test their environment theory. Subsequently, as the customers rated the same meal as being better in a restaurant than in the refectory, the environment was concluded to have a substantial impact on the customers' food experience. Furthermore, Meiselman, et al (2000) demonstrated that as well as influencing customers whilst in the restaurant, the type of eating establishment affects customers' expectations of the likely meal experience they will have, which also affects meal perception.

Although there is no scientific proof of what constitutes, or directly affects the 'meal' aspect of the restaurant experience, as it is very subjective, it is nevertheless, critical to understand how restaurant customers view their meal, whatever it is deemed to consist of. Until recently, interpretation of food has been explained through sociological variables like class, gender and age (Sneijder and te Molder, 2006). It is now, however, accepted that such categories are quite vague and new interpretation methods need to be investigated. In Sneijder and te Molder's (2006) work they implemented the use of discursive psychology which considers conversational interaction, ethnomethodology and social construction as a tool to decipher how people, in the case of their 2006 study, demonstrated themselves to be gourmets. Although some authors, such as, Wright, Nancarrow and Brace (2000) believe that sensory findings directly relate to opinions of foodstuffs, Sneijder and te Molder (2006) contradict this theory because they argued that evaluations of taste have "rhetorical and interactional implications" therefore, taste analysis is not as straightforward as deciding if a food is palatable. In support of this,

Cardello's (1995) work discussed how food quality is down to perceptual and evaluative opinion relative to person, place and time and that it is also subject to context and expectations.

An example of how Cardello (1995) puts this into context is by comparing how different people would interpret food quality. For example, a food scientist might use years of proven research to discuss the foods nutritional and microbiological aspects. This would be in contrast to how the average customer would view the quality of a food product. However, as Cardello (1995) highlights although customers are responsible for the success of the food industry, in fact customer definitions and opinions of food quality are known least about. Although Cardello's (1995) work focusses on how to measure customers' opinions of quality, the work additionally provides insight into the difficulties of understanding how customers rate and categorise food. Importantly, Cardello's (1995) work added a crucial element to the issue of customers' interpretation of a meal by suggesting opinions of food are formed based on 'expectation' and 'perception'.

It can be seen, therefore, that eating in a restaurant is more than just consuming a meal outside the home. Many factors created by both the restaurant and customers themselves impact upon the experience. There have been several key issues considered by researchers who have investigated the food aspects of restaurants, however, what is behind much the motivation in researching the area, is the need to understand customers' interpretations and in connection to the changing industry.

## 2.2 Service Aspects

When considering restaurants, service is a main feature and much research has been carried out looking at different aspects of service. Furthermore, models have been created which have attempted to interpret customers' opinions of service. Some of the models are conflicting in their conclusions of customer satisfaction but they nevertheless provide theories to test when considering meeting restaurant customer expectations.

#### 2.2.1 Service

A service encounter has been described as "a period of time during which a customer directly interacts with a service" (Shostack, 1985: 243 in Bitner, 1990). Although it is not the intention to investigate service in great depth, this aspect of the restaurant experience has to be understood for two purposes: First, to understand what 'service' encompasses, and secondly establish how important 'service' is to customers when dining out.

Service, it has been established (Brown and Swartz, 1989), is not purely the interaction between the person providing the service but rather it indicates all of the service encounter, such as, interactions, or the provision of information. Bitner, Booms and Tetreault (1990: 72) defined the service encounter as the moment of "interaction between the customer and the firm", which demonstrates that service is more than purely what is being served. Some research has indicated that there are common series of thought as to what service is and that these factors are the same for the customer and the employee involved with the service. Other research however disputes this (Folkes and Kotsos, 1986) and argues that customers and the employee see different sides of the

service encounter – one being the provider and the other passing judgement. Additionally, much research has looked at providing service to a satisfactory level, but typically fails to assess the non-human aspects, such as the importance of atmospherics in service encounter satisfaction (Bitner, Booms and Tetreault, 1990). Furthermore, Meiselman, *et al* (2000) and Pierson, Reeve and Creed (1995) comment how little research has been carried out through controlled comparisons of important influences on food and experience, such as, service. Moreover, Brown and Swartz (1989) commented that little research has been undertaken between the standard of the service and customer satisfaction and the research which does exist in this area is both general and descriptive in its nature. What is agreed upon, is that satisfaction occurs for the customer when outcomes meet, or exceed their expectations, whereas dissatisfaction is experienced if the customer's expected outcome is not met, or exceeded (Brown and Swartz, 1989).

Johns (1999a) cites that a parallel development to the experience economy is that a service experience is about emotion which is related to the customer's values. The idea of customers attributing emotion to service is developed by Pizam and Ellis (1999: 327) who stated that customer satisfaction is a "psychological concept involving a feeling of well-being and pleasure and that these are ultimately the goals hoped for and expected by customers of an appealing product, or service". Therefore, service is a part of the restaurant experience and authors regard service as a crucial element of eating in restaurants. Lee and Hing (1995: 293) comment that "...meal quality, the environment and service – the former two can easily be improved, but it is the service element which will eventually provide a business with a sustainable competitive advantage". Little was written regarding service quality until the 1970s with not much to distinguish between 'services' before the 1960s (Lee and Hing, 1995). It was not until the introduction of

Parasuraman's (1985) SERVQUAL model that a recognised model for service existed. Bowen and Cummings (1990 in Lee and Hing, 1995) still maintain that service delivery is difficult to specify and support the theory that the feeling of service along with the atmospherics of the setting is what is important in providing customers with a positive opinion on the overall service delivery.

#### 2.2.2 Customer Service Measures

Walker (1995: 5) cited that "services are primarily intangible, cannot be separated from their provider or stored in an inventory, and their delivery tends to be inconsistent". Furthermore, Walker (1995) described how service qualities can be decided upon by the customer through different quality analysis and posed three categories: 'search qualities' are those which the customer knows before any service exchange happens; 'experience' are the qualities of service experienced by the customer during the service encounter; and 'credence qualities' are the intangible qualities of service that customers find difficult to evaluate. Smith (1999, in Chan, Wan and Sin, 2006: 3) defined what actually causes the failure of a service, as perceived by the customer, is when the "service is delivered in a flawed, or deficient manner, resulting in the loss of social resources (e.g. status, esteem) for the customer". However, this conclusion was somewhat limited and Chan, Wan and Sin (2006) built on Smith's theory and added 'non-delivery' as a cause of service failure for the customer. Non-delivery is that which may result in the loss of economic resources, such as, money, or time for the customer.

Service quality research (Chan, Wan and Sin, 2006; Mohr and Bitner, 1995) has split service into two sections that can be identified by customers: the process of service delivery (the transfer of service from employee, social and psychological aspects, to the customer) and the service outcome (the physical/instrumental factors which relate to the

service that the customer has). The Chan *et al* (2006) study looked at how customers become dissatisfied with service and identified that customers can feel dissatisfaction through two ways. Firstly, social interactions can provide a favourable public self-image and this is linked with a customer's perceived feeling of social self-worth and self-esteem (Ting-Toomey and Kurogi, 1998). So if a customer is ignored, feels threatened or is treated differently due to age, income, or gender (Prisble, 2000) this will lead to dissatisfaction through the social-interaction route. This idea of the social implications that a restaurant experience can have on its customers is summed up by Finkelstein (1989: 3):

"In our society, much of dining out has to do with self-presentation and the mediation of social relations, through images of what is currently valued, accepted and fashionable. The restaurant is regarded as a place where we experience excitement, pleasure and a sense of personal well-being...The images of wealth, happiness, luxury and pleasant social relations which are evoked within the restaurant are iconically represented through its ambience, décor, furnishings, lighting, tableware and so on. These are in turn dominated by fashion; there are distinct waves of style in dining out....Objects of décor become the representations of human emotions; they summarize the mood we expect to enjoy while dining out and as such they appear to be simultaneously the instruments which create desired emotions.."

In other circumstances, where an undesirable event occurs that affects the customer, such as, an item no longer being available on the menu, this is an incidence which is removed from the customer and can be classed as more situational. In each instance there will be customers who are more dissatisfied than others, for example, if a customer is particularly self-aware they may be more dissatisfied via the social-interaction route than others. Moreover, customers who believe in fate and luck will be predisposed to believe an unfavourable situational event was meant to be and may therefore, be less dissatisfied than customers who believe it to be the service provider's responsibility (Ural, 2008). The disconfirmation model by Woodruff, Cadotte and

Jenkins (1983) (Figure 2-1) is one that has often been referred to as a method of understanding how a customer decided whether they felt positive, negative, or indifferent about the service experience they encountered.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

Fisk (1981) looks at the resulting decisions on service in three stages: pre-consumption; consumption; and post-consumption. Initially, in the first stage no service has taken place and this is where the environment (being considered as a service aspect), or the service providers' appearance is often considered by the customer. Walker (1995) referred to atmospherics at the first service consideration stage, as it may be an influence on customers prior to experiencing the core service. Studies cited by Walker (1995) have highlighted that decisions on service (atmospherics, personal, the environment) at this initial stage can influence the overall evaluation of the whole service encounter. This demonstrates that although no service had been provided to that point, the factors that could be considered, were very important to customers. Although first stage factors are not removed once the main, or 'core service' aspect occurs, the

customers' attention moves from these aspects to the actual service. These include whether the meal was hot when it arrived (if required), was it what was ordered and, so on. This stage is vital for a business to ensure customer satisfaction and perhaps it is the most difficult because as Czepiel, Soloman, Suprenant and Gutman (1985 in Walker 1995) comment, only minor problems with the core service can be overcome if the total service experience is to have a positive outcome. This may relate to the fact that in terms of service delivery, customers know what to expect – cooked food should be hot, members of staff should be courteous, whereas for the first stage, room colour, or layout may be different to expectations but can still bring a positive evaluation.

The core stage is often the assessment of the 'tangible' which Johns and Kivela (2001) believed to be more influential than the intangible. In their study of customers experiencing a restaurant for the first time, the physical elements were used more often to describe a negative response to the experience whereas the intangible, such as the atmospherics were often used when discussing a positive experience by the customer. Furthermore, within the restaurant setting this stage is providing the food, which Johns and Howard (1998) considered to be important as it fulfils one of the basic human needs. In the final evaluation stage, aspects from stage one can begin to be reconsidered again along with post-service activities, such as, payment and where any actions to compensate for minor flaws in stage two are evaluated. Whatever conclusion is made on service, the last stage will define the whole service encounter – this may be linked with the rule of primacy and recency (Bowen and Morris, 1995).

Another dimension of customer service is 'attribute value theory' (Pizam and Ellis, 1999). This is how customers are believed to view a service, that is, viewing the dining out experience against a set of variables which are then attached with a level of

importance. From these measures customers can weigh up the overall experience. These variables can be split up by non-weighted/weighted compensatory models and non-compensatory models which may be further split into disjunctive and conjunctive models. Non-weighted compensatory models presume that trade-offs are made of one attribute for another to make a decision on the overall experience. Whereas the weighted compensatory model is the concept that customers add an importance rating to each attribute. Non-compensatory models (no trade-offs of attributes) which follow the conjunctive route adhere to the concept that as well as not having any attributes being able to be compensated, all measures have to reach a certain level as perceived acceptable by the customer in order for that attribute not to fail the whole experience. Non-compensatory models that are disjunctive only require certain key attributes to have minimum levels imposed on them by customers (Pizam and Ellis, 1999).

Swan and Combs (1976) produced an hypothesis based on 'instrumental' (performance of the physical product) and 'expressive' (psychological performance of the product) determinants, where both needed to be above, or equal to expectations in order for customer satisfaction to occur. Maddox (1981) implemented Swan and Combs study and found that if an 'expressive' attribute was not met, then satisfaction was reduced although not necessarily to the point of dissatisfaction. Hausknecht (1998, in Johnston, 1995) took the study further and rather simplistically linked emotions with what satisfies and dissatisfies. Not surprisingly, it was found that a common theme for expressions of joy, surprise and interest was associated with satisfaction, whereas anger, disgust and surprise were linked with dissatisfaction.

In order to gain positive customer affirmation, especially with service delivery, a business must go beyond what is expected or else customers can choose to be indifferent to the event (Bitner, 1992). Unfortunately, as Walker (1995) demonstrated, although the peripheral aspects to service are crucial, the business efforts are not always noted by customers. Potentially, this occurs as there are so many areas of focus for a customer to notice, that even those where a business may be surpassing expectations, can go unrecognised by the customer. To avoid this, Walker (1995) suggested drawing attention to the situation so that the customer considers it when making their decision as to whether they were satisfied by the service.

As previously discussed, service encounter satisfaction has also been defined by the disconfirmation of the expectations paradigm (Churchill and Suprenant, 1982; Oliver, 1980; Oliver and DeSarbo 1988; Tse and Wilton, 1988). The disconfirmation paradigm suggests that customers decide if they are satisfied by comparing their received product and service with prior expectations, and each customer has individual expectations of the level of product, or service that they should receive. The sense of satisfaction by the customer is different from their overall attitude towards the service and Bitner, (1990) defined service satisfaction as the assessments made about individual transactions compared with attitude, which can be seen as being more general. Bitner's (1990) research concluded that all individual service encounters need to be managed and controlled separately in order to enhance overall perceptions of service quality.

Staff explanations for service failures can diffuse dissatisfaction and symbolic cues of non-verbal messages, such as the physical appearance of staff, may increase service encounter opinions. Although it may be possible to put into place variables to please the customer it may also be the case that some customers will not conform and will still leave the restaurant experiencing dissatisfaction. For example, Clark and Wood (1998) reinforced the idea that tangible aspects will often be the deciding factors as to whether

a customer had a positive meal experience. However, different customers may interpret quality in very unpredictable ways due to previous experiences of critical incidents or cultural factors (Johns and Howard, 1998).

Although satisfaction may be demonstrated by the customer, Arnould and Deibler (1995) suggested that there was a deeper response (emotional) experienced by customers rather than simply 'satisfied', or 'dissatisfied'. However, on average customers report experiencing little emotional response most of the time, although one area where emotional response increases is when the service provider offers extra attention and understanding towards the customer (Smith and Bolton, 2002).

It can be seen therefore, that service can be both measurable and intangible. Extensive research has been carried out looking at service in restaurants and models exist for implementing service under best practice conditions. A number of key issues regarding service have been raised by researchers and most notably service is important to this study as it demonstrates an element that customers may base expectations on.

Determining if service standards have been met is also a question that has often been considered through post-expectation research studies. A number of models, such as, disconfirmation theory and attribute value theory, which are judged through non-weighted and weighted models, have been designed. However, no one overall determining theory appears to apply to all restaurant scenarios, or encompasses all aspects of the restaurant experience, and so this area is still open to interpretation.

# **2.3** The Meal Experience

Hansen, Jensen and Gustafsson's (2005) research investigated restaurant customers meal experiences of  $\grave{a}$  la Carte restaurants and divided what the restaurants offered and what the customers 'experienced' into 5 sections:

- The core product that created the customers total experience of food and beverage consumption and subsequent social reactions and interactions;
- The restaurant interior consisting of all elements providing the meal setting;
- The personal social meeting or the interactions between customers and customers and staff and customers;
- The company gathered to share the same meal;
- The restaurant atmosphere which relates to the emotional experience brought on by the restaurant throughout the meal.

In Gustafsson, Ostram, Johansson and Mossberg's study (2006) the 'Five Aspects Meal Model' (FAMM) was used as a basis for demonstrating that a meal consists of more aspects than just the food being consumed, namely: management control system; room; meeting; product; and atmosphere. These five areas were then split into two groups, the first of which coincided to a logical timeline (room, meeting and product) and the second was more extensive (management control system and atmosphere). Gustafsson's model was created by assessing Michelin Guide inspectors' meal experiences over a number of years. This contrasts with Hansen, Jensen and Gustafsson's later 'Customers' Meal Experience Model' (CMEM) which was based on empirical data. However, the CMEM model was based purely upon data from five focus groups that provided insight into customers' meal experiences, which subsequently formed into the aspects of the questions and the model used in the interview template to gather the study's data. Another investigation that attempted to define what makes up the restaurant experience was Andersson and Mossberg's (2004) 'concentric rings model' which illustrates what aspects influence a customer's

multidimensional meal experience. The 'must' is the food (forming the centre of the model) and in the adjacent rings there are five groups of satisfiers:

- (1) Service
- (2) Fine cuisine
- (3) Restaurant interior
- (4) Good company and
- (5) Other customers

However, again this model lacked extensive research as it was "based on reviews of related studies" (Andersson and Mossberg, 2004: 172) rather than any specific quantitative, or qualitative data gathering exercise. Furthermore, although Warde and Martens work is referred to by Hansen, Jensen and Gustafsson (2005) with regard to the development of their study and model, in terms of how they divided the aspects of the meal experience, this was based on their "service provisioning approach to consumption" (Warde and Martens, 2000: 16) as opposed to actual investigative studies.

There have been a number of studies looking at the meal experience, however, the models created to define the restaurant experience have not been based on extensive customer research. Insight into what defines the restaurant experience would be very beneficial to the industry but definitive conclusions have yet to be drawn by researchers.

#### 2.4 Restaurant Environment

Auty (1992) believes that style, service, décor, price and ultimately the atmosphere created by these elements are so important to customers that when a market segment of restaurants has been chosen, it is these individual elements of service, décor and so on that become the deciding factors as to where to choose to eat. Indeed, Auty considered them to be 'critical' to the final choice, especially between restaurants serving similar

types of food. This is reinforced by Balzas (2002) who visited a number of three star Michelin restaurants and concluded that people eating in this type of restaurant did so, not for reasons of hunger, but to escape everyday life and indulge in an exceptional experience. However, even at the other end of the market, customers also look for something more than just food when eating out. This has driven the growth of 'themed' restaurants with customers seeking atmosphere, as well as a good, or different meal. Although restaurants are traditionally judged on service quality, due to the evidence suggesting that customers are reading more into the experience than just service, Johns and Pine (2002) recommended that measuring the standard of a restaurant on the general attributes for service quality alone are not satisfactory because they do not describe the full restaurant experience.

Belk (1975) developed a list of all possible environmental factors that could be proved to have an impact on those dining within the environment as previous attempts at environmental descriptors were found not to be comprehensive. However, Russel and Mehrabian (1976:62) considered Belks' idea of creating a conclusive environmental factors list was too 'cumbersome'. Instead they proposed descriptors that were more general...."for instance, temperature.." and these additional factors would not create 'redundancy' by overlapping with other descriptors. In addition they recommended that lists of descriptors relating to the environment should be made up of as few variables as possible but should still provide insight on the environment with regard to human responsive behaviour. In terms of how peoples' behaviour is communicated, Russel and Mehrabian (1976) proposed a set of outcomes: 'pleasantness', 'arousing effect' (information rate) and 'dominance-pleasing effect' to describe the impact an environment has. A further study by Lindquist (1974: 32) produced from "a search of

literature" of twenty-six authors' publications, nine attributes that could contribute to image formation, or influence customer attitudes. They were:

- Merchandise (goods offered) quality, selection, styling, guarantees and pricing.
- Service service-general, salesclerk service, presence of self-service, ease of returns, delivery service and credit policies.
- Clientele class appeal, self-image congruency and store personnel.
- Physical facilities elevators, lighting, air conditioning and amenities. May also include layout, aisle placement and width, carpeting and architecture.
- Convenience convenience-general, location and parking.
- Promotion sales promotions, advertising, displays, trading stamps, symbols and colours.
- Store atmosphere customers feeling of warmth, acceptance or ease (atmosphere-congeniality).
- Institutional factors conservative-modern projection of the store, attributes of reputation and reliability.
- Post-transaction satisfaction merchandise in use, returns and adjustments.

Lindquist, however, recognised that although from the literature review there had been a comprehensive list created, no empirical conclusions had been made of factor combinations. With regard to interpretation of signifiers, or cues Riley (1994) proposed the idea that the 'environment' tells a story and the clearer and understandable, or uncomplicated this is seen by customers the easier it is for them to recognise aspects and identify with them according to the dimensions of their lifestyle. An example of this theory would be to keep a theme constant throughout the restaurant, style of service and menu. However, trying to communicate atmospheric and design information to restaurateurs is difficult.

In Auty's (1992) study the majority of the restaurant managers/owners involved did not believe they had many competitors and acknowledged they did not respond to competitor activity. Instead they were so confident of their own performance they believed that their competitors would respond to them. Finkelstien, (1989) took the

opposite view and considered that what restaurant customers were looking for was not a new concept to restaurateurs. In fact, according to Finkelstein, restaurateurs have been aware of the importance that aspects and features, such as atmosphere, play for customers when eating out and in some cases it was noted that restaurateurs paid more attention to the atmosphere than the food itself. In Balazs' (2001) study of some of France's most well-known and acclaimed chefs, although the chefs admitted that their passion was the food, they acknowledged that the dining experience they created is far more than just the food and included the atmosphere, décor, the waiters and table setting, and in effect they were selling to the customer "something intangible and ethereal" (Balazs, 2001: 142).

As the trend in new restaurant openings continues, customer choice becomes increased and potentially customer re-visits occur less frequently. Thus, for restaurateurs, attention to atmospherics has become more important. As Johns and Kivela's (2001) study showed, each time a customer visits a new restaurant they experience a high level of anxiety. Although customers may not return to a restaurant due to the availability of places to eat, an affirmative experience is never the less required in order for customers to deliver positive 'word of mouth'. When Jones and Kivela (2001) looked at the intangible, in relation to their cohort's comments regarding first time restaurant visits, it was found that the customers were very wary of being in an unfamiliar environment and found that other customers and staff could exacerbate these feelings. Jones and Kivela (2001) comment that staff fit into two roles: by being in the environment of the restaurant they were considered a physical aspect and not found to be a problem, in fact, they could add 'authenticity'. However, when interaction was necessary with a staff member they were seen as potentially 'hostile' by the customer. Furthermore,

customers eating in a restaurant for the first time cited feeling as though they were on someone else's territory.

People prefer to eat in groups when dining in restaurants, which as Sommer and Steele (1997) suggested, could be due to customers not wanting other diners to think they do not have partners, or friends. This concurs with Pettinger, Holdsworth and Gerber's (2004) study, which indicated that customers prefer dining in groups and were likely to have a more enjoyable experience when in a group, due to being able to act as a crowd, when situations with staff, or other diners arise. Subsequently, it has been proved that when customers eat in groups they consume proportionally more food than when individuals eat alone (King, Weber, Meiselman and Lv, 2004). In the King et al, (2004) study, satisfaction of the main component of the meal did not increase when diners had social interaction. This could indicate that increased meal enjoyment is only linked to eating in a social setting when companions create a comforting environment for each other, examples being friends, or relatives. Grove and Fisk's (1997) study looked at how the presence of multiple customers influenced each other and Shamir (1980, in customers who are in the same service Grove and Fisk, 1997) identified that environment demand different requirements from the provider and the way in which the business manages their different customers can produce "inter-client conflict".

Potentially, other customers present may also enhance an experience by providing excitement (Lovelock, 1996 in Grove and Fisks, 1997). Lovelock suggested that in order to manage the situation, customers' appearance, behaviour, age and so on needed to be regulated to try to ensure customer satisfaction. Grove and Fisks (1997) study into customers waiting in lines at a tourist attraction found that negative consequences of other customers, such as increased waiting times, caused issues with their cohort.

Additionally, it was noted that different customers cannot all be provided with the same experience, for example, a noisy group enjoying themselves may subsequently create a negative atmosphere for another customer group.

Addressing issues of customer trepidation, as Johns and Kivela (2001) comment, is about staging a welcoming environment for the customer, through positive and often intangible cues. An example can be seen in Bowen and Morris' (1995) study where they cite how aspects, such as, colour, design and illustrations, when used correctly on a menu, cannot only increase sales of food items but can also convey the personality of the restaurant.

Due to the numbers and choice of restaurants, customers can elect not return to the same restaurant to eat, this however contradicts the purpose of a restaurant putting effort into the service, décor and staff, to gain business from word of mouth, build reputation and most importantly encourage customers to return. Wildes and Seo (2001) concluded that retention of existing customers is five times less costly than trying to attract new customers and if errors occur, correcting these, in cost terms, will be far less than losing the customer's business altogether. Kivela, Inbakaran and Reece (1999) suggest that a customer's decision on whether to return to a restaurant is the 'moment of truth' for the restaurateur as this would demonstrate whether a customer has had their expectations either met, or exceeded.

Tse, Sin and Yim (2002) demonstrated in their study how customers are constantly evaluating their environment and bring into discussion how often the assumptions that people make are psychologically protecting rather than down to preferences. In fact when a person has little control over their environment they will form attributions

regarding the situation in order to regain control, so if at a point within the meal experience something unexpected happens, or a negative event takes place, the customer will generate an attribute (Mattila and Petterson, 2004). The assumptions made are not always negative and Tse *et al* (2002) use a crowded restaurant as an example. In a crowded situation a customer will need to understand the environment and so will attach their own theories as to why the restaurant is busy. In the case of a crowded restaurant this brings about positive attributes for the customers, such as, the presumptions of 'high quality', 'delicious food', 'low prices', or 'good restaurant reputation' whereas, the perceived perception of an empty restaurant is that it must have 'low quality food', be expensive and have a poor image (Tse *et al*, p450/452, 2002). This demonstrates how customers are constantly influenced by cues, many of which happen automatically for psychological purposes.

Furthermore, links are made from the initial conclusions to making additional assumptions. In the Tse *et al* (2002) study it was suggested that further research was needed to find a balance between the good attributes formed when customers saw a busy restaurant but which were counterbalanced by customers being concerned as to whether they would still receive good, timely service due to the number of other diners. This theory of customers making assumptions may go some way to explain why, when people ate the exact same meal but in different environments, they rated the food differently (Edwars, Meiselman, Edwards and Lesher, 2002) and also demonstrates the influence of pre-meal expectations.

"Design indelibly colours your entire dining experience...you consume the design with every bite of the food" (Brennan, 2011). Furthermore, when looking at how pleasing an environment is to customers a number of dimensions, it is suggested, (Clarke and

Schmidt 1995) need to be combined. Complexity (visual richness, ornamentation, information rate) has been found consistently to increase emotional arousal, whereas coherence (order, clarity, unity) has been found to enhance positive evaluation (Nasar, 1989). Furthermore, compatibility has been found to work well in restaurant settings and refers to how well a place blends in with its surroundings and is related inversely to contrasts (in colour, texture, size and shape) with the natural background (Bitner, 1992: 63 in Clarke and Schmidt, 1995).

Bitner (1992) cites that little has been published regarding the effects of spatial layout and functionality on customers in commercial service settings. Spatial layout within a restaurant is the way in which equipment and the furniture are arranged along with their size and shape and the spatial relationships between the items whereas, 'functionality' refers to the ability of the equipment and furnishings to perform and serve a purpose. Bitner (1992) makes the observation that there is a lack of empirical research, or theoretically based frameworks examining how physical surroundings affect 'consumption settings' from a marketing perspective. The physical environment of a business is rich in cues which can suggest capabilities and quality to customers (Rapoport, 1982 in Bitner, 1992). However, Bitner (1992) proposed that often factors such as pricing, advertising, added features and promotions are considered more than the physical surroundings as ways to attract and satisfy customers.

In Clarke and Schmidt (1995: 150) they quote Ward, Bitner and Gossett (1989) to demonstrate how environmental cues can affect customer evaluation of the restaurant experience:

"....products have symbolic meaning and are evaluated, purchased and consumed based upon their symbolic meaning....the concept is highly applicable to services whose evaluation may be strongly influenced by inferences based upon the symbolic meaning of cues encountered during service delivery".

The design of premises can therefore produce cognitive responses in people and can determine opinions about a place and customer beliefs about the people and products found in that place (Golledge 1987; Kaplan and Kaplan 1982; Rapoport 1982 in Bitner, 1992).

## 2.5 Semiotics

Perhaps one of the least researched areas of the restaurant experience are the intangible aspects that influence the environment. Semiotics may influence the atmosphere, or ambience of the meal experience and this section will discuss the meaning of semiotics along with the interpretation of semiotic cues.

"Broadly speaking, semiotics analyzes the structures of meaning-producing events, both verbal and non-verbal" (Mick, 1986: 197). Semiotics has two pathways: 'general semiotics' that seek to answer, for example, "what is the nature of meaning" and 'specific semiotics' which addresses "how does our reality - words, gestures, myths, products/services, theories acquire meaning" (Ransdell, 1977). In order for sign production and interpretative responses to be understood semioticians investigate the sign systems, or codes relating to all types of communication (Mick, 1986). As semiotics looks at 'meaning' it is different to any other social science and Harman (1981, in Mick 1986) considers that as 'meaning' is not physical, or measurable it is therefore awkward for scientific researchers to deal with. However, despite 'meaning' not necessarily being a measurable factor it does need investigating as it continues to be present in customer answers in research exercises. This was illustrated by Johns and

Howard (1998) who found, through their study of customer expectations, that there was an issue with coding a number of responses due to the fact that the respondent/customer had interpreted the item in question into a 'meaning'. Johns and Howard use the example of a high chair being present in a restaurant, which was perceived in the study, as the establishment providing the high chair, demonstrating friendliness and having empathy with its customers. Another factor – cleanliness, had the meaning that the establishment was seen to show care, attentiveness towards its customers and even demonstrated competence as a business.

People who purchase a product, or service in this context respond to more than the tangible, with atmosphere being more influential than the product itself (Milliman, 1986). Atmosphere refers to what cannot be seen but is instead 'felt' and Kotler (1974) uses the terms 'spatial aesthetics', or 'atmospherics' to describe the process of creating a space to produce desired effects for customers. Milliman (1986: 286) describes 'atmospherics' as elements such as "brightness, size, shape, volume, pitch, scent, freshness, softness, smoothness and temperature". Temperature, lighting, noise, music and scent affect the five senses and are also known as "ambient conditions" (Bitner, 1992). A small number of studies have been carried out into the effect of certain ambient conditions on customer behaviour, such as, scent in restaurants and music tempo (Gueguen and Petr, 2006; Milliman, 1986) however, these studies are limited in scope.

In Johns' (1999) paper looking at the meal experience, Pine and Gilmore (1998) are cited as suggesting that the western economy is changing from a 'service base' to an 'experience base'. Additionally, Johns suggested that this transition is nowhere more obvious than in the restaurant industry through both tacitly and overt methods

dependent upon the outlet. Alongside the developments of the 'experience economy', or businesses creating memorable events for their customers, Johns (1999) suggests that another development is that of the action of service becoming linked with emotion and ultimately the 'meaning' of service to the customer. Johns (1999) highlights how Pierce's semiotic triangle (1934) can explain how people 'consume' experiences within restaurant settings.

Pierce (1934, in Johns 1999) through the semiotic triangle shows how pictures, objects and actions can all be seen by customers to signify a meaning as well as be interpreted differently depending on the person who is translating the sign. Johns (1999) uses 'semiotics' to explain that the 'experience' can only occur for customers if they create their own dining experience through looking at appearances, objects and people and then relating these cues to meanings that already exist for them. Although each customer is different and each cue is likely to have many meanings the likelihood is that on interpretation only one message will be focussed upon by customers (Johns, 1999).

Artwork, photographs, floor coverings and personal objects all communicate symbolic meaning and cues to the customer (Bitner, 1992). Such symbolic and aesthetic communication is complex and, as Becker (1977, in Bitner, 1992) and Davis (1984) conclude, what is communicated may be intentional, or accidental but subject to multiple interpretations and subsequently may induce both intended and unintended consequences. Johns (1999) also comments that some cues may be unintendedly placed by the restaurateur or may be mis-interpreted by customers and that it is important to firstly convey the right 'message' as well as removing any cues that could cause false messages.

The environment can be considered a form of nonverbal communication (Rapoport, 1982 in Bitner, 1992) and although the design of a business can take into consideration the desired outcomes of both customers and staff, due to the way people respond to their environment – cognitively, emotionally and physiologically, all of which determine their responses, (Bitner, 1992). It is therefore, an individual's personality that ultimately influences their reaction to the physical surroundings (Mehrabian and Russell 1974; Russell and Snodgrass 1987). Milliman (1986) suggested, using Mehrabian's and other environmental psychologists work as examples, that people react to their environments due to their feelings and emotions and additionally people can respond to their environment with varying sets of emotions which subsequently encourages them to approach, or avoid the environment in question (Donovan and Rossiter, 1982: 39 in Milliman, 1986).

Although personality traits can be relatively stable, plans and purposes for being within an environment change and, as such, this can affect both mood and what an individual notices and remembers (Bitner, 1992) and how responses are influenced (Russell and Snodgrass 1987; Snodgrass, Russell and Ward 1998 in Bitner, 1992). Belk (1975) reflects that for behaviour to be predicted, or explained both environmental and personal variables need to be considered. Bitner (1992) further suggested that if expectations of an environment are met, or exceeded for a person then they are likely to react positively and the opposite being true if expectations are not met. It is past experiences of other restaurant environments and preconceptions gathered from external sources that influence the customers' expectations (Schmalensee, 1976).

The delivery of the signs, or cues is very important, as Carbone and Haeckel (2005: 4) comment, "style must be consistent with the targeted perception of the experience and

should not come across as manipulative". However, how convincing the message is and in-effect how polished, rather than clumsy, the delivery is, can cover any signs of manipulation and be greeted positively by customers. Carbone and Haeckel (2005) suggested that cues can be either performance, or context based, performance being the action, or performance of the service, and context relating to aspects, such as, the décor, smell and cleanliness.

Guéguen and Petr (2005) comment that no previous studies had examined the effect on a restaurant setting of introducing different odours. In their 2005 study the results demonstrated that a lemon aroma did not significantly improve length of time spent in the restaurant and average spend, whereas, a lavender aroma increased length of time spent in the restaurant and the average spend compared to when no aroma was present. The suggested rationale for this is that the lavender aroma has a relaxing effect compared with lemons, recognised for their stimulating properties. Laird's (1932) study examined customers' perceptions of quality and the link that this has with aroma. Laird believed that the desirability of an item is judged by its colour and design and these attributes then play a role in determining "the complex estimate of quality". During this study participants were asked to choose an item of clothing they deemed to be of the best quality. Although all of the products were identical the products with a scent provided more positive responses than those without although not all of the scents This, as Laird concluded, indicated that aromas can affect quality proved equal. perceptions and certain aromas are more persuasive than others in influencing decisions on quality.

When passing judgements, people will always be moved and appealed to by something with a pleasing form (Kotler and Rath 1984; Nussbaum 1988 in Bloch 1995). When

evaluating 'appeal', this is usually applied to an actual product, and as semiotics considers the sign, or cues from objects there is an interpretation of that object, or person. So 'appeal' plays a large role in creating positive interpretations, therefore, if the appeal of an object, person, or the atmosphere induces semiotic interpretation then a positive human response, or thought will follow. Making people favour objects is not an idea that has come about recently with an increased emphasis on product marketing and advertising but has always existed and can be seen in civilisations starting with the decoration of weapons, pottery and clothing (Beker, 1978 in Bloch 1995).

There are a number of manipulation methods that have been demonstrated to have had an effect upon restaurant customers. In their research Garber, Hyatt and Starr (2000) carried out a study which looked at how food colour affected customers' perception of food flavour. As part of the study the authors initially carried out an audit which highlighted that the use of colour in food is mainly for flavour influences. Moir (1936) as reported in Moskowitz (1978: 163 in Garber, Hyatt and Starr, 2000) carried out an experiment to show how the colour of food can affect customers' perceptions. During a dinner where several foods were inappropriately coloured there were a number of incidents of diners complaining about 'off' flavours and subsequent illness despite only the colour of the foods, not taste, quality, smell, or texture, being altered. The results of the Garber, Hyatt and Starr (2000) investigation indicated that customers' use colour to identify foods and this informs flavour profiles and preferences. Additionally, taste is less influential to customers compared with the information they deduce from colour.

Naipaul and Parsa's (1997) study demonstrated that businesses that operated at the high end of the market, and wished to be seen in this way by the customer, often end the price of their food and beverages on the menu with a '0' which is referred to as

'psychological pricing' (Nagel, Holden and Monroe, 1997 in Naipaul and Parsa, 2001). This has huge implications for restaurants as the menu is a necessity in not only providing food information for the customer, but as Naipaul and Parsa's study shows, may also be used to communicate a quality message.

Bloch's (1995) model of customer responses to product form (Figure 2-2) demonstrated how complex the process of response is and how many factors affect decision making in terms of appeal and positive response. Cultural forces also shape how customers decide on their preferences for appeal (McCracken, 1986; Carvellon and Dubé, 2005) due to what values a particular culture holds. In addition to cultural influences, individual preferences also change, Bloch (1995) referred to these as 'design acumen', 'prior experience' and 'personality'. All of these factors play a role in the thought process of individuals, for example, those with design acumen have been found to have faster sensory connections and demonstrate more sophisticated preferences in terms of design than people who have lower design acumen (Csikszentmihalyi and Robinson, 1990).

With regard to personality traits, a number of influencing factors on choice have been studied from comparisons between those who veer towards romanticism, or classicism in their choices. People fall into two categories those who prefer the unusual, due to a high optimum stimulation level and who would rather be pleased by the effect on their senses and emotions, whilst there are others who tend to respond to anything which is linked with sensory innovativeness, or visual processing (Bloch, 1995).

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

In order to develop the model for the reasons behind customer choices (Figure 6) Bloch (1995) had to consider opinions from different disciplines including art, psychology, marketing and customer behaviour. Although much of the previous work looking into the appeal of products and objects has come from marketing, Bloch (1995) cited that within the field of marketing the use of the term 'product' can in fact be applied to goods and services in both tangible and intangible forms and often with elements blended in order to induce a sensory effect. Furthermore, if a positive response from the customer is required then anything which is purposely placed to achieve a positive semiotic effect, has to be considered in the overall aesthetic mix including interior design of the setting and the physical appearance of personnel. Although a semiotic cue may be positioned to have an effect upon customers and the product may be an independent variable it will not necessarily have interdependence amongst other elements which make up the overall setting. Therefore, it will be the blended mix of cues which will induce the reaction leading to responses to both the tangible and intangible.

The semiotic studies reviewed thus far have been concerned with the whole meal experience of the customer rather than focussing on the semiotic cues which have been purposefully controlled by the restaurant and the impact these have had on the customer experience. Very few systematic observational studies have been carried out in restaurants, perhaps the most common out-of-home consumption setting in the western world (Sommer and Steele, 1997). Moreover, a number of studies have highlighted how little research has been carried out into actually finding out what customer expectations are, along with how once the expectations have been met these contribute to providing a positive experience for the customer (Lockyer and Panakera, 2004; Clark and Wood, 1998).

Semiotics may not be understood or considered by some restaurateurs, however, as this chapter has shown there are many messages conveyed to customers through semiotics which could potentially enhance, or ruin a restaurant experience. Although semiotics may form part of the disconfirmation process it also has a place within this study because it will contribute a factor within expectation formation development.

## 2.6 Customer Satisfaction

The customer satisfaction section looks at the variables that may be applicable to different meal situations and how they can impact on the overall acceptability of the meal.

Work carried out by Clark and Wood (1996) has brought together their own findings along with those of June and Smith (1987) and Lewis (1981) to conclude that although the meal experience is made up of a number of factors, such as, atmosphere, service,

price and food it is the tangible aspects which influence customers' choice of restaurants. This information may provide some understanding as to what are the important aspects of the meal experience for customers. Although many attributes may make up the meal experience and a number of researchers, such as, Auty (1992); Bitner, (1992) and Milliman (1986) consider the intangible as important as the tangible. If as Wood and Clarks (1996) work suggests, that despite the occasion, it is always the tangible aspects which feature as more important for customers, then this highlights how important the meal itself is within the restaurant experience.

To further complicate the issue as Zellner (2007) discussed that although many people would argue that they pass accurate judgements on the hedonistic aspects of foods, in actual fact studies show that how the food has been presented or the context that the food is consumed in will affect ratings of 'goodness'. Some rationalisation of judgements is understood because when assessing food 'likability' it has been identified that both 'good' and 'bad' can be acceptable when assessed separately, although obviously when set against each other, testers preferred the 'good' product. This, nevertheless, indicates that what can cause a bad opinion of a meal can be if the meal is out of context, so not appropriate to the setting, or expected standard and when there are discrepancies between the overall attributes of the meal. One solution to customer judgements that Zellner (2007) suggested was that anything which is likely to be rated by customers' needs to be seen as 'unique', this, therefore, prevents comparisons being made. Obviously, this is not always possible but to further understand how the context affects customer perceptions Meiselman (2002) suggest that four aspects impact upon how a customer relates context to satisfaction of the meal:

- 1] Function as a meal component,
- 2] Social interaction during consumption,
- 3] Environment and
- 4] Food choice freedom.

Despite a number of factors specific to an individual that can alter their likes and dislikes, there are also a number of aspects which may contribute to satisfaction within the restaurant environment. With regard to the physical environment, a number of individual elements create the 'atmosphere' which can impact upon the meal experience, namely lighting, sound, colour and expectations set by the perceived standard of the environment. It is important that the environment has the correct amounts of temperature, lighting and acoustic conditions (Macht, *et al* 2005) and in the right balance. If these basic environmental conditions are not in place this will subsequently have an impact on the desirability and pleasure received from the food.

The basic requirements of the environments for enjoying food are: cleanliness, calmness, neither too cold, nor too hot and neither too bright, nor too dark (Macht, Meininger and Roth, 2005). Social setting looks at the influence that others have over a meal experience. This is an important factor due to an increased number of meals being consumed by more than one person than by lone individuals. Finally, customer choice is a context which is thought to sway opinion, however, there is little conclusive research into this area because although variety has been shown to increase satisfaction (Bell, Meiselman, Pierson and Reeve, 2004) there has not been enough research in one setting, either field or laboratory, to conclusively decide the relationship between choice and satisfaction.

Weber, King and Meiselman's (2004) study demonstrated the impact of the environment and how manipulating factors can actually influence food consumption with the conclusion that altered environmental conditions can impact on quantities eaten. Again, this study highlighted the contextual aspect of eating as playing a role in customer satisfaction with their food. Perceived choice is also an important factor in customer satisfaction. In longitudinal studies looking at the monotony of food, it can be seen that the consumers of provided food ate less and rated the palatability of the food lower as time went on (Kramer, Lesher and Mieselman (2001). However, when someone *chooses* to eat the same food repeatedly, it has been found to not impact on how pleasant they find the food (Zandstra, deGraaf and van Trijp, 2000). Although as Kramer, Lesher and Mieselman (2001) highlighted caution must be taken in assuming people are content to eat the same foods as in certain situations, such as, in the home, or in a laboratory setting, as refusing the food, or showing dissatisfaction, might be considered inappropriate behaviour.

In the Weber, King and Meiselman (2004) study it was indicated that choice extends beyond the menu as a change in eating habits was seen when respondents were offered a dressing to compliment the salads offered. When salad dressings were offered more salad was consumed then when a plain salad was provided to the participants. This would indicate that other factors, rather than just the food on the plate, play a role in making up the meal experience for restaurant customers.

As Mustonen, Hissa, Huotilainen, Miettinen and Tuorila (2007) discussed, although choice can impact on how food is rated by the customer, what precedes choice and starts the whole acceptance process were the actual expectations of the food. In Mustonen's *et al* (2007) study they tested participants acceptance of different cheeses by first having

participants rate the cheese in order of their expected preferences. Initially the cheeses chosen to eat generally featured as one of those on the upper-ends of the participant's choices. However, over time the participants were seen to expand their choice of cheese to include those that they had not initially rated as their favourites indicating that choices are in-line with what current tastes a person has, as opposed, to initial reactions to food. A key factor to highlight within this study relating to food choice and restaurant customer satisfaction, is that in the Mustonen's *et al* (2007) study, short-term flexibility over choice was low (participants initially chose to eat their favourite cheeses). Therefore, as meals in restaurants happen over a short period of time, if there is a lack of choice, or an option chosen by the customer is not available, this would imply that there would be an impact on how the meal experience was perceived by the customer.

Choice can be influenced as Wansink, Painter and Ittersum, (2001) demonstrated through their study. Where by providing alterations to a meals name, to convey more information, sales increased by 27 per cent and it was also acknowledged to induce loyalty and positive feelings towards the establishment.

Although it may be very difficult for a restaurant to determine what choices their customers will want, the issue appears to be that there should be a choice of foods befitting of the standards conveyed by the restaurant. As can be seen from the salad dressing study by Weber, King and Meiselman (2004), the provision of choice can also improve food uptake. When food choices are offered on a menu and then additional choices can be achieved through, for example, the provision of condiments and dressings, then this may heighten customer satisfaction. However, restaurateurs may see this as a difficult challenge to attempt to provide food choices to make every

customer happy. Berridge's work (1996) may add some ease to this problem as it was suggested that wanting and liking are not necessary linked functions within the human brain. Therefore, appearing customers by understanding why they have chosen to eat out and offering customers the suitable pre-expected experience and menu may be enough without the requirement of predicting what *every* customer would want to eat.

To further encourage a good meal experience, work carried out by Dubé and Cantin (2000) suggested that it is possible to encourage customers to be enthusiastic about the food that they are to consume. Although it may be necessary to initially feel positive towards a food, Dubé and Cantin suggested that "...persuasive, emotional appeals..." (as opposed to informational appeals) can influence the idea of liking the food even more. In a restaurant context this fits into understanding why a customer has chosen the restaurant in the first place and appealing to them in the correct way or "..communications that match the attitude functions.." (Dubé and Cantin, 2000:258). Subsequently, this emotional encouragement may be a factor in a restaurant customer enjoying the meal experience, especially, if initially, they were not particularly enthused by the food items offered on the menu. This would then bring into the experience the role of restaurant staff.

Murray, (1991) suggested that when a customer sees a risk (in a restaurant this could be interpreted as being unsure of food items on the menu, or what to choose) then there is a greater tendency for the customer to look for guidance about the 'risk'. For maximum influence the waiting staff need to be perceived by the customer as mature and committed (Engell, Kramer, Luther, Adams, 1990; Pratten, 2004). Influence (either positive comments, or negative comments) has a low impact on those customers who have made up their mind (Edwards and Mieselman, 2005) but in a restaurant setting if a

customer cannot choose what to eat from the menu Edwards and Mieselman (2005) contended that customers can be swayed in their decision making. Therefore, by having appropriately behaving staff present, customers can be encouraged to make a choice from a menu which initially may not have been appealing.

Other factors that have been proved to significantly influence choice are sensory appeal, health, convenience and price (Steptoe, Pollard and Wardle, 1995). Within a table service restaurant convenience would be obsolete, however, the other three factors would be relevant and could play a role in influence. Steptoe *et al*, (1995) discussed how certain issues are more important to different people, for example, for those on a lower income, price is important, whereas, for those with higher disposable income, sensory appeal proved to be more important. These factors should, therefore, be considered by a restaurant when trying to encourage customers to view the food choices on offer positively. Although, it would be necessary for the restaurant to be self-aware of the image that they portray and the customers' that they were to typically serve, in order to focus on the correct influencing factor.

In different meal scenarios restaurant customers will expect certain variables to be present, furthermore, these variables may also be rated differently dependent upon the meal experience expected. These variables, such as, lighting, cleanliness, temperature, choice and so on are factors that meet with 'acceptance' to contribute to the overall meal experience which will determine if a customer expectations have been met.

Restaurants need to understand their target market and appeal to the specifics, whether it is the likely reasons behind eating away from home, price, sensory standards and so on, of their typical customer base.

## 2.7 Customer Expectations

It is accepted that customers generate expectations as a "simple function only of past observations" (Schmalensee, 1976). The 'Customer Expectations' section aims to provide insight into what factors create expectations and what influences customer measurements of meal experiences.

Eating experiences have been studied from many viewpoints, (Macht, *et al* 2005) however, when eating in restaurants the decision–making process that occurs beforehand can be assumed to have been one that has not derived from biological need. In Jackson, Cooper, Mintz and Albino's (2003) work they comment that there are a number of reasons which drive humans to consume, these are "to cope with negative effect, to be social, to comply with others expectations, and to enhance pleasure".

Swan and Combs (1976) highlighted that little research had been carried out to understand customer satisfaction and their subsequent work looked at expectations, performance and relationship in order to understand customer satisfaction. This provided some additional information relevant to how customers may interpret their meal experience. Although Swan and Combs (1976) work related to how customers' judged items of clothing, their findings can be related to how customers consider their meal experience, as the research evidence appears to show that expectation plays a large role in all decision processes. The hypotheses tested in the Swan and Combs (1976) study looked at how customer satisfaction related to the fulfilment of expectations and if this was judged on attributes that were either linked to supporting satisfaction, or dissatisfaction. Work by Myers and Alport (1968) suggested that the decision making process is linked with attributes that are not standard. The example used was when purchasing a car, safety might be taken for granted and it is more likely to be the style

of car that influences choice between cars. However, post the decision making process, for the product to be seen as a success by the customer, Swan and Combs (1976) findings suggested that 'instrumental performance', or the performance rather than expectation criteria must be fulfilled for customer satisfaction to occur. Significantly, however, an attribute which leads to dissatisfaction may not be one which appears when satisfaction occurs and furthermore, the research concluded that the weighting of importance placed on each attribute by an individual is difficult to measure.

If customers' perception and ratings of acceptance are linked with the level of expectation experienced by the customer - which has been created by the restaurant, it is important to know what factors influence customers to choose a particular restaurant initially. Pedraja and Yague (2001) suggested that, to begin with there has to be a need which a restaurant can offer a solution to, whether it is to avoid cooking, to gather a group of people and so on. However, if a restaurant is not known to the potential customer there are still a number of methods by which a customer can deduce if a restaurant meets their requirements. Pedraja and Yague (2001) group these into "passive and active levels" (2001: 316). In 'passive state' people will pay attention to adverts and accept recommendations, or overhear and take on board the commentary of others, whereas in 'active state' potential customers may visit a restaurant before booking, or read the menus before choosing the restaurant. In Clow, et al (1997) looking at the expectations of service industries and how customers form opinions of expectation there is an acknowledgement that expectation does impact on how customers judge their experience, or the service. This is further highlighted by the work of authors such as Bitner, (1990) and Tse and Wilton (1998). Clow, et al (1997) discussed how tangible cues, price, word of mouth and past experiences all modify customers' level of expectation and how this then impacts upon the evaluation process.

This work combines well with the work of Cardello (1995), however, to really understand how customer expectations are formed it is necessary to uncover what provokes expectation, as opposed to concluding that it stems from generic factors, such as, price, or image conveyed.

With regard to how customers begin to form images and expectations of companies Clow, et al (1997) comment how advertising had little effect on how customers view a company. Subsequently, they suggest that there was no obvious link between advertising and how customers formed an image of a company, even though on first consideration image would seem to be an obvious message to be conveyed by advertising. Therefore, it is suggested that 'image' and 'advertising' have been neglected and have not been specified with regard to understanding how and what customers use to construct an 'image' of a business. Furthermore, Clow, et al (1997) suggested that it is also possible that within different industries customers construct images of businesses using different cues.

Although not restaurant specific, work by Boulding, Kalra, Staelin and Zeithaml (1993) suggests that perceptions are derived from what customers think will and should happen during the service encounter. In addition to this, positive attitude formation comes from what Johnson and Mathews (1997) describe as the influence of regular encounters and how the brain improves attitudes towards a context if there is increased exposure. That is, if using current information from memory, higher expectations will occur when considering a future service encounter if the same experience has recently occurred. For example, repeat patronage of a restaurant. This concept stems from work looking at the "exposure effect" (Zajonc, 1968 in Johnson and Mathews, 1997).

#### 2.7.1 Customer Acceptance

The customer acceptance section demonstrates how meal expectations and acceptability are linked by highlighting how expectation is not a fixed point. Therefore, by accepting that expectation is relative to different situations, satisfaction can occur at all levels.

Taste and pleasantness ratings of food by customers have to be treated with caution because as Macht, Meininger and Roth (2005) highlighted, at any one time a number of physiological factors within the human body can impact on the appeal of a food, or meal. Additionally, individual tastes can also sway the way in which a customer rates a food experience (Bolles, 1991).

A significant area of research, where understanding of what makes food acceptable for consumption, is work carried out on food acceptance by the military. Much research has been carried out to understand the conditions of acceptability of food in military setups and as part of The Quartermaster Food and Container Institute of the Armed Forces, USA, a food acceptance branch was formed in 1944 (Meiselman and Schutz, 2003). This unit allowed for the prediction of the acceptability of both daily food, as well as, rations. However, although this unit was trying to determine what would be acceptable for soldiers to consume, the testing was carried out in a laboratory setting where experienced human taste testers and animals were used as opposed to actual 'field' research using soldiers. Although the transfer of information regarding aspects, such as, appetite regulation, human senses and psychophysical studies were said to be able to be successfully implemented for use by soldiers in the field, a development occurred when a long-term study was implemented by Hirsch and Meiselman (1984). In that study, which measured the acceptance of rations over time, soldiers away from their base were monitored and it was concluded that soldiers eat less when in the field than when using

a cafeteria on base. This result may never have occurred if the research had been laboratory based.

As Miselman and Schutz (2003) highlighted natural eating studies are of value as they often establish results that would not occur under laboratory conditions. This US army research demonstrates, that food acceptance can be broken into three areas; "food factors, soldier factors and contextual, or situational factors" (Meiselman and Schutz, 2003: 211). Transferring this information into a restaurant setting, the factors necessary for assessing what makes a good meal experience would be: the food, the customer and the restaurant environment.

Cardello (1995) suggested that customer acceptability of food is what demonstrates the best way to measure customer satisfaction and factors, such as, choice are secondary and only occur because of food acceptance. Moskowitz (1995) demonstrates how acceptability is the best way to establish customers' liking food by using the example that although 'junk food' is linked with poor quality and such food is even classed as 'junk' people like it and choose to eat it despite the acknowledged low quality of the food. This is a good and insightful demonstration of a food meeting expectations and, therefore, being acceptable and liked by customers.

The idea that acceptance is not just based on experiencing the best, highest quality, or standards is supported by Pavesic (1989) who suggested that customers evaluate a restaurant on their perception of their chosen place to eat and whether it falls into the 'eat-out category', in which case it can be aligned with home cooked food standards, or whether the meal is a 'dine-out opportunity' where expectations would be higher.

Maskowotz's (1995) work is focussed on 'liking' but is related to quality and is very specific in terms of demonstrating what makes up quality. This can be seen through an analysis of what constitutes quality and defining it into flavour, texture and appearance and how these can be maximised in a product to appeal to the mass market, and how manufacturers try to ensure their products satisfy at least one driver of quality for customers. However, this highlights how different individuals' tastes can be and relates to Weber, King and Meiselman's (2004) work that suggested that for a good experience there should be variety on the menu it also demonstrates the need to understand all of the senses and ensure they are all catered for within a meal in order to capture each individual customer. Moreover, the study by Brunso, Fjord and Grunert (2002) found that there was a strong relationship between visual appearance (perceived quality cues) and expected quality. This combines well with the studies by Cardello (1995) who noted that there is a link between many authors work with regard to standards meeting the expectations of customers, if the expectations have been encouraged and set by the restaurant itself.

#### 2.7.2 Expectation Formation

"Expectation – a belief judgement regarding a future event or state of affairs".

(Olson and Dover, 1976: 169)

So far these expectation sections have discussed expectations in terms of what expectations are and what variables can have expectations placed upon them. However, to this point the purpose of an expectation has not been discussed, therefore, this section will look at what happens to an expectation – the rationale for forming expectations.

Expectation has been split into a number of research areas, the main area, in relation to dining out, has been to look at what customers form 'general' dining out expectations about. A number of authors (for example, Johnson and Mathews, (1997); Boulding *et al* (1993) have studied this area and many build on previous work with some providing rationale for changing how to look at expectation variables. Another area looked at has been post the point of creating expectations and what 'happens' to the expectation. Other research areas have also included, subjective evaluation, economic theory, uncertainty, memories based on experience (Tolman, 1932), post-purchase effect on pre-purchase expectations (Oliver, 1977). Oliver and Burke (1999: 196) comment on their research into the working of expectations and highlight the number of ways that expectations can affect each other, interrelate as well as impact upon scenario in question:

"Results showed that the expectation manipulation and the expectations thereby created had an immediate but declining effect over the consumption period, that expectations acted as forward assimilation agents for performance, that retrospective expectations were partially influenced by performance observations in the manner of backward assimilation, that expectation-initiated performance comparisons (disconfirmation) and performance judgments were important satisfaction influences, and that the expectancy disconfirmation model is dimension-specific with regard to operation of its components. These findings shed insight into the operation of expectations, performance, and disconfirmation in service environments and illustrate some effects of consumption tracking".

Expectations research is very important because satisfied customers purchase more and spread positive word of mouth, which encourages other customers (Pieters, Koelmeijer and Roest, 1995). In today's current economic climate restaurant businesses need to know what are critical factors for their customers (Autun, Frash Jr., Costen and Runyan, 2010). Expectation theory can be widely applied and is important to many subjects, such as, psychology economics as well as hospitality. However, as Oliver and Winer

discussed (1987: 470) there is no one theory that belongs to any subject area that "can lay claim to a widely endorsed expectations framework". "Sources of customer expectations have been explored by a few researchers. Past experience, reputation and corporate image (Zeithaml *et al.*, 1990), formal and informal communications (Gronroos, 1982; Teboul, 1991), personal needs (Zeithaml *et al.*, 1990), promotional mix (Teboul, 1991) and price (Teboul, 1991) were the main sources of expectations. So, future research is needed to delve more into the sources of expectations" (Soriano, 2002: 1066).

An accumulation of research has established a number of variables that customers may, or may not base expectations upon. Helson (1959 in Oliver, 1980 p461) suggest 1: the product itself including prior experience, brand connotations and symbolic elements, 2: the context including the content of communications from sales people and social referents and 3: individual characteristics including persuasability and perceptual distortion. Okada and Hoch (2004) found from their work that significant variables in satisfaction of dining out were food quality, dining atmosphere and seating order fairness. Olson and Dovers (1976) work considers that expectations can be created through advertising, word-of-mouth, observations, prior use and written information.

However, over two decades on from work completed by authors, such as, Winer (1987) there is still no conclusive research that determines exactly how people form expectations and how this then impacts on issues, such as, satisfaction, or purchase decision and so on. Although expectation work can be linked with many fields of research, in itself it has been established as fitting into the field of customer behaviour (Oliver and Winer 1987).

If the expectation is the input, then there has to be an outcome and with expectation this is seen by many (Arora and Singer, 2006; Oliver, 1980) as 'disconfirmation' and much work has been carried out looking at satisfaction as a driver of business delivery success. Expectation not only starts the process of decisions and various outcomes but is actually intertwined through the 'assimilation' effect (Pieters, Koelemeijer and Roest, 1994). The experience that the expectation was about will impact upon how the expectation was remembered and the expectation will impact upon how the experience is judged (Pieters, Koelemeijer and Roest, 1994). Another concept to expectations, as Olson and Dover (1976) suggest, is that expectations can be formed sometime before the actual experience takes place. There is a cognitive process underlying the attitude formation and attitude change due to the disconfirmation process, as shows through performance specific expectation (Oliver, 1980).

Expectations are thought to create a frame of reference about which a comparative judgement is made. Outcomes judged to be poorer than expected have a negative disconfirmation and are rated below the original reference point and better than expected outcomes are rated more highly and are referred to as a positive disconfirmation. The outcome is the degree to which a product exceeds, meets, or falls short of expectations – positive, zero, or negative disconfirmation. Satisfaction is then an additive of the expectation level and the resulting disconfirmation (Oliver and Burke, 1999; Oliver and Bearden, 1980). In Pieters, Koelmeijer and Roest's work (1995) it is suggested that an expectation can impact upon an experience, and higher expectations lead to better experiences and lower expectations lead to lesser experiences. Cardozo's study (1965) showed that customer satisfaction was influenced by how much effort was required to achieve the product and additionally what the expectations were concerning the product. The higher the level of effort inputted, the higher the level of satisfaction

achieved, with the additional effect of customer satisfaction being lower if expectations were not met than if expectations were met.

As previously discussed, much work has been undertaken to try to establish a definitive list of factors that customers base their expectations on and which, therefore, could provide the basis for on-going research. Dube and Cantins (2000) work looks at the reason for returning to a restaurant, some of the factors considered included aspects, such as food quality, menu variety, restaurant environment, waiting time. All of these variables are significant but another varying factor is the effect caused by the reason for the visit, for example, business, or leisure.

Tse and Wilton (2001) propose that both male and female customers consider price to be more important than service when choosing a restaurant and the more educated the customer the more importance is attached to price. Brumback (1998, in Soriano, 2002) highlighted how customers need a reason to return to a restaurant and quality of food and fresh ingredients prove to be the highest ranking reasons for this. In Soriano's 2002 study 3,872 customers who participated in the Spanish study were questioned about the following aspects: 'Quality' – menu variety, innovative food, presentation of food and fresh ingredients and food consistency. 'Service' – courtesy of employees, waiting-time before being seated, waiting time before food arriving, waiting time before paying the bill. 'Cost/value of the meal' – food was competitively priced, wine was competitively priced. 'Place' – appearance, ambience, or atmosphere of the restaurant, appliance repair, bathroom, phone service and parking. It can be seen that different researchers' believe that there are different collections of customer expectations and some are more extensive than others.

Koo Frederick and Young (1999, in Cullen, 2004) suggested that from their Hong Kong based focus group work, customer's buy bundles of attributes that simultaneously combined represent a certain level of service quality expected that is related to the price being paid. However, Johns and Howards (1998) work looked at the separate measurement of expectations and perception of service attributes. Their study revealed that from the 100 persons involved in the study, expectations and performance perceptions were based on a similar list of variables – food, price and value. Cullen's (2004) research took a different direction but confirmed that when selecting a restaurant customers consider 2 factors - the strength of belief towards the restaurant and their evaluation of these beliefs based on their knowledge of the restaurant. Prisbell and Andersen (1980) identified that people who hold similar values, beliefs and education are more like to have homophily (non-negative ties with people who are similar in a socially significant way) and interaction and as Autun et al (2010) highlights with homophily comes an easiness for people with regard to aspects, such as, communication, which in turn, could influence judgements on intangible factors like the atmosphere and feelings of comfort.

During the time period of 1951-1960 Katona looked at expectation theory in relation to budget and the restraints that this could have on consumption (in Oliver and Winer, 1987). This remains the main body of work completed where money has been factored into expectation creation and although work has been carried out and commented upon in the area of economics (see Wallis, 1980 and Muth, 1961) it has not always been seen as reliable, or applicable (Oliver and Winer, 1987). A topic closely linked to cost, is value and according to Fredericks and Salter (1995) value can be seen as being price, product, quality, innovation, service and company image. Rubel 1995 in (Arora and

Singer, 2006) also adds that value has a relationship with the worth of the value that competitors will be offering.

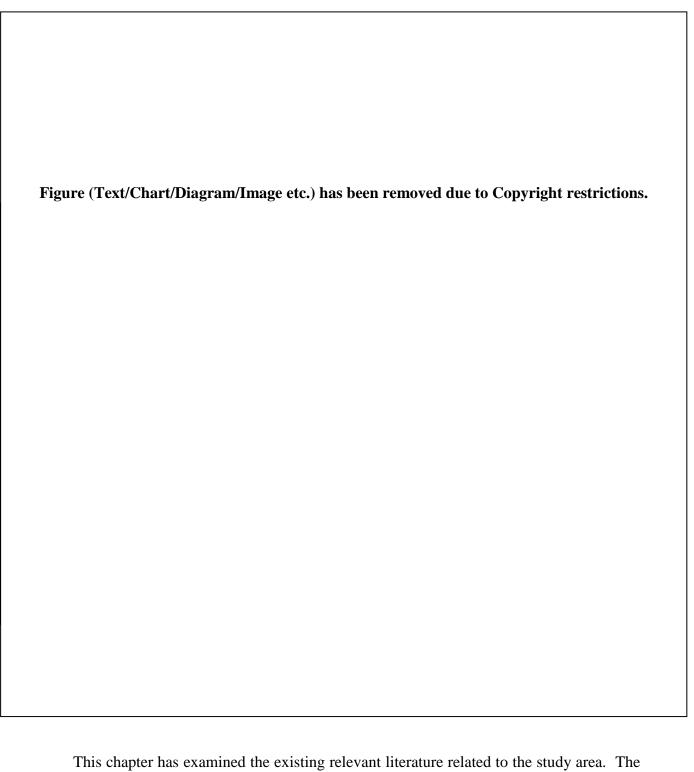
As well as price and affordability, Autun et al, (2010) highlight that a considerable amount of research has ignored the social aspects of dining out and Raajpoot's work (2002) shows that much of the well know research such as SERVQUAL (Parasuraman, 1985) and DINESERV (Stevens, Knutson and Patton, 1995) have omitted tangible factors, such as, ambience. The work of Autun et al (2010) came about due to their preresearch measurement scales that have been used to understand customers' requirements. However, as Autun et al explained ... "these approaches have not been exactly successful in that they did not take into consideration the full complement of restaurant customer concerns (i.e., social and health issues)" (2010: 375). The DinEx scale created by Autun et al (2010) includes the variable groups: Social Factors, Atmosphere Factors, Service Factors, Health Factors and Smoking Factors. The authors claim that this scale is efficient and comprehensive and, due to only 20 factors needing to be commented upon, it is very usable and should be well received by foodservice settings. Although this scale is the most up-to-date and considers previous, well known studies, what is immediately obvious about the DinEx scale is how it is not fully applicable to the UK dining out market, as from July 2006 (BBC, 2006) smoking was banned in public spaces in the UK, such as, restaurants and smoking is a featured category on the DinEx scale.

# 2.8 Literature Review Conclusions and Rationale for Study

An overview can be taken of the existing research into dining out and divided between the broad categories of: customers; restaurants, and expectations. However, within all fields of research into restaurant experiences what can be identified from the literature is that there is very little which is conclusive or uncontested.

The meal element is a critical part of a restaurant visit and uniquely incurs a thought process to set expectations prior to experiencing the food and environment. Measurement of the meal against predetermined factors is a crucial aspect of the restaurant experience and can determine if the restaurant visit is to be viewed positively, or negatively. Although there are many theories regarding what factors form dining out expectations, the existing body of work is not conclusive and research regarding the impact of cost is limited. As Robledo (2001) discusses, from an industry perspective it is important for customer expectations to be understood, as without a comprehension of customer expectations businesses will never be able to understand why they are not matching their customers' requirements.

The following table (Table 2-1) summaries the accumulation of information from the previous sections to demonstrate research insights/areas that have formerly been commented upon. By recognising established research, whether it is comprehensive, or inconclusive, and merging with the research gaps identified from Chapter 1, the aim is to underpin, create consistency and influence the developing research study.



This chapter has examined the existing relevant literature related to the study area. The review has indicated that the focus on hospitality customer expectations in the past has mainly been reflected within the area of satisfaction research. Chapter 2 also examined further topics connected to the defined study area, with the intention of disseminating the related research, to identify the influences and aspects connected with the proposed field of enquiry. The outcome has been the generation of the Key Themes Table (Table

and objectives that are presented in Chapter one.	
Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions	S.

2-1) which will underpin the research direction by being a consideration for the aims

Chapter one and Table 2-2 illustrate the aims and objectives that have been developed as a result of analysis and understanding of previous relevant context studies. The development of the aims and objectives will direct this study's research to explore both restaurant customer expectations and the impacts of socio-economic factors affecting these customers. Furthermore, the following chapter, Research Design and Methodology, considerers and defines the research issues and processes most appropriate to this investigation.

# 3 Research Design and Methodology

This chapter sets out the considerations taken in order to decide upon the most appropriate research methodology for the study. According to Denscombe (2008) good research is not based on established rules but instead it is for the researcher to make strategic decisions about the research options and strategies to follow. There are four stages applicable to this research which this chapter will identify: research philosophy, rationale for the design of the research, data collection and methods for analysis of the empirical data generated, together with the considerations behind each aspect.

# 3.1 The Research Philosophy

Neuman (2006: 80) highlighted the importance of understanding the different methodological approaches by the explanation that classical theorists developed the argument that through "rigorous, systematic observation of the social world, combined with careful, logical thinking, could provide a new and valuable type of knowledge about human relations". This combination of behaviours meant that over time studying human behaviour has been accepted as a science. There are nevertheless different outlooks on how the science is actually approached and conducted, mainly due to the fact that researchers cannot agree on the differences posed by studying humans. In the 1960s a re-evaluation of the social sciences took place and three new approaches emerged — 'post positivism', 'critical theory', and 'constructivism' and although research can combine elements from each, separately the approaches highlight the differences in outlooks about social science research (Guba, 1990).

## 3.1.1 The Paradigm<sup>4</sup>

Within social science three approaches, or philosophies exist: *positivist, interpretive and critical*. These approaches are often referred to as 'paradigms' an idea made famous by Thomas Khun (1970, in Neuman, 2006). Neuman (2006) describes a paradigm as a system of thinking that takes into account basic assumptions, important questions and puzzles to be answered, the research techniques implemented and an example of what accurate scientific research should look like in order to answer ontological, epistemological and methodological questions (see Table 3-1). The paradigm of importance to this study is *positivist* due to the quantitative data generated and objective research conducted.

"Positivist social science is an organised method for combining deductive logic with precise empirical observations of individual behaviour in order to discover and confirm a set of probabilistic causal laws that can be used to predict general patterns of human activity"

*Neuman* (2006: 82)

i (2000. 02)

<sup>4</sup> 

<sup>&</sup>lt;sup>4</sup> The term 'paradigm' is a term popular within social science research due to the work of Kuhn who used the word to describe the progress of scientific practices in progress (Easterby-Smith, Thorpe and Lowe 2002: 29)

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

#### 3.1.2 Research Perspectives

What underlines research are the different possibilities, assumptions, values and For the different areas of ontology, epistemology and methodology different paradigms can be followed, each carrying strengths and weaknesses for the study which require awareness (Smith and Dainty, 1991). Choosing the right paradigm concept is important because as Hassard (1988, in Smith and Dainty, 1991) highlights different paradigm stances can impact upon the outcome of the research in practice. Paradigms can be combined in order to answer the research question and it is the research question that should lead all methodological decisions (Smith and Dainty, 1991). However, Hassard (1988, in Smith and Dainty, 1991) questions whether multiple research approaches can be combined by serious researchers due to the constraints of orthodoxy and furthermore that there are so many paradigm schemes that there is a danger of confusion and inconsistency (Smith and Dainty, 1991). Ultimately, despite the array of paradigms and combinations that can occur, the main criteria when choosing the right paradigm within the philosophical frameworks and in addition to the ontological and epistemological considerations is the suitability "for methods to investigate a problem, not for a problem to fit acceptable research methods" (Smith and Dainty, 1991: 5).

### 3.1.3 The Paradigms and Methodology for Behavioural Enquiry

This study's research question fundamentally considers the relationship for customers between cost in relation to expectations when dining out. Due to the lack of significant studies this research must start with a grounded theoretical approach which will provide generative information from extant and study texts (Charmaz, 2006).

Following the judgment of Smith and Dainty (1991) and fitting the research methodology around the question; the area of the study, the participants and environment of the study lends the research to being of an *epistemological* standpoint. Finally, the framework that best describes the research is a *positivist empirical* paradigm.

Comte<sup>5</sup> designed the science of positivism in the early 19<sup>th</sup> century believing that it was possible to observe social behaviour on a 'positive' basis as with other natural sciences accepted at the time (Cohen, Manion, Morrison and Morrison, 2007). Positivism was created to decipher, through observation and experiments, the sense experiences that generate knowledge and with only firmly established outcomes being accepted as evidence.

Empirical studies do not contradict with positivism as many of the viewpoints of the positivist paradigm were aligned with empirical traditions (Cohen *et al*, 2007). Five steps in the process of empirical science (Mouly, 1978 in Cohen *et al*, 2007: 10) are presented below:

Experience – the starting point of scientific endeavour at the most elementary level;

Classification – the formal systemisation of otherwise incomprehensible masses of data;

Quantification – a more sophisticated stage where precision of measurement allows more adequate analysis of phenomena by mathematical means

Discovery of relationships – the identification and classification of functional relationships among phenomena

Approximation of truth – science proceeds by gradual approximation to the truth.

107

<sup>&</sup>lt;sup>5</sup> Comte invented the science of society with the aim of this science being conducted on a 'positive' basis and viewed by biological laws and investigated empirically (Oldroyd, 1986 in Choen et al, 2003).

Within the positivist researcher activities, the researcher should remain independent from the situation making all data collected unbiased. Furthermore, data collected is numerical and tested through established reliable methods to ultimately reflect the situation as opposed to any researcher bias.

### **3.1.4** One Mode of Inquiry Rationale

As Eaterby-Smith, Thorpe and Lowe (2002) highlight, to not consider philosophical methods before embarking on research can affect the quality and the research design. Furthermore, through well-judged decisions about philosophical issues research designs will become apparent with regard to what methods of research to conduct, knowledge of the information style that will be generated and whether the answers will be able to resolve the research questions.

One of the most significant positivist researchers is Pugh. Pugh's 'classic' research work has been recognised since the 1960s and he described himself as an "unreconstructed positivist" (Pugh, 1983, in Easterby-Smith *et al*, 2002: 35). Pugh's key principles of his research strategies that make his work positivist are:

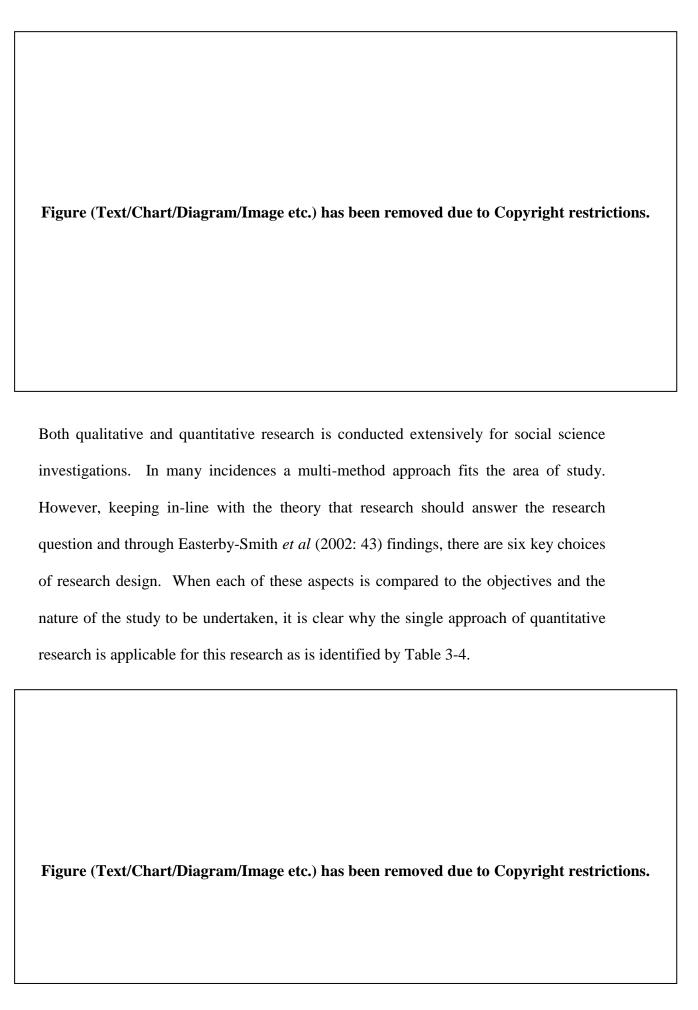
- Focussing on hard data rather than opinions
- Looking for regularities in the data obtained
- Producing propositions that can generalise from the specific example to the wider population
- Facts and values can clearly be separated

(Pugh, 1983, in Easterby-Smith *et al*, 2002: 35)

Therefore as Table 3-2, Table 3-3 and Table 3-4 highlight a quantitative approach is most appropriate and due to the outcomes that the aims and objectives have been set to

applicable.	
Figure (Text/Chart/Diagram/Image etc.) has been	n removed due to Copyright restrictions.

achieve in this study, the single approach, as opposed to, a mixed method is the most



### 3.1.5 Research Design

The research design was firmly established as a *quantitative methodology*. To establish the appropriate measures within the quantitative investigation, literature was used to inform the preliminary stages of the study and the design of the questionnaire. Focussing on the positivist empirical paradigm principles, sound data collection for the formulation of behaviour resulting from the combination of cost and expectations, the method deemed most appropriate was large scale data collection. The consequence being a reduced number of options for the questionnaire delivery method, resulting in the decision to email a significantly sized cohort (Figure 3-1).

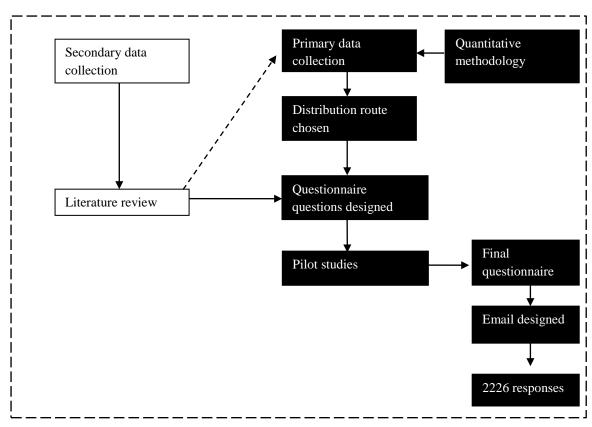


Figure 3-1: Data Collection Outline

### 3.2 Questionnaire Survey

As Swan and Combs (1976) discussed there is little research into the area of customer expectations with what does exist being largely based on small cohort samples. Therefore, the starting point for the research was focussed on customer expectations whilst ensuring significant response rates from participants.

By looking at existing research into customer expectations and methods of large data collection, it was decided to focus on the aspect of the cost of the meal with distribution and responses to the questionnaire being in the thousands. A descriptive survey was designed based on the aims and objectives and information included in the Introduction and Literature Review Chapters. A number of email routes existed but for reasons of salience, which will be discussed further on, the distribution to subscribers of a specific website was chosen. The distribution avenue of the *Delicious Magazine* e-subscribers' service was selected as compared to other websites as they were proven, through previous mailings, to be able to deliver the numbers of responses required from their subscribers.

#### 3.2.1 Distribution Method

Postal questionnaires, face-to-face questionnaires and telephone questionnaires would have meant that for each of these methods a significant number of people would need to be approached and being able to access specific contact details may have posed a problem (including data protection). Research has established that on-line surveys "demonstrated superiority over postal surveys in terms of response speed and cost efficiency" (Sheehan, 2001: 2; Mehta and Sivadas, 1995; Jones and Pitt, 1999; in Fricker, 2002). Additionally, if face-to face interviews were conducted there would potentially be a time issue and the majority of the respondents would be local to the

area, which could cause a distortion of the responses that would need to be factored into the analysis. Furthermore, the variable of the respondent's location could pose a problem as in the local area, restaurant choice is relatively limited and so this could impact on dining out habits and ultimately expectations. Another significant point with face-to-face questioning is the interaction factor, "the interviewer effect" with regard to how respondents' perceive the interviewer can affect responses (Denscombe, 2008: 184). It is recognised that all forms of questioning (even on-line questionnaires) will leave respondents with perceptions, which is why the use of the University logo was important to convey the purpose. It is nevertheless recognised that responses to on-line surveys are also recognised to be more candid than answers provided for mail, or phone surveys (Bachmann, Elfrink and Venzana, 1996).

### 3.2.2 Delicious Magazine Website

Delicious Magazine was chosen over other magazines and avenues of subscriber distribution for a number of reasons:

- Cost was a major consideration and whereas other costs came to approximately £4,000 for the creation and distribution processes (BBC Good Food Magazine)

  Delicious Magazine charged 8p plus VAT per email sent, resulting in a total cost of £3,171.33 (Appendix 2).
- The Delicious Magazine organisation designed the email which made the presentation fit with the magazines standard image which was important for consistency and to alleviate respondents concerns over unsolicited email.
- Timings for sending the email and questionnaire could be specified.

- The magazine was content to include the Plymouth University logo and information about research being undertaken at the University.
- There was good communication regarding the research and distribution design; the questionnaire was attached to the email via a link button and Delicious Magazine's marketing and technology departments understood how this would work.
- Other websites suggested 'pop ups' as the distribution method. This did not provide the uptake rate let alone response rate and in all cases cost more (GoodFood, 2008).
- The magazine (Delicious magazine) knew information regarding their subscribers which allowed for pre-questionnaire analysis of the cohort.
- A high possibility that all Delicious Magazine subscribers had an interest in food meant that they were likely to be a knowledgeable target group, as well as, having specific traits, which at a later stage during the analysis, could be accounted for.
- The style of Delicious Magazine is not of a recipe magazine, or associated with buying food, as per a supermarket linked food magazine. This meant the likelihood that the Delicious Magazine subscribers dined out, or had an interest in dining out, whereas as those buying supermarket magazines or recipe orientated magazines may be more likely to buy food to cook and eat in the home.

A survey of this design was appropriate for this research as it covered a number of aspects that would create desirable outcomes:

1] Delicious Magazine had a wide readership of 103,041 as of January to June 2008. The target market was well understood and defined as ABC1 women aged between 25

and 54. Additionally, it was known that the audience had a wide range of interests and obviously a keen awareness of food (Delicious Magazine, 2008).

- 2] Would generate variable data that could be analysed for relationship patterns.
- 3] Responses could be processed statistically.

A well-known weakness of internet surveys is that they are essentially providing a convenience sample. However, there are a number of positive factors that can be seen to balance any misgivings relating to the survey:

- 1] Delicious Magazine research has been able to conclude that their e-subscribers have an awareness of food (Delicious Magazine, 2008). Therefore, those who participated in the survey actually brought meaning to the study because they were likely to have understood the questions relating to dining out, as well as, being able to provide answers based on experience.
- 2] The survey structure provided large scale data gathering to ensure that outcomes could be generalised to be applicable across all dining out scenarios. The sample size offered scope for the research question to be covered adequately along with balance within the cohort responses. This enhances the representativeness of the sample and allows for confidence in making generalisations based upon the findings (Denscombe, 2007).
- 3] "Overall evidence suggests that the internet-user populations represent a vast and diverse section of the general population..." (Hewson, 2003: 26). Therefore, the survey only being available in an electronic format was not an obstruction due to the recognised widespread accessibility of internet technologies.

However, as with all surveys there has to be some form of caution exercised with regard to the extrapolation of data and as Meyer (2008) discusses the limitations of research should always be recognised and overgeneralisations avoided.

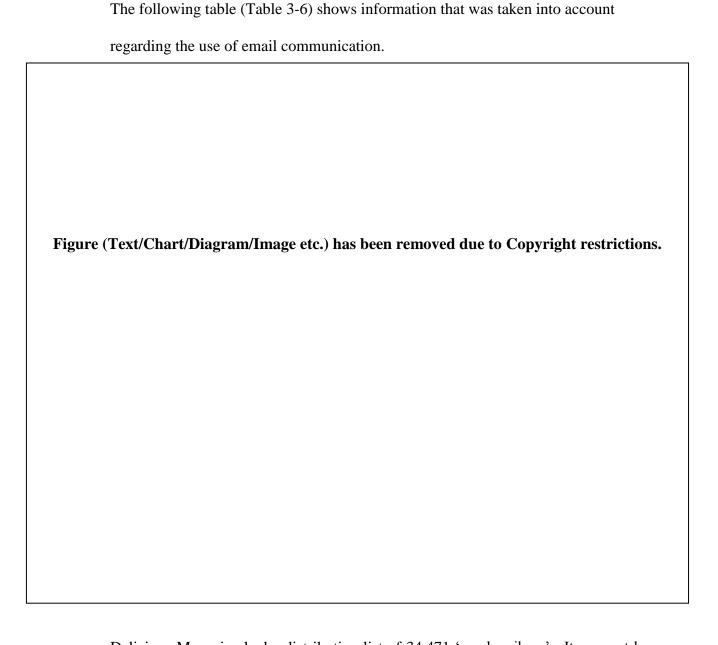
### 3.2.3 Sampling Strategy

As well as having an appropriate methodology in place, the sample of people who respond and provide the data also have an impact upon the quality of outcomes (Fowler, 1993). To ensure that quality responses were achieved the following four factors were considered:

- 1] The sample size required.
- 2] How the UK population would be represented by the sample.
- 3] Communication with the sample.
- 4] The plan for distribution.

Through analysis of existing research into customer expectations and similar on-line surveys it was possible to determine the numbers of participants that would be required to provide an appropriate response rate for this study.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.



Delicious Magazine had a distribution list of 34,471 'e-subscribers'. It was not known how many of these e-subscribers read the emails that the magazine site sent to them, however, it was considered to be high as there was the option to unsubscribe at any time. Research completed (Table 3-5) into on-line questionnaire response rates appear to be at a 5.9% click-through rate on average. Therefore, with the distribution group being at 34,471, approximately 2034 responses were predicted.

The list of Delicious Magazine's subscribers was unknown other than by quantity and all 34,471 were sent an email with the on-line survey accessible via a link in the email.

It was decided through analysis of previous emails sent to Delicious Magazine esubscribers that Thursday afternoon appeared to be the day that on average there was
the highest level of immediate responses. All subscribers were emailed at the same time
with the identical email. In purchasing access to the subscribers a number of other
factors were also agreed to by the magazine: that no other emails would be sent by the
magazine until at least a week after the email had been sent. Additionally, it was
checked that no other emails including survey links had been sent or were due to be sent
within a month either side of the email being sent. Other considerations were also made
such as seasonal timings – the following month was not recommended for the email to
be sent, due to Christmas approaching. The magazine often sends out newsletters and it
was ensured that one had not recently been sent and was not due to be sent following
the email.

The incentive of winning 1 of 10 books was offered to anyone who submitted the questionnaire. The book was Jamie's America by Jamie Oliver. Jamie Oliver's books have always been popular with those who are interested in food – Jamie Oliver's cookery books have made him one of Britain's biggest selling authors (Adams, 2009). Additionally, the plan was that a high profile name would also drive interest for recipients to read the initial email - many subscription emails are deleted before being read properly and so this was the main purpose of the incentive. Little research has been conducted into whether incentives improve response rates (Sheehan 2001), however, what has been identified is that the majority of email surveys provide no incentive other than having access to the results at a future date (Sheehan, 2001). With the increase of unsolicited mail and the threat of viruses, uptake of email surveys has reduced and therefore, it was planned that a combination of capturing interest (picture of Jamie Oliver), saliency for the topic, the recognised format of the Delicious Magazine

designed email and information linking Plymouth University with the survey would capture respondents' interest.

Seeking a large response rate does not necessarily concur with the theory that after a little over 380 responses the sample responses remain constant (Krejcie and Morgan, 1970: 608). If this were the case however, there would be less interest in sampling error and bodies, such as, The Office for National Statistics would be inclined to conduct far smaller studies than they currently do (see for example, Office for National Statistics, 2005c). Errors in studies often come about due to the gap between the responses from the study and the true value for the population that the study would be applicable to (Trochim, 2006). "The amount of variation can generally be reduced by increasing the size of the sample, and by improving the sample design" (Office for National Statistics, 2005c: 1). Increasing a samples size, which will lessen 'random error' and ensuring the study is free of errors, or influence will ensure that the study can be interpreted accurately and meaningfully for the wider group that the data are being applied to. Knowing how the sample may be biased allows for measurement against a wider group of people, this allows for the lessening of 'systematic error' (Office for National Statistics, 2005c: 1). In addition to trying to remove both random errors and systematic errors from the study, through statistical analysis, it is possible to look for any issues through measurements, such as, standard deviation.

If the survey did not have the aim of improving upon existing low cohort studies, then a lower response rate may fulfil the brief, however, a number of factors, as well as Aim 2, (Chapter 1) encouraged the requirement for a larger number of responses:

- 1] The number of variables to be generated by the responses
- 2] Ensuring the sample reflected many categories of the UK population, for example, age, gender, occupation and income.
- 3] Current information on the impact of expenditure on expectations unavailable to measure if a lower response rate would still provide an accurate reflection of opinions.

What was not overlooked at any stage in the design of the research and questionnaire, was trying to deliver high numbers from the survey and subsequently confusing quality with quantity (Fricker and Schonlau, 2002).

### 3.2.4 Sampling Frame and Response Encouragement

One of the main issues with any questionnaire distribution is the problems associated with trying to access a representative group of the population where everyone has an equal chance of being asked to partake in the study (Dillman and Bowker, 2001). In fact creating such a study is very unrealistic and so deciding who should be targeted needs to be considered carefully, especially as responses from a small number could prove to be conflicting with the responses of those who did not answer the questionnaire (Bean and Roszowski, 1995 in Sheehan, 2001). A sampling frame is required as the basis for sending out email questionnaires. However, a number of aspects were considered when looking to create an appropriate sampling frame. The main aspect was to ensure that the email recipients would show a saliency with the topic, therefore, this led to: a focus on groups interested in food, an up-to-date list being important (as permanency of contact is not as stable through emails as by post) (Denscombe, 2007) and finally knowing some information prior to conducting the research was important,

as this information would help to understand and examine the sampling bias during the data analysis stage.

Management of the questionnaire and a well-considered target group are some of the best ways to ensure interest and responses. Martin (1994) describes salience as the association of importance and or timeliness to a specific topic. Heberlein and Baumgartner (1978) and Bean and Rooszkowski (1995, in Sheehan, 2001) have suggested that salience has more influence on response rates than other factors that are often considered important, such as, questionnaire length. In order for there to be a salience with the questionnaire, a group of people had to be chosen who had an interest in the questionnaire topic. This is another reason that Delicious Magazine e-subscribers were chosen to be asked to complete the on-line questionnaire as, it was predicted, that they would attach some interest to the topic and in-turn this would help completion rates. Furthermore, added to the email was an extract of information highlighting that the research (the questionnaire) was for academic purposes. This again was in an attempt to provide the email recipients with a reason to respond. Ultimately, it was hoped that a recognised academic institution (Plymouth University) along with the proposed use of the data for academic purposes may improve uptake along with completion rates (Manfreda, Batageli and Vehovar, 2002 in Sheehan, 2001). Delicious Magazine also allowed for Plymouth University's logo to be displayed on both the email and questionnaire. Manfreda et al, (2002) identified how logos have been found to make the questionnaire more interesting and to motivate respondents into starting and completing the questions.

### 3.2.5 Questionnaire Design

The design of the questionnaire was completed using the questionnaire design programme  $Perseus^6$  and it was ensured that in the design of the questionnaire there was consistency, a theme (Plymouth University logo) and that it was a basic enough design so that the graphics did not slow up the loading of electronic pages - this has been known to increase rates of uncompleted surveys (Manfreda  $et\ al$ , 2002). Little research has been conducted regarding design format with regard to how the response is actually inputted (Sheehan, 2001), however, simplicity to aid speed and reduce complication and following a nearly all closed question design format, ready for statistical analysis, was the format reasoned as the most appropriate.

From an early stage it was identified that the method of analysis would be largely through the use of the Statistical Package for the Social Sciences (SPSS) programme. SPSS is among the most widely used computer programs for statistical analysis in social science. Subsequently, questions had to be designed to a specific format so that the data generated would be appropriate for analysis at a later stage.

The questions included within the final questionnaire (Appendix 1) were a combination of the data generated by the two pilot questionnaires (Appendix 3) as can be seen, for example, by questions 2, 5a, 5b and 5c. Questions, such as 1, 3 and 4 contained within the final questionnaire, were originally posed in the pilot questionnaires and were effective in generating data that was deemed to be beneficial to the study. Finally, there were standard socio-economic data gathering questions, such as age, and household

<sup>&</sup>lt;sup>6</sup> The Perseus programme develops and deploys sophisticated web-based surveys that are centrally managed, delivering results in real time. The programme manages the process from questionnaire design through to results presentation, enabling control over the survey process and ensuring a specific design.

income that appear in both the pilot and final questionnaires. Generating variables that respondents' believed to be their expectations was an important aspect to the research and it was in contrast to previous studies where diners' inputs and actual attributes have not been taken into consideration with regard to the design of questionnaires. For example, June and Smith (1987) used fifty professionals to undertake the ranking of attributes set against pre-existing hypothetical contexts, and in Lewis' (1981) study only five variables, that had been pre-determined by the author, were addressed in the research for consideration by the research participants'.

The concluding questionnaire design appears more simplistic than the pilot studies and questionnaires from existing research, such as Cullen's (2004), or Parasuraman et al (1988) studies. However, the alteration of the design to the final presentation and the exclusion of certain questions from the pilot studies are related to the format required for on-line completion and this is detailed further in section 3.2.6.

The final questionnaire (Appendix 1) comprised of three sections of questions which each focussed on a different aspect of variables. Section one (questions 1-6) was a mix of short open, Likert scale and closed questions. The open questions were to determine patterns of behaviour when dining out, such as, frequency of dining out, influences of choice and cost per person. The closed and Likert scale questions' content were sourced from the pilot study and existing research in order to provide an accurate list of choices and variables likely to be thought about when dining outside the home.

The next section (questions 7-11) focussed on patterns of behaviour, these questions were included to understand if there was a link between lifestyle patterns, choices and levels of expectations. The second section was again a mix of short open, closed and another Likert scale question. The Likert scale question was included as it provided a

way to include questions that would verify answers to other questions as well as including personality trait insight questions that were taken from The Big-Five Trait Typology (John and Srivastava, 1999) so that the results could be benchmarked against established findings into personality. Other information for the second section was sourced from a mix of existing questionnaires and included questions about behaviours, such as, hobbies, newspaper preference and television viewing habits.

Finally, the last section (questions 12-18) were questions regarding personal information such as gender, income, location and so on. As well as again providing information to link lifestyle with expectations, it was planned for this section to also offer insight into the cohort and allow for analysis of the respondents as a whole against the rest of the UK population.

The final sections accuracy was measured against existing questionnaires and where additional details were required, such as, examples of occupation, UK Government statistics and UK Government population reports (Office for National Statistics, 2009 and Office for National Statistics, 2006) were sourced. This was to ensure that all questions required to build up a picture of demographic, had been included.

Lastly, the respondents' were asked if they wished to take part in the Jamie Oliver book prize draw and whether they would consider taking part in any further studies. A space for an email address and a tick box accompanied these questions respectively.

The following table (Table 3-7) shows the considerations that stemmed from the literature review that needed to be taken into account when designing the questions for the research in order to cover each aspect. The additional column indicates the resulting

responding question/s in the questionnaire (Appendix 1). This demonstrates how the contents of the Introduction Chapter and the Literature Review Chapter have informed the aims and objectives and subsequently the questionnaire contents. The outcome of collecting the data will be to further the process of achieving the aims and objectives and gain additional understanding of dining out customers and their expectations.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright
restrictions.

## 3.2.6 Questionnaire Content

The overall style of the questions meant that all information could be entered into SPSS for analysis. Additionally, the design of the questionnaire included the most appropriate

style of questions for such research. John and Lee-Ross (1998) suggest that this type of questioning is the most common way to measure attitudes and expectations; closed questions are understood and answered quickly which means more questions can be included and the analysis of such questions is relatively straightforward, especially when a coding scheme is being used. Overall, as Oppenheim (1992) comments, closed questions have the advantage of being attitudinal, factual and reliable. Nevertheless, some open questions had to be posed throughout the questionnaire to find out specific details, although these were considered carefully at the design stage and space for inputting details was purposely limited in order to guide the respondents' length of answer.

The questionnaire was designed to be interactive and was of a multiple-page design (one question per page). It was important for the respondents not to see the questions as related entities, so as to provide genuine answers for each set of criteria. Additionally, when faced with one page of many questions respondents have been found to significantly increase the rate at which they pick and choose questions to answer (Manfreda *et al*, 2002). Although multiple-page questionnaires reduce correlations between answers (Reips, 2002, Couper *et al* 2000 in Manfreda 2002), as Dillman and Bowker (2001) indicated, when participants do not know how far they are from the end of the questionnaire the tendency can be to abandon the questionnaire part-way through. However, as certain design elements could be added to the questionnaire, it was decided to let the respondents know how far they were through the survey and to be able to go back as well as forwards. The decision was taken to only make one question compulsory (question 5), this meant that the questionnaire would not move to question 6 until 5 had been completed. Obviously, this meant that at any other point the

respondent could omit questions, but this was deemed better than the respondent closing

down the questionnaire without the submission of any information.

In total the questionnaire took approximately 7 minutes to answer and in comparison to

other recent Delicious Magazine on-line questionnaires, such as the 'Scrabble' and

'Marks and Spencer' questionnaires it was a relatively long questionnaire. However, 7

minutes or 18 questions is not extensive in contrast to data gathered from other research

into on-line questionnaires (Sheehan, 2001) where some questionnaires had up to 94

questions. Furthermore, researchers are not agreed on whether length of questionnaire

is a component for people not completing questionnaires (Bruvold and Comer, 1988;

Mason et al, 1961; Herberlien and Baumgartner, 1978; Steele, Schwending and

Kipatrick, 1992; Yammarino, Skinner and Childers, 1991). It is recognised that certain

groups can be survey length sensitive, such as, business workers (Jobber and Saunders,

1993 in Sheehan, 2001) however, salience is thought to be the key factor in achieving

higher response rates (Bean and Roszkowski, 1995).

**3.3** Ethical Considerations

"In the formulation, design, conduct and dissemination of social

research the research manager will face ethical choices or

dilemmas, which will need to be addressed and resolved".

Tarling (2006: 158)

As per all research conducted with support from Plymouth University, the University's

ethical guidelines have to be adhered to and an application for ethical approval of

research form submitted to the Faculty Research Ethical Approval Committee (FREAC)

(Plymouth, 2010).

127

The application form outlines six areas for consideration: *Informed consent, openness and honesty, right to withdraw, protection from harm, debriefing and confidentiality.*Of these measures four were applicable to the study and procedures put in place to ensure that the respondents were treated with ethical consideration throughout the process.

- 1] Informed consent: the email sent to Delicious Magazine subscribers fully detailed the purpose of the questionnaire. Additionally, the questionnaire was only accessible via a link button, this ensured it was the respondents' choice to connect to the questionnaire.
- 2] Openness and honesty: All details of the research, including information about Plymouth University and the purpose of the research were included in the email.
- 3] Right to withdraw: At any point a respondent could close down the questionnaire and no information would be exchanged. There were no penalties for only answering and submitting part of the questionnaire, for example, everyone who submitted had an equal chance of winning one of the book prizes, even if they had not fully completed the questionnaire.
- 4] Confidentiality: Data will not be directly shared with any external bodies other than Plymouth University. Additionally, all responses were anonymous unless the respondent chose to detail their email address. Although this was used as the way to inform respondents if they had won a book, completing this section was not compulsory.

Additional to respondent considerations, ethics of the study data must also be considered. According to Tarling (2006: 161) "researchers have an ethical duty to

promote the public understanding of their discipline and the status and standing of their profession". In line with this, the methodology implemented has been carefully considered in order to provide the best interpretation of the data to answer the research questions, with objectiveness and impartiality a key focus throughout.

## 3.4 Chapter Summary

Understanding the theoretical background to the research has been a fundamental issue in relation to the aims, and objectives and the overall progression of the study. Through analysis of both research theories and aspects raised by the literature review, the direction of the study could be confirmed. Both secondary and primary data were important as the secondary data facilitated the structure and content of the large-scale on-line questionnaire.

The data collection has provided responses which reflect information required to fulfil the research openings posed by the Introduction Chapter. The collated data are analysed and discussed in the following chapters. Chapters 5, 6 and 7 explain and analyse the findings and Chapter 8 subsequently discusses the outcomes in relation to the established secondary data and finally the practical typology and theoretical model are introduced.

## 4 Discussion of Quantitative Data

The purpose of this chapter is to analyse and discuss the information obtained from the on-line questionnaire survey. In total 34,471 questionnaires were electronically sent to Delicious Magazine 'e-subscribers' and 2,226 completed responses (6.5%) were returned. When the responses were completed they were automatically stored in an Excel spread sheet where they were collected in order of response. All responses were used except for six where no data was entered and obvious nonsensical data had been added for compulsory question 5. Other than these responses, all other responses were analysed with any missing data being managed through the inputting process in SPSS.

Before statistical analysis can begin it is necessary to have an understanding and overview of the replies. This Chapter therefore identifies the responses that emerged, amalgamating to form the basis of insight into the cohort and initial findings of the research question. Within sections 4.1 to 4.4 of this chapter the answers have been discussed in the context of the questionnaire. At the start of each section the question and answer options have been detailed to set the scene for the commentary.

# 4.1 Cohort Synopsis

#### 4.1.1 Gender



Data received from 2,220 questionnaires showed that a significantly higher proportion of females than males responded with 1847 (83%) being female and 373 (16.8%) male. Although there is a clear gender bias, this is very much in-line with the selected cohort that were approached to answer the questionnaire.

4.1.2	Age at is your age?			
Q. Wh	at is your age?			
	т.			

Ages of those who responded were between 18 and 84, a histogram from these data of ages from under 24-75 and over was developed (Figure 4-1).

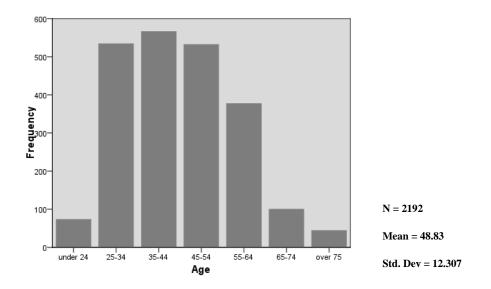


Figure 4-1: Age Distribution of Questionnaire Respondents.

The dominant age groups were in the age categories of 25 to 54 representing 73.3% of all respondents with the mean age being 49 years. A comparison can be seen with regard to the age ranges of those who responded to the questionnaire and the UK population age statistics (Barnes, 2012) in Table 4-1. The main groups that could be seen to be underrepresented by the study are those under 24 and 75 and over. Nevertheless, this is exactly the target market that Delicious Magazine expects its subscribers to be in.

Figure (Text/Chart/Diagram/	Image etc.) has been removed due to Copyright restrictions.

## 4.1.3 Household

Q. How many others (excluding yourself) are there living in your household?
Q. If there are others living in your household how many fall into the following age categories:
Under 18
19 - 40
Above 65

The data indicated that the age group 'under 18' are most likely to be living within a larger family set-up (Table 4-2).

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

## 4.1.4 Occupation

Q. 1	Which best describes the occupation of the main wage earner in your household?
0	Traditional occupation (e.g. laborer, cleaner, farm worker)
0	Processor or machine operative (e.g. manufacturing, assembly)
0	Sales or customer service (e.g. retail assistant, call centre)
0	Individual services (e.g. hairdresser, travel agent, nursery nurse)
0	Skilled trade (e.g. mechanic, carpenter, electrician, plumber)
0	Administrative or secretarial (e.g. office worker, civil service)
0	Semi-professional or technical (e.g. technicians, nursing)
0	Professional (e.g. teacher, lawyer, clergy)
0	Manager or senior official (e.g. company manager, officers in armed forces/police)
0	Retired or other (e.g. student, housewife)

A synopsis of the occupation categories that respondents aligned with is presented below (see also Table 4-4):

- The most frequently chosen occupation category was 'professional' and described by the examples of teacher, lawyer and so on. The total of this category made-up 24% of the responses.
- The next category was that of 'manager or senior official' (22.5%) such as, a company manager and officers in the forces.
- The next category with 15.9% was the category of choice for the retired, or

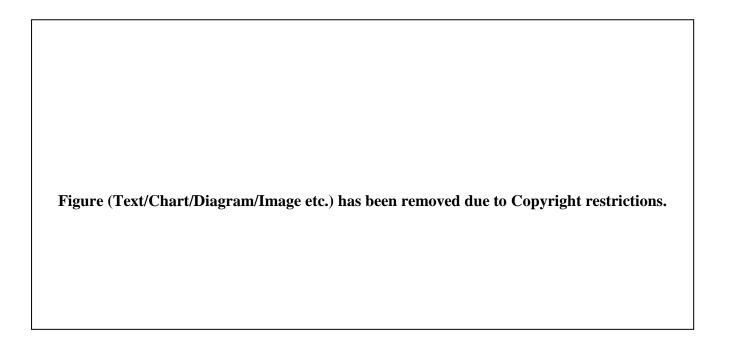
students and those with job anomalies that do not fit into other categories. It is possible to tally up this category up with ages – Table 4-3 shows that the ages of 55 and over are the most frequent in this category and that of all the occupations this category is most popular for these age groups.

- The people in the next highest job categories (12.5%) relate to administrative, or secretarial work, for example, a secretary, or someone in the civil service.
- The next two categories are semi-professional and skilled trade, so technicians, electricians etc. (8.8% and 8% respectively).
- Sales and customer service (3.3%), traditional work, such as, cleaning, or farm work (2.5%), individual services like hairdressing, or nursery work (1.5%) and finally processing work, for example, manufacturing, or assembly (0.9%) were the least chosen types of work to best describe the occupation of the main wage earner.

A summary table to show occupation by age category is presented below:

Age	Occupation	Traditional	Processor	Sales	Individual	Skilled	Admin	Semi- professional	Professional	Manager	Retired/other	Total
Under 24		1	1	3	1	4	17	6	17	10	13	73
25-34		13	4	20	10	37	92	62	181	92	23	534
35-44		15	7	26	12	51	63	58	129	184	21	566
45-54		19	4	11	6	58	59	45	127	151	52	532
55-64		4	4	12	4	26	44	20	67	56	140	377
65-74		2	1	0	1	2	4	1	9	1	79	100
Over 75		2	0	1	0	1	0	3	4	7	26	44
Total		56	21	73	34	179	279	195	534	501	354	

Table 4-3: Age and Occupation of Respondents



those at the opposite end of the occupation categories. This, however, is in-line with the expected demographics of Delicious Magazine e-subscribers. Within the study 16% of people who responded classed themselves as 'other' so this could be retired, an unusual occupation and so on. This is a reasonably reflective number as in the UK 18% of the population are retired (Barnes, 2012).

### 4.1.5 Household Income

Q. V	Which of the following best describes your annual household income?
0	Less than £12,999
0	£13,000-£24,999
0	£25,000-£34,999
0	£35,000-£45,999
0	£46,000-£56,999
0	£57,000-£67,999
0	£68,000-£78,999
0	£79,000-£90,999
0	Over £91,000

Within the survey there were questions that enquired about the respondent's occupation as well as household income. Clearly, household income is not just reflective of the respondent's salary. However, the purpose of understanding household income is because it will impact upon everyone in the household and knowing this information may provide evidence for everyday patterns and behaviours.

With regard to income, the most frequently chosen categories were £35,000 to £45,999 - the option chosen by 15.9% of respondents and £25,000-£34,000 chosen by 15.5% of respondents. 39.2% of those answering the questionnaire live in households with an income above £46, 000 these being £46,000-£56,999 (12.4%), £57,000-£67,999 (8.8%), £68,000 to 78,999 (6.3%), £79,000 to£90,999 (5.1%) and over £91,000 (6.6%). Below the most frequent percentages were £13,000-£24,999 (13.7%) and less than £12,999 (5.7%).

A histogram of household income generated by the questionnaire responses (in GBP) is presented below:

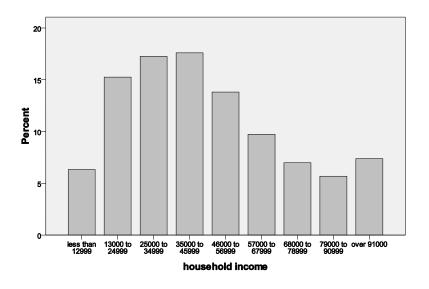


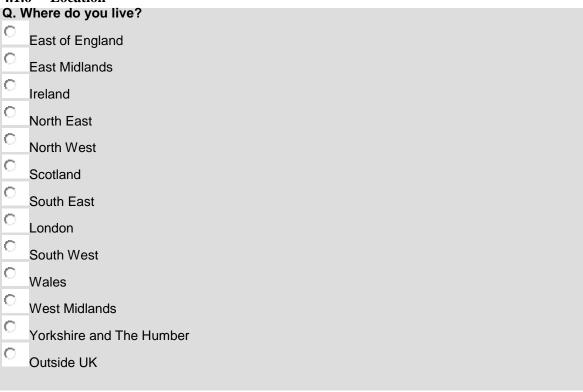
Table 4-5: Annual Household Income

Once again, comparing the data to that of the UK Government figures (Annual Survey of Hours and Earnings, 2009) it can be seen that the median salary for a UK worker is £23,472 per annum. However, 71% of the questionnaire respondents lived in a household where the income was above this amount. Only 10% of the UK population earn more than £46,608 per year, however, by comparison 39% of those who took part in the survey lived in a household where this amount was the near to *minimum* income. Finally, 10% of the UK population earn less than £13,008 per year, whereas, only 5% of those questioned for the survey fell into this income bracket.

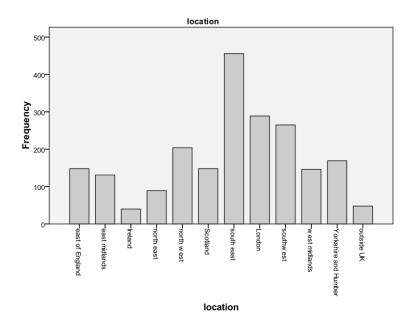
Looking at the 9 income categories, they can be split down by reasonably even percentage quartiles.

- The smallest group at 20.1% is those with a household income of £68,000 and over.
- Towards the other end of the income categories is the second smallest group (21.6%) who earn £24,999 or less.
- The next group (23.5%) have a household income between £46,000 and £67,999
- The household incomes that accounts for most responses (34.8%) is between £25,000 and £45,999.

### 4.1.6 Location



The questionnaire was a national survey and all regions as set out by the UK Government (Direct.gov, 2011) are represented by those who partook in the questionnaire as Table 4-6 indicates.



**Table 4-6: Location of Respondents** 

#### 4.1.7 Area

Q. How many of the home?	followir	ng food	establis	shments are within a 10 minute walk from your
Restaurants	0	0	0	0
Pubs	0	0	0	<u> </u>
Fast food outlets	0	0	0	<u> </u>

The data collected also indicates the type of area that the respondents live in, for example, urban, or suburban. The results show that the majority of people do not live within a 10 minute walk of any or many restaurants, 38% do not have any restaurants within this distance and 39.6% have 1-4 within a 10 minute walk. For there to be 5, or more restaurants within a 10 minute walk the respondents would need to live near a town: 11.3% are within 10 minutes' walk of 5-9 restaurants and 9.3% are within a 10 minute walk to over 10 restaurants.

16 people did not answer how many pubs were within a 10 minute walk, however, the majority of respondents (64.4%) do live within a 10 minute walk of 1-4 pubs. 15.4% live this distance to 5-9 pubs and 6.8% of respondents live within a 10 minute walk of over 10 pubs, it is highly probable that such a number of pubs would only exist within a town centre location. The remainder, 12.7% do not live within a 10 minute walk of any pubs.

Finally, 38.7% of respondents said that they did not live near to a fast food outlet but a similar number (39.7%) said that they were within a 10 minute walk of between 1 and 4. Again, due to the market required for fast food outlets, it is highly likely that 5, or more fast food outlets would only occur in a town setting. 12.4% who answered said that they lived within a 10 minute walk of 5-9 and 7.1% said that they lived within this distance of more than 10 fast food outlets.

This question helps to understand location and accessibility as both of which may have an impact upon dining out behaviours. To have over 10 of any of the categories would mean that it would be very likely that the respondent lived within a town, or city location. Subsequently, it could be assumed that those who do not live within a 10 minute walk of a pub are likely to live in more of a rural location.

- The largest group of respondents (39.6%) live within a 10 minute walk of 1-4 restaurants. However, this is closely followed at 38% of respondents having no restaurants within this distance.
- A significant number of respondents (64.4%) live a 10 minute walk away from 1 to 4 pubs.
- There is a similar picture for fast food as there was with restaurants with 39.7% of respondents living a 10 minute walk to 1-4 fast-food outlets but again very close to this figure were the number of people (38.7%) who did not live with a 10 minute walk of any such outlets.

## **4.2** Dining Out Behaviours

### 4.2.1 Frequency of Eating out

Q. Approximately how many times in the last 6 months have you eaten at each of the following:
Pub restaurant
Café
Full service restaurant
Not eaten at any of the above

Although some respondents did not eat at all of the food outlet options, 2173 responses did include at least 1 dining out visit to a food outlet type, with the mean number of visits being at around 7 times and standard deviation being of an acceptable level (Table 4-7) this meant that the respondents were able to recount a dining out experience within the last 6 months upon which to base their replies.

Establishment	N	Minimum	Maximum	Mean	Std. Deviation
Pub 6 months	2173	0	140	7.08	8.486
Cafe 6 months	2173	0	180	6.84	10.677
Restaurant 6 months	2173	0	60	6.60	8.109

Table 4-7: Number of Visits to Pubs, Cafes and Restaurants

Out of a total of 2220 respondents only 2.1% or 47 persons had not eaten at a pub restaurant, a café, or a full service restaurant in the past 6 months (Figure 7). As it is highly unlikely that this group of people had never eaten out their responses to the rest of the questionnaire were still treated as valid.

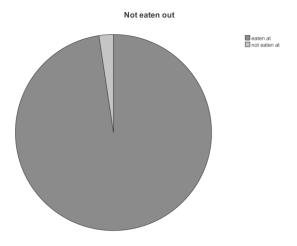


Figure 4-2: Number of Respondents Not Eaten Out Within Last 6 Months

	4.2.2 Cost of Dining Out
	Q. What cost per person do you think represents
	An inexpensive meal £
	A mid-priced meal £
	An <b>expensive</b> meal £
	Cost of dining out responses ranged from £2 to £50 for an inexpensive meal, £3-£80 for
	a mid-priced meal and £7 to £250 for an expensive meal. The standard deviation for an
	inexpensive meal was 5.13, 10 for a mid-priced meal and 23 for an expensive meal.
	The averages from all of the responses appear to be very realistic for an outside of the
	home dining experience (Table 4-8):
Figur	e (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.
Figur	e (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.
Figur	e (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.
Figur	e (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.
Figur	4.2.3 Dining Away from Home
Figur	
Figur	4.2.3 Dining Away from Home Q. Which FOUR aspects from the following list are most important to you when eating
Figur	4.2.3 Dining Away from Home Q. Which FOUR aspects from the following list are most important to you when eating
Figur	4.2.3 Dining Away from Home Q. Which FOUR aspects from the following list are most important to you when eating away from the home?
Figur	4.2.3 Dining Away from Home Q. Which FOUR aspects from the following list are most important to you when eating away from the home?  Experience nice tableware Meal fits into budget Meal fits into time limitations
Figur	4.2.3 Dining Away from Home Q. Which FOUR aspects from the following list are most important to you when eating away from the home?  Experience nice tableware Meal fits into budget Meal fits into time limitations Reason linked with convenience
Figur	4.2.3 Dining Away from Home Q. Which FOUR aspects from the following list are most important to you when eating away from the home?  Experience nice tableware  Meal fits into budget  Meal fits into time limitations
Figur	4.2.3 Dining Away from Home Q. Which FOUR aspects from the following list are most important to you when eating away from the home?  Experience nice tableware Meal fits into budget Meal fits into time limitations Reason linked with convenience
Figur	4.2.3 Dining Away from Home Q. Which FOUR aspects from the following list are most important to you when eating away from the home?  Experience nice tableware Meal fits into budget Meal fits into time limitations Reason linked with convenience To celebrate a special occasion

To have a meal similar to home cooked food

To provide positive memories

Other important factors not listed

The social aspect

Dining out establishments can use tableware to convey an image and to highlight the food through presentation, however, it would appear that very few customers view this as an important factor. Potentially, this may be a feature that is part of the overall dining experience as opposed to a separate element. Additionally, if a dining out establishment has tableware that is practical or basic, then customers logically would not see as a special feature to consider.

The question of budget produced some surprising results. 47% said that budget was not an important factor when dining away from the home, with the other 53% thinking it was. This near half split could be possibly due to a number of reasons, firstly, if people are dining away from the home out of necessity, such as, lunch breaks and so on then this may be an accepted level of expenditure. Additionally, if people are dining out for pleasure then perhaps they do not worry about the cost as they will visit establishments that fit within their budget. Nevertheless, with the current economic climate nearly half of the respondents saying that they are not concerned with budget was unpredicted.

Only 11.5% of respondents said that time was a consideration when eating away from the home. Maybe time is important if other family members, like children, are being considered - the family is an aspect that will be looked at in more depth further on in this study. Overall, the majority of people 88.5% when dining out, do not consider time limitations to be an important factor.

Although, cooking skills of the UK population are declining (Fort, 2003) it would *not* appear that convenience is a considerable factor for eating out (86.4%). This could be due to either those who responded to the survey having an interest in food and therefore, not having an issue with cooking at home, or being able to source other fast options of

cooking within the home, such as, ready meals. Additionally, eating out could be seen as an 'occasion' rather than a replacement for cooking at home. However, dining out is not just reserved for special occasions, with half of the respondents answering that a special occasion is not necessary important to them when eating out.

The restaurant environment is considered to be related to aspects, such as, intangible factors of ambience and so on and over recent years has risen in level of importance for restaurateurs (Autun *et al*, 2010; Finkelstein, 1989). However, the environment is not a particularly big issue for respondents with only 32% saying that it was an important consideration. Potentially, this is due to a number of factors; firstly, if respondents were dining out due to necessity, for example, a break from shopping, or a lunch break, then the environment might not be a consideration. Or, perhaps the majority think if they did not like the look or feel of a dining out establishment they would not eat there and so the environment would not be an issue. Furthermore, the environment can often be judged, or is known, prior to dining at an establishment, therefore, if the environment did not suit, perhaps the restaurant would not be chosen in the first place.

43% of respondents' think trying new food is important when dining out. However, that leaves 57% who do not. Perhaps the split shows that some people are adventurous and seek new experiences, in this case, foods, whereas others prefer what they are familiar with.

66% of respondents were looking for a different meal to that which they would have at home. However, 34% do not think that a different meal from those consumed in the home is important. Possibly this is due to the fact that some meals could be similar to what is often had in the home and so respondents consider other factors to be more

important? Or, maybe the respondents enjoy food and like cooking and eating at home? However, whether food is the same, or different to that cooked at home, the social factor of dining out is important to 66.4% of respondents.

Despite 34% of respondents thinking that having a meal similar to that cooked in the home is not an issue, it would appear that only 3.5% *seek* the experience of having a meal the same as their usual home cooked food. Therefore, having a meal different to home cooked food is actually the most important factor when dining away from the home.

Dining out is now considered a very 'regular' activity which could be why only 26.8% think that the reason of creating a positive memory is important. It could also be that a positive memory is tied into special occasions and as these would not be that frequent, this could account for fewer people thinking this reason was important.

Although the majority of responses to 'other reasons that are important when eating outside the home' could have fitted into the listed categories, many respondents still listed them under the 'other' category. The main issues listed that were different were to have a break from cooking, children being able to experience eating out, good food and wine and service of staff.

Looking at the question overall, the four most important aspects when eating away from the home fall into three clear groups.

• Firstly, the social aspect (66.4%), different to home cooked food (66%), experiencing new food (57.1%), celebrating a special occasion (54.5%) and budget (53%).

- The next group includes the experience of a different environment (32.9%) and to provide positive memories (26.85).
- The final group of responses is obviously considered the least important factors and the response rates clearly show this reasons linked with convenience (13.6%), time limitations (11.5%), other (8.4%), tableware (6.4%) and to have a meal similar to home cooked food (3.5%).

There are 5 clear important factors (see Table 4-9) to customers when eating away from the home:

- The social aspect (66.4%)
- A meal different to that of home cooked food (66%)
- Experiencing new food (57.1%)
- Celebrating a special occasion (54.5%)
- Budget (53%)

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

#### **4.2.4** First Time Restaurant Visits

Q. What factors encourage you to visit a restaurant for the first time?							
J.	<u> </u>						

When questionnaire respondents were asked to disclose what makes them visit a restaurant for the first time, less than 1% chose not to answer the question. After analysis of the qualitative responses, five clear categories are evidently in customers' minds when choosing a restaurant for the first time:

- 1] Reviews/word of mouth/reputation
- 2] Look/ambience
- 3] Offers/promotions
- 4] The menu
- 5] Something new/different/originality

### 4.3 Customer Expectations when Dining Out

With regard to what equates to *inexpensive*, *mid-priced* and *expensive* dining, the costs are being linked to the categories of expected amounts, as determined by the respondents, that can be seen in Table 4-8 in section 4.2.2. Within section 4.3 the questions asked have options that are on a scale. For ease of interpretation the following information regarding the responses will be used in the discussion:

<b>Question Response Number</b>	Referred to in the discussion as
1	Not Important
2	Less Important
3	Neutral
4	Important
5	Extremely Important

**Table 4-10: Response Interpretation Information** 

#### 4.3.1 Inexpensive Dining

Q. How do your expectations alter regarding the following aspects when eating at an inexpensive restaurant?									
Not Important Extremely Important									
	1	2	3	4	5				
Good service by well-trained/experienced staff	0	0	0	0	0				
Good atmosphere and décor	0	0	0	0	0				
Cost	0	0	0	0	0				
Good quality food	0	0	0	0	0				
Provision made for children, friends/groups	0	0	0	0	0				
The location of the restaurant is convenient	0	0	0	0	0				
Cleanliness of restaurant and staff	0	0	0	0	0				
Menu provides a good range of choices	0	0	0	0	0				
Good quality beverages	0	0	0	0	0				
You are recognised or made to feel special/valued	0	0	0	0	0				
Reliability/consistency of good food and experience	0	0	0	0	0				
Food not standardised	0	0	0	0	0				
The restaurant has a good reputation	0	0	0	0	0				

Looking at customer expectations relating to dining out, in what the respondent considered to be an inexpensive establishment, the **service** was rated most highly (34.7%) at the neutral point (3) and then 27% said it was important (4) and 20.1% considered the service to be extremely important on their list of expectations. The remaining 16.6% who answered the question thought service was at an expectation level of less important, or not important.

The most frequent level of **expected atmosphere** was neutral (3) by a reasonable amount (41.7%) with the next figure being 25.2% for it being an important consideration but, unlike with service, the next most popular option was a lower expectation of less important at 15.5%. The next category (13.6%) considered atmosphere to be extremely important and then finally 2.4% of those asked did not think atmosphere was important at all.

When eating at an inexpensive restaurant it appears **cost** is extremely important and the responses to this question (with only 1.9% not answering) rated cost as an extremely important expectation at 28.9% and then worked backwards from extremely important to not important: 26.5%, 25%, 13.6% and 4.3% respectively.

Despite the question relating to inexpensive restaurants, **food quality** is still very important to customers. Only 9.3% rated food quality as less important, or unimportant and the rest of respondents said food quality was neutral (34.7%), important (30.9%), or extremely important (23%).

The level of customer concern for restaurants making provision for **children and groups** at inexpensive restaurants was most popular at the neutral level (35.2%) and the

next highest category above neutral at (important) 22.5%. However, after this the next most popular opinion drops to less important at 16.8% and then there is a reasonable even split between the two remaining categories with 12.1% of respondents rating children and groups as extremely important and 11.2% rating their expectation as not important.

Where the **location** of the restaurant is does not appear to be an issue as the most frequent response for the location of an inexpensive restaurant was neutral (36.8%). This was closely followed by it being important at 30.7% and extremely important was next at 16.8%. Potentially, this could be convenience related as only 14% said location was not important to them.

**Cleanliness** is an important issue even when customers consider dining at an inexpensive restaurant and the response rates to this question run in order from extremely important to not important (45.3%, 29.1%, 19.5%, 3.6% and 0.8% respectively). This is only one of two questions in the section, where the most important category is the most popular, the other being cost.

The **menu** providing a good range of choices at an inexpensive restaurant is considered to be neutral by the majority of respondents (37.7%). However, when combined more than the neutral percentage think that menu choice is more crucial (44.9%) with 28.7% choosing the important category and 16.2% opting for the extremely important category. Only 15.5% think that menu choice is less important.

Although, **beverages** may not always be considered central next to food, in fact this expectation received a neutral response as the most highly chosen option (41%). This is

higher than the neutral category for food itself, although there was a higher percentage overall for rating of food than for beverages. Nevertheless, 80.6% still consider good quality beverages as neutral, important, or extremely important (41%, 26.8% and 12.8% respectively).

Being **recognised** and **made to feel special** does not appear to be overly important, as although the highest category was neutral at 33.8%, there is a near equal percentage either side of this, so 22.4% rate this aspect as important, or extremely important but 21.7% think it is less important than neutral. With 7.1% considering the aspect to be not important and 13.1% rating being recognised as extremely important there almost seems to be no trend to what respondents think.

The **reliability/consistency** of good food and experience does rate highly with respondents. The most popular categories are those above neutral (34.3%) with 86.2% in total, thinking that this aspect is neutral, or above. Only 11.6% think that reliability is lower than neutral.

Although many inexpensive restaurants might be considered to be chains, or high street style restaurants with a consistent format, it would appear that even in this category of restaurants, the food **not being standardised** is a consideration for customers with 73.3% thinking that this aspect is neutral, or higher (40.8%, 22.1% and 11.9% respectively). 18.6% thought food being standardised was less important than neutral and only 6% considered it as not important.

Only 9.3% of respondents' rate **reputation** being less than neutral as acceptable, this is one of the lowest amounts for the two categories below neutral for all of the questions

in the section. 34.3% of respondents' think reputation is neutral but this is closely followed at 32.6% for important and 22% for extremely important. From this it can be seen that reputation is certainly a consideration for customers.

Taking an overview of expectations of the inexpensive dining out category; firstly, there were only three sections to question 5a that were rated either extremely important, or important (as seen in Table 4-11). These are: *cost* (extremely important), *cleanliness of staff and the restaurant* (extremely important) and *reliability/consistency* of good food and experience (important). However, looking at all of the sections together and seeing which had the highest score brings about another set of key aspects for customers and these are: 1] cleanliness of restaurant and staff (45.3%), 2] good atmosphere and décor (41.7%), 3] good quality beverages (41%) and 4] food not being standardised (39.9%).

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

Overall the following are the most important expectations that need to be met by an inexpensive restaurant when a customer is dining out:

- Cleanliness of restaurant and staff
- Cost
- Good atmosphere and décor
- Good quality beverages
- Food not being standardised

#### 4.3.2 Mid-priced Dining

Q. How do your expectations alter regarding the following aspects when eating at a mid-priced restaurant?								
Not important Extremely important								
	1	2	3	4	5			
Good service by well-trained/experienced staff	0	0	0	0	0			
Good atmosphere and décor	0	0	0	0	0			
Cost	0	0	0	0	0			
Good quality food	0	0	0	0	0			
Provision made for children, friends/groups	0	0	0	0	0			
The location of the restaurant is convenient	0	0	0	0	0			
Cleanliness of restaurant and staff	0	0	0	0	0			
Menu provides a good range of choices	0	0	0	0	0			
Good quality beverages	0	0	0	0	0			
You are recognised or made to feel special/valued	0	0	0	0	0			
Reliability/consistency of good food and experience	0	0	0	0	0			
Food not standardised	0	0	0	0	0			
The restaurant has a good reputation	0	0	0	0	0			

Within mid-priced restaurants **service** was rated as important (53.6%), or extremely important (27.3%) by the majority of respondents. Only 17.5% of people thought that their expectations of service within a mid-priced restaurant was neutral, or below (16.3%, 1% and 0.2% respectively).

Although the **atmosphere** rating most popular with respondents was important (57.3%) there were still 22.2% who thought that atmosphere was only neutral. 17.3% did consider atmosphere to be extremely important but the total for neutral and below is 23.7%. So there is a majority of responses falling under the most chosen option of important, than above.

In a mid-priced restaurant the **cost** of the meal is considered important (45.3%). Perhaps because there is a large section of the restaurant market that would fall into a mid-priced category of restaurants and so when deciding where to dine customers consider the price of the meal. 32.3% are neutral as to what their expectations are concerning cost, although only 2.6% think of it as less important, or not important at all. This then leaves 18% who think the cost of dining out in a mid-priced restaurant is extremely important.

The provision being made for **children** and **friends/groups** in a mid-priced restaurant has not changed from the response for that of inexpensive restaurants. The expectation is neutral for such provision within a mid-priced restaurant – the same as it was for an inexpensive restaurant (33.6% and 35.2% respectively). Slightly more think that it is important than did previously (29.4% compared with 22.5%) but for the extremely important, less important and not important categories the expectation outcomes are very similar 11.9%, 13.5% and 9.2% respectively for a mid-priced restaurant as compared to 12.1%, 16.8% and 11.2% for an inexpensive restaurant. It can be identified that the neutral is the most popular response to this question. However, it also highlights consistency/consideration in the responses as children and/or friends/groups are unlikely to change in importance to a respondent and so, although other aspects might change, it is encouraging to see consistency for this variable.

As per the previous statement on expectation for customers considering mid-priced restaurants, the responses have changed very little too for a convenient **location** as compared to the responses for inexpensive restaurants. The neutral option is still the most agreed with, at 39.7% (compared to 36.8%), important is 32.1% with extremely important being 12.1% which is similar to the totals for these ratings for an inexpensive restaurant (47.5%). Only 14.2% think the convenience of the location is less important, or not important (14% previously). Once again, however, this shows consistency which indicates that the majority of people are answering genuinely, hence the similarity between the same variable but different priced restaurants.

Although **cleanliness** has more respondents indicate that their expectations are higher for the cleanliness of a mid-priced restaurant than an inexpensive restaurant the pattern is nevertheless still exactly the same. Cleanliness is rated as being extremely important by 50.5% and 37.2% consider it to be important then on a decreasing scale of 9.6%, 0.7% and 0.1% from neutral through to not important.

**Menu choice** has increased in both numbers and overall rating from the inexpensive restaurant expectations. Choice is perhaps an area that is slightly overlooked but it has over 79% of respondents agreeing that menu choice is either important (54.7%), or extremely important (24.6%). 17.1% think that their expectation is neutral and 1.6% of respondents are not particularly concerned as they have chosen the less important, or not important categories.

Either side of the important category for customer expectations of **beverage quality** are two similar sized groups of responses. The total of those who consider beverages to be important is 50% and extremely important is 19% and neutral 24.8%. This is a very

similar response pattern to when the question was asked relating to inexpensive restaurants. However, this time the category has moved up from neutral and so it can be seen that the increased price of a restaurant does increase respondents' expectations of the quality of drinks available.

Respondents indicated that **recognition**, or being made to feel **special/valued** when visiting a mid-priced restaurant becomes more important. Perhaps this could be because such aspects are tied in with service, or as the style of restaurant changes in peoples' minds the experience aspect is different, or maybe if more money is being spent customers start to require some acknowledgement for their investment. 42.3% agreed that being recognised, or being made to feel special was important to them and 18% considered this extremely important. 29.7%, which is 4% less than when the question was asked concerning inexpensive restaurants, think their expectations are neutral. The movement of numbers from the previous question has occurred due to the lack of responses for less important and not important, just 7.5% as compared with 28.8% previously.

83.7% of respondents think that the **reliability/consistency** of good food and experience is important (53.2%), or extremely important (30.5%). 12.8% considered this aspect to be neutral with 1% thinking it was less important. Out of all respondents none chose not important to describe their expectations of consistency. Only questions relating to cleanliness and menu choice, in the mid-priced category, have had so many respondents' answer that the aspect is either important, or extremely important.

As with opinions of non-standardisation in inexpensive restaurants the numbers of respondents who have expectations that are high, with regard to **food not being** 

**standardised,** is the most numerous of all of the levels of expectation, 64.3% of respondents said that in a mid-priced restaurant meeting their expectations was either important (45.8%), or extremely important (18.5%). 28.9% thought that their expectation was neutral, which is 11% less than for inexpensive restaurants. Previously, 24.6% did not think non-standardisation was important, whereas for a mid-priced restaurant the number has dropped to just 4.4%. Perhaps this is an indicator as to how respondents' ideas of styles of restaurants alter within different price brackets.

If the respondents are paying more it would appear that they are looking for somewhere that has a good **reputation**, this aspect becomes more important the more money being spent. Formerly, when considering inexpensive restaurants the majority of respondents considered their expectation level of this aspect to be neutral, however, for mid-priced restaurants it has moved to important and whereas previously only 54.6% thought reputation was either important, or extremely important, for mid-priced restaurants these two are the main categories and account for 78.8% of the responses, with just 17.9% for neutral and 1.3% and 0.3% for less important and not important (see Table 4-12).

All of the categories that had high percentages for inexpensive restaurants have either risen in terms of importance, or stayed the same. If they have moved from, for example, neutral to important it would appear that this is in-line with the increase in cost and the rise in expectations. Where categories have stayed the same it is either because the aspect is important whatever the cost of the meal, for example, cleanliness of the restaurant, or it is more of a fixed variable, such as, the consideration of children and friends/groups. When these consistent results have occurred it has allowed for the checking of patterns to ensure that the majority have been responding genuinely and conscientiously. Where it has been possible to check for these patterns it can be

as for a mid-priced restaurant.
Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.
Overall the following are the most important expectations that need to be met by a mid-

identified that there are similarities between the responses for an inexpensive restaurant

Overall the following are the most important expectations that need to be met by a midpriced restaurant when a customer is dining out:

- Good atmosphere and décor
- Good service by well-trained/experienced staff
- Menu provides a good range of choices
- Reliability/consistency of good food and experience
- The restaurant having a good reputation

#### 4.3.3 Expensive Dining

## Q. How do your expectations alter regarding the following aspects when eating at an expensive restaurant? Not important Extremely important 1 2 4 3 5 Good service by well-trained/experienced staff Good atmosphere and décor Cost Good quality food Provision made for children, friends/groups The location of the restaurant is convenient Cleanliness of restaurant and staff Menu provides a good range of choices Good quality beverages You are recognised or made to feel special/valued Reliability/consistency of good food and experience Food not standardised O O The restaurant has a good reputation

**Service** expectations of customers are very high for expensive restaurants with 96.2% of respondents' choosing extremely important (88.1%), or important (8.1%) as their levels of expectation. Possibly this is because there is an additional element being paid for in an expensive restaurant, such as, staff knowledge, 'theatre' elements and consideration being shown towards customers.

The expectation of **atmosphere** and **décor** has increased for each type of priced restaurant - starting at neutral for an inexpensive restaurant and finally extremely important for an expensive restaurant. This category has a significantly higher number of responses than the next category down, which is important, (78.8% and 15.4% respectively). Only 4.2% of respondents' considered atmosphere to be neutral, or less.

Cost for mid-priced restaurants was only rated as important, however, for an inexpensive restaurant it is was extremely important and for expensive restaurants it has become an important factor. This could possibly be respondents' considering a restaurant that is expensive carefully before deciding whether to eat there. There is a steady decline from extremely important down to not important (52.2%, 22.6%, 16.5%, 5.2% and 1.8% respectively). When the pattern of responses appears logical, as it does for the responses to cost, once again this would indicate that people's responses are considered, rather than just random.

There was a significant increase in numbers and ratings of importance as to how respondents' expectations changed with regard to provisions being made for **children** and **groups**. The increase can be seen in a movement from respondents rating this aspect in the main as neutral, or important for inexpensive and mid-priced restaurants to the higher end of being important in expensive restaurants (33.7%, 20.4%, 21.4%, 11.5% and 10.6% extremely important to not important). There may always be a group of people who consider this aspect to be not so important mainly due to the fact that not everyone will have children and the number of times that some people may choose to go out in a group could be limited.

The responses relating to the **location** of the restaurant has previously been mainly rated as being neutral in respect of customers' expectations. However, responses for the importance of location for an expensive restaurant are not clearly defined. The main group of 33.1% do consider a convenient location to be important, however, 27.3% remain neutral and although 17.3% consider this aspect as important, 20.6% do not, as they have chosen the less important and not important options (13.8% and 6.8%).

respectively). Potentially, this could indicate that some people want a convenient location if they are paying a lot for a meal, maybe if drinking with the meal is being considered for example, whereas others could in fact be happy to travel in order to reach an expensive restaurant that they wish to eat in. Some respondents may think the experience of particular restaurant is worth investing the time and travel into.

Again, as for previous categories of restaurant, very few customers are willing to accept anything less than a **clean restaurant and staff**. With 87.2% rating this as extremely important and 8.1% indicating it still as an important issue to respondents in an expensive restaurant as it was for mid-priced and inexpensive restaurants. There could also be a rise in expectations because, for previous categories, as long as a restaurant was hygienically clean maybe that was all that concerned the cohort. However, with expensive restaurants potentially there has to be an even greater emphasis of care taken, such as, polished glassware, pressed tablecloths, smart uniforms and so on.

The more expensive the restaurant the more **choice** respondents expect to have, subsequently rating this aspect as extremely important (70.5%). The most populated categories have increased a level each time the restaurant scenario has become more costly. It is not possible to tell what respondents have interpreted choice as, but possibly it is to do with style, as well as range, as opposed to just quantity of items on the menu.

The importance of **beverage quality** has been very surprising in previous restaurant categories. Respondents considering expensive restaurants do not move away from this trend with the majority concluding that beverage quality is either extremely important, or important with 69.5% and 20.4% of respondents' choosing these categories

respectively.

The way that the **staff** treat customers has increased in respondents expectation levels as the cost of the restaurant categories has increased. As previously mentioned this could be due to wanting a form of recognition from staff as the amount being spent increases. Potentially, the more a customer pays the better they expect to be treated, perhaps there is a link between affordability and status which respondents would like acknowledged. Hence, subsequently rating this aspect as extremely important 66.5% and important 19.5% and only 12.3% rating this as neutral, or below.

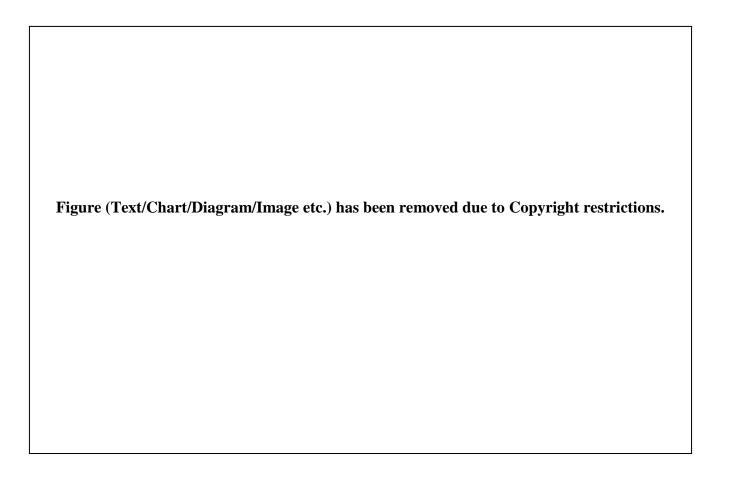
The **reliability/consistency** of good food and experience has been significant for all previous categories of restaurant, being important both times. It is no surprise, therefore, that it should increase to the next level when customers are paying more. This time there is a less of a spread of respondents, with 85.2% indicating that they expect reliability and consistency when visiting an expensive restaurant. 10.1% of respondents' rated the issue as important. With a mere 3.21% of respondents saying that their expectations of consistency and reliability in an expensive restaurant were neutral, or below.

An expensive restaurant is very unlikely to have a fixed menu and a la carte is far more expected, or at the very least a menu that is regularly changed and plays to the chefs' strengths. Therefore, food **not being standardised** is rated as extremely important to respondents and this is possibly a reflection of the style of food that customers expect depending upon the amount they are paying for their meal. 71.7% and 16.6% of respondents' considered this aspect to be either extremely important, or important respectively. There were only 9.7% combined who considered that a restaurant serving

non-standardised food was neutral, or less important.

A good **reputation** is what traditionally expensive restaurants want to achieve and maintain. It is therefore, not a surprise that respondents' expectations have increased the more expensive the restaurant category becomes. Initially, for an inexpensive restaurant the main level of expectation was neutral, this then moved to important and for expensive restaurants opinion has changed again, with respondents thinking an expensive restaurants reputation is extremely important (76.4%). Even at the important level of expectation there are still 16.3% of respondents with only 5.4% indicating that their expectations on reputation are neutral, or less.

What is evident from the responses to questions relating to dining out at expensive restaurants is that the percentages reclassify into higher levels of expectations in nearly all incidences. Subsequently, there is less of an equal split between categories and certainly less respondents considering neutral, or below as a reflection of their levels of expectations (see Table 4-13).



Overall, the following are the most important expectations that need to be met by an expensive restaurant when a customer is dining out:

- Good quality food
- Good service by well-trained/experienced staff
- Cleanliness of the restaurant and staff
- Reliability/consistency of good food and experience.

Although there have been studies into expectation and customer satisfaction before, there has not been any research looking at how expectations can change and how the levels of importance move in accordance with the cost of a restaurant meal.

From the questions investigating expectations of dining out, it can clearly be seen that expectations do change depending upon the amount that the meal is costing – there is not a consistent set of requirements from the customer. It can be identified from the

data, that there is more closeness in customer opinion between inexpensive and midpriced restaurants than there is between mid-priced and expensive restaurants. In some
cases between inexpensive and mid-priced the numbers for different levels of
expectation for various aspects are similar, or although a movement upwards in
expectations may occur, the pattern remains the same. However, expensive restaurants
appear to be seen by customers in a totally different way, with responses changing
pattern so that the majority of respondents consider their expectations to be extremely
important, or important for the different aspects posed. This complete change in levels
of expectation may be why disappointment can occur quickly in expensive restaurants
and customers are very unforgiving, often not returning to the restaurant if any
problems arise (Soloman, 2009).

Recommendations from the responses to questions regarding expectations in relation to meal cost have been made for each category of restaurant. However, looking at eating in a restaurant from a customer perspective, there would appear to be some clear aspects that need to be met in order to meet customer expectations, whatever the cost bracket of the meal:

- Good atmosphere and décor
- Cleanliness of the restaurant and staff
- Good service by well-trained/experienced staff
- Reliability/consistency of good food and experience.
- Menu providing a good range of choices

#### **4.4** Cohort Personalities

#### 4.4.1 Personality and Insights

Q. Please indicate how you feel about the following statements								
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree			
I carry out tasks efficiently	0	0	0	0	0			
Eating out with my family is important to me	0	0	0	0	0			
I would class myself as a 'foodie'	0	0	0	0	0			
I am trusting	0	0	0	0	0			
I am interested in food related magazines and/or food programmes on television	0	0	0	0	0			
I visit food festivals and food events	0	0	0	0	0			
I value artistic and creative experiences	0	0	0	0	0			

The next section of questions in the questionnaire were designed to find out further information about the respondent, as well as, looking at some personality traits. These forms of questions are also often included within questionnaires to check for respondent reliability.

'Conscientiousness' considers responsibility, order and dependability in a person so was included to see if the respondents had these traits which could then indicate as to whether their answers were likely to be reliable (John and Srivastava, 1999). 90% of the respondents' said that they strongly agreed, or agreed that they carried out tasks efficiently.

To try to have some insight into personalities the next question asked how **trusting** the respondent was. This eludes to how agreeable a person is, the more trusting the more likely they are to be good natured and cooperative (John and Srivastava, 1999). 72.4% answered that they strongly agreed, or agreed that they were trusting and 19.2% said that they were neutral.

Although to ask about **artistic experiences** may seem unusual, those who agree that they value such experiences are said to show openness to experiences in general (John and Srivastava, 1999). In total 66.3% said that they strongly agreed, or agreed that they valued artistic experiences and 26.1% who were neutral on the question. This only left 7.7% who either disagreed, or did not answer the question (1.2%).

To find out if **children** are a big factor when dining out the question of how important is dining out with the family was posed. It does not ask about children specifically as the whole family set-up is important, so potentially answers to this question could also include considerations for groups of people dining out. 81% said that dining out with the family was important to them (agree and strongly agree) and 15.1% were neutral and the remainder did not agree with the statement.

The three statements that were food related (shown below):

- *Eating out with my family is important to me*
- I would class myself as a 'foodie'
- I visit food festivals and food events

were included to firstly, find out levels of food interest from the cohort who had received the email due to being signed up to food magazine related website. Then, secondly, to check for consistency of responses, 89% agreed, or strongly agreed, that they had food interests, such as, reading food related magazines, or watching food programmes and 7.9% were neutral on this matter. 71.1% said that they strongly agreed, or agreed that they would class themselves as a 'foodie' with 21% being neutral and 62% said that they strongly agreed, or agreed that they visited food festivals and events with 22.4% being neutral.

Overall, this question was designed to find out some more information, such as, family importance, which may otherwise prove difficult to ask, along with personality traits that could infer if the group were going to be 'suitable' questionnaire respondents. Another area of investigation, was how interested in different aspects of food, other than eating, people were. By asking three food questions consistency of responses could also be considered. Overall, it was found that: With regard to the food related questions consistency was good with 3 questions all being answered mainly with a strongly agree, or agree response (Table 4-14).

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Missing
Tasks efficiently	39.0%	51.0%	8.1%	0.6%	0.4%	0.9%
Family important	35.0%	46.0%	15.1%	2.2%	0.9%	0.8%
Foodie	32.5%	38.6%	21.0%	6.2%	0.9%	0.8%
Trusting	26.8%	45.6%	19.2%	6.5%	0.9%	1.1%
Food interests	54.3%	34.7%	7.9%	1.6%	0.9%	0.7%
Visit food events	28.0%	34.6%	22.4%	11.1%	2.7%	1.3%
Artistic experiences	24.5%	41.8%	26.1%	5.3%	1.2%	1.2%

**Table 4-14: Measures of Personality Characteristics** 

The majority of people will indulge their food interest in other ways other than just eating out.

- Family is very significant to the majority of respondents (81%) so it is highly likely that family aspects, perhaps children, or groups will impact on dining out experiences in some way.
- The personality trait questions indicate that the majority of respondents would consider themselves to be able to carry out tasks efficiently, be trusting and to value artistic experiences. Looking into these traits further suggests that in the main the respondents were a conscientious, good natured group of people who show openness to new experiences (John and Srivastava, 1999).

#### 4.4.2 Newspapers

Q. V	Vhat newspapers do you regularly read? (Please tick all that apply)
	Daily Mail
	Independent
	Mail on Sunday
	Mirror
	Sunday Times
	Sun
	Telegraph
	Times
	Local paper
	None
	Other newspaper(s)
	<u>▲</u>
	_

The type of newspaper that a person reads is insightful with regard to looking at certain demographic traits. Newspaper readership can indicate income, education level as well as a person's political view point. The two most popular newspapers were local papers (36.2%) and the Daily Mail (24.6%). The next set of most likely newspapers read by the respondents' were The Sunday Times (19.5%) The Telegraph (16.8%), The Times (16.4%), The Mail on Sunday (15.9) as well as the option of not reading a paper (17.3%). A slight error occurred with the listing of the papers in the questionnaire as the Guardian and Observer papers were missed off the list and this has accounted for the high number of people (18.6%) choosing the 'other' option and specifying a paper. This option also revealed a number of other newspapers that were not mainstream - as well as, people specifying the name of their local paper, also listed was the Metro, interest papers, such as Farmers Weekly, international papers, for example the New York Times, free papers and most surprisingly listed were internet news sites. The last category of papers is made up of the least popular papers and includes The Sun (8.7%), the Independent (6.4%) and the Mirror (4.8%) (Table 4-15).

	% Uptake
Daily Mail	24.6%
The Independent	6.4%
Mail on Sunday	15.9%
The Mirror	4.8%
Sunday Times	19.5%
The Sun	8.7%
The Telegraph	16.8%
The Times	16.4%
Local	36.2%
No paper	17.3%
Other paper	18.6%

**Table 4-15: Newspaper Choices** 

The Daily Mail and Mail on Sunday are papers that position themselves aimed at the 'middle market' and with strong conservative values. These papers are considered to be tabloid style and the Daily Mail is the second highest selling newspaper in the UK after The Sun newspaper (Jonathan, 2008). The Times and The Sunday Times are papers that are seen to be 'serious' informative publications with high standards of journalism. The Daily Telegraph and Sunday Telegraph are two of the few 'centre-right' broadsheet papers. The Telegraph is the highest selling British 'quality' paper and the papers take a politically conservative viewpoint, The Telegraph has close links with the Conservative Party (Jonathan, 2008).

#### 4.4.3 Spare Time Activities

Q. V	Q. Which activities do you enjoy taking part in? (Please tick all that apply)							
	Attending cultural/arts events		Golf					
	Camping/hiking		Gourmet/fine food					
	Community work		Gym					
	Cooking		Horse riding					
	Computer and/or games		Photography					
	Crafts		Reading					
	Cruise ship holidays		Running (outdoors)					
	Cycling		Sailing					
	Dieting		Science/new technology					
	DIY		Team sports					
	Eating out		Other sports					
	Foreign travel		Visiting Trust properties					
	Fishing		Wildlife/environmental issues					
	Gardening		Wines					
	Other activities		<u>^</u>					

Twenty-nine options were offered for respondents to indicate what they did in their spare time. These were listed in alphabetical order in the questionnaire but have subsequently been grouped into the categories of food, lifestyle, hobbies, physical activities and other for the purpose of analysis.

Firstly, it was clear to see that the respondents were interested in food in one way or another with 86.6%, the highest response to any activity, enjoying eating out in their spare time and cooking was very close to this at 85.9%. Although not selected as much, the options of gourmet food (53.8%) and wine (45.7%) still gained some of the highest responses of all the activities.

Looking at lifestyle, reading at 73.6% proved to be the most popular option followed by

travel (63.7%), cultural events (39%), visiting Trust Properties (27.8%), wildlife and environmental issues (26.1%) and camping (25%). Also in this section, but not quite as popular, were dieting (14.1%), community work (11.3%) and cruise holidays (8.4%).

In the hobbies group of activities the most popular activity was gardening (43.9%), followed by computers (37.4%), crafts (30.7%), photography (26.6%), DIY (18.1%) and lastly science and technology with 11.1%.

Finally, the last category of options is those relating to physical activities, using the gym was the most popular option (20%) followed by cycling at 17%. However, the other options were all rated relatively low - running (10%), 'other' sports (9.2%), team sports (8.3%), horse riding (6.7%), golf (6.5%), fishing (4.8%) and lastly sailing with 4%.

The option to choose and specify another, non-listed activity had a 10.5% response rate, often included in the specified activities were activities which were a variation of already listed categories. However, other very popular activities, not mentioned previously, were church activities, water sports, winter sports, theatre, cinema, walking, flower arranging, dogs/pets, children, music and lifestyle activities, such as, yoga and Pilates. There were also some more unusual activities, such as, volunteering for a heritage railway, cloud appreciation and mushrooming.

Finding out what activities people enjoy taking part in (Table 4-16) provides an insight into many aspects, such as, lifestyle, age, gender and so on. It also allows for cross-checking of information and consistency between questions answered, for example, cross referencing between if people considered themselves to enjoy food activities and then if they actually chose the food options as the activities that they take part in.

	Yes	No		Yes	No
Cultural events	39.3%	60.7%	Golf	6.5%	93.5%
Camping	25.0%	75.0%	Gourmet food	53.8%	46.2%
Community work	11.3%	88.7%	Gym	20.8%	79.2%
Cooking	85.9%	14.1%	Horse riding	6.7%	93.3%
Computer/games	37.4%	62.6%	Photography	26.6%	73.4%
Crafts	30.7%	69.3%	Reading	73.6%	26.4%
Cruise hols	8.4%	91.6%	Running	10.6%	89.4%
Cycling	17.0%	83.0%	Sailing	4.0%	96.0%
Dieting	14.1%	85.9%	Science/technology	11.1%	88.9%
Diy	18.1%	81.9%	Sports team	8.3%	91.7%
Eating out	86.6%	13.4%	Sports other	9.2%	90.8%
Travel	63.7%	36.3%	Nat trust properties	27.8%	72.2%
Fishing	4.8%	95.2%	Wildlife/environment	26.1%	73.9%
Gardening	43.9%	56.1%			

**Table 4-16: Activities and Pastimes** 

- The most popular activities by far are eating out (86.6%), cooking (85.9%), reading (73.6) and travel (63.7%).
- The least popular category of activities was those that were physical activities, such as, running (10.6%).

#### 4.4.4 Television Viewing

# Q. Please indicate how many hours a week on average you spend watching television? Number of hours:

The average number of hours spent watching television per week by the respondents was 15.5. The standard deviation is quite high (10.1) as the responses were anywhere from never watching television to 80 hours per week (Table 4-17). However, around 50% of questionnaire respondents actually only watch 2 hours or less of television per

day and then the next 25% do not watch that much more, at just 2-3 hours per day. The age group watching the most television is that of 55-64 year olds and the least is the 35-44 year category.

Age Group	Under 24	25-34	35-44	45-54	55-64	65-74	over 75
TV Hours							
Under 7 hours	4.9%	26.7%	30.7%	22.0%	10.9%	3.3%	1.3%
8 - 14 hours	3.4%	27.2%	27.0%	22.7%	14.8%	2.7%	2.1%
15 - 21 hours	2.2%	22.6%	24.3%	26.3%	18.3%	4.0%	2.2%
22 - 31 hours	2.1%	18.3%	18.3%	24.3%	24.3%	10.6%	2.1%
32 and above hours	5.0%	15.8%	20.0%	23.3%	26.7%	7.5%	1.7%

Table 4-17: Age and Television Watching Hours Per Week

#### 4.4.5 Further participation

# Q. If you are interested in this research and are willing to participate in any further studies please tick this box

I would like to be considered for further studies

The question was asked if questionnaire respondents would take part in further research and it was found that the majority would, with the most likely group being males in the 45-54 age group, closely followed by females aged between 35 and 44.

			under 24	25-34	35-44	45-54	55-64	65-74	over 75
Female	Participate	No	3.8%	28.2%	23.5%	22.5%	16.0%	3.4%	2.8%
	Further	Yes	3.5%	24.3%	27.2%	24.0%	15.9%	3.9%	1.2%
Male	Participate	No	3.0%	17.8%	23.0%	23.0%	20.7%	10.4%	2.2%
	Further	Yes	.8%	13.9%	25.2%	27.7%	22.7%	7.6%	2.1%

**Table 4-18: Further Participation Interest** 

#### 4.5 Income Impacts Analysis

To be a customer costs money and therefore the income variable is incredibly important to the study. Income is considered one of the most important socio-economic characteristics within the study and how this influences other factors within customers' lives has been analysed to be able to gain insight into any variations of consumer behaviour.

As expectations in relation to meal cost is a major area for consideration within the study, income, which could contribute to affordability and influence expectations relating to cost, is an important area to analyse. The following section details where income appeared to have an impact upon the responses. Although United Kingdom HM Revenue and Customs (Directgov, 2012) define income through tax bands (Table 4-19). In comparison, for the purposes of this study, it is the data that has been generated through the questionnaire responses that forms a framework for the income brackets (Table 4-20). It is also worth noting that the income for the study has been gathered through *household income* as opposed to individual income.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

#### 4.5.1 Visits to Food Establishments.

As dining out has a cost attached it is logical to assess the correlation between visit frequency and income brackets. The results indicated that mid—earners ate out in cafes the least, whereas, low and higher earners ate in cafes more in comparison. The pub environment was very mixed with regard to visits by income group, however, higher earners visited more than the lower earners. Restaurant visit numbers are definitely related to salary. People earning less, make fewer visits, whereas those who earn towards the higher end of the salary scales dine out much more frequently.

#### 4.5.2 Income and Cost of Meal Expectations.

All participants were asked to indicate what they considered to be an expected amount to pay when considering inexpensive, mid-priced and expensive meals. From this data it was possible to create a high, medium and low cost group for each meal category. There was a correlation between income and cost expected to pay for each meal type. Consistently lower earners expected to pay less, mid earners expected to pay a mean amount and higher earners showed that their expectations of meal cost were always in the highest bracket.

#### 4.5.3 Reasons to Dine Away from the Home linked to Income

Not all variables related to dining away from the home proved to be significant when looking at income. However, 'budget', 'new food', 'same as home' and the 'social aspect' all showed that there was a significant difference in behaviours between income groups. For those earning £57,000 or more a year as a household, budget was overall rated low, which is in comparison to £24,999 or less earners, who rated budget as a high

consideration. All income brackets from £46,000 and upwards considered 'new food' to be a high priority when dining away from the home. However, the income group of £13,000-£24,999 thought this only to be a low priority. There was a significant difference between the highest and lowest income groups with regard to the importance of the social side of dining out. Those earning £91,000 or more considered it to be a very important aspect which was an opposite opinion to those who earned £24,999 or less.

#### 4.5.4 Hobbies and Income

Twenty-nine activities were offered as options for participants to indicate their activities and pastimes. Some of these activities have proved to show a significant difference in participation levels between the different income groups. Cultural and art events, and cooking scored low for those with a household income of £12,000 or less whereas, computer games were of higher importance to those in lower income categories. Eating out showed a trend where there was a pattern between income and the importance of eating out. The increase in importance of eating out was consistent with the increase in salary until the very highest salary bracket of £91,000+, at which point, the importance of this activity became lower. Following a similar pattern were the categories of wines and gourmet food, these were important to all those earning middle incomes to higher incomes. Perhaps ironically, dieting also followed the same trend as wine and gourmet food. Crafts were most important to those in the middle income brackets and sports including, the gym, running, team sports, tennis, golf, sailing and cycling were important to the middle income and higher income earners. Travel also showed a significant income link where the importance went from low to high in line with income.

#### 4.5.5 Newspapers Read Compared with Income

Although many newspapers have a mixed readership, some papers showed significant variance between the reader and their income group. The Mirror's readership mainly came from £34,999 or less salary bracket with its popularity peaking with those in the £12,000 or less salary range. The Sunday Times was mixed but showed high readership in the income categories of £57,000 and above. The Times was very highly rated by those earning £91,000 and over, had mixed readership for middle earners and a low readership in the £24,999 category and below. The Sun was mixed but showed a high readership in income groups earning £34,999 or less and finally the Telegraph was mixed but had a very low readership with those earning £24,999 or less.

#### 4.5.6 Number of Pubs, Cafes and Restaurants within a 10 Minute Walk of Home.

Only one of the groups proved to have a significant outcome when numbers of food outlets and income was assessed. The only category that showed significance between distance from home to eating establishments, was the income category of those earning £91,000 and above, who had a propensity to live closer to more restaurants than any other group.

#### 4.5.7 Income and TV Hours watched.

There was a very simple significant outcome to the combination of TV hours and income variables. That is, the more being earned, the less the television is watched.

#### 4.5.8 Dining Away from Home

Questions were asked regarding the influence of *tableware*, *budget*, *time*, *convenience*, *occasion*, *environment*, *new food*, *having different food to home*, *same food as home*, *memories*, *social and other factors* as the reason for dining outside the home. Although it has been possible to create frequencies from the data, the groups of people that these variables apply to are not consistent.

## **4.6** Summary and Research Direction

What can be seen from the analysis work of the quantitative data collected is an overview of patterns and trends created by 2,220 responses to the survey distributed through the Delicious Magazine website. The following provides a concise synopsis of some of the central findings from the data generated.

- The cohort that participated in the questionnaire demonstrated characteristics that were expected from Delicious Magazine e-subscribers in terms of sociodemographics.
- The average number of times a respondent has eaten outside the home within the six months prior to the questionnaire was 21 times.
- Only 2.4% of the cohort had not dined out during the six months before they answered the questionnaire.
- £10.63, £21.63 and £42.62 were the costs determined for an inexpensive, midpriced and expensive meal respectively.
- The social aspect and experiencing something different are the most important factors when deciding to dine out.

- Information provided by others, or a resource, are key drivers for encouraging a first visit to a restaurant.
- Eating out, cooking and reading proved to be the activities that the cohort enjoyed and participated in the most.
- Expectations that an inexpensive restaurants customers consider to be significant considerations: Cleanliness, cost, atmosphere, beverages and non-standardised food.
- Expectations that a mid-priced restaurants customers consider to be significant considerations: Atmosphere, service, menu choice, reliability and reputation.
- Expectations that an expensive restaurants customers consider to be significant considerations: Food, service, cleanliness and reliability.

Currently, the data are being seen as one group that can be looked at by specific variables, for example, gender, salary, dining out frequency. The data are not however providing insights into customer groups that are designated through similarities, such as, combinations of expectations. This is the subject of discussion in the following chapter, Analysis of Quantitative Data – Statistical Analysis, and it is the outcomes of Chapter 5 that will differentiate the analysis work form what has been undertaken in previous studies. Through statistical analysis, groups (factor groups) of customers can be created that combine together in relation to variables, but which may not at first seem obvious. This analysis will categorise the dining out public, who initially may not appear alike members of groups, but who in fact display close expectations and behaviour traits when dining out.

## 5 Analysis of Quantitative Data – Statistical Analysis

The overarching purpose of this chapter is to establish and demonstrate relationships from the resultant survey data. The data were organised so that expectation related responses were initially analysed separately through factor analysis, and the socio-economic responses analysed by administering T-tests, correlation and ANOVA tests to the data. The outcomes from the tests have then been combined in order to generate the foundation for the subsequent development of a typology.

## **5.1** Chi-square Tests

Chi-square tests are non-parametric (they do not make assumptions about underlying population distribution) (Pallant, 2007). The test is used to understand the association between two categorical variables. The output is generated by comparing the values being measured against what would be expected if there was no association. The use of chi-square tests was restricted due to the limited nature of the tests. However, chi-square tests were implemented initially for the purposes of assessing the data and providing further information about the cohort. The chi-square tests took place before any factor analysis was undertaken and were then superseded by ANOVA, T-Test and correlation variable test outputs.

## **5.2** Factor Analysis

A set of variables<sup>7</sup> were repeated three times within the questionnaire (Appendix 1) to establish respondents' ratings of critical factors when dining at inexpensive, mid-priced

<sup>&</sup>lt;sup>7</sup> 'Inexpensive', 'mid-priced' and 'expensive' variables relate to expectations associated with dining out. The variables stay the same across the cost categories of restaurants, what changes are the customers' perspectives of the variables when considering different dining out costs.

and expensive restaurants. The variables listed in the questionnaire can be seen in Table 5-1 and were rated by respondents as being 1 (not important) to 5 (extremely important) with regard to their perceived importance.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

### **5.2.1** Correlated Relationships between Variables

Through factor analysis it is possible to split the variables into factor groups that share patterns of correlation. "Factor analysis attempts to identify underlying variables, or factors, that explain the pattern of correlations within a set of observed variables" (Henriett, 2012). This is the beginning of the process to bring together common variables (of those asked about in the questionnaire) and which start to demonstrate patterns of expectations from dining out customers.

Table 5-2, Table 5-4 and Table 5-6 show the output from the initial factor analysis on the variables at inexpensive, mid-priced and expensive locations respectively. They further demonstrate how, after rotation and examining the Eigenvalue, the variables in each table split into 2 factor groups. Table 5-3, Table 5-5 and Table 5-7 display the variables aligning with each factor groups. The relevant variables have been emboldened to indicate how they have been distributed between the two factor groups for each of the cost categories. The sections following on from the next six tables discuss the process of defining and concluding the factor groups.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restriction	ns.

## **5.3** Factor Analysis Process

The method used for the rotation process (the foundation of factor group creation) was 'Varimax' which allowed for the factor group variables to maintain independence. Extraction was tried at both the levels of 2 and 3 but beyond 2 many of the variables did not load onto any of the factors (number of groups able to be formed). Additionally, looking at the 'Eigenvalue', that is, the variances of the factor, to determine factor groups, it was clear from the scree plots, that there were two factor groups (see Figures 5-1, 5-2 and 5-3). Scree plots highlight the number of groups through the distinct shapes related. All of the scree plots show a clear change in direction from a point on the graph, which indicates two different groups within each category. Total variance was also measured for acceptability and the factor groups after rotation were grouped based on being above .44 which is the number that is considered salient (Comery, 1973 in Miller, Acton, Fullerton and Maltby, 2002). The higher the loading of the variable above this point, the more vital within the factor they are.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

Although there are relationships between the factors within each group it is not possible to determine levels of opinions for the different aspects within the groups, nor is it possible to suggest why one person may be more inclined to rate an aspect more highly than another.

The data collected can be manipulated (recoded in SPSS) in various ways to create different sets of raw data, for example, using ordinal data displayed as 1-5 or low to high and so on. However, it was decided to use the data in its original form so that accurate comparative factor groups could be made. Additionally, there is the option to choose the number of rotations (groups) and it was possible to break up the variables into up to 4 factor groups, however, a more accurate outcome is created when a variable loads highly onto one factor and low on the others. It was found that beyond two groups that the variables either did not load onto any factors, or began to fit more than 1 factor which again does not lead to good factor groupings. Table 5-3, Table 5-5 and Table 5-7 show the interpretation of the contents of the factor groups by placing the variables in rank order according to the corresponding component number and aligning them with the appropriate factor group. Although variables below 0.5 are not generally

included in the factor group, the ranking provides an interpretation of the order in which respondents rated the variables. However, it is necessary to note, that the variables within the different factor groups could contain responses from the same respondent. Therefore, although an order can be presented from the figures, a percentage of respondents to each factor cannot. Each of the factor groups encompass variables that the factoring process has aligned. The factor groups therefore propose what variables restaurant customers would combine based on importance. For each of the three restaurant cost categories, two factor groups have been created, with six being produced in total.

## **5.4** Reliability of Groups Used for Factor Analysis

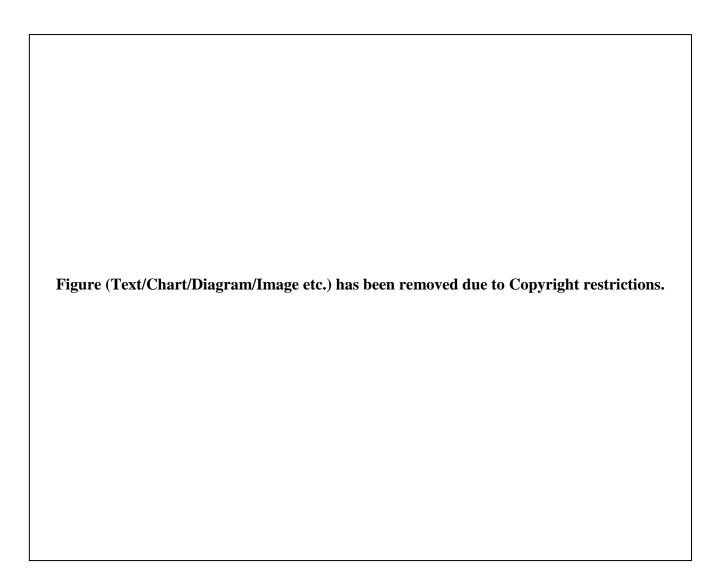
Factor analysis provided a means by which it was possible to group customer expectations based on visiting differently priced food outlets. It was important to ensure that the group of factors were measuring consistently, for example, all responses were positive, or changed into the same format, before being tested. Additionally, research factors can often be brought together with a predetermined outcome and may not actually be relevant to each other. Furthermore, internal reliability allows for reassurance that the re-administration of the questions to the same respondents' would elicit the same responses (Griffin, 2010).

Cronbach's alpha test (Janssens, Wijnen, De Pelsmacker and Van Kenhove, 2008) measures the reliability of factors that are grouped together in the construction of a scale response question. Using Cronbach's alpha test (Jassens *et al*, 2008) it is possible to produce and subsequently measure the alpha number which indicates the internal consistency of the factors. A high alpha number, such as those found for the inexpensive (.900), mid-priced (.902) and expensive (.849) sets of data, allows for

interpretation of the correlation between factors. This means that respondents who tended to select high scores for one item also tended to select high scores for the others and the reverse of low scores for one and low for another is also true. Conversely, with a low alpha output it would not be possible to distinguish such patterns.

Looking at the Corrected Item-Total Correlation (CITC) column in Table 5-8, Table 5-9 and Table 5-10, each variable has a CITC score and this number is the correlation indicator between the variables. The higher the number the stronger the positive correlation is between the combined scores of the variables. Subsequently, this indicates the factor group's internal consistency. If the correlation is weak, that is, a low number of .30 or below is produced (de Vaus, 2004) then the variable should be removed. All variables have internal consistency with a high CITC number (Table 41, Table 42 and Table 43), this would indicate that the variables being rated by the questionnaire participants work well as a group and are reliable.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.



### 5.4.1 Linear Regression

Regression analysis is used in order to determine 'causality' between an explained variable and explanatory variables (Janssens, Wijnen, De Pelsmacker and Van Kenhove, 2008). The variables used were the open data question of the representative cost per person for an inexpensive meal, mid-priced meal and an expensive meal (Q. 5) (Appendix 1) along with the ratings of factors (Q. 6) (Appendix 1) for each of the meal costs. The R Square numbers generated are low and insignificant, indicating that opinions of what costs represent different meal cost brackets do not reflect levels of expectations. Due to the nature of the linear regression test (Janssens *et al*, 2008) the lack of significance may be due to the combination of cardinal and ordinal data.

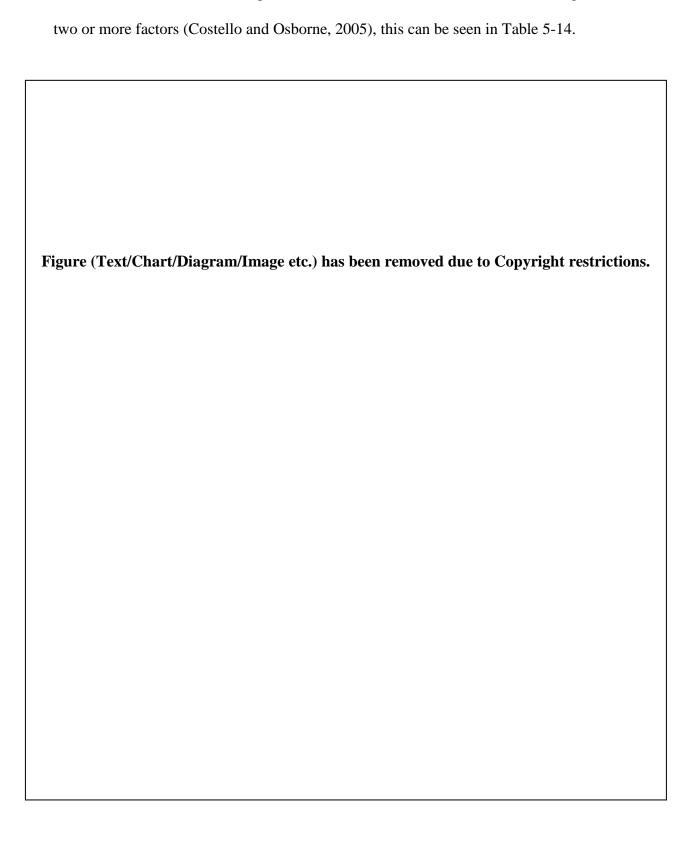
The following tables (Table 5-11, Table 5-12 and Table 5-13) have been generated to demonstrate what variables sit within each of the factor groups, along with their factor number and extraction numbers. Extraction numbers indicate the proportion of each variable's variance that can be explained by the retained factors. Variables with high values are well represented in the common factor space, while variables with low values are not well represented. Analysing the extraction number leads to understanding the 'communality' of the variables, that is, the proportion of each variables variance but which should not exceed 1. (UCLA Academic Technology Services, 2011). As can be seen from Table 5-11, Table 5-12 and Table 5-13 there are no numbers generated for the communality that exceed the value of 1.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

Six factor groups have been recognised – two per cost group, however, these groups are still constrained by the original questionnaire questions of inexpensive, mid-priced and expensive dining out scenarios and as such, the factor groups have been created within these parameters. From the factor group outputs it has been evident that there is a consistent group emerging that shares the variables of 'children' and 'location'. To reduce the number of factor groups and create overriding groups for all of the categories each of the data sets have been collated into one factor analysis (Table 5-14).

In line with Costello and Osborne's (2005) recommendations to create "solid factors" (2005: 5) any variables that factored alone were removed and according to Costello and Osborne (2005) any factors below .5 should be removed and groups ideally made up of 5 or more variables. However, as Janssens *et al* (2008) highlight the assigning of variables to factors is subjective, so a number of factors were removed, namely: *cost* (*inexpensive*), *location* (*inexpensive*), *non-standardized* (*mid*), *beverages* (*mid*), *recognition* (*mid*), *location* (*expensive*), *cost* (*expensive*) and *recognition* (*expensive*) on the basis that they made very small, or individual factors. On re-running the factor analysis four very strong groups emerged with all variables being over, or extremely



close to .5 and no 'crossloading', that is, where the variable loads at .32 or higher on

The combination of these data provides factor groups for all restaurant meal cost brackets and this can be seen in the combination of data for the fourth factor group as a factor from each cost category is included. However, it occurred that three of the four

factor groups are made up of variables that are specific to the meal cost bracket, that is, inexpensive, mid-priced and expensive.

The information from the four new overarching factor groups: FG1, FG2, FG3 and FG4 can be combined with the outputs from further statistical tests on the socio-economic data collected. These combined will form the basis of the development of the typology that will consider customer dining out expectations based on meal cost. The following sections will begin the process of the statistical analysis of the socio-economic data.

### 5.5.1 Factor Analysis Route

Factor analysis was the analysis method chosen above other applicable tests for a number of reasons relating to both the study itself and previous research. Principally, when considering the factor groups in Table 5-14, these have been created through the analysis of the three sets of variables (39 variables in total) associated to questions 5a, 5b and 5c in the questionnaire (Appendix 1). Although it may have been possible to apply other analysis techniques, such as, clustering to 13 variables, once the variable groups were amalgamated into one large group, the most appropriate method to create new groups, which are the result of reducing a large set of variables to a smaller number of dimensions and components, is factor analysis (Anglim, 2007). Furthermore, this analysis method is commonly used when developing questionnaires to understand the relationship between the items in the questionnaire and underlying dimensions (Anglim, This consideration has future implications because when planning further research routes for this study, it is likely that the factor groups will be contained within additional questionnaires. An example of the importance of considering reliability when using questionnaires is evident within Parasuraman et al (1988) SERVQUAL model where the groups had been produced from factor analysis. Studies that were subsequently developed from the SERVQUAL model, but not subject to factor analysis, have been criticised by other researchers in the field for not having reliable groups within their questionnaires on which to base their collected data and findings upon.

"When attempting to refine SERVQUAL, Parasuraman *et al.*, (1991) also failed to replicate their original five-factor structure, as did Knutson et al. (1991), LODGSERV, and Stevens et al. (1995), DINESERV. It is also worth noting that these studies have not reported factor-structures, hence, it is difficult to evaluate the reliability and utility of these models" (Kivela *et al*, 1999: 5).

However, due to the internal and reliability tests that can be completed on factor groups, the accuracy of factor groupings can be tested and therefore the groups can be justified as being accurate and well founded.

#### **5.6** Variable Tests

Once factor groups have been created it is then necessary to understand what other variables looked at by the questionnaire are related to each group. This was the purpose of introducing the socio-economic questions, to identify patterns of behaviour that are significantly reflected by each group.

#### 5.6.1 Correlation

Correlation determines if two variables are, without assuming correlation, linearly related (Janssens *et al*, 2008). The correlation test uses bivariate data, as two variables are involved – independent and dependent. Correlation is used to understand the behaviour of a variable in relation to the value of the second variable (Pallant, 2007).

Table 5-15 is an example of a correlation test where the factor groups have been tested against the number of hours spent watching television per week. It can be seen that there is a significant outcome for factor groups 1 and 4 as both of these show positive correlations.

C	.1.4
Corr	elations

	REGR factor REGR factor REGR factor					
		score 1 for	score 2 for	score 3 for	score 4 for	Hours a
	_	analysis 1	analysis 1	analysis 1	analysis 1	week tv
REGR factor	Pearson	1	.000	.000	.000	.087**
score 1 for	Correlation					
analysis 1	Sig. (2-tailed)		1.000	1.000	1.000	.000
	N	1885	1885	1885	1885	1883
REGR factor	Pearson	.000	1	.000	.000	004
score 2 for	Correlation					
analysis 1	Sig. (2-tailed)	1.000		1.000	1.000	.869
	N	1885	1885	1885	1885	1883
REGR factor	Pearson	.000	.000	1	.000	.016
score 3 for	Correlation					
analysis 1	Sig. (2-tailed)	1.000	1.000		1.000	.486
	N	1885	1885	1885	1885	1883
REGR factor	Pearson	.000	.000	.000	1	.092**
score 4 for	Correlation					
analysis 1	Sig. (2-tailed)	1.000	1.000	1.000		.000
	N	1885	1885	1885	1885	1883
hours a week tv	Pearson	.087**	004	.016	.092**	1
	Correlation					
	Sig. (2-tailed)	.000	.869	.486	.000	
	N	1883	1883	1883	1883	2221

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

**Table 5-15: Correlation for Television Watching Hours by Factor Group** 

#### **5.6.2** T-test for independent samples.

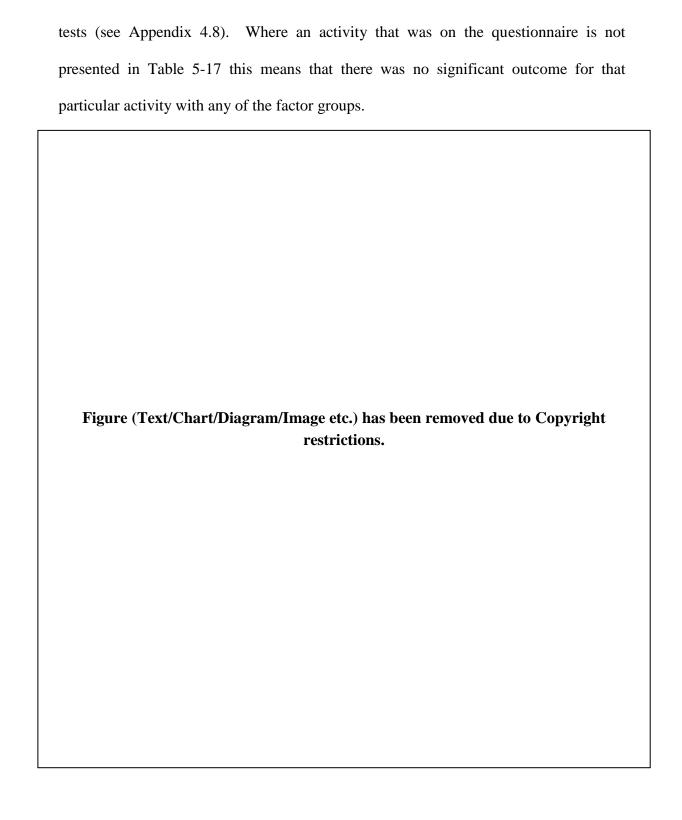
The purpose of the T-test is to find out if there is a difference in the preferences between the factor groups and relevant variables. The test is applied to data that is not related, for example, by repetition of responses (Miller *et al*, 2002). The 'Levene's' test of equality of variances (based on the F-statistic) (Miller *et al*, 2002) is used to understand if the group variances are equal. The resulting outcome indicates which number from within the generated table needs to be read – whether it is the t-value from the case of equal variances, or unequal variances. From this point, if the number is significant, then the group statistics number can be read to see the difference within the factor group (Miller,

2002).

It needs to be noted that T-tests only show a significant difference and not a particular outcome, nor does the outcome 'predict' trends. For example, in Table 5-16 (sourced from the data in Appendix 4) it is evident that more people in Factor group 1 read, than do not read, the Daily Mail newspaper. However, the outcome does not conclude that this is the only paper read by factor group 1 readers, or that everyone in the group reads this particular paper. It simply indicates that within this group of people significantly more do read this paper than do not. It also does not signify that other groups do not read a particular newspaper, or the frequency that a paper is read, it purely highlights that there is a significant difference within the particular group.

Fig	re (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.
8	

In addition to which factor groups newspapers have a significant level of readership, or non-readership with, the activities of the factor groups were also analysed through T-



The reason that T-tests are important is that they begin to build up a picture of the factor groups and provide insight into trends that can then be utilised. For example, if a mail order wine club was advertising, the T-test results could be analysed to see which factor groups were interested in wine. Then the papers that the groups are likely to read could

be established from the T-tests and finally from existing readership demographics, it would be possible to decide which newspaper to target with the advertising.

#### **5.6.3** ANOVA Tests (Analysis of Variance)

Analysis of variance (ANOVA) is an extension of the T-test that is used to test categorical data which contains a number of variables within the dataset. The test compares group variance with individual variances. If the gap within the group is larger than between the individuals of the groups, then it is the groups that make the difference which will be demonstrated in the output (Miller *et al*, 2002). Along with the standard ANOVA test a Scheffe post-hoc test was also run in order to be able to see if any difference showing in the ANOVA table were actually significant.

Table 5-18 to Table 5-20 displays what the output for the ANOVA test looks like and presents clearly some strong significant outcomes for the different factor groups with regard to how many people live within the household.

**Descriptives** 

Descriptives									
						95% Coa	nfidence		
						Interval for Mean			
				Std.		Lower	Upper		
		N	Mean	Deviation	Std. Error	Bound	Bound	Minimum	Maximum
REGR factor score 1 for analysis 1	upto 2	1410	.0232011	.99869537	.02659644	0289718	.0753740	-4.31702	2.59685
	3-4	423	.0952082	1.00367544	.04880037	1911303	.0007139	-4.41264	2.40660
	over 5	52	.1453746	.96886835	.13435787	1243601	.4151093	-3.90251	1.67901
	Total	1885	.0000000	1.00000000	.02303267	0451722	.0451722	-4.41264	2.59685
REGR factor score 2 for analysis 1	upto 2	1410	.0023882	1.00251434	.02669814	0547605	.0499842	-8.67232	1.14203
	3-4	423	.0295234	.97156102	.04723891	0633294	.1223763	-6.27479	1.16209
	over	52	-	1.15121633	.15964498	4959065	.1450949	-5.04706	1.13605
	5		.1754058						
	Total	1885	.00000000.	1.00000000	.02303267	0451722	.0451722	-8.67232	1.16209
REGR factor score 3 for analysis 1	upto 2	1410	.0391706	.96171669	.02561165	0110705	.0894116	-3.37832	3.23308
	3-4	423	.1160394	1.08161253	.05258980	2194100	0126688	-3.91743	3.27261
	over 5	52	- .1181892	1.24096763	.17209125	4636768	.2272984	-3.65007	2.23808
	Total	1885	.0000000	1.00000000	.02303267	0451722	.0451722	-3.91743	3.27261
REGR factor score	upto	1410	-	1.02676751	.02734403	1570088	0497300	-3.13717	2.63743
4 for analysis 1	2		.1033694						
	3-4	423	.3200108	.84120156	.04090062	.2396165	.4004052	-3.35588	1.78515
	over 5	52	.1997369	.87989630	.12201966	0452278	.4447016	-1.62641	2.16125
	Total	1885	.0000000	1.00000000	.02303267	0451722	.0451722	-3.35588	2.63743

Table 5-18: Descriptives Section for ANOVA Test

## ANOVA

		Sum of Squares	Df	Mean Square	F	Sig.
REGR factor score 1 for	Between Groups	5.692	2	2.846	2.852	.058
analysis 1	Within Groups	1878.308	1882	.998		
	Total	1884.000	1884			
REGR factor score 2 for	Between Groups	1.977	2	.988	.988	.372
analysis 1	Within Groups	1882.023	1882	1.000		
	Total	1884.000	1884			
REGR factor score 3 for	Between Groups	8.586	2	4.293	4.308	.014
analysis 1	Within Groups	1875.414	1882	.997		
	Total	1884.000	1884			
REGR factor score 4 for	Between Groups	60.459	2	30.229	31.199	.000
analysis 1	Within Groups	1823.541	1882	.969		
	Total	1884.000	1884			

Table 5-19: ANOVA for Numbers Living in the Household

**Multiple Comparisons** 

Scheffe

Dependent Variable	(I) new total house		(J) new total house	Mean			95% Cor Inter	
	110430		110 4150	Difference			Lower	Upper
				(I-J)	Std. Error	Sig.	Bound	Bound
REGR factor score	_	upto	3-4	.11840933		.102	0172618	.2540804
1 for analysis 1		2	dimension3 over	12217348	.14107044	.687	4677532	.2234063
			5					
		3-4	upto	11840933	.05538282	.102	2540804	.0172618
	dimension2		dimension3 <sup>2</sup>	24050201	1.4600770	2.1	6000160	1100510
			over 5	24058281	.14680759	.261	6002168	.1190512
		over	upto	.12217348	.14107044	.687	2234063	.4677532
		5	dimension3 2					
			3-4	.24058281	.14680759	.261	1190512	.6002168
REGR factor score 2 for analysis 1		upto 2	3-4 dimension3 over	03191159 .17301762	.05543757	.847	1677168	.1038936
2 for allarysis f		۷	5	.1/301/02	.14120990	.472	1729038	.5189390
		3-4	upto	.03191159	.05543757	.847	1038936	.1677168
			dimension3 <sup>2</sup>	20.402021	1.4505252	250	1550602	<b>7</b> <10100
			over 5	.20492921	.14695273	.378	1550603	.5649188
		over	upto	17301762	.14120990	.472	5189390	.1729038
		5	dimension3 2					
			3-4	20492921	.14695273	.378	5649188	.1550603
REGR factor score 3 for analysis 1		upto	3-4	.15520996*	.05534015	. <mark>020</mark> *	.0196434	.2907765
5 for analysis f		2	dimension3 over 5	.15735978	.14096175	.536	1879537	.5026733
		3-4	upto	-	.05534015	<mark>.020</mark> *	2907765	0196434
	dimension2		dimension3 <sup>2</sup>	.15520996*				
			over 5	.00214983	.14669448	1.000	3572071	.3615067
		over	upto	15735978	.14096175	.536	5026733	.1879537
		5	dimension3 2	00014000	1.4660.440	1 000	2415045	2552051
REGR factor score		upto	3-4	00214983	.05456944	1.000 . <mark>000</mark> *	3615067 5570588	.3572071
4 for analysis 1		upto 2		.42338029*	.03430944	. <mark>000</mark> ·	5570566	209/01/
		_	dimension3 over	30310635	.13899860	.093	6436107	.0373980
			5					
		3-4	upto	.42338029*	.05456944	* <mark>000</mark>	.2897017	.5570588
	dimension2		dimension3 <sup>2</sup>	10007304	14465140	700	2240702	47.46060
			over 5	.12027394	.14465149	.708	2340783	.4746262
		over	upto	.30310635	.13899860	.093	0373980	.6436107
		5	dimension3 2					
	_	_	3-4	12027394	.14465149	.708	4746262	.2340783

Table 5-20: Scheffe Output level.

All of the tests described have been used to analyse the data collected and combine the information within the four factor groups. This has provided groups with shared behaviours that can now be looked at as distinct customer groups.

st The mean difference is significant at the 0.05

# 5.7 Summary

From 2220 data sets based on 17 questions a significant amount of data was generated as can be seen in the appendices (Appendix 4). Through initial factor analysis tests, four customer cohorts emerged. To ensure that the factor groups were well founded a number of additional parameters, such as, a high CITC number were applied.

To be able to attribute identities and behaviours to the factor groups, the most appropriate statistical tests were used to analyse the data relating to the socio-economic aspects of the questionnaire. Combing the statistical test outputs with the factor groups and interpreting the resulting outcomes was the basis for the practical typology. This further analytical work, the subsequent insights and the rationale for the development of the practical typology are discussed in the following chapter, Chapter 6.

## 6 Typology Development

Following on from conducting a range of statistical analyses it was possible to demonstrate how a large customer group can be split up into individuals to statistically assess behavioural traits. After this, the groups can be rebuilt but in a different format - creating smaller groups that behave in the same way and share additional socio-economic variables. These 'factor groups' then demonstrate how different cohorts of customers behave in relation to dining out and their overarching expectations. It is proposed that the development of these customer archetype groups can be employed in both practical and theoretical terms.

Many of the models for the hospitality industry, for example, the framework suggested by Jones and Lockwood (1998) and the Khan and Khan model (2009) are actually focussed on the industry instead of the customer and look at, for example, the content of the industry, or technologies and process. The taxonomies and models that do consider customers are beyond the hospitality sphere and so, although there may be similarities in the overall context, that is customers, what is being evaluated is not relevant (amongst other see Claxton, Fry and Portis, 1974; Jarrat, 1996; Belk, 1975). The difference with this study's typology is that it develops a practical typology for the hospitality industry, whilst demonstrating customer behaviours, and the rationales for these actions, as well as, also building in expectation requirements.

Based on the data collected from 2200 dining out customers, it was evident that by defining the respondents' expectations by meal cost and establishing the parameters of cost brackets, dining out customers can be placed within a number of similarly behaving groups. Although the details of customer opinions of cost along with resulting expectations is of benefit to the hospitality industry, the practical typology is extended

by then considering socio-economic factors. This provides the potential for a more extensive model, with the socio-economic characteristics underpinning and providing a rationale for the different customer groups, and subsequently also providing further information into customer behaviours and habits in general.

## 6.1 Typology

This section first tabulates the data and then explains the 4 customer groups (factor groups) that have been created. This is the accumulation of all of the research data and interpretation of the data through, factor analysis (Table 5-14), ANOVA tests, correlation and T-tests (Appendix 4). This is in addition to much of the initial developmental analysis work that was conducted, which included, work within SPSS, such as, frequency tests, cross-tabulation tables, Chi-square tests and data reorganisation (Appendix 4). What can be seen from Figure 6-1 is all of the information that has been required to create the typology to define customers in the context of socio-economic factors, with specific reference to meal cost and the influence on expectation generation in a dining out context.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.	

#### 6.1.1 Factor Group 1 (FG1)

Members of factor group 1 (FG1) are 45-75 years and over (significant) in age range, which fits in with one of the main occupations of the group of being retired, along with skilled and processing jobs. The general nature of the jobs fitting into the recognised brackets from the Office for National Statistics (2005c) reflects the main earning band of £13,000 to £34,999. There appears to be just one other in the home, described as 'other people living at home', whom the age range seems to indicate is likely to be a partner. Considering the age of the group, 45-75 and over, the age range of the other person living at home is likely to be 19-40, 41-65, or over 65 and all of these age groups fit around the respondents' age range. The likely activities that are participated in by this group are DIY, fishing, gardening, wine appreciation and cruise holidays. However, running is an activity that many of this group are unlikely to enjoy. The group numbers are likely to read a paper and definite favourites of the group are the Mail and Mail on Sunday, however, The Times was a paper that was not regularly taken by the group. The group fell into 2 categories of television watchers; those who watched 15-21 hours per week and the heaviest user category of 32, or more hours per week. When looking at the personality traits of the group there appears to be a split, for example, family is both very important and very unimportant to this group and being a 'foodie' is very important, a neutral issue, or very unimportant. Although the majority of the group say they do not have food interests, actually, food events are something which the group likes to participate in. The group creates 2 sub-groups, when looking at what they consider the price of a meal to be for an inexpensive, mid-priced and expensive meal - this could be reflective of the large salary range of the group. £0-£7 and £16+ were the price brackets for an inexpensive meal, £0-15 and £16-£20 for a mid-priced meal and £0-£25 and £26-£38 for an expensive meal and although 2 groups have emerged, each price category moves up logically for each meal price bracket. FG1

live within a 10 minute walk of a number of pubs and a few fast food outlets but not restaurants. This may explain why this group have, on average, visited a pub more than 10 times in the past 6 months and in terms of café visits, these are low at just 2 in the past 6 months although restaurant visits are between 6 and 10 times in the past 6 months. When dining out FG1 consider tableware and budget as important factors but socialising is not a driving factor for going out to eat.

Expectations that are important to this group when dining out (Table 6-1):

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

#### **6.1.2** Factor Group 2 (FG2)

FG2 is what could stereotypically be described as the 'professional working' group. This group are largely aged 35-44 and earn the highest salaries of all of the groups, that is £46, 000 to £56,999 per annum. The likely job categories are towards the higher end of the occupations scale with the respondents being managers, semi-professionals, or processors. It is likely that the majority of people in this category do not have children as, although one of the categories of ages of people living at home is under 18, the other age groups (9-40, 41-65 and over 65) seem to fit in more with the main age group of the respondent. Additionally, as usually there is only 1 other person in the household it is potentially a partner. This is a very active group; they visit pubs, cafes and restaurants

regularly (over 10, over 10 and 6-10 times respectively) and they enjoy cooking, crafts, eating out, travel, gourmet food, reading and wine appreciation. The only trend seen with regard to reading material is that this group has a liking for the Telegraph. This group live in relatively urban areas with there being 5-9 restaurants, 0-9 pubs and 5-9 fast food outlets within a 10 minute walk of the respondents house. This group like food and when answering if they thought of themselves as a 'foodie, if they had food interests and if they liked food events they fell into the strongly agree as well as the agree categories. FG2, in-line with their salaries, showed the highest expectations of prices likely to be paid for inexpensive, mid-priced and expensive dining, that is, £8-10 and £16+ for an inexpensive meal, £27+ for a mid-priced meal and £51+ for an expensive meal. This group look to socialise when dining out and as expected with what appear to be busy lifestyles, this group watch the least television at just 8-14 hours per week.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

#### 6.1.3 Factor group 3 (FG3)

FG3 are a mixed group in terms of age: 24-34 and 55-75+ and this is also reflected in the most popular occupations of this group which are retired and processors and semi-professionals. It is evident that FG3 consists of younger people, who are still of employment age, and older people who fall into the retirement category. With regard to

who is also in the house excluding the respondent, the respondent could possibly be single, or has a partner, maybe an older child at home, or even a parent. FG3 are very food orientated and include cooking and gourmet food in their likely list of activities pursued. This is also reflected in the amounts they consider are likely to be paid for an inexpensive, mid-priced and expensive meal: £16+, £27+ and £51+ respectively which are the highest consistent set of cost expectations. Time and budget are not factors that influence FG3 to dine out and of all the groups FG3 spends the most time in pubs, cafes and restaurants with visits for the past 6 months being over 10 times, 3-10 times and over 10 times respectively. This group also live close to areas where there are pubs, cafes and restaurants as within a 10 minute walk of the house, the most popular number for each of the establishments was 10+. Cultural events, crafts, travelling, gardening, reading and other activities were also significant activities for FG3 to participate in, although they were not keen on golf. The most likely read paper for this group is The Times and FG3 spend an 'average' amount of time watching television 15-21 hours per week.

Expectations that are important to	FG3 group when dining out (Table 6-3):
Expectations that are important to	1 03 group when thining out (1 able 0-3).
Figure (Text/Chart/Diagram/l	Image etc.) has been removed due to Copyright restrictions.

#### 6.1.4 Factor group 4 (FG4)

Significantly, FG4 is made up of under 24 year olds, however, the age group 35-44 is closely linked with this group although it is not significant. This group have traditional, processor or individual types of job and the group's earnings vary from less than £12,999 to £45,999 per annum. At home there are between 2 and 3 people, other than the respondent, this combined with the age ranges being under 18, 19-40, 41-65 and over 65 show a family set up of perhaps a partner and children, or the respondent being the 'child' and possibly even extended family living in the home. This group have more activities that they are unlikely to do than they actually enjoy partaking in: cooking, cultural event, eating out, travelling, golf, reading, tennis, running and wine appreciation and gourmet food. This unlikeliness to eat out is reflected by the number of times this group visit a pub in 6 months (up to 5 times), visit a café (3-5 times) and eat at restaurants (up to 5 times) these numbers are the lowest visit figures of all the factor groups. The combination of not enjoying eating out and the relatively low salaries may also explain the comparatively low amounts expected to pay when dining out. For an inexpensive meal up to £10, for a mid-priced meal up to £20 and for an expensive meal up to £38. These figures are very similar, if slightly lower, than FG1. As with FG1 tableware and budget are important factors considered when dining away from the home, as is time. However, experiencing a different environment, or new food are unlikely to be considerations for FG4. FG4 do not live close to many restaurants, pubs, or fast food outlets (0-4, 0 and 1-4 respectively) and although some within the group consider themselves to be foodies, overall, this group are neutral, or even disagree that they are interested in food. From the household set up and age groups it would appear that children are present in FG4 respondents' families and perhaps this accounts for the rating of 'strongly agree' when it comes to considering how important family is. Conversely, it is worth noting that at the other end of the scale 'disagree' is also

significant for this group. FG4 watch the same amount of television as FG1 (15-21 and over 32 hours) per week and these are the highest number of hours of all the responses. Another media interest is The Sun newspaper, although in general, this group are unlikely to read a paper and The Sunday Times, the Telegraph, The Times and 'other' papers are the papers most unlikely to be read by this group. The groups lack of interest in papers may be due to finding information on line as this was the only group who had an interest in computers, along with crafts and DIY.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

#### **6.2** Typology Summary and Conclusions

This chapter has analysed the groups that have been produced by attributing variables to the factor groups. The results from the different statistical analysis tests along with the factor analyses have determined that there are four customer groups that each have different expectations when dining out. By differentiating the groups, insight is provided into the type of person who may fit into each of the four factor groups and what varying behavioural and socio-economic traits define them.

The flowing chapter considers these findings, along with the literature review findings and a discussion how all of the research amalgamates to answer the aims and objectives. Furthermore, presentation of the practical typology and a theoretical model, thus providing a contribution to the subject area, is displayed in Chapter 7, the Discussion Chapter.

#### 7 Discussion

This chapter explores and discusses the findings generated by the quantitative research as detailed in Chapters 4, 5 and 6. Through combining the existing theory, as identified in Chapter 2, with the research outcomes, the chapter proposes to establish links between the two sets of information. The outcomes of the study, discussed here, will provide information for the hospitality industry along with research considerations for the related academic field. Additionally, the information derived from this research into customer expectations of dining out in relation to meal cost will add further knowledge to the currently limited general area of customer expectations.

#### 7.1 Review of Study Rationale and Aims

The intention of this chapter is to discuss the study findings and to develop a clearer understanding of customer expectations of dining out whilst also considering the impacts of customers' socio-economic situations. The key topics that can be seen progressing through, and underpinning the study and, therefore, this chapter are 'customer expectation' in relation to dining out, 'socio-economic influences' and their impact upon customer choice and the subsequent development of a practical typology and theoretical model.

Tables 1-1, 1-2 and 2-1 (in Chapters 1 and 2) demonstrate the investigation of information for this study and how the themes from the literature informed the aims and objectives and ultimately the research. Table 7-1, presented here, demonstrates the framework based on the aims and objectives for this chapter and highlights how, in order to discuss customer expectations of dining out, there has to be a synthesis of

understanding between the separate areas of restaurants, customer expectations and socio-economics. All of the aims and objectives set by the study have been addressed by the investigative work, which subsequently provides further insights into the research area, along with the development of a practical typology of customers and theoretical model.

#### Aims and Objectives as a Framework for the Discussion Chapter and Proposed Models

- Aim 1 To analyse and synthesise the body of knowledge related to customer expectations of dining out.
- Aim 2 To undertake a substantial data collection exercise to enable an evaluation of customer expectations of dining out.
- Aim 3 To clarify and derive meal costs from a customer perspective.

Evaluate what customers determine as the cost brackets for inexpensive, midpriced and expensive restaurants based on meal cost.

Aim 4 - To assess how customer expectations vary between different restaurant types.

Classify customer expectations of different restaurants as determined by cost categories.

#### Aim 5 - To evaluate what influences customer expectations of dining out.

Analyse the influence of socio-economic characteristics on customer expectations.

Assess the extent to which expectations are consistent amongst the different socio-economic groups.

# Aim 6 - To make an original contribution to knowledge through the development of the study findings in the context of customer expectations of the dining out experience.

Develop a practical typology in relation to restaurant customer expectations that combines the factors of meal cost and socio-economic characteristics. Develop a theoretical model in relation to restaurant customer expectations that combines the factors of meal cost and socio-economic characteristics.

Table 7-1: Framework for the Discussion Chapter and Proposed Models

This study took the view from the outset, that being able to afford a meal was fundamental in choice, even if this translated into saving for an occasion. Therefore, although there are many established reasons behind restaurant choice, if the meal cannot

be paid for, it cannot be purchased in the first place. This raised the importance of meal cost and, in turn, identified that there were different price brackets of restaurants for customers to dine in. Consequently, the study needed to explore in-depth pricing and the restaurant variables that customers expect within each price bracket. The combination of generating a significant number of data sets, along with the recognition from existing literature that further customer understanding is required in relation to expectations, provided the opportunity to produce a practical typology and a theoretical model. It is planned for the model to contribute to the theoretical research area, and the typology to provide an industry application opportunity.

In combination with the existing literature considerations, the Discussion Chapter considers the study outcomes that have been generated by the investigative work. To provide structure to the chapter the evaluations have been sectioned by a framework formed by the study's aims and objectives (as discussed in chapter 1). It is within section 7.8 of chapter 7 that the final practical typology and theoretical model are proposed, which are the original contribution outputs of the study.

#### 7.2 Expectations Research

The literature reviewed for this study covered many aspects that all related to customer expectations when dining out and a number of questions have been raised, deliberated and posed by the literature. Many motivations and purposes have been identified as driving the requirement and action of dining out. However, no one theory has emerged to answer the questions that surround the action of customers dining out. In particular there are still unanswered questions over the importance of the tangible and intangible aspects of the experience, how to achieve customer satisfaction, ensuring repeat

patronage and questions that potentially affect other areas but may never have a definitive answer, such as, a customer's psychology and physiological impacts upon the experience.

Looking at the restaurant industry it can be seen that research has to move with the fast pace of the market and it is predicted that the UK will continue to consume a higher percentage of food outside the home in coming years (Mintel, 2005). Additionally, patterns of behaviour, such as, seeking convenience, the population's diminishing cooking skills and providing sustenance for a populations increasing appetite will increase (Mintel, 2005).

To progress the study beyond that of existing studies, an on-line questionnaire was developed for distribution amongst the e-subscribers of Delicious Magazine. To initially fulfil methodological objectives the questions were sourced from existing studies, along with information gathered from pilot studies (Appendix 3). Furthermore, consideration was focussed on achieving a UK wide survey along with a high number of respondents. This, as discussed previously, was in contrast to many other hospitality studies. A combination of expectation and socio-economic questions provided responses that have been looked at as a whole, but more importantly, later segmented through factor analysis. From the complete set of data it is feasible to establish aspects, such as, price points for dining out and general customer expectations for differently priced dining out establishments.

Post factor analysis, four groups emerged with varying expectations. This meant that it was possible to segment the respondents into groups who shared similar characteristics with regard to their dining out expectations. Combining the factor groups with the socio-economic outcomes from the questionnaire a practical typology and theoretical

model were created and proposed in section 7.8. The four factor groups were defined by either their choice of dining out establishment based on price, or the requirement to dine with family, or friends. Therefore, it can be seen that the different groups have various motivations driving their behaviour. Although the factor groups motivations for dining out are evident and each factor group shares a set of expectations through ANOVA tests, chi-square tests and T-tests it was also possible to attribute to each group common socio-economic characteristics and behaviours. Subsequently, these four groups demonstrate not only the expectations required by customers when dining out at differently priced restaurants, but also clarify the life characteristics that influence each factor group.

# 7.3 Aim 1 - To analyse and synthesise the body of knowledge related to customer expectations of dining out.

From the review of the literature, it is evident why the study questionnaire was positioned to focus on the area of expectations and that the data gathered would be enhancing what Oliver and Winder (1989) describe as a largely neglected area in consumer behaviour research. Furthermore, these authors considered that to thoroughly understand consumer expectations it is necessary to recognise that expectations impact upon decisions being taken by customers in many different consumption settings. Robledo (2001: 23) also considered that customer expectations have not been well understood; "in particular, sources of expectation remain largely unexplored and expectation management is an area of study yet to be developed". Johnson and Mathews (1997: 290) concur "the current state of knowledge regarding expectations appears somewhat limited; they are far from being understood". From the data generated it was found that 2173 respondents had dined out within the past 6 months. When 97.6% of this study's research sample are found to use dining out establishments outside the

home, it demonstrates how potentially important understanding the customer is and especially so for the associated industry.

Customers choose to dine out for various reasons and this is recognised by a number of authors, for example, Jackson et al (2003) who discussed the drivers of consumption. These included aspects, such as, being social, or to enhance pleasure. Pedraja and Yague (2001) suggested that dining out provides solutions to problems, such as, avoiding cooking. Although surprisingly, what is not a recognised driver for restaurant patrons is biological need (Macht et al, 2005). From the findings of this investigation, five clear factors were identified as being important when choosing to dine outside the home: the social aspect, a change from home cooked food; the chance to experience new food; celebrating a special occasion; and finally budget considerations. Importantly, it was evident that what was frequently discussed in dining out literature was eating out being a social activity, or to do with an occasion and these issues along with the importance of homophily, (see amongst others, Autun et al, 2010) was also demonstrated by the study findings. There was a large gap between the five most important factors and the five lowest rated factors: convenience, time, other, tableware and to have similar food to that cooked at home, which could be seen to be less social, or pleasure based reasons. This concurs with many of the established findings (see, for example work by Mieselman et al, 2000).

Evaluation of restaurants is based on perception of the chosen place to eat (Pavesic, 1989), which can differ between dining out settings, but is related to the food meeting expectations (Moskowitz, 1995). This study demonstrated that across a large cohort group (2200 participants) all types of dining out establishments were being visited, and as the generated mean figures demonstrate, pubs, cafes and restaurants are visited in

fairly equal numbers. This reinforces the notion that customers will frequent dining out establishments that have different variables, such as, service, price, menu range and so on. With regard to expectation, an important finding, therefore, is that people can develop different expectations based on where they have chosen to dine — in other words, an expectation based on a 'fit for purpose' understanding. Subsequently, it is not necessary for all dining out establishments to provide the same offering based on the same set of criteria. Importantly, as Pieters, Koelmeijer and Roest (1995) have recognised for dining out establishments, satisfied customers purchase more, spread positive word of mouth and encourage others to visit.

This study concurred with the findings of Olson and Dover (1976) who suggested that expectations were formed by customers before the actual event happened. As can be seen from the findings, the respondents were able to consider and decide how they would rate their expectations of differently priced dining occasions. This additionally supports the theory that not only can expectations be formed beforehand, but there can be varying levels of expectation placed upon the same variables. This aligns with the theory that higher expectations will lead to better experiences in various contexts, that is, if a customer is paying a higher price for a meal, then it would be logical that they would expect a higher experience and subsequently they would form a higher set of expectations (Pieters, Koelmeijer and Roest, 1995).

The literature and theories examined by this study have provided a framework for the research, as well as, informing the study with regard to what research has been previously undertaken and the perspectives adopted. The key literature for this study (collated in Tables 1-1 and 1-2) has been considered throughout this study. Table 7-2

academic research.
Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

represents the outcomes and findings of this study in relation to the relevant published

#### 7.3.1 Customer Related Models

When considering customer expectations it is necessary to reflect on existing behavioural models. There are three models that this study considers to be of importance: Robledo's Expectations Management Model, the Howard Sheth Model and the Engel-Kollat-Blackwell Model.

Each of these models is in some way related to this study. For example, the Robledo Model is focussed upon expectations, and the Howard Sheth model includes social factors, as does the Engel-Kollat-Blackwell model. However, considering comments regarding complexity and how too much complexity can negatively affect understanding (Jackson, 2005), the Howard Sheth model and Engel-Kollat-Blackwell model could certainly be considered within this category. For example, within the Howard Sheth model there are four aspects of customer buyer behaviour being assessed: inputs, perceptual construct, learning constructs and outputs. Within each of these sections there are numerous variables along with forward as well as backward effects. Additionally, this model also tries to understand customer behaviour in circumstances out of scope of this study's purpose. From all of the dining out related literature it is evident that there is little consensus on many aspects of providing a positive meal Additionally, considering Jackson's (2005) opinion, these models experience. challenge the existing work due to factors of complexity, or that they overlook aspects in order to achieve an understanding of a different area. This can be seen with Robledo's model where, although expectation is the starting point of the model and many important influences are considered, the model progresses to understand the outputs of disconfirmation leading to perception outputs. Moreover, although expectation and expectation influence appear within the model there are no specific expectations described. So in addition to using expectations to achieve interpretations of perception, this model is not well detailed.

Both the Howard Sheth and Engel-Kollat-Blackwell models are focussed upon customer behaviour, which means they are not just related to the dining out market. Subsequently, as well as being out of context (Erasmus *et al*, 2001) they are also complex models that generalise. There are no specific details provided by the models

but instead they propose a pathway to understand how and why customers may purchase and behave in a certain way. Furthermore, expectations are not featured within either model.

### 7.3.2 Section Summary - Aim 1: To analyse and synthesise the body of knowledge related to customer expectations of dining out.

Through this research a number of models have been examined. However, the most relevant models have also been identified as being related to other fields of investigation, or very generic in their purpose. Although the models discussed have been influential, or used to inform an aspect of the study, no single model can be seen as providing a deductive foundation for this research. Therefore, this study has not produced a 'progression model' based on an existing authors' work. Instead, a number of approaches have been taken with regard to the data generated. First, customer expectations of dining out have been tabulated along with the inclusion of socioeconomic characteristics (Table 6-1). From this categorisation of information a practical typology model of customer expectations of dining out (Table7-7) has been created. The final stage has been to propose a theoretical model in relation to customer groups dining out expectations, predicted behaviours and socio-economic influences (Figure 7-1).

# 7.4 Aim 2 - To undertake a substantial data collection exercise to enable an evaluation of customer expectations of dining out.

The literature reviewed has raised a number of issues that surround customers and their restaurant meal choices, including, decision making, reasons for dining out and factors directly relating to the restaurant. Indeed work by Cullen, (2011); Clark and Wood,

(1998); Pedraja and Yague, (2001) and Koo, Tao and Yeung, (1999) to name but a few, have all tried to look at what determines choice and selection of restaurants by customers. However, this study was determined to find out further fundamental information on a more significant scale. Much of the current research, for example, Clark and Woods (1998) study and Hansen, Jensen and Gustafson's (2005) 'Customers' Meal Experience Model' (CMEM) used few participants and this is a recognised limitation issue acknowledged across hospitality research.

'Meal experience' research does not generally discuss customer expectations but does often include variables that this study has considered. Previous work into this area has been actioned to find out what is actually within the meal experience, as opposed to, using factors to decipher the gap between expectation and perception. The Five Aspects Meal Model (FAMM) by Gustafsson (2002) looked at five different areas of a customer's meal experience. The variables used were based on an analysis of Michelin Guide inspectors' meal experiences. The potential issue with this model is that a Michelin Guide inspector will only be frequenting a type of establishment that is already in the guide or seeking to be judged for entry into the guide. By the nature of the guide, these restaurants will be of a certain cost bracket and provide particular types of service and food. The 'Customer Meal Experience Model' which came after the FAMM should have been made up of more diverse variables, however, the variables consisted of data collected from just five focus groups. As defined by Bitner (1992), the existing hospitality literature often lacks sufficient respondents involved as customers in related hospitality research. Additionally, the studies of Andersson and Mossberg (2004), are made up of variables that have been accumulated through reviews of previous related studies, as opposed to any primary data collection. During this study's research to define price brackets for different meal costs, the validity of the findings was established through a sample sufficiently large and wide (across UK) scale to facilitate analytical statistics.

Russell and Mehrabian's (1976) opinion, with regard to the creation of variables and ensuring that variables do not create redundancy of other variables, was considered when creating the variable list for this study. What was interesting was that the descriptors used by these authors were not variables, or terminology that came to light during the pilot study (Appendix 3). Furthermore, it was considered, during this study, that to allow for descriptors that may infer the variables to be used (as with the Russell and Mehrabian (1976) study) would not be accurate enough. The variables chosen for the respondents to rate when considering their dining out expectations, as discussed previously, were disseminated from many different authors' work along with the results from the pilot study (Appendix 3). The purpose of combining the two sets of data was to develop a concise and accurate list of variables that were considered by dining out customers when forming expectations. It is necessary to recognise the different purposes between this study's lists and the variables of previous researchers. Many of the existing customer expectation variables were formed based on the assumption that they would be the basis for a calculation by which to determine customer satisfaction. Whereas, the list generated for this study, was to understand the associations between customer expectation formation and the cost of the dining out establishment. Subsequently, it can be reasoned that there may, and should, be differences between the expectation variables of this study and those from previous studies.

Many studies highlight (for example, Lewis, 1981) how important the issue of food is within the dining out experience. This study demonstrated that factors move up and down in terms of importance between difference styles of restaurant – family, gourmet

and so on. However, other studies lists often stay the same. When looking at the variables that are important to customers of differently costing establishments some variables do not even feature across all restaurants. Additionally, it would be expected that the most expensive dining options would produce the most extended list of customer expectations. In fact, in terms of number of expectations that are considered significantly important by the corresponding factor groups, it cascades from the inexpensive, followed by expensive, then mid-priced and finally to the fewest variables for restaurants catering for groups and children.

Many studies have suggested numerous factors that can make a visit to a restaurant a successful experience and will encourage return rates. However, in many studies, the outputs are based upon variables that have no rationale, or credence for being within the study. Furthermore, the studies make generalisations across every type of customer and with the assumption that all customers visit the same dining out establishments. From looking at work by Bowen and Morris (1995) there also appears to be information generated by previous research that has almost gone beyond what is important in practical sense. No one questioned in the pilot study for this research (Appendix 3) considered aspects, such as, menu colour and design to be of importance. Although it is recognised that such work may have a specific use, this study considered establishing a customer determined list of expectations, that can be used for further work into customers and dining out, as an important list to achieve consensus over and more applicable to the industry than previous work.

### 7.4.1 Section Summary - Aim 2: To undertake a substantial data collection exercise to enable an evaluation of customer expectations of dining out.

Aim 2 of this study was concerned with completing a quantitative study on a large scale. The rationale for this was based on a number of factors related to previous research. First, in general, much hospitality research is considered to be 'small scale'. Secondly, the generation of data, which formed the basis of many studies, was sometimes second-hand and often an extension of a past research study, as opposed, to being independent and current.

The issue of 'variables' became a focus as an output from this study. In comparison to previous studies there is a sound rationale for the variables put forward as part of this study's questionnaire. It was considered that the variables were of paramount importance if they were to form a list of customer expectations that would provide further information, new knowledge generation and potentially have practical application to the industry.

#### 7.5 Aim 3 - To clarify and derive meal costs from a customer perspective.

Evaluate what customers determine as the cost brackets for inexpensive, mid-priced and expensive restaurants based on meal cost.

When questioning respondents regarding the cost of an 'inexpensive' mid-priced' and 'expensive' meal when dining out, no guidance or scenarios were provided, rather the interpretation was left to the respondent. Arora, Singer and Bloch (2006: 90) in their study asked "do people go out to eat or to dine" (2006) they suggest that partially this question can be answered by what the customer aims to achieve from the meal and the type of restaurant chosen. As so many different dining out establishments exist,

gauging what *customers* considered to be different price brackets for dining out, was the rationale for not intimating the dining out format. Ultimately, the question aimed to define meal cost for an 'average' or 'typical' meal for the person responding. This would result in price points that could be taken as a 'general' picture for the market.

Although average meal prices are often generated, such as, facts for tourist information (for example, The Good Food Guide, (Carter, 2011)) these are sourced from restaurant material, where average meal costs have been calculated from menus, as opposed to what customers consider the meal cost should be. Another layer to the data generated is that it includes three cost points in relation to meal price: inexpensive, mid-priced and expensive. Due to the same participants answering the questions on all of the cost points, it can be considered that these were more accurate. Deliberating the three price points made the respondent consider the relativity of the numbers against each other, as opposed to suggesting a single cost without any parameters.

From the data collected for this study, it was clear that there was a wide gap between the lowest points and the highest points, for what the respondents considered to be an inexpensive, mid-priced and expensive meal. However, this is based on the complete set of responses and before the data had been analysed through factor analysis. Once this data was fitted into the practical typology, what can be seen is that FG1 and FG4 were always at the lower end of the amounts (£) that constituted the differently priced meal options. FG2 and FG3 consistently significantly provided costs at the higher end of the price categories. FG1 expectations aligned with inexpensive dining out establishments, whereas FG2 was purely concerned with expensive restaurants. For all of the groups, the typology provides extra information that could not be sourced from speculation, such as, home life scenarios. Although FG3 had provided higher amounts

for what was expected to pay for their meals, in fact, this group aligned with expectation factors that happened within mid-priced dining establishments. This infers that this group may have the disposable income to spend, but were less likely to frequent expensive restaurants than mid-priced ones. This concurs with further findings of the typology that demonstrated budget was not a consideration for FG3. FG4 indicated that they have expectations relating to inexpensive, mid-priced and expensive, however, this was in relation to providing dining for children and groups. Hence, although this group may visit restaurants across the cost spectrum, their main focus was a form of social, or family dining.

The following table (Table 7-3) shows the average prices for the different price points that were obtained from the data collection.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

Although much work has focussed on customers and restaurants, (see amongst others, Bitner, 1990; Cardello, 1995; Pedraja and Yague, 2001; Tse and Wilton, 1998) what is lacking from the existing literature is how customers viewed the cost of the meal. This information could have significant impacts for the industry because rather than restaurant owners, or managers estimating what the price of a mid-priced meal should be, there is now cost data available for their relative position in the market. With the economy under strain at this present time (Study Perspectives (2012), what is also necessary to consider is that it has been identified that customers do source information

before choosing where to dine (Pedraja and Yague, 2001). Therefore, if the meal cost is checked by a customer, for example, through an on-line menu source prior to booking, or if the meal cost does not align with the price category that the restaurant is perceived to be in, then this may induce the customer to find another venue. Many authors recognise the importance of pre-consumption (for example, Fisk, 1981) and have discussed how there is a pre-consumption period for customers, therefore, available information does have the potential to influence customers even before the restaurant has been frequented. With the expansion of the industry (Caterersearch, 2010) there is considerable competition and if customers are seeking information (active-state) or, for example, over-hear commentary (passive-state) (Pedraja and Yague, 2001) regarding price, and it does not fit into how they perceive the restaurant, this could have a negative impact upon future visit intentions.

Aside from affecting customer decisions on whether, or not, to dine at a restaurant, the price point at which a restaurant sets itself at is a factor that will modify customers' levels of expectation (Clow, *et al* 1997). Therefore, knowing about customer interpretations of price points could help a restaurant fit into their desired category. This will subsequently align expectations with what is being provided. This is supported by Maskowotz's (1995) work which establishes that, as long as the meal is what was expected, it is judged against these merits and not in comparison to other dining out options.

### 7.5.1 Section Summary - Aim 3: To clarify and derive meal costs from a customer perspective.

The rationale for investigating meal costs from a customer perspective was based on the context that this work had not been completed previously. Although the hospitality industry may be the provider, with regard to dining out provision, it was considered by this study, that meal cost is an aspect that customers should inform the industry on. The rationale being that, as end users, the customers will be the people deciding if the meal cost is appropriate and reflective of their assumptions as to where a restaurant sits in the marketplace.

From the work completed by this study, the cost of dining out has been attached to customer expectations. The subsequent information generated by this research, that is, the practical typology and theoretical model (see Table 7-7 and Figure 7-1) demonstrate how specific dining out cost categories can be aligned with different customer groups with varying expectations.

## **7.6** Aim 4 - To assess how customer expectations vary between different restaurant types.

Classify customer expectations of different restaurants as determined by cost categories.

Assessing the information provided from the respondents for different price categories of restaurants and disseminating the expectations of the three price categories of dining out establishments, it is clear to see that, the general public do not have an issue with distinguishing between different types of eating out venues. The Mintel (2004) study that highlighted how customers choose different eating venues further supports this. In the Mintel (2004) study, diners who ate out regularly chose a restaurant 44% of the

time, 36% of the time a pub was chosen and the remaining time was split between fast food outlets and cafes. There was more of an even split between the three establishments for this study, with restaurants being the most popular by a slight margin. Nevertheless, the pattern is similar and potentially there could have been uplift in pub usage due to recent media coverage (Flanders, 2012) of the UK economy, because as Mintel (2004) identified, pubs are seen to provide more value for money. However, the purpose for dining out is more likely to be a driver for deciding which type of restaurant is most suitable for a particular occasion. The importance of budget is an apparent consideration when dining away from home for FG1 and FG4 and this concurs with FG1 looking to spend the least of the factor groups. Tableware (FG1 and FG4) is also important as is time (FG4) to these groups. Social and 'other' reasons are what FG2 and FG3 respectively look for. The recognition that factors are being considered by the respondents when dining away from the home, supports the finding that customers define between different restaurant venues and the distinctions that they can offer. The range of reasons (Table 7-4) and the clear mix of active and passive actions related to choice, as to why respondents dine somewhere for the first time, demonstrates further that customers can distinguish between different dining out environments in-line with their purpose for dining out.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

Establishing that customers have numerous rationales for dining out, combined with various restaurant offerings, is an important platform to then comprehend if, along with different restaurant choices, whether customer expectations change accordingly.

Referring to Table 7-5 it contains the most important variables with regard to customer expectations when dining out. It can be seen that there are clear differences about what variables are important to customers in varying meal cost scenarios.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

Meiselman *et al* (2000) discussed the relationship between how the environment was perceived and how highly the meal was considered. The work of Steptoe *et al* (1995) also looked at the impacts of pricing and it was suggested that for those on a higher disposable income, sensory appeal was more important. Additionally, Cardoza's (1965) study also considered cost, however, the cost was described as an 'effort' that is, the more effort that a customer has to put into achieving a product, then the higher level of satisfaction achieved. From Cardoza's (1965) research it would be expected that the higher the meal cost and the more 'effort' being put into the dining out event, the higher the level of expectation and the more important the sensory attributes would be. However, from this study, in the expensive meal expectation scenario, although sensory attributes are shown to be of importance *atmosphere and décor* appear fifth in the list and are not listed in Table 7-5 due to a reasonably sized gap in significance between the listed important factors and *atmosphere* and *décor*. Conversely, *atmosphere* and *décor* appear in both lists of expectations for inexpensive and mid-priced meals. Therefore, what these results indicate is an inverted translation of what perhaps would be expected

when combining the considerations of expectation and the work of Meiselman *et al* (2000), Cardoza (1965) and Steptoe *et al* (1995).

Perhaps work that aligns more with this study is that of Wakefield and Blodgett (1994) who established a link between choice of restaurant and a customer's susceptibility to environmental aspects. Looking at the different cost categories, it is evident that whatever the reasons are to dine out, and whatever the cost of the restaurant chosen, atmosphere was always a variable that was of some importance. With regard to Wakefield and Blodgett's (1994) work it is however necessary to recognise that they assessed susceptibility and once again, this is an example of research using expectation as a reference point, not for direct interpretation.

When considering the problem of concluding what customer expectations were of different restaurants, as determined by cost categories, then the corresponding factor groups each indicate, what the most likely customer group's (in Table 7-6) expectations would be.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

Percy (1976) wrote about influencing different segments of the population and thus recognised that the population could be segmented and Auty (1992) acknowledged that restaurants could segment themselves for different groups of customers. Furthermore, Auty's (1992) work considers that individual elements of the restaurant environment become the deciding variables when making the final decisions on where to dine. This study aligns with Auty's viewpoint and the outcomes of this study therefore assist in determining the factors that are important to each dining out category.

### 7.6.1 Section Summary - Aim 4: To assess how customer expectations vary between different restaurant types.

It is clear from the diversity of the UK restaurant industry that customers can, and do, view the restaurant market as being segmented. However, little research to date, has established the variations in expectations of different customer groups. As the restaurant industry is so extensive, the most logical way to investigate customers differing expectations was to section the industry by cost.

Recognising what customers expected from varying dining out scenarios could have huge implications for a number of industry aspects, such as, repeat patronage and marketing. Although some researchers have recognised that customers do not all behave in the same way. To date, in previous research, no specific or statistically based recommendations have been made with regard to what is expected from different segments of the restaurant industry by customers.

This research, through statistical analysis, has presented significant information on the expectations of the customer groups who are likely to frequent particular cost categories of dining out establishment.

### 7.7 Aim 5 - To evaluate what influences customer expectations of dining out.

Analyse the influence of socio-economic characteristics on customer expectations.

Assess the extent to which expectations are consistent amongst the different socio-economic groups.

Olsen, Warde and Martens (2000) in their study demonstrated that customers dine out in accordance with group belonging linked to age, education, class and income. This study concurs with Olsen, Warde and Martens (2000); Binkley, (2006); Byrne, Capps Jr, and Saha (1998); Kim and Geistfield(2003) and has found that when people dine at an establishment that configures with their opinion of what they would pay for an inexpensive, mid-priced, or expensive meal, they conform to an identified group and each group shares other common traits.

It is important to recognise the traits of each factor group rather than making assumptions. An example of this would be, if considering the original cohort for this study, it could be assumed that those on lower incomes would eat out less and expect to pay less for a meal. However, this basic rationale would not demonstrate the complete picture of how circumstances of certain situations display themselves.

Many authors, for example, Riley (1994); John and Pine, (2002); Auty, (1992); and Finkelstein, (1989) discuss various factors of importance for those dining out.

However, they do not deduce if the variables are consistent, across all dining out options. The output of such general research is that restaurateurs would conclude, if trying to implement any of the research, that they need to encompass every type of variable. However, this study has demonstrated that, dependent upon the cost of the meal offering, the main customer group identified by this research would only consider certain variables to be of importance.

Many of the variables that feature in the lists of expectations for this study need some form of assessment, or interpretation and this is where semiotics comes into effect. It could be argued that semiotics is the start of the disconfirmation process and therefore moves beyond what this study is trying to achieve. However, an important aspect, which is accepted by this study, is that expectations can be based on memories or experiences (Tolman, 1932) and therefore, understanding how those memories of variables were formed, that is, through use of semiotics is important. Semiotics is not an aspect that is being tested by this study, it is instead, an area that is accepted and forms part of the understanding into the way that customers view many variables.

Tse *et al* (2002) highlighted how customers translate cues from a restaurant in a number of ways. In their example, if a restaurant appears busy, this brings about positive behaviours and interpretations from potential customers. Therefore, understanding what dining out customer expectations are is important so that the right messages can be sent to match what customers are concerned about.

The work of Clark and Wood (1998) concluded that it is the tangible aspects that actually influence customers' choice when deciding where to dine. However, this conflicts with the work of Auty (1992); Bitner (1992) and Milliman (1986) who all

believe that for customers the intangible is just as important. Zellner's (2007) study further added to this conflict of ideas by remarking that it was how the food is presented and in what context the food is consumed that ultimately affects customers' decisions as to whether the food could be classed as 'good'. There is a forward/backward link between expectations and dining out because as suggested by Schmalensee (1976) customers generate expectations due to prior observations. Therefore, what occurs within a dining out establishment will provide development material for future expectations.

Expectations feature in hospitality research to mainly investigate customer satisfaction. The expectation criterion within such studies provides the measure to produce the 'gap' between what was expected and what was experienced. Walker (1995) recognised that service is actually something that is considered prior to the meal and calls this a 'search quality'. However, again this work forms part of the understanding of satisfaction and the experience of service. What can be established from this study's findings is that service is a reoccurring variable amongst FG1, FG2 and FG3 and in each case is considered relatively highly.

Despite the rise of the 'experience economy' (Pine and Gilmore, 1999) and the work that has been conducted into disconfirmation, there is still a lack of parallels between variables this research has created and existing variables. From comparisons with the previous research, this research begins to infer that there are variables that are considered by the customer prior to the dining out experience. However, in terms of judging satisfaction, or the experience and deciding whether, or not, to dine again at an establishment, perhaps there are a different set of reflective variables that need to be experienced once in the venue? To further this observation, in the work of Sommer and

Steel (1997) and Pettinger, Holdsworth and Gerber (2004), the impact of dining in groups and with others is considered and it is shown that there are some negative aspects experienced by customers who dine alone. If these issues were expected beforehand then it would be unlikely customers would dine alone in the first place. Additionally, if customers could not rationalise and attribute such anxieties post the meal experience it would be unlikely that they would ever dine out again. Therefore, this seems to call for some work into whether there are changes in what is measured pre the experience (expectations), during the experience and post the meal.

In Dube and Cantins (2000) work they recognised that there has to be an 'appeal' set out by the restaurant in terms of making customers feel positive about features of the restaurant. This work therefore recognised that there were variables that customers were interested in prior to actually dining within an establishment. Looking at all the responses regarding expectations for this study there have been no variables collected from the pilot study or other authors' past studies that indicated expectations are ever linked to a negative aspect, that is, expecting the possibility of something negative occurring. Therefore, it could be judged that dining out expectations are positive functions and negative aspects are only cited during, or post experience. Murray (1991) highlights the issue of negativity in the study regarding 'risk' and restaurants trying to resolve such feelings. Therefore, such studies along with those of disconfirmation do highlight that negative situations can occur for restaurant customers, however, it would appear from this study and data from past studies that, when planning to dine out, negative variables are not part of the expectation criteria.

Myers and Alport's (1968) work demonstrated that decisions were made on attributes that were not generally expected and this study would agree with that assertion. For

example, food is not at the top of any of the factor groups expectations and possibly this is related to the findings of Myers and Alport's work, as food would be considered to be an expected variable of the experience. Swan and Combs (1976) looked at clothing within their study, not a relevant hospitality aspect, however, they provided information that this study concurs with, that expectations are not always the variables that customers judge the experience on reflectively. Their findings suggested that instrumental performance, as opposed to expectation criteria of a recently purchased car must be fulfilled in order to achieve customer satisfaction. This contradicts all the authors who created models to look at satisfaction and disconfirmation because what Swan and Combs (1976) and Myers and Alport's (1968) work suggests is that expectation variables are in place to induce the uptake, however, a different set of variables are formed during the experience which are judged for perception/satisfaction. Therefore, it has to be questioned how past hospitality research, through calculating the difference between the same two sets of variables, has been able to accurately judge satisfaction, or the propensity to return? Furthermore, as Macht, et al, in their 2005 study showed, physiological factors impacted upon appeal. However, due to the individual nature of physiological factors, much work into disconfirmation does not include, or even consider these important variables. Cardello (1995) suggested that food acceptability is how best to measure customer satisfaction, however, there is no way to interpret individual tastes and preferences. The closest work that explains this is Weber, King and Meiselman's (2004) research, that does take account of individual opinions and recommends providing a good menu variety in order to accommodate a range of requirements.

### 7.7.1 Section Summary - Aim 5: To evaluate what influences customer expectations of dining out.

The purpose of Aim 5 was to understand the influence that a person's life circumstances have on expectations when dining out. Although socio-economic factors will impact upon behaviours, to date, little hospitality research exists that is related to this area. Many of the outcomes from the participant responses indicated that recognised socio-economic factors did impact upon their expectations and much of these data formed the basis of the subsequently developed practical typology and theoretical model (see section 7.8).

There were also other important outcomes related to Aim 5 that stemmed from the combination of information from the literature review and data generated by this study. Expectation research within a hospitality context is usually related to disconfirmation work. However, this study, with the support of literature, questioned if customer expectations are the same as the variables used to view the dining experience as it occurs, or as the variables used to reflect upon the event. This enquiry has had the subsequent effect of questioning much of the disconfirmation research that has been completed previously.

This study accomplished Aim 5, and although it was not the intention to question earlier disconfirmation research, by investigating expectations, important questions have consequently been raised about the context in which expectations have been used in preceding hospitality research.

# 7.8 Aim 6 - To make an original contribution to knowledge through the development of the study findings in the context of customer expectations of the dining out experience.

Develop a practical typology in relation to restaurant customer expectations that combines the factors of meal cost and socio-economic characteristics. Develop a theoretical model in relation to restaurant customer expectations that combines the factors of meal cost and socio-economic characteristics.

Examining the dining out market, one of the main, if not the main, indicator of restaurant type, is conveyed by price. Price can be a method for segmenting the market (Carter, 2011) and is well understood by customers. Therefore, to establish expectations purely based on price and then further narrowed down by socio-economic factors is logically a coherent way to segment customers, view dining out options, determine expectations and develop this emerging study area.

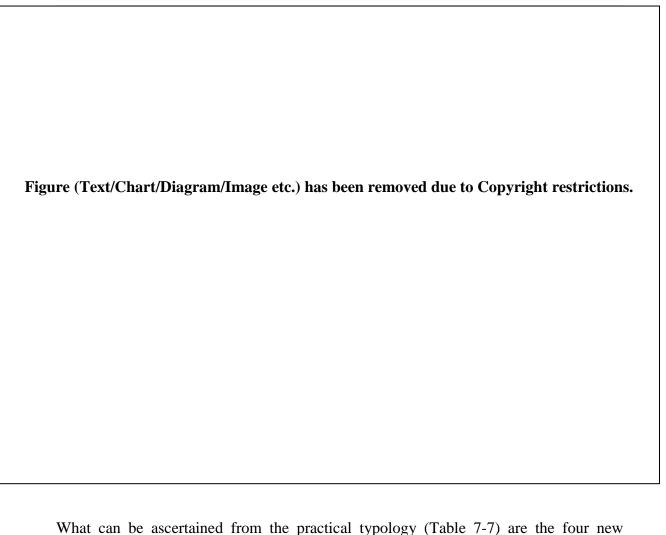
This research undertook factor analysis as the main statistical enquiry method along with subsequent variance and association tests to clarify and classify customer groups based on dining out expectations and sectioned by meal cost. The four categories determined by the statistical tests were then distinguished further through the inclusion of socio-economic variables and behavioural traits. From the data generated the four established customer groups (factor groups) were applied to both a practical typology, as well as, a theoretical model.

#### 7.8.1 Practical Typology

The practical context from which this research originates has not eluded the research purpose of the study. Therefore, a practical taxonomy (Table 7-7), which assists in explaining the various customer groups formed as a result of the research and highlights

the differentiation between the customer groups and their predicted actions, has been developed. The practical model allows for interpretation and identification of the sample of customers, their requirements and behaviours for application and implementation by the industry.

The questionnaire response groups that have been created through factor analysis and used within the practical typology table are not unusual in that they begin to reflect cross-sections of society. The difference between this typology and previous analyses is that the practical typology in this study has enabled customer groups to be sectioned with principal attributes and behaviours emerging from these four groups. Additionally, what can also be identified from the practical typology is that each of the developed customer groups has definitive requirements in terms of expectations when dining out.



what can be ascertained from the practical typology (Table 7-7) are the four new customer groups and their behaviours in relation to their dining out choices along with certain socio-economic factors. The groups' socio-economic characteristics assist in providing further insight into the group, which in turn, also makes the dining out behaviours more understandable. As can be seen from the constituents of the factor groups in the practical typology, undertaking statistical work on the data gathered was an important step to understanding the groups as, it would otherwise not be possible, to accurately assume the combinations of variables that the practical typology displays.

Although customer behaviour models established through previous research exist, as can be seen in section 1.2 many of these are generic models as is often highlighted through their complexity, for example, the Engel-Kollat-Blackwell Model of Customer

Behaviour. Furthermore, some of the existing models have been established for different purposes, or research contexts, such as, motivation, even though they can be found within relevant customer behaviour literature. Therefore, this study has developed a theoretical model (see Figure 7-1) that reflects customer groups resulting from a survey received by 34,471 individuals in reference to dining out. Moreover, in order to add certainty and meaningfulness to the theoretical model, the characteristics and patterns of the customer groups, as recognised by this research, have also been combined within the model.

#### 7.8.2 Theoretical Model

Creating a theoretical model is an important interpretation tool as it provides a framework of overarching groups within which large numbers of activities, behaviours and characteristics can be interpreted in a simplified manner. Furthermore, it is possible to analyse the groups and understand how they interrelate and potential patterns of group member's future behaviours. This study has completed a factor analysis on the respondents from the quantitative study who dined outside the home. With the additional statistical analysis tests, that is, T-tests, correlation and ANOVA tests completed, it has been possible to segment the respondents.

As discussed in section 5.5, the expectation variables from the questionnaire that were amalgamated to develop the four customer groups were subject to a number of tests and considerations during the factor group formation process. In-line with Costello and Osborne's (2005) recommendations, no variables measuring below .5 were included within the factor groups, no variables were shared between factor groups and preferably no groups should constitute of less than five variables.

Subsequently to ensure that the resulting factor groups contained "solid factors" (Costello and Osborne, 2005: 5) the following variables were removed before the factor groupings were finalised.

- Inexpensive variables removed: Cost and location.
- Mid-priced variables removed: Non-standardised food, beverages and recognition.
- Expensive variables removed: Location, cost and recognition.

The consequence of the factor analysis process is that the variables removed, for purposes of creating accurate factor groups, are not included within the final groups identified in the theoretical model.

From the study data, four groups of customers emerged from the analysis based on their expectations of dining out at differently costing restaurants. These four groups have been tabulated (see Figure 6-1) to highlight the patterns of expectations, social situations and preferences. Until now the analytical work has either discussed practical outcomes from the study (see the practical typology), that is, different customer types and their expectations and how these relate to existing literature and models. What differentiates the practical typology and this theoretical model section is that it aims to discuss the factor groups beyond simple interpretation. The ensuing sections of this chapter will consider the customer groups in relation to the theoretical model, insights generated by the model and the different pathways, or movements that can be applied to each of the groups, along with the implications of their positioning.

Identifying customer groups emerging from the study and combining them with statistical analysis allows for each group to be recognised within the customer sphere and also for identification of their distinguishing features. The theoretical model (Figure 7-1) will assist with understanding the groups and their different requirements.

These groups have, for the purposes of the theoretical model, been termed <i>Fledglings</i>
(FG4), Occupied (FG2), Frenetic (FG3) and Established (FG1). The theoretical model
(Figure 7-1) is replicated at the end of sections 7.8.3, 7.8.4, 7.8.5 and 7.8.6 for ease of
reference.
Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.
rigure (reng enargementalisments) has been removed due to copyright restrictions.

#### 7.8.3 Fledglings

The group was assigned the name *Fledglings* due to the main age range of those who answered the questionnaire. In comparison to the other groups the *Fledglings* are the youngest group identified. They come from mixed aged households and as there are 2-3+ living within the household it would seem that the *Fledglings* are often part of a traditional family set up and are potentially the 'children' within the household. This group, of all the groups identified, was the 'anomaly' group as their main concerns when dining out were just four variables, that is, eating with family and groups across all three price brackets of restaurants and the location when dining in mid-priced restaurants. As well as having a very narrow list of expectations, this group was the group that ate out the least and has little interest in food whether it is cooking at home, or food interests, such as, food events outside the home.

This group fit into a wide salary bracket that can be summarised as them being 'midearners', however, this is annual household income which therefore could also potentially be/include parental salary. It is worth recognising that parents, or extended family of *Fledglings* are likely to fit into a different group as identified by the theoretical model. The main occupations of *Fledglings* fit into the lower bands as set out by the UK Government (The Office for National Statistics, 2000).

The group had some likes with regard to hobbies and one in particular reflects the age range of this group, that is, computer games which are often associated with the 'S Generation' (Potter, 2012). Interestingly, *Fledglings* had an extensive list of activities that they were significantly unlikely to be engaged in. Possibly these can be assumed to either be activities of an older group of people (especially, as some of the activities do feature in the other groups). They were the only group to take a predominantly

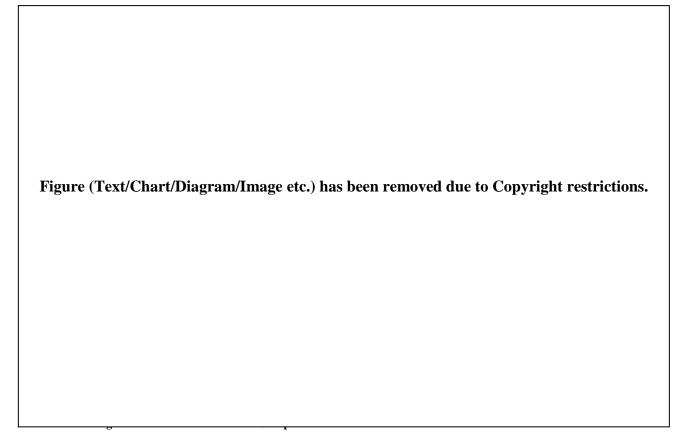
ABC1C2 demographically classified paper and were unlikely to read any papers that fit into the AB category (NMA, 2012). This group also watched a large amount of television with the range being between 15-32+ hours per week. The model indicates that *Fledglings* can move forward in one of two ways; based on the age brackets *Fledglings* move either to the *Occupied* group or to the *Frenetic* group.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

#### 7.8.4 Occupied

Respondents of the questionnaire who have been identified as belonging to the *Occupied* group do not start off in this group, they will have either moved from the *Fledgling* group or from the *Frenetic* group. *Fledglings*, once they gain in years, will move to the *Occupied* group and through moving up the career ladder, or potentially going through life changes, such as divorce, *Frenetic* group members can also move into the Occupied group. What distinguishes the *Occupied* group is the impact that their jobs have on their lives. These questionnaire respondents are high earners, people

whose jobs fit into predominantly the higher occupation classification bands (The Office for National Statistics, 2005c) and they are unlikely to have more than one other person living in the household. This group reflects its earning potential in their response as they were most concerned with expectations for expensive restaurants and their assumptions of meal costs for an inexpensive, mid-priced and expensive meal were some of the highest suggested. The Occupied groups main reason for eating out was identified as the social aspect and it can be seen that in many ways they have become the opposite to the *Fledglings* as they enjoy many of the activities that *Fledglings* were unlikely to do, such as, cooking, travelling, reading and wine appreciation. Their television viewing hours are dramatically different from Fledglings and are the lowest of all the groups at just 8-14 hours per week. They also read the Telegraph which has a recognised readership of mainly AB and ABC1 adults (NMA, 2012). Respondents within the Occupied group could potentially move in two ways as their circumstances change; as they age they may move to the Established group, or they could move to the Frenetic group if children become significant within the household. With regard to using the term 'significant' this indicates that children have changed the nature of the household, for example, by reducing the household disposable income.



#### 7.8.5 Frenetic

There is assimilation between the *Occupied* and *Frenetic* group members due to similarities, such as, their likely activities and the style of newspaper that they read (both The Daily Mail and The Times are extensively read by AB and ABC1 population categories (NMA, 2012). Additionally, there is some alignment with potential jobs held by those in both the *Frenetic* and *Occupied* groups. They also both eat out extensively, more than those in the other groups. The main difference between the questionnaire respondents who are in the *Occupied* and *Frenetic* groups is that children appear to be present more within the *Frenetic* group and the groups salaries are lower, possibly due to one parent remaining at home to look after the child/children. Nevertheless, this group expected to pay at the higher end for each price category of meal, whether it was inexpensive, expensive, or mid-priced, although their main concern with regard to expectations were those centred around mid-priced dining establishments. The study's findings suggest that those who belong to the *Frenetic* group can move one of two

ways; the natural progression route would be to move onto the *Established* group, although it would appear that some people who, upon reaching retirement age, remain in the *Frenetic* group. However, if a life altering event occurred, then it is possible to move back into the *Occupied* group.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyright restrictions.

#### 7.8.6 Established

This is the last group of respondents identified and those from *Occupied* and those who do not stay in the *Frenetic* group, once they are older, could transfer into the *Established* group. This group consists of those aged 45 and above and there is a meaningful percentage of retired people in this category. The main difference between this group and the *Frenetic* group is that the impacts of children do not seem to be a feature. Otherwise, there are a lot of similarities between this and the other groups. Although *Established* is a predominantly older aged group, a large proportion of the

group still work and the jobs are similar to those of *Frenetics*. The income starts the same as with the *Frenetic* group although does go a little higher, they do not eat out as much as the *Frenetic*, or *Occupied* groups and their food interests are not as pronounced from the responses. Once people move into the *Established* group, the study suggests, it is unlikely that they will move unless they become part of a family situation again when, potentially they could move back into the *Frenetic* group. Many enjoyed activities of the group were leisurely, such as fishing, gardening and cruise holidays and the amount of television watched would also infer that people in this group do not have as many commitments and have more time to pursue activities and leisure time. Even though this group may have average earnings of all of the groups, this is not reflected in dining out, as this group are most concerned with expectations relating to inexpensive dining out establishments and cite 'budget' as a factor for consideration when dining away from the home.

Figure (Text/Chart/Diagram/Image etc.) has been removed due to Copyrig	ht restrictions.

#### 7.8.7 Theoretical Model Further Considerations

Looking at the theoretical model (Figure 7-1) it can be seen how the respondents of the questionnaire interrelate and can move groups depending on influencing factors, predominately: age, family situation and financial means. However, it is recognised that the model cannot account for every point in people's lives and so an overarching theory, that is Maslow's Hierarchy of Needs (King, 2009), has also been incorporated into the model. This overlays the model and provides insight into what may happen to customers in circumstances that this study has not been able to account for, such as, unemployment, or scenarios of other unfortunate happenings. At the other end of the spectrum, where people may have excessive amounts of money and spare time, but are unlikely to be significant in numbers to be captured by this study, Maslow's Hierarchy of Needs indicates where such customers could be placed in the model. The theoretical model indicates the identified groups and their defining elements, such as, income and frequency of dining out and the positioning of the four groups within Maslow's Hierarchy of Needs parameters reflects these aspects. From the model it can be identified where people who are in need and lack ability, or motivation to partake in dining out may be placed. At the other end of the scale of needs, self-actualisation occurs and a person positioned in this region of the model would account for customers who frequent very exclusive and/or expensive restaurants, due to being able to satisfy altruistic needs.

#### 7.8.8 Personality Traits

Within the questions used to generate the data there were four questions included which were designed to produce information on the respondents' personality (as discussed within the Methodology Chapter) and based on work conducted by John and Srivastava

(1999) and Gosling, Rentfrow and Swann (2003). Understanding personality patterns through the application of the statistical tests to the factor groups should have alluded to behaviour traits of each of the customer groups. However, the majority of the responses were significantly mixed. The only customer group that could have any patterns of behaviour drawn from the results was the *Occupied* group. This group showed a propensity for openness to experiences and extraversion. Gosling *et al* (2003: 30) describe extravert characteristics as ones that imply "an energetic approach to the material world and include traits such as sociability, activity, assertiveness and positive emotionality". Whereas, openness to experience demonstrates that a person's mental and experiential life are extensive. This outcome can be verified by the responses provided by the *Occupied* group as one of the group's main reasons to dine away from the home was the social aspect. Although the personality trait questions have been meaningful and correlated with other responses for the *Occupied* group, for the other customer groups there were no patterns that could be statistically rationalised.

# 7.8.9 Section Summary - Aim 6: To make an original contribution to knowledge through the development of the study findings in the context of customer expectations of the dining out experience.

Although within the restaurant industry it is recognised that varying customer groups exist, no previous research has investigated who is choosing where to dine, what their requirements are and what has influenced these expectations. From an industry relevant perspective an initial practical typology has been developed from Delicious Magazine esubscriber responses. The contents of the practical typology have been maintained at a level that is straightforward and that evidently relates to aspects of dining out that could with further validation be important for the industry. Both the practical typology and the theoretical model contain information from the quantitative survey responses that

were subsequently statistically analysed, the complete set of outcomes can be found in Figure 6-1 and Appendix 4.

To be able to define *Fledglings*, *Occupied*, *Frenetic* and *Established* customer groups based on the study's questionnaire responses is an important step to recognising and understanding customers before they have even frequented a restaurant. Furthermore, these customers can be specifically targeted by appealing to their requirements in order for businesses to generate custom. Finally, once the customers have been encouraged to dine at an establishment, if expectations can be met, or even exceeded, then it is predicted this would encourage repeat patronage. The aspect of customers returning to dine on more than one occasion is fundamental in the success of the majority of hospitality food businesses.

# 7.9 Discussion Chapter Summary

This chapter documents how the outcomes from the study have been considered and aligned with the aims and objectives. By endeavouring to make an original contribution to knowledge and examine an emerging study area, four customer groups, based on the Delicious Magazine questionnaire responses, have been defined that each hold different expectations of dining out. The evidence demonstrates how socio-economic factors, such as, income, age and others in the household do alter expectations and requirements when dining out and that expectations can be aligned with differently costing dining out establishments. It also explains how socio-economic characteristics affects more than just expectations, it also influences what people will pay for their food, where they like to dine and how often they will dine outside the home.

This research has looked at what Delicious Magazine e-subscribers dining out expectations are and demonstrated how socio-economic characteristics impact upon the outcomes. However, the nature of the study was wider than only just finding out about expectations, it has also created initial practical, as well as theoretical outputs, through understanding restaurant pricing from a customer perspective. Defining what expectations are for the differently identified customer groups, as well as, additional behaviours and traits have also been established. This study has also raised questions with regard to how this work interrelates with existing research that has looked into customer behaviour and expectations. Considering these factors the theoretical model (Figure 7-1) was created to build upon the outputs established for the practical typology.

#### 7.9.1 Further Contributions to Knowledge

The work conducted for this study and the outcomes that duly arose have questioned, agreed and extended the current understanding of dining out customers (as segmented groups) with regard to their specific expectations and general behaviours and preferences. Overall, this work has added to the existing research by providing an understanding into an area that has previously not been treated as a separate entity, or where expectation work has been carried out there has been no recognition of customers being part of different customer cohorts. Many of the idiosyncrasies that have been recognised are the result of the impact of socio-economic circumstances, which again, have not been researched in this specific context previously.

From the questionnaire results and analytical work completed four customer groups have been established and to these groups, expectations, behaviours, requirements and influences have been founded. Before this study, research relating to dining out had not looked at what influences customers, or been able to theorise about different customer

groups, build a picture of the different groups, or generate understanding of how customers' can transit between groups. The outcomes from the study provide both insights into customers as well as practical implications for the industry. Until now the main focus of practical research within this area has centred on satisfaction and expectations have been a part of the equation for understanding perception.

Along with building on existing research, this study has had another outcome and that is to raise the question about existing customer satisfaction research. Much of the research relating to this area that has been conducted to date makes an inference that expectation variables are the same as the variables that people use to determine their dining out experience reflectively.

Building a picture of customer consumption during the current economic downturn (Flanders, 2012) has provided both a focus for the research, with considerations for the importance of the practical outputs, as well as, generating a picture of customer behaviours both with regard to dining out intentions, expectations and general lifestyle factors. This reflection of customers was made possible through the use of an extensive data collection exercise which differed from much of the existing research in that it was a large scale study that collected data from across the UK to try to create a relevant interpretation.

The concluding chapter will further evaluate how this research and its findings can benefit practitioners who are working within the realms of both customer behaviour and expectation research. Furthermore, although the practical outputs have been discussed it is necessary to identify routes and means by which the information can reach those working within the industry, so that the facts can influence considerations with regard to

customer expectations and different customer groups dining out. The final part of the Conclusion Chapter will assess the study's strengths and weaknesses along with how the outcomes of the study, and questions raised by the study, could be developed further by researchers.

# 8 Conclusion

The main purpose of this thesis was to gain insight into customer expectations of dining out. To make this achievable and applicable to the industry, dining out was categorised by meal price, (defined as, *inexpensive*, *mid-priced* and *expensive*). What has been considered by previous research, in relation to customer expectations, has mainly focussed on satisfaction, as opposed to many of the other factors of the UK dining out market that link with expectations, such as, customer choice. As much of the research for this study focussed around price, it was rational to consider how customers' socioeconomic characteristics influenced and impacted upon their expectations. This research also noted evidence of previously concluded hospitality primary research that was based on low response rates, or that had judgments based upon secondary data.

This thesis has considered the limitations of previous research and in many aspects used the existing limitations of the research area as a framework to inform the present study. This study collected data from a large cohort, sourced from a questionnaire distributed through the Delicious Magazine website, and developed knowledge and understanding to add to the realm of customer behaviour research. From the data generated, statistical analysis has been completed and four customer groups with varying requirements and behaviours have been, in both practical and theoretical terms, defined. This study has been able to demonstrate that merging these key areas provided important findings that contribute to existing academic knowledge and was able to produce practical implications. As the study was led from the outset by existing literature and the restaurant market, the practical typology developed considered the importance of such information to the industry. Whereas, the theoretical model that has been developed is the outcome that has most potential to assist prospective academic enquiry in this area. As this research is the foundation of enquiry into the study area there is plenty of

opportunity for future developments, which will be discussed later in this chapter. Reviewing the aims and objectives (Table 8-1) this thesis has demonstrated how each has been the origin for an aspect of the research. Chapters 4, 5, 6, 7 and this concluding chapter exhibit how each of the six aims and six objectives have been achieved.

#### **Study Aims and Objectives**

- Aim 1 To analyse and synthesise the body of knowledge related to customer expectations of dining out.
- Aim 2 To undertake a substantial data collection exercise to enable an evaluation of customer expectations of dining out.
- Aim 3 To clarify and derive meal costs from a customer perspective.

  Evaluate what customers determine as the cost brackets for inexpensive, midpriced and expensive restaurants based on meal cost.
- Aim 4 To assess how customer expectations vary between different restaurant types.

  Classify customer expectations of different restaurants as determined by cost categories.
- Aim 5 To evaluate what influences customer expectations of dining out.

  Analyse the influence of socio-economic characteristics on customer expectations.

  Assess the extent to which expectations are consistent emongst the difference of the diff

Assess the extent to which expectations are consistent amongst the different socio-economic groups.

Aim 6 - To make an original contribution to knowledge through the development of the study findings in the context of customer expectations of the dining out experience.

Develop a practical typology in relation to restaurant customer expectations that combines the factors of meal cost and socio-economic characteristics. Develop a theoretical model in relation to restaurant customer expectations that combines the factors of meal cost and socio-economic characteristics.

Table 8-1: Study Aims and Objectives

# 8.1 Original Contribution to Knowledge – Practical Typology

A practical application of the outcomes was considered to be an important element of the research due to the industry having little guidance about customer groups and behaviours. Although it is generally accepted that many hospitality businesses will conduct their own research to understand their particular customer base, little collective knowledge exists of such information. Furthermore, much of what is used will not have been statistically tested, or combined with additional important variables that impact upon customers, such as, family situation, or behaviours and choices. With the recognised increase in demand for dining outside the home (Mintel, 2004) and the realistic continuation of this trend, it is important to understand what drives customers to make the decisions that they do, and what their expectations are of the dining out experience.

The characteristics that are present within the practical typology and the specific requirements in relation to expectations for each customer group are not evident within the theoretical model. Nevertheless, it was recognised that certain factors within a typology need disseminating and this was a further rationale behind developing both the practical typology and the theoretical model. It is expected that the detail of the practical typology will assist with the application of the information. Whereas, the theoretical model can be interpreted, used for comparative purposes, or applied as a template to further research scenarios. Customer models exist (as explored in section 1.2), however, a specific practical typology within the specified research area has not been evident within the existing literature. Through the accumulation and analysis of the data the practical typology has been an output (Table 7-1) that has been a contributor in attaining Aims 3 to 6 and Objectives a to e.

With regard to the commercial interpretation of the practical typology, the research has demonstrated the variables that were important to the different customer groups. Therefore, if a restaurant business were aligning their establishment with a customer group, for example, the *Frenetic* group, providing aspects that would deliver for children and groups would be a priority. In some instances the practical typology infers more specific recommendations, such as, 'non-standardised food'. However, largely, the practical typology provides an overview of the four different customer groups and general conditions to be met to fulfil the expectations of each of the customer groups. The practical typology is not exceptionally specific beyond identifying the relevant variables as it is expected a hospitality business would know what conditions and actions the named variable encompassed.

# 8.2 Original Contribution to Knowledge – Theoretical Model

This study has illustrated that dining out customers belong to defined customer groups and although there is a wide market, in terms of restaurant choice, as the results of this study suggest, each distinct group has a set of expectations and requirements to be fulfilled. This ultimately determines the restaurant category that the customer will choose to frequent. The theoretical model provides an overview and has been created through the generation and combination of outcomes as revealed by the data analysis.

Through the amalgamation of socio-economic variables that influence customer's circumstances and dining out expectations, in relation to cost, it is possible to create initial profiles of customer groups. Through transferring the interpreted data to a model, an overview can be taken, where it is possible to follow customers throughout their life stages and understand how variables influence a person to move from one customer

group to another. Reflecting upon what the model proposes some people may transit between several of the customer groups, whereas others may belong to each of the groups at some point in their lives. There is also the flexibility for customers to move back into groups that they previously frequented.

Although earlier customer behaviour models exist (see section 1.2) this study has developed an alternative model, by which to view the dining out public. The specifics of the model, in comparison to existing models, and its uniqueness, were the driving forces behind the development of the model. The theoretical model (Figure 7-1) that was defined from the study's research outputs illustrates where the four newly defined customer groups are positioned in relation to each other and demonstrates how socioeconomic influences and subsequent dining out expectations place distance between certain groups, such as, Fledglings and Frenetic. However, some similarities, that at first may not be obvious, bring other customer groups closer together, as can be seen between Fledglings and Established. This study did not define if there was a specific driving factor, or a key aspect that determined expectations from the statistical analysis conducted. Nevertheless, it can be seen that the four dining out customer groups can be placed within the theoretical model in relation to salary, frequency of dining out and food interests. Statistically, the variables have been determined for each group, which created a reflective picture of circumstances and rationalises the placement of each group in relation to the variables. Ultimately this created the configuration of the groups and demonstrated their relativity to each other.

It has been established that through a person's life their requirements, interests and behaviours will change and the theoretical model shows the course of direction that customers can take between groups. As it is a theoretical model, further details, such as, reasons for movement were not incorporated into the model, but the indicated pathways demonstrate potential movements. Customers will interchange between groups throughout their lives, although the model also exhibits visually, that not all groups have to be visited by every person. As movement is indicated between groups and is set against measures of salary, visit frequency and food interests it is intended for this to make the justification for customer movements clear.

The theoretical model suggests patterns of movements, who the customer groups may be and measures (salary, dining out frequency and food interests). It is therefore similar to the well-recognised customer behaviour models that are referred to by hospitality research (see section 1.2). Indeed, the concept of interpretation was influenced by such models for use within this study's theoretical model. However, the theoretical model presented here contributes to knowledge, (Aim 6) through its original context and the intended application for use within hospitality research.

# **8.3** Study Conclusions

The following sections do not describe again the specific customer groups as ascertained by this study, as this information is contained within Chapter 7. What follows here, are core themes that underpin the outcomes specifically from the data collected from delicious magazines e-subscribers responses. The information also demonstrates the association between this study and its relevance to the industry, which was a consideration for the research, from the outset. Nevertheless, it is necessary to recognise that the research sample was generated from a specific target audience and subsequently the data cannot be generalised beyond the sample to reflect the expectations and behaviours of the whole of the UK population.

Customers will identify with one of four broad groups of restaurant patrons. From the research undertaken, four customer groups have been identified: *Fledglings*, *Frenetic*, *Established* and *Occupied*. It has been possible to establish that the majority of customers will fit into one of these groups and will subsequently display certain identified characteristics of this group. These include specific family requirements, employment situation, life stage and personal expectations. What has also been identified is that restaurant customers will move between groups dependent upon their changing personal circumstances. Understanding 'movement' motivation has yet to be identified but, taking an overview, a distinction between the groups is demonstrable.

Customers do not have an endless list of expectations that the dining out experience must achieve. Customers dine out as individuals and trying to manage their needs must often appear complex to restaurateurs. However, what this study has demonstrated, in particular the practical typology, is that there are overarching requirements that need to be considered for each identified customer group. Moreover, where a restaurant may have a convergence of customer groups, what can be identified from the list of expectations is that a number of variables are applicable to more than one group. This does not infer that these are the only variables that need to be addressed, however, if all of the significant criteria can be met then, this would be a serious step in meeting customer expectations and potentially achieving customer loyalty and repeat custom.

There are common expectations across all customer groups but no expectations that are consistently important across all of the customer groups. Although it has been recognised that there is not an endless list of customer requirements and some

expectations are shared by customer groups, there is not a list of expectations that is of importance and generic across all the customer groups. This promotes the significance of the restaurant industry understanding specific customer bases. Recognising that there is no single list of crucial criteria for all customers demonstrates further the flaws in past research that has looked at dining out customers as a single group and assumed they all have the same shared requirements.

A restaurant failing to meet customer expectations will not induce a customer to change their restaurant choice category. From the research conducted it is evident that the respondents' corresponded to four customer groups. Due to the size of the restaurant industry there will be many restaurants that meet the needs of a particular customer group. Therefore, if customer expectations are not met, it is predicted that, the likelihood of repeat custom is reduced. Instead, the customers are more likely to frequent a competitor establishment, as they are unlikely to deviate from the customer group that they most align with.

Customers do distinguish between different restaurant categories. As identified by this study's findings customers and customer groups have particular requirements that need to be met whether this is, for example, the level of spend, or the need to accommodate children. Although patterns of behaviour for one-off occasions, such as, a celebratory meal, have yet to be established, overall, it can be seen that customers choose restaurants that will provide for their requirements. Therefore, it has been found by this study that customers can assess and distinguish between the understood, or expected, merits and nuances of restaurants when choosing where to dine.

Life stages and socio-economic factors determine which group customers will belong to. The customer groups for restaurant patrons have been developed through the inclusion of variables that, in the main, have not been considered by past research. The importance of not considering the population as one un-segmented group is demonstrated by this study through the identified variables that contribute to each of the customer group's formation. What has become evident is that aspects, such as, life stage and socio-economic characteristics are core elements that have considerable meaning to the definition of each of the customer groups.

# **8.4** Application of Research

The work within this study has been founded on aims and objectives that have, in most instances, been generated, or influenced by existing relevant literature. Therefore, the academic outcomes that can provide the foundations for further study should be clearly evident. The practical typology has only been discussed so far in terms of direct consideration for customers frequenting a restaurant. However, with all of the data generated the practical typology actually provides a much wider resource.

Initially interpreting the practical typology would allow a restaurant to put in place measures to ensure that the relevant expectations can be met. This is not only likely to ensure customers will be satisfied with their dining out experience but implementing the variables could potentially attract customers. Furthermore, recognising and applying certain variables will focus the restaurant business on who their target market consists of, as well as, indicating potential competitors in the sector. With the restaurant market growing steadily competition for customers can be fierce and attracting paying customers can be a determining factor as to whether a business survives, or fails.

Therefore, advertising is a key avenue to generate customer interest and the practical typology is based on socio-economic factors, behaviours and interests that could infer how and where to target advertising to a specific customer group. As such, the results of this thesis could be used for application to advertising design to target specific customer types. Additionally, new businesses looking to establish a restaurant could use the study findings to determine their future market, and to inform their decision on whether the opportunity exists in the marketplace for a particular restaurant type.

Considerations have been made with regard to communicating the findings of this study to industry as, although hospitality research outputs have benefits to industry, it is recognised that often the accessibility of the information is what interrupts the application of the findings in a practical sense. This study's questionnaire was distributed through Delicious Magazine's website and so an alliance between the study and a non-academic resource has already been created. It is intended to carry out further work for non-academic channels by producing articles for trade magazines about the study so that industry professionals can disseminate the findings. Furthermore it is planned to contribute, via the inclusion of both the practical typology and the theoretical model, to a hospitality textbook. Potentially the textbook could be used by those who are in the learning stages of understanding the hospitality industry and the information could form part of what underpins their actions once they are established in the workplace.

The intended main purpose for the theoretical model is for inclusion within future academic articles relating to this study's combined research areas. Initially, it will form the basis for distributing these research findings and potentially in the future provide the foundation of work by other researchers. The model will also support future research

relating to a series of comments and conclusions that have emerged from this work regarding previous hospitality satisfaction studies and their limited view of customer expectations.

#### 8.5 Limitations

A limitation of both the theoretical model and the practical typology is that the study did not measure customer expectations or behaviours during transition periods. Therefore, the theoretical model takes account of unknown behaviours by not assuming customer behaviours during periods of movement from one customer group to another. Looking at the theoretical model and making general assumptions about the cohort included in the study, it was recognised that the findings would be unlikely to account for anomaly groups. That is, customer groups at either end of the dining out spectrum. After consulting a number of established models, Maslow's Hierarchy of Needs (King, 2009), provided the formulation as to where extremes could be placed within the theoretical model and the likely characteristics and effects that could be applied to each of these groups. In such circumstances, it is expected that, the customer's situation is very different from what has been determined in general by this study. In the theoretical model, examples of considered scenarios, which would be determined by Maslow's Hierarchy of Needs sections, could be an absence of motivation to dine out because of a lack of available funds. At the opposite end of the spectrum, expectations could be extreme due to a very significant event, or high amounts being paid for dining experiences.

Both the practical typology and theoretical model include information that is deemed to be the most significant from the statistical analysis. However, as is highlighted by Appendix 4 the discussed outcomes were not the only ones produced by the data. Indeed, other outputs were relevant, but not as important, as the elements that have been included within the practical typology and the theoretical model. Further information that has been produced, but was not deemed to be significant, nevertheless demonstrates that although the practical typology and theoretical model provide accurate generalisations for the cohort they cannot account for everyone. Additionally, it is necessary to again acknowledge that the sample used for the study was generated from a target group and subsequently the data and outcomes cannot be generalised to reflect the expectations, situations and behaviours of the whole of the UK population.

Another limitation is that clarification of what happens to customers who have a poor dining out experience was not achieved. It is assumed that customers who experience a negative incident will not leave their customer group. However, currently considered a limitation, this aspect is a potential course for further investigation. The perceived route would be to assess if negative experiences kept occurring for customers when dining out, what would be their subsequent decisions regarding future dining out choices.

#### **8.6** Further Research Direction

From the outset of the study and the initial review of the literature, it is clear that the combination of aspects looked at by this study have not featured greatly in previous research outputs. Therefore this study has provided consequential outputs, but at the same time, raised additional questions and issues that could be explored through further investigations. Forthcoming studies could develop this research and expand the context to determine more specific details, or potentially widen the scope of the research, whilst still underpinning the research with this investigations founding concepts.

Two clear recommendations for future research would be to test both the practical typology and the theoretical model. Although both outputs demonstrate the findings of this study, neither has formed the foundation of a research study to validate the accuracy of their contents. Confirmation of the outputs would provide substantiated findings that would be more difficult to reasonably challenge and would subsequently reinforce the original study.

Additional logical next stages for the continuation of the study theme would be to look at the four customer groups and determine further information. For example, are there variables within the factor groups that underpin the formation, whilst other variables have a lesser influence, such as, family being more significant in defining the group than spend?

An important aspect that could provide scope for additional investigative work is what happens to customer expectations and which customer group do people fit into when a significant, but temporary variable, in their lives alters, such as, a change in employment, an inheritance, or a special occasion. A further extension of this theme would be to understand customer expectations, choices and so on when the customers are transiting between the four identified customer groups.

What is also interesting to consider for future research, and could have important applicable outputs for the industry, is what happens to customer expectations when someone dines outside their projected customer group? To gain understanding of the outcomes of scenarios, that are not everyday occurrences, the practical typology and theoretical model could be considered along with additional potential circumstances.

For example, if there was a novelty factor involved in the dining out experience, how does this impact upon the customer? This could be considered as a 'temporary change' of customer group and further research could decipher if, under such circumstances, are customer expectations met, or perhaps even exceeded? Other scenarios that could be investigated are the outcome on expectations of removing the decision making or payment aspects, as when a person is in a 'guest role'. Additionally, expectations may be affected by influences other than the restaurant itself. This could be an outcome of putting emphasis on an event, such as a special occasion, or visiting a restaurant in a location that has a reputation, such as, perceptions of a dynamic city, such as, London.

Aim 3, Objective a. was to understand how customers perceived cost brackets for meals at different price points: *inexpensive*, *mid-priced* and *expensive*. Therefore, measuring the accuracy of the meal costs, as generated by this study, could be undertaken to ensure that the amounts represent either broader, or more specific cohorts.

The cohort for the study has been discussed in the Research Design and Methodology Chapters, however, further investigations could re-administer the questionnaire to a wider and more diverse participant group, although the specified number of participants required should still fall within data saturation guidelines (Mack, Woodsong, McQueen and Guest, 2005). However, it is acknowledged that this may be an ambitious further research recommendation as most studies enlist far lower participant numbers than even this original research, due to manageability of the study.

Over time, it is recognised that trends relating to people change and develop. Furthermore, the business environment also adapts. Subsequently, keeping the findings

up to date by re-conducting the questionnaire and modifying the questions, as necessary, is an important action if the research is to have continued relevance.

The research has encompassed and drawn into the study a number of subject areas, such as, hospitality and customers and furthermore looked at a multitude of sub-topics within the main areas. It would have been impossible to have covered every related area in depth and instead the study's framework was intended to combine areas, drawing together the relevant aspects for a new study area. However, this research structure could be applied to any of the research spheres included in this study and be fully developed within the different specific fields.

# **8.7** Customer Dining Out Expectations in Relation to Meal Cost – Final Notes

Dining out is an activity participated in by a growing number of customers who dine out for a multitude of reasons. It is part of an industry affected by increasing uptake rates and intensifying competition. Principally, dining out is no longer an infrequent, or necessarily indulgent activity, and consequently restaurant customers are not a predictable homogenous group. So many dining out opportunities exist that restaurant patrons are equally different, with varied socio-economic backgrounds, intentions, behaviours, beliefs, and spend capacity. A key driver for customer choice of dining out venue is their expectations. This study and the generated outcomes have provided new insights and understandings into the current UK dining out situation, as well as, developing and proposing concepts in relation to the future of the evolving dining out industry. The results, therefore, have both academic and industrial application.

#### 9 References

A&M (2001) 'Marketing Topics: 6. Consumer Behavioural Models', [Online]. Available, at:

www.marketing-topics-vfd.blogspot.com/2011/01/6-marketing-communication.html (Accessed: June 2011).

Abdallat, M. A. & El-Emam, H. (2007) 'Consumer Behavior Models in Tourism Analysis Study. p1-41 [Online]. Available at:

http://faculty.ksu.edu.sa/73944/DocLib/Consumer%20Behavior%20Models%20and%2 0Consumer%20Behavior%20in%20Tourism.PDF (Accessed: December 2010).

Adams, S. (2009) *Jamie Oliver becomes Britain's Biggest Selling Author*. Available at: <a href="http://www.telegraph.co.uk/culture/books/booknews/5043515/Jamie-Oliver-becomes-Britains-biggest-selling-author.html">http://www.telegraph.co.uk/culture/books/booknews/5043515/Jamie-Oliver-becomes-Britains-biggest-selling-author.html</a> (Accessed: June 2010).

Allen, R. (ed.) (2002) The Penguin English Dictionary. London: Penguin.

Andersson, T., & Mossberg, L. (2004). The dining experience: do restaurants satisfy customer needs? *Food Service Technology*, 4(4), 171-177.

Anglim, J. (2007). 'Cluster Analysis and Factor Analysis'. [Online]. Available at: <a href="http://web.psych.unimelb.edu.au/jkanglim/03clusterandfactoranalysis.pdf">http://web.psych.unimelb.edu.au/jkanglim/03clusterandfactoranalysis.pdf</a> (Accessed: July 2012)

Antun, J. M., Frash Jr, R. E., Costen, W. & Runyan, R. C. (2010) 'Accurately Assessing Expectations Most Important to Restaurant Patrons: The Creation of the DinEX Scale', *Journal of Foodservice Business Research*, 13 (4), 360-379.

Arora, R. & Singer, J. (2006) 'Customer satisfaction and value as drivers of business success for fine dining restaurants', *Services Marketing Quarterly*, 28 (1), 89-102.

Auty, S. (1992). Customer choice and segmentation in the restaurant industry. *The Service Industries Journal*, 12(3), 324-339.

Bachmann, D., Elfrink, J. & Vazzana, G. (1996) 'Tracking the progress of e-mail vs. snail-mail', *Marketing Research*, 8 31-35.

Balazs, K. (2001). Some like it haute:leadership lessons from Frances great chefs. *Organizational Dynamics*, 30(2), 134-148.

Barnes, L. (2012) *Measuring National Well-Being- Population*. Available at: Office for National Statistics.

Bean, A. & Roszkowski, M. J. (1995) 'The Long and Short of It: When does questionnaire length affect response rate?', *Marketing Research*, 7 20-20.

Belk, R. (1975). Situational Variables and Customer Behaviour. *The Journal of Customer Research*, 2(3), 157-164.

Bell R, Meiselman, H. L., Pierson, B., J., & Reeve, W. G. (1994). Effects of adding an Italian theme to a restaurant on the perceived ethnicity, acceptability, and selection of foods. *Appetite*, 22, 11-24.

Berridge, K. C. (1996) 'Food reward: brain substrates of wanting and liking', *Neuroscience & Biobehavioral Reviews*, 20 (1), 1-25.

Bettman, J. R. (1979) An information processing theory of consumer choice. Addison-Wesley.

Binkley, J. K. (2006) 'The effect of demographic, economic, and nutrition factors on the frequency of food away from home', *Journal of Consumer Affairs*, 40 (2), 372-391.

Binkley, J., & Eales, J. (1998). Demand for fast food across metropolitan areas. *Journal of Restaurant and Foodservicing Marketing.*, 3, 37-50.

Bitner, M. (1990). Evaluating Service Encounters: The Effects of Physical Surroundings and Employee Responses. *Journal of Marketing*, *54*(2), 69-82.

Bitner, M. (1992). Servicescapes: The Impact of Physical Surroundings on Customers and Employees. *Journal of Marketing*, 56(2), 57-71.

Bitner, M., Booms, B., & Mohr, L. (1994). Critical Service Encounters: The Employee's Viewpoint. *Journal of Marketing*, 58(4), 95-106.

Bitner, M., Booms, B., & Tetreault, M. (1990). The Service Encounter: Diagnosing Favorable and Unfavorable Incidents. *Journal of Marketing*, 54(1), 71-84.

Bloch, P. (1995). Seeking the ideal form: product design and customer response. *Journal of Marketing*, 59(July), 16-29.

Bolles, R. C. (1991) *The hedonics of taste*. Lawrence Erlbaum Associates, Inc. Bolton, R. N. & Drew, J. H. (1991) 'A multistage model of customers' assessments of service quality and value', *Journal of consumer research*, 375-384.

Boulding, W., Kalra, A., Staelin, R. & Zeithaml, V. A. (1993) 'A dynamic process model of service quality: from expectations to behavioral intentions', *Journal of marketing research*, 30 (1), 7-27.

Bowen, J. (1998). Market segmentation in hospitality research: no longer a sequential process. *International Journal of Contemporary Hospitality Management*, 10(7), 289-296.

Bowen, J., & Morris, A. (1995). Menu design: can menus sell? *International Journal of Contemporary Hospitality Management*, 7(4), 4-9.

Brennan, M. (2011) 'Michael Brennan Design'. [Online]. Available at: <a href="http://www.michaelbrennandesign.com/">http://www.michaelbrennandesign.com/</a> (Accessed: January 2012)

Brown, S. W., & Swartz, T. (1989). A gap analysis of professional service quality. *Journal of Marketing*, 53(April), 92-98.

Brunsø, K., Fjord, T. A. & Grunert, K. G. (2002) *Consumers' food choice and quality perception*. Aarhus School of Business, MAPP-Centre for Research on Customer Relations in the Food Sector.

Bruvold, N. T. & Comer, J. M. (1988) 'A model for estimating the response rate to a mailed survey', *Journal of Business Research*, 16 (2), 101-116.

Byrne, P. J., Capps Jr, O. & Saha, A. (1998) 'Analysis of quick-serve, mid-scale, and up-scale food away from home expenditures', *The International Food and Agribusiness Management Review*, 1 (1), 51-72.

Carbone, L., & Haeckel, S. (1994). Engineering Customer Experiences. *Marketing Management*, 3(3), 8-19.

Cardello, A. V. (1995) 'Food quality: relativity, context and consumer expectations', *Food Quality and Preference*, 6 (3), 163-170.

Cardozo, R. N. (1965) 'An experimental study of customer effort, expectation, and satisfaction', *Journal of marketing research*, 244-249.

Carter, E. (2011) *The Good Food Guide*. Which? Books.

Caterersearch (2008) 'consumers set to eat more fast food than ever'. [Online]. Available at: <a href="http://www.caterersearch.com/Articles/02/01/2008/318170/UK-consumers-set-to-eat-more-fast-food-than-ever.htm">http://www.caterersearch.com/Articles/02/01/2008/318170/UK-consumers-set-to-eat-more-fast-food-than-ever.htm</a> (Accessed August 2011).

Caterersearch. (2005). *Restaurant Trends and Data*. Online]. Available at: <a href="http://www.caterersearch.com/Articles/FilterList.aspx?NavigationID=15&CategoryID=287">http://www.caterersearch.com/Articles/FilterList.aspx?NavigationID=15&CategoryID=287</a> (Accessed September 2006).

Caterersearch. (2010). *Number of Hospitality and Catering Outlets*. [Online] . Available at: <a href="http://www.caterersearch.com/Articles/06/05/2010/317292/number-of-hospitality-and-catering-outlets-industry-data.htm">http://www.caterersearch.com/Articles/06/05/2010/317292/number-of-hospitality-and-catering-outlets-industry-data.htm</a> (Accessed August 2011).

Cervellon, M. C. & Dubé, L. (2005) 'Cultural influences in the origins of food likings and dislikes', *Food Quality and Preference*, 16 (5), 455-460.

Chan, H., Wan, L. C., & Sin, L. Y. M. (2004). Hospitality service failures. *Hospitality Management* 2-14.

Charmaz, K. (2006) Constructing grounded theory: A practical guide through qualitative analysis. Sage Publications Ltd.

Chisnall, P. M. (1995) Consumer behaviour. McGraw-Hill.

Churchill Jr, G., & Surprenant, C. (1982). An Investigation into the Determinants of Customer Satisfaction. *Journal of Marketing Research*, 19(4), 491-504.

Clark, M. A., & Wood, R. C. (1998). Customer loyalty in the restaurant industry - a preliminary exploration of the issues. *International Journal of Contemporary Hospitality Management*, 10(4), 139-144.

Clarke, I., & Schmidt, R. (1995). Beyond the servicescape-The experience of place. *Journal of Retailing and Customer Services*, 2(3), 149-162.

Claxton, J. D., Fry, J. N. & Portis, B. (1974) 'A taxonomy of prepurchase information gathering patterns', *Journal of consumer research*, 35-42.

Clow, K. E., Kurtz, D. L., Ozment, J. & Ong, B. S. (1997) 'The antecedents of consumer expectations of services: an empirical study across four industries', *Journal of Services Marketing*, 11 (4), 230-248.

Cohen, L., Manion, L., Morrison, K. & Morrison, K. (2007) Research methods in education. Psychology Press.

Costello, A. B. & Osborne, J. W. (2005) 'Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis', *Practical Assessment, Research & Evaluation*, 10 (7), 1-9.

Cronin Jr, J. J. & Taylor, S. A. (1992) 'Measuring service quality: a re-examination and extension', *the Journal of Marketing*, 55-68.

Csikszentmihalyi, M., & Robinson, R. (1990). The Art of Seeing: An Interpretation of the Aesthetic Encounter.

Cullen, F. (2004) 'Factors influencing restaurant selection in Dublin', *Journal of Foodservice Business Research*, 7 (2), 53-85.

Davis, T. (1984). The Influence of the Physical Environment in Offices. *The Academy of Management Review*, 9(2), 271-283.

De Vaus, D. A. (2004) Surveys in social research. Routledge.

Delicious, Magazine, (2008). Delicious Magazine, Seven Publishing

Denscombe, M. (2008) The good research guide: for small-scale social research projects. Open University Press.

Dillman, D. A. & Bowker, D. K. (2001) 'The Web questionnaire challenge to survey methodologists'. [Online]. Available at: <a href="http://mres.gmu.edu/pmwiki/uploads/Main/oss-book.pdf#page=59">http://mres.gmu.edu/pmwiki/uploads/Main/oss-book.pdf#page=59</a> (Accessed January 2010)

Directgov (2012) 'Income Tax Rates'. [Online]. Available at: http://www.direct.gov.uk/en/Nl1/Newsroom/DG\_200224 (Accessed April 2012).

Dubé, L. & Cantin, I. (2000) 'Promoting health or promoting pleasure? A contingency approach to the effect of informational and emotional appeals on food liking and consumption', *Appetite*, 35 (3), 251-262.

Easterby-Smith, M. R., Thorpe. E., & Lowe A. (2002). Management research: An introduction, Londen: Sage Publications Ltd.

EatOut (2011) *Eating Out in the UK*. [Online]. Available at: <a href="http://www.eatoutmagazine.co.uk/online\_article/Eating-out-in-the-UK/8006">http://www.eatoutmagazine.co.uk/online\_article/Eating-out-in-the-UK/8006</a> (Accessed August 2011).

Edwards, J. S. A., & Meiselman, H. L. (2005). The influence of positive and negative cues on restaurant food choice and food acceptance. *International Journal of Contemporary Hospitality Management*, 17(4), 332-344.

Edwards, J., Meiselman, H., Edwards, A., & Lesher, L. (2003). The influence of eating location on the acceptability of identically prepared foods. *Food Quality and Preference*, 14(8), 647-652.

Epsilon.com (2010) 'Email Trends and Benchmarks'. [Online]. Available at: <a href="https://www.epsilon.com/pdf/Q3\_2010\_Email\_Trends\_and\_Benchmarks\_FINAL.pdf">www.epsilon.com/pdf/Q3\_2010\_Email\_Trends\_and\_Benchmarks\_FINAL.pdf</a> (Accessed June 2011)

Erasmus, A. C., Boshoff, E. & Rousseau, G. (2001) 'Consumer decision-making models within the discipline of consumer science: a critical approach', *Journal of Family Ecology and Consumer Sciences/Tydskrif vir Gesinsekologie en Verbruikerswetenskappe*, 29 (0),

Evans, M., Jamal, A. & Foxall, G. R. (2006) *Consumer behaviour*. John Wiley & Sons. Finkelstein, J. (1989). *Dining out: a sociology of modern manners*: New York University Press.

Flanders, S. (2012) 'BoE Introduces More Quantitative Easing'. [Online]. Available at: www.bbc.co.uk/news/business-18725129 (Accessed July 2012)

Fishbein, M. & Ajzen, I. (1975) *Belief, attitude, intention and behaviour: An introduction to theory and research.* Addison-Wesley.

Fisk, R. (1981). Toward a consumption/evaluation process model for services. *Marketing of Services, hrsg. vJH Donnelly und WR George, Chicago*, 191–195.

Folkes, V., & Kotsos, B. (1986). Buyers' and Sellers' Explanations for Product Failure: Who Done It? *Journal of Marketing*, *50*(2), 74-80.

Fort, M. (2003) 'The Death of Cooking'. *The Guardian*. [Online]. Available at: <a href="http://www.guardian.co.uk/lifeandstyle/2003/may/10/foodanddrink.shopping5">http://www.guardian.co.uk/lifeandstyle/2003/may/10/foodanddrink.shopping5</a> (Accessed Jun 2006)

Fowler, F. J. (1993) Survey research methods. vol. 1. Sage Publications, Inc.

Fricker, R. D. & Schonlau, M. (2002) 'Advantages and disadvantages of Internet research surveys: Evidence from the literature', *Field Methods*, 14 (4), 347-367.

Garber Jr, L., Hyatt, E., & Starr Jr, R. (2000). The effects of food color on perceived flavor. *Journal of Marketing Theory and Practice*, 8(4), 59–72.

Glesne, C. & Peshkin, A. (1992) *Becoming qualitative researchers: An introduction*. Longman White Plains, NY.

Gosling, S. D., Rentfrow, P. J. & Swann, W. B. (2003) 'A very brief measure of the Big-Five personality domains', *Journal of Research in Personality*, 37 (6), 504-528.

Griffin, B. W. (2009) 'Cronbach's Alpha (measure of Internal Consistency)', [Online]. Available at:

http://www.bwgriffin.com/gsu/courses/edur9131/content/cronbach/cronbachs\_alpha\_sp\_ss.htm (Accessed November 2011).

Gronroos, C. (1982) 'An applied service marketing theory', *European Journal of Marketing*, 16 (7), 30-41.

Grove, S. J., & Fisk, R. p. (1997). The impact of other customers on service experiences: a critical incident examination of "getting along". *Journal of Retailing*, 73(1), 63-85.

Guba, E. G. (1990) The paradigm dialog. Sage Publications, Inc.

Guéguen, N., & Petr, C. (2005). Odors and customer behaviour in a restaurant. *Hospitality Management*.

Gustafsson, I. B., Öström, Å., Johansson, J. & Mossberg, L. (2006) 'The Five Aspects Meal Model: a tool for developing meal services in restaurants', *Journal of Foodservice*, 17 (2), 84-93.

Hamaker, S. (2000) Delicious by design: Creating an unforgettable dining experience. *Restaurant*. [Online]. Available at:

http://www.restaurant.org/profitability/openrestaurant/businesstopics/design/article/?Art icleID=131 (Accessed December 2008).

Hansen, F. (1981). Hemispheral lateralization: implications for understanding human behaviour. *Journal of Customer Research*, 8(June), 23-36.

Hansen, K., Jensen, Ø., & Gustafsson, I. (2005). The Meal Experiences of á la Carte Restaurant Customers. *Scandinavian Journal of Hospitality and Tourism*, 5(2), 135-151.

Heberlein, T. A. & Baumgartner, R. (1978) 'Factors affecting response rates to mailed questionnaires: A quantitative analysis of the published literature', *American Sociological Review*, 447-462.

Henriett (2012) 'Chapter 7 – Factor Analysis – SPSS'. [Online]. Available at: http://www.cs.uu.nl/docs/vakken/arm/SPSS/spss7.pdf. (Accessed August 2011)

Hewson, C. (2003) Internet research methods: A practical guide for the social and behavioural sciences. Sage Publications Ltd.

Hirsch, E. S. & Kramer, F. M. (1993) 'Situational influences on food intake', *Nutritional needs in hot environments*, 215-243.

Hirsch, E., Meiselman, H., Popper, R., Smits, G. & Jezior, B. (1984) *The Effects of Prolonged Feeding Meal, Ready-to-Eat (MRE) Operational Rations*. DTIC Document. Available.

Howard, J. A. & Sheth, J. N. (1969) 'The theory of buyer behavior', Appleton-Century-Crofts: NY

Hubber, A. R., Sehorn, A. G., & Brown, S. W. (1994). Service Expectations: the customer versus the provider. *International Journal of Service Industry Management*, 6(1), 6-21.

InnerMarketing (2011) 'Consumer Behaviour Part II - The Howard Sheth Model'. [Online]. Available at: <a href="www.facebook.com/note.php?note\_id=249499278403380">www.facebook.com/note.php?note\_id=249499278403380</a> (Accessed April 2011)

Jackson, B., Lynne Cooper, M., Mintz, L. & Albino, A. (2003) 'Motivations to eat: Scale development and validation', *Journal of Research in Personality*, 37 (4), 297-318.

Jackson, T. (2005) *Motivating Sustainable Consumption*. Sustainable Devlopment Research Network, University of Surrey. Available at: <a href="https://www.surrey.ac.uk/CES">www.surrey.ac.uk/CES</a>.

Janssens, W., de Pelsmacker, P., Wijnen, K. & Van Kenhove, P. (2008) *Marketing research with SPSS*. Prentice Hall.

Jarratt, D. G. (1996) 'shopper taxonomy for retail strategy development', *International Review of Retail, Distribution and Consumer Research*, 6 (2), 196-215.

John, O. P. & Srivastava, S. (1999) 'The Big Five trait taxonomy: History, measurement, and theoretical perspectives', *Handbook of personality: Theory and research*, 2 102-138.

Johns, N. & Howard, A. (1998) 'Customer expectations versus perceptions of service performance in the foodservice industry', *International Journal of Service Industry Management*, 9 (3), 248-265.

Johns, N. & Lee-Ross, D. (1998) *Research methods in service industry management*. Cengage Learning EMEA.

Johns, N. (1999) 'What is this thing called service?', *European Journal of Marketing*, 33 (9/10), 958-974.

Johns, N. (1999). The meal experience - a matter of signs? *The Hospitality Review, October*, 50-54.

Johns, N. (1999). What is this thing called service? *European Journal of Marketing*, 33(9), 10.

Johns, N., & Howard, A. (1998). Customer expectations versus perceptions of service performance in the foodservice industry. *International Journal of Service Industry Management*, 9(3), 248-265.

Johns, N., & Kivela, J. (2001). Perceptions of the first time restaurant customer. *Food Service Technology*, *I*(1), 5-11.

Johns, N., & Pine, R. (2002). Customer behaviour in the food service industry: a review. *International Journal of Hospitality Management*, 21(2), 119-134.

- Johnson, C. & Mathews, B. P. (1997) 'The influence of experience on service expectations', *International Journal of Service Industry Management*, 8 (4), 290-305.
- Johnston, R. (1994). The determinants of service quality: satisfiers and dissatisfiers. *International Journal of Service Industry Management*, 6(5), 53-71.
- Jonathan (2008) 'Which British Newspaper are You? A Guide to British Newspapers'. *Anglotopia.net*. [Online]. Available at:
- http://www.anglotopia.net/countries/england/which-british-newspaper-are-you-a-guide-to-british-newspapers/ (Accessed October 2011).
- Jones, P. & Lockwood, A. (1998) 'Operations management research in the hospitality industry', *International Journal of Hospitality Management*, 17 (2), 183-202.
- Jones, T. O. & Sasser, W. E. (1995) 'Why satisfied customers defect', *Harvard business review*, 73 88-88.
- June, L., & Smith, S. (1987). Service attributes and situational effects on customer preferences for restaurant dining. *Journal of Travel Research*, 26(2), 20-27.
- Kalwani, M. U., Yim, C. K., Rinne, H. J. & Sugita, Y. (1990) 'A price expectations model of customer brand choice', *Journal of marketing research*, 251-262.
- Khan, M. & Khan, M. A. (2009) 'How technological innovations extend services outreach to customers: The changing shape of hospitality services taxonomy', *International Journal of Contemporary Hospitality Management*, 21 (5), 509-522.
- Kim, E. J. & Geistfeld, L. V. (2003) 'Consumers' restaurant choice behavior and the impact of socio-economic and demographic factors', *Journal of Foodservice Business Research*, 6 (1), 3-24.
- King, P. W. (2009) Climbing Maslow's Pyramid. Troubador Publishing Ltd.
- King, S., Weber, A., Meiselman, H., & Lv, N. (2004). The effect of meal situation, social interaction, physical environment and choice on food acceptability. *Food quality and preference*, 15, 645-653.
- Kivela, J. (1999). Customer research in the restaurant environment, Part 1: A conceptual model of dining satisfaction and return patronage Jaksa Kivela, Robert Inbakaran, John Reece The Authors. *International Journal of Contemporary Hospitality Management*, 11(5), 205-222.
- Kivela, J., Inbakaran, R. & Reece, J. (1999) 'Consumer research in the restaurant environment, Part 1: A conceptual model of dining satisfaction and return patronage', *International Journal of Contemporary Hospitality Management*, 11 (5), 205-222.
- Knasko, S. (1989). Ambient odour and shopping behaviour. *Chemical Senses*, 14(5), 718.

Knutson, B., Stevens, P. & Patton, M. (1995) 'DINESERV: measuring service quality in quick service, casual/theme, and fine dining restaurants', *Journal of Hospitality & Leisure Marketing*, 3 (2), 35-44.

Koo, L., Tao, F. K. C. & Yeung, J. H. C. (1999) 'Preferential segmentation of restaurant attributes through conjoint analysis', *International Journal of Contemporary Hospitality Management*, 11 (5), 242-253.

Kotler, P. (1973). Atmospherics as a marketing tool. *Journal of Retailing*, 49(4), 48-64.

Kotler, P., & Rath, G. (1984). Design: a powerful but neglected strategic tool. *Journal of Business Strategy*, 5(2), 16-21.

Kramer, F., Lesher, L. & Meiselman, H. (2001) 'Monotony and choice: Repeated serving of the same item to soldiers under field conditions', *Appetite*,

Krejcie, R. V. & Morgan, D. W. (1970) 'Determining sample size for research activities', *Educ Psychol Meas*,

Laird, D. A. (1932). How the customer estimates quality by subconscious sensory impressions. *Journal of Applied Psychology*, *16*, 241-246.

Lee, Y. L., & Hing, N. (1995). Measuring quality in restaurant operations: an application of the SERVQUAL instrument. *International Journal Hospitality Management*, 14(3/4), 293-310.

Lewis, R. (1981). Restaurant advertising: appeals and customer intentions. *Journal of Advertising Research*, 21(5), 69-74.

Lincoln, Y. S. & Guba, E. G. (1985) *Naturalistic inquiry*. vol. 75. Sage Publications, Inc.

Lindquist, J. (1974). Meaning of image. *Journal of Retailing*, 50(4), 29-38.

Lockyer, T., & Panakera, C. (2004). *Restaurant guest satisfaction: an investigation*. Paper presented at the Proceedings of the New Zealand Tourism and Hospitality Research Conference, Wellington.

Macht, M., Meininger, J. & Roth, J. (2005) 'The pleasures of eating: A qualitative analysis', *Journal of Happiness Studies*, 6 (2), 137-160.

Mack, N., Woodsong, C., McQueen, K. & Guest, G. (2005) *Qualitative research methods: A data collector's field guide*. FLI. [Online]. Available at: <a href="http://www.fhi360.org/NR/rdonlyres/etl7vogszehu5s4stpzb3tyqlpp7rojv4waq37elpbyei3tgmc4ty6dunbccfzxtaj2rvbaubzmz4f/overview1.pdf">http://www.fhi360.org/NR/rdonlyres/etl7vogszehu5s4stpzb3tyqlpp7rojv4waq37elpbyei3tgmc4ty6dunbccfzxtaj2rvbaubzmz4f/overview1.pdf</a> (Accessed January 2012).

Maddox, R. (1981). Two-factor Theory and Customer Satisfaction: Replication and Extension. *The Journal of Customer Research*, 8(1), 97-102.

Manfreda, K. L., Batagelj, Z. & Vehovar, V. (2002) 'Design of web survey questionnaires: Three basic experiments', *Journal of Computer Mediated Communication*, 7 (3),

Marketing, I. (2011) 'Consumer Behaviour Part II - The Howard Sheth Model'. [Online]. Available at: <a href="www.facebook.com/note.php?note\_id=249499278403380">www.facebook.com/note.php?note\_id=249499278403380</a> (Accessed June 2011).

Martin, C. L. (1994) 'The impact of topic interest on mail survey response behavior', *Journal of the Market Research Society*, 36 (4), 327-338.

Mattila, A. (2001). Emotional bonding and restaurant loyalty. *Cornell Hotel and Restaurant Administration Quarterly*, 2001(December), 73-79.

McCracken, G. (1986). Culture and Consumption: A Theoretical Account of the Structure and Movement of the Cultural Meaning of Customer Goods. *The Journal of Customer Research*, 13(1), 71-84.

Mehrabian, A. & Russell, J. A. (1974) An approach to environmental psychology. the MIT Press.

Meiselman, H. L. & Schutz, H. G. (2003) 'History of food acceptance research in the US Army', *Appetite*, 40 (3), 199-216.

Meiselman, H. L., & Bell, R. (1991/2). The effects of name and recipe on the perceived ethnicity and acceptability of selected Italian foods by British subjects. *Food quality and preference*, 3, 209-214.

Meiselman, H., Johnson, J., Reeve, W., & Crouch, J. (2000). Demonstrations of the influence of the eating environment on food acceptance. *Appetite*, 35(3), 231-237.

Meyer, J. (2008) 'Common errors made in research'. [Online]. Available at: <a href="http://sociology.camden.rutgers.edu/jfm/tutorial/errors.htm">http://sociology.camden.rutgers.edu/jfm/tutorial/errors.htm</a> (Accessed May 2009).

Mick, D. (1986). Customer Research and Semiotics: Exploring the Morphology of Signs, Symbols, and Significance. *The Journal of Customer Research*, 13(2), 196-213.

Miller, R. L., Acton, C., Fullerton, D. A. & Maltby, J. (2002) SPSS for Social Scientists. Houndmills: Palgrave Macmillan.

Milliman, R. E. (1986) 'The influence of background music on the behavior of restaurant patrons', *Journal of consumer research*, 286-289.

Mintel (2004) 'Eating Out Habits, Leisure Intelligence, April 2004', Available at: Mintel International Group Limited.

Mintel (2005) *Celebrity Endorsement, Market Intelligence, January 2005.* Available at: Mintel International Group Limited.

Mitchell, V. W. (1999) 'Consumer perceived risk: conceptualisations and models', *European Journal of Marketing*, 33 (1/2), 163-195.

Mohr, L. A. & Bitner, M. J. (1995) 'The role of employee effort in satisfaction with service transactions', *Journal of Business Research*, 32 (3), 239-252.

Morrin, M., & Ratneshwar, S. (2000). The Impact of Ambient Scent on Evaluation, Attention, and Memory for Familiar and Unfamiliar Brands. *Journal of Business Research*, 49(2), 157-165.

Moskowitz, H. R. (1995) 'Food quality: conceptual and sensory aspects', *Food Quality and Preference*, 6 (3), 157-162.

Muller, C. C. (1999) 'The business of restaurants: 2001 and beyond', *International Journal of Hospitality Management*, 18 (4), 401-413.

Murray, K. B. (1991) 'A test of services marketing theory: consumer information acquisition activities', *the Journal of Marketing*, 10-25.

Mustonen, S., Hissa, I., Huotilainen, A., Miettinen, S. M. & Tuorila, H. (2007) 'Hedonic responses as predictors of food choice: Flexibility and self-prediction', *Appetite*, 49 (1), 159-168.

Muth, J. F. (1961) 'Rational expectations and the theory of price movements', *Econometrica: journal of the Econometric Society*, 315-335.

Myers, J. G. & Nicosia, F. M. (1968) 'On the study of consumer typologies', *Journal of marketing research*, 182-193

Naipaul, S. & Parsa, H. (2001) 'Menu price endings that communicate value and quality', *Cornell Hotel and Restaurant Administration Quarterly*, 42 (1), 26-37.

Naipaul, S., & Parsa, H. (1997). Menu Price Endings That Communicate Value and Quality. *Journal of Customer Research*, 24, 57-67.

Namkung, Y. & Jang, S. C. (2007) 'Does food quality really matter in restaurants? Its impact on customer satisfaction and behavioral intentions', *Journal of Hospitality & Tourism Research*, 31 (3), 387-409.

Nasar, J. (1989). Perception, Cognition, and Evaluation of Urban Places. *Public Places and Spaces*, 31-56.

Nayga, R., M., & Capps, O. (1994). Impact of socio-economic and demographic factors on food away from home consumption: number of meals and type of facility. *Journal of Restaurant and Foodservice*, 1(2), 45-69.

Neuman, W. L. (2005) Social Research Methods: Qualitative and Quantitative Approaches (6th Edition) Allyn & Bacon.

Nicosia, F. M. & Mayer, R. N. (1976) 'Toward a sociology of consumption', *Journal of consumer research*, 65-75.

NMA (2012) 'Facts and Figures '. [Online]. Available at: http://www.nmauk.co.uk/nma/do/live/factsAndFigures?newspaperID=11.

Office for National Statistics, (2003) Government Office Regions ONS Geography GIS & Mapping Unit.

Office for National Statistics. (2005a). Family Food 2004-2005 Report. London: Defra.

Office for National Statistics. (2005b). *Time Use Survey*. London: UK Government. [Online]. Available at: <a href="www.ons.gov.uk">www.ons.gov.uk</a> (Accessed March 2009).

Office of National Statistics, (2005c) The National Statistics Socio-economic Classification User manual.

Office of National Statistics,. (2006) *General Household Survey 2006*. [Online]. Available at: www.ons.gov.uk (Accessed March 2009).

Office for National Statistics. (2009) 'Earnings 2009 Annual Survey of Hours and Earnings'. [Online]. Available at: <a href="www.statistics.gov.uk/cci/nugget.asp?id=285">www.statistics.gov.uk/cci/nugget.asp?id=285</a> (Accessed June 2010).

Oh, H. (1999) 'Service quality, customer satisfaction, and customer value: A holistic perspective', *International Journal of Hospitality Management*, 18 (1), 67-82.

Okada, E. M. & Hoch, S. J. (2004) 'Spending time versus spending money', *Journal of consumer research*, 31 (2), 313-323.

Oliver, R. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. *Journal of Marketing Research*, 17(4), 460-469.

Oliver, R. L. & Bearden, W. O. (1985) 'Disconfirmation processes and consumer evaluations in product usage', *Journal of Business Research*, 13 (3), 235-246.

Oliver, R. L. & Burke, R. R. (1999) 'Expectation processes in satisfaction formation', *Journal of Service Research*, 1 (3), 196-214.

Oliver, R. L. & Winer, R. S. (1987) 'A framework for the formation and structure of consumer expectations: Review and propositions', *Journal of Economic Psychology*, 8 (4), 469-499.

Oliver, R., & DeSarbo, W. (1988). Response Determinants in Satisfaction Judgments. *The Journal of Customer Research*, 14(4), 495-507.

Olson, J. C. & Dover, P. (1976) 'Effects of expectation creation and disconfirmation on belief elements of cognitive structure', *Advances in consumer research*, 3 (1), 168-175.

Olsen, K., W., Warde, A., & Martens, L. (2000). Social differentiation and the market for eating out in the UK. *International Journal of Hospitality Management*, 19(2), 173-190.

Oppenheim, A. N. (1992) *Questionnaire design, interviewing and attitude measurement*. Continuum Intl Pub Group.

Pallant, J. (2007) SPSS survival manual. Maidenhead: McGraw Hill.

Parasuraman, A., Berry, L. L. & Zeithaml, V. A. (1991) 'Understanding customer expectations of service', *Sloan Management Review*, 32 (3), 39-48.

Parasuraman, A., Zeithaml, V., & Berry, L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of Marketing*, 49(4), 41-50.

Pavesic, D. V. (1989) 'Psychological aspects of menu pricing', *International Journal of Hospitality Management*, 8 (1), 43-49.

Pedraja, M. & Yagüe, J. (2001) 'What information do customers use when choosing a restaurant?', *International Journal of Contemporary Hospitality Management*, 13 (6), 316-318.

Percy, L. (1976). How market segmentation guides advertising strategy. *Journal of Advertising Research*, 16(5), 11-22.

Pettinger, C., Holdsworth, M., & Gerber, M. (2004). Psycho-social influences on food choice in Southern France and Central England. *Appetite*, 42(3), 307-316.

Pierson, B. J., Reeve, W. G., & Creed, P. G. (1995). The quality experience in the foodservice industry. *Food Quality and Preference*, 6, 209-213.

Pieters, R., Koelemeijer, K. & Roest, H. (1995) 'Assimilation processes in service satisfaction formation', *International Journal of Service Industry Management*, 6 (3), 17-33.

Pine, B., & Gilmore, J. (1999). *The Experience Economy: Work is Theatre & Every Business a Stage*: Harvard Business School Press.

Pizam, A., & Ellis, T. (1999). Customer satisfaction and its measurement in hospitality enterprises. *International Journal of Contemporary Hospitality Management*, 11(7), 326-339.

Plymouth University. (2006) 'Research ethics: a policy for staff and research students '. [Online]. Available at:

www.plymouth.ac.uk/files/extranet/docs/.../Researchethicspolicy.doc (Accessed January 2008).

Potter, T. (2012) Tomorrows World - Hospitality for the Future Conference. [Speech].

Pratten, J. D. (2004) 'Customer satisfaction and waiting staff', *International Journal of Contemporary Hospitality Management*, 16 (6),. 385-388.

Price, L., Arnould, E., & Deibler, S. (1995). Customers' Emotional Responses to Service Encounters. *International Journal of Service Industry Management*, 6(3), 34-63.

Prisbell, M. & Andersen, J. F. (1980) 'The importance of perceived homophily, level of uncertainty, feeling good, safety, and self-disclosure in interpersonal relationships', *Communication Quarterly*, 28 (3), 22-33.

Prisble, C. (2000). What Bugs Customers. Restaurants and Institutions, July.

Pullman, M. E., & Gross, M. A. (2004). Ability of Experience Design Elements to Elicit Emotions and Loyalty Behaviours. *Decision Sciences*, *35*(3), 551-578.

Putnam, J., & Van Dress, M. (1984). Changes ahead for eating out. *National Food Review*, 26, 15–17.

Raajpoot, N. A. (2002) 'TANGSERV', *Journal of Foodservice Business Research*, 5 (2), 109-127.

Ransdell, J. (1977). Some Leading Ideas of Pierce's Semiotic. *Semiotica*, 19(3), 157–178.

Rettie, R., & Brewer, C. (2000). The verbal and visual components of package design. *Journal of Product & Brand Management*, 9(1), 56-70.

Riley, M. (1994). Marketing Eating Out: The Influence of Social Culture and Innovation. *British Food Journal*, *96*(10), 15-18.

Robledo, M. A. (2001) 'Measuring and managing service quality: integrating customer expectations', *Managing Service Quality*, 11 (1), 22-31.

Roos, E., Lahelma, E., Virtanen, M., Prättälä, R. & Pietinen, P. (1998) 'Gender, socioeconomic status and family status as determinants of food behaviour', *Social Science & Medicine*, 46 (12), 1519-1529.

Russell, J., & Mehrabian, A. (1976). Environmental Variables in Customer Research. *The Journal of Customer Research*, 3(1), 62-63.

Russell, J., & Snodgrass, J. (1987). Emotion and the environment. *Handbook of Environmental Psychology*, *1*, 245–280.

Ryu, K. & Jang, S. C. S. (2007) 'The effect of environmental perceptions on behavioral intentions through emotions: The case of upscale restaurants', *Journal of Hospitality & Tourism Research*, 31 (1), 56-72.

Saint-Paul, T. (1997). Business and the Semiotics of Food: American and French cultural perspectives. *Global Business Languages*, 119-128.

Schmalensee, R. (1976) 'An experimental study of expectation formation', *Econometrica: journal of the Econometric Society*, 17-41.

Sheehan, K. B. (2001) 'Email survey response rates: A review', *Journal of Computer Mediated Communication*, 6 (2),

Shostack, G. (1985). Planning the service encounter. The Service Encounter, 243-254.

Smith, A. K. & Bolton, R. N. (2002) 'The effect of customers' emotional responses to service failures on their recovery effort evaluations and satisfaction judgments', *Journal of the Academy of Marketing Science*, 30 (1), 5-23.

Smith, N. C. & Dainty, P. (1991) *The management research handbook*. Taylor & Francis.

Sneijder, P. & te Molder, H. F. M. (2006) 'Disputing taste: food pleasure as an achievement in interaction', *Appetite*, 46 (1), 107-116.

Solomon, M. R. (2009) The truth about what customers want. FT Press.

Sommer, R., & Steele, J. (1997). Social Effects on Duration in Restaurants. *Appetite*, 29(1), 25-30.

Soriano, D. R. (2002) 'Customers' expectations factors in restaurants: The situation in Spain', *International Journal of Quality & Reliability Management*, 19 (8/9), 1055-1067.

Steer-Fowler, J. M. W. (2009) Caravan second homes: an empirical study of consumer behaviour towards a depreciating property asset.

Steptoe, A., Pollard, T. M. & Wardle, J. (1995) 'Development of a measure of the motives underlying the selection of food: the food choice questionnaire', *Appetite*, 25 (3), 267-284.

Stevens, P., Knutson, B. & Patton, M. (1995) 'DINESERV: A tool for measuring service quality in restaurants', *Cornell Hotel and Restaurant Administration Quarterly*, 36 (2), 56-60.

Study Perspectives. (2012) 'London Borough of Hillingdon Convenience Goods Retail Study Update 2012.' [Online]. Available at:

http://www.hillingdon.gov.uk/media/pdf/b/3/Appendix 3 Retail Sector Key Trends.p df.

Swan, J., & Combs, L. (1976). Product Performance and Customer Satisfaction: A New Concept. *Journal of Marketing*, 40(2), 25-33.

Tarling, R. J. (2006) Managing social research: a practical guide. Psychology Press.

Teboul, J. (1991) Managing quality dynamics. Prentice Hall Direct.

Ting-Toomey, S., & Kurogi, A. (1998). Facework competence in intercultural conflict: an updated face-negotiation theory. *International Journal of Intercultural Relations*, 22(2), 187-225.

Tolman, E. C. (1932) *Purposive behavior in animals and men*. [Online]. Available at: <a href="http://www1.appstate.edu/~kms/classes/psy5150/Documents/Tolman1933.pdf">http://www1.appstate.edu/~kms/classes/psy5150/Documents/Tolman1933.pdf</a> (Accessed May 2009).

Trochim, W. (2006) 'Statistical Terms in Sampling'. [Online]. Available at: www.socialresearchmethods.net/kb/sampstat.php (Accessed March 2011)

Tse, A., Sin, L., & Yim, F. (2002). How a crowded restaurant affects customers' attribution behaviour. *International Journal of Hospitality Management*, 21(4), 449-454.

Tse, D. K. & Wilton, P. C. (1988) 'Models of consumer satisfaction formation: an extension', *Journal of marketing research*, 204-212.

Ural, T. (2008) 'Consumer responses to process and outcome failures in service firms', Vroom, V. H. (1964) *Work and Motivation*. New York: Wiley.

Wakabayashi, T. (2003) 'What are customer expectations of and satisfactions with a Japanese restaurant in Minneapolis'. University of Wisconsin. Available at: <a href="http://www2.uwstout.edu/content/lib/thesis/2003/2003wakabayashit.pdf">http://www2.uwstout.edu/content/lib/thesis/2003/2003wakabayashit.pdf</a> (Accessed March 2010).

Wakefield, K. L. & Blodgett, J. G. (1994) 'The importance of servicescapes in leisure service settings', *Journal of Services Marketing*, 8 (3), 66-76.

Walker, J. L. (1995). Service encounter satisfaction: conceptualized. *Journal of Services Marketing*, 9(1), 5-14.

Wallis, K. F. (1980) 'Econometric implications of the rational expectations hypothesis', *Econometrica: journal of the Econometric Society*, 49-73.

Wansink, B. (2004). Environmental factors that increase the food intake and consumption volume of unknowing customers. *Annual Review of Nutrition*, 24(1), 455-479.

Wansink, B., Painter, J. & Van Ittersum, K. (2001) 'Descriptive menu labels' effect on sales', *The Cornell Hotel and Restaurant Administration Quarterly*, 42 (6), 68-72.

Warde, A., & Martens, L. (2000). *Eating Out: Social Differentiation, Consumption and Pleasure*: Cambridge University Press.

Wildes, V., & Seo, W. (2001). Customers vote with their forks: Customer complaining behaviour in the restaurant industry. *International journal of hospitality & tourism administration*, 2(2), 21-34.

Wood, R. C. (1992). Dining out in the urban context. British Food Journal, 94(9), 3-5

Woodruff, R., Cadotte, E., & Jenkins, R. (1983). Modelling Customer Satisfaction Processes Using Experience-Based Norms. *Journal of Marketing Research*, 20(3), 296-304.

Wright, L. T., Nancarrow, C. & Brace, I. (2000) 'Researching taste: layers of analysis', *British Food Journal*, 102 (5/6), 429-440.

Yammarino, F. J., Skinner, S. J. & Childers, T. L. (1991) 'Understanding mail survey response behavior a meta-analysis', *Public Opinion Quarterly*, 55 (4), 613-639.

Zandstra, E., de Graaf, C. & Van Trijp, H. (2000) 'Effects of variety and repeated inhome consumption on product acceptance', *Appetite*, 35 (2), 113-119.

Zeithaml, V. A., Parasuraman, A. & Berry, L. L. (1990) *Delivering quality service: Balancing customer perceptions and expectations.* Free Pr.

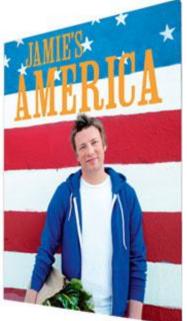
Zellner, D. A. (2007) 'Contextual influences on liking and preference', *Appetite*, 49 (3), 679-682.

### **Appendix 1 - Questionnaire**

**Email Sent to Delicious Magazine E-Subscribers** 



# COMPLETE THE UNIVERSITY OF PLYMOUTH ONLINE SURVEY AND YOU COULD WIN 1 OF 10 COPIES OF JAMIE'S AMERICA



Dear Reader,

**delicious.** magazine has teamed up with The University of Plymouth to find out why dining out has become one of the main leisure activities here in the UK. With this in mind the University of Plymouth would like to know what your expectations are when you eat out

So complete our easy online survey by **Thursday 26 November 2009**, and you'll be in with a chance to win one of 10 copies of Jamie Oliver's latest cookbook, *Jamie's America*, worth £26. Please <u>click here</u> to start the survey.

The University of Plymouth was voted as one of the top providers of hospitality courses in the UK by both *The Times* and *Guardian* newspapers, and its courses in hospitality are designed to produce professional managers who have the skills to function and communicate in one of the world's fastest-growing industries.

Many thanks

Matthew Drennan, Editor

For great recipes for every occasion visit <u>deliciousmagazine.co.uk</u> or why not follow us on <u>twitter.com/deliciousmag</u>

### Prize draw terms and conditions:

- 1. The prize: winners will each receive a copy of *Jamie's America* by Jamie Oliver
- 2. All entries must be received by 6pm Thursday 26 November 2009. No entries received after that time will be accepted.
- 3. The winners will be drawn at random and the judge's decision is final.
- 4. The winners will be notified by email within 28 days.
- 5. No purchase necessary.
- 6. It is the responsibility of the winners to ensure they are able to take delivery of their prize.
- 7. You must be a UK resident, excluding employees (or families of employees) of Seven Publishing, Michael Joseph or anyone professionally linked to the competition.
- 8. No cash alternative will be offered; the prize is non-transferable.
- 9. By entering the competition, competitors have agreed to be bound by these rules.

If you would prefer not to receive emails from delicious. magazine, <u>CLICK HERE</u> to unsubscribe. This email is from delicious. magazine, part of Seven Publishing Group Ltd. You have been sent this email because you signed up to receive the delicious. e-newsletter and other communications which may be of interest to you.

delicious. © Seven Publishing Group Ltd. Sea Containers House, 20 Upper Ground, London SE1 9PD, Reg Number 04809240



# **Consumer Expectation Survey**

1. Approximately how many times in the last 6 months have you eaten at each of the following
Pub restaurant  Café  Full service restaurant
Not eaten at any of the above
2. Which <b>FOUR</b> aspects from the following list are <b>most important</b> to you when eating <b>away</b> from the home?
Experience nice tableware  Meal fits into budget  Meal fits into time limitations  Reason linked with convenience  To celebrate a special occasion  To experience a different environment  To experience new foods  To have a meal different to home cooked food  To have a meal similar to home cooked food  To provide positive memories  The social aspect  Other important factors not listed

3. What factors encourage you to visit a restaurant for the <b>first time</b> ?
<b>4.</b> What cost <b>per person</b> do you think represents  An <b>inexpensive</b> meal £
A mid-priced meal £
An <b>expensive</b> meal £

**5a.** How do your expectations alter regarding the following aspects when eating at an **inexpensive** restaurant?

	Low				High
	1	2	3	4	5
Good service by well trained/experienced staff	0	0	0	0	0
Good atmosphere and decor	0	0	0	0	0
Cost	0	0	0	0	0
Good quality food	0	0	0	0	0
Provision made for children, friends/groups	0	0	0	0	0
The location of the restaurant is convenient	0	0	0	0	0
Cleanliness of restaurant and staff	0	0	0	0	0
Menu provides a good range of choices	0	0	0	0	0
Good quality beverages	0	0	0	0	0
You are recognised or made to feel special/valued	0	0	0	0	0
Reliability/consistency of good food and experience	0	0	0	0	0
Food not standardised	0	0	0	0	0
The restaurant has a good reputation	0	0	0	0	0

**5b.** How do your expectations alter regarding the following aspects when eating at a **mid-priced** restaurant?

	Not impor	Not important			Extremely important		
	1	2	3	4	5		
Good service by well trained/experienced staff	0	0	0	0	0		
Good atmosphere and decor	0	0	0	0	0		
Cost	0	0	0	0	0		
Good quality food	0	0	0	0	0		
Provision made for children, friends/groups	0	0	0	0	0		
The location of the restaurant is convenient	0	0	0	0	0		
Cleanliness of restaurant and staff	0	0	0	0	0		
Menu provides a good range of choices	0	0	0	0	0		
Good quality beverages	0	0	0	0	0		
You are recognised or made to feel special/valued	0	0	0	0	0		
Reliability/consistency of good food and experience	0	0	0	0	0		
Food not standardised	0	0	0	0	0		
The restaurant has a good reputation	0	0	0	0	0		

**5c.** How do your expectations alter regarding the following aspects when eating at an **expensive** restaurant?

	Not impor	tant		Extremely important		
	1	2	3	4	5	
Good service by well trained/experienced staff	0	0	0	0	0	
Good atmosphere and decor	0	0	0	0	0	
Cost	0	0	0	0	0	
Good quality food	0	0	0	0	0	
Provision made for children, friends/groups	0	0	0	0	0	
The location of the restaurant is convenient	0	0	0	0	0	
Cleanliness of restaurant and staff	0	0	0	0	0	
Menu provides a good range of choices	0	0	0	0	0	
Good quality beverages	0	0	0	0	0	
You are recognised or made to feel special/valued	0	0	0	0	0	
Reliability/consistency of good food and experience	0	0	0	0	0	
Food not standardised	0	0	0	0	0	
The restaurant has a good reputation	0	0	0	0	0	

6. Please indicate h	ow yo	ou feel a	about th	ne fol	lowing	stater	nents		
					trongl Agree	_	Neu tral		Strongly Disagree
I carry out tasks e	fficier	ntly			0	0	0	0	0
Eating out with my me	fami	ly is im	portant	to	0	0	0	0	0
I would class myse	elf as	a 'food	ie'		0	0	0	0	0
I am trusting					0	0	0	0	0
I am interested in magazines and/or television			mmes (	on	0	0	0	0	0
I visit food festival	s and	food e	vents		0	0	0	0	0
I value artistic and	crea	tive exp	perience	es	0	0	0	0	0
<b>7.</b> How many of the from your home?	follov				nents a	-	hin a	10 min	ute <b>walk</b>
	0	1-4	5-9	10+					
Restaurants	0	0	0	0					
Pubs	0	0	0	0					
Fast food outlets	0	0	0	0					

<b>8.</b> V	hat newspapers do you regularly read? (Please tick all that apply)	
Sur	Alirror Sunday Times Sun Felegraph Times Local paper	
	Other spaper(s) Please specify	

9. \	9. Which activities do you enjoy taking part in? (Please tick all that apply)				
	Attending cultural/arts ents  Camping/hiking  Community work  Cooking  Computer and/or games  Crafts  Cruise ship holidays  Cycling  Dieting  DIY  Eating out  Foreign travel  Fishing  Gardening  Other activities  Please specials	·	Golf Gourmet/fine food Gym Horse riding Photography Reading Running (outdoors) Sailing Science/new technology Team sports Other sports Visiting Trust properties Wildlife/environmental issues Wines		
	<u></u>				

Number of hours:	
,	
11. Please indicate your	gender
remale	
Male	
<b>12</b> . What is your age?	
12. What is your age?	
12. What is your age?	

13. How many others (excluding yourself) are there living in your household?
14. If there are others living in your household how many fall into the following age categories:
Jnder 18
19 - 40
41 - 65
Above 65

15. Which best describes the occupation of the main wage earner in your household?
Traditional occupation (e.g. laborer, cleaner, farm worker)
Processor or machine operative (e.g. manufacturing, assembly)
Sales or customer service (e.g. retail assistant, call centre)
Individual services (e.g. hairdresser, travel agent, nursery nurse)
Skilled trade (e.g. mechanic, carpenter, electrician, plumber)
Administrative or secretarial (e.g. office worker, civil service )
Semi-professional or technical (e.g. technicians, nursing)
Professional (e.g. teacher, lawyer, clergy)
Manager or senior official (e.g. company manager, officers in armed forces/police)
Retired or other (e.g. student, housewife)
16. which of the following best describes your annual household income?
C Less than £12,999
£13,000-£24,999
£25,000-£34,999
£35,000-£45,999
£46,000-£56,999
£57,000-£67,999
£68,000-£78,999
£79,000-£90,999
Over £91,000

	Where do you live?
0	East of England
0	East Midlands
0	Ireland
0	North East
0	North West
0	Scotland
0	South East
0	London
0	South West
0	Wales
0	West Midlands
0	Yorkshire and The Humber
0	Outside UK
-	
Ple 'Jar	ase fill in your email address so that you can be contacted if you win a copy of mie's America'.
Em	ail address:

If you are interested in this research and are willing to participate in any further studies please tick this box

I would like to be considered for further studies

### Appendix 2 – Pre-questionnaire Information

# delicious.

# Invoice

University of Plymouth Drakes Circus Plymouth Devon PL4 8AA Great Britain Invoice Date 17/07/09 Invoice No. A020450

Seven Publishing Group 20 Upper Ground London SE1 9PD

For the Attention of

Christina Westhead-Lewi

Customer Tel. No.

01752 585 696

Description
Solus e-shot: University of Plymouth
Broadcasting of Uni. of Plymouth survey to 34,471
e-subscribers x £ 0.08
NOM-5030/S/DMMKT

e-subscribers x £ 0.08 NOM:5030/S/DM/MKT CLIENT:C2102 Our contact: Becca Bailey 
 Quantity
 Unit Price
 VAT %
 Amount

 1
 2,757.68
 15
 2,757.68

Total GBP Excl. VAT 2,757.68 15% VAT 413.65 Total GBP Incl. VAT 3,171.33

A020450

17/07/09

3,171.33

Invoice No.

Invoice Date

Total GBP Incl. VAT

\_\_\_\_\_

**Credit Terms** 

Payment due 30 Days from invoice date Please return remittance advice to the above address

We accept the following forms of payment:

Please make cheque payable to: Seven Publishing Ltd
Credit Card: Please phone to arrange payment
Direct Deposit: NafW est Bank
Account Name: Seven Publishing Ltd
Sort Code: 60-40-05
Account No. 32063385

VAT No. 884243701

email: finance@7publishing.co.uk tel: 020 7775 7775 fax: 020 7775 7705 Seven Publishing Group Registered in England 4809240 Registered Office 20 Upper Ground, London SE1 9PD

## **Appendix 3 – Pilot Questionniares**

### Pilot Questionnaire I

Hello, my name is Christina Westhead and I am a doctoral student at the University of Plymouth. This short survey is being conducted in order to gain insight into opinions of eating out.

out.				
Your answers will provide a foundation of knowledge in order to understand more about consumer choices and opinions. This will provide the basis for interview questions, the answers to which will aim to establish what food businesses understand about their consumers' opinions and habits and how/if they adapt their businesses to their consumers.				
There are 4 different categories of eating out establishments discussed in this questionnaire. The following are indicators of how to best interpret the categories.				
Pub – establishment predominantly serving alcohol that also serves food or has a restaurant attached.				
Fast-food outlet - where most food is taken off the premises to be consumed, seating likely to be limited in relation to the number of customers the take-away typically serves.				
Café – informal eating, seating provided, likely to be 'help yourself' food, may be stand alone establishment or found in other premises, for example, shops.				
Restaurant – table service, booking may be required.				
Q1. How often do you eat in the following types of eating establishments over an average 3 month period?				
No. of Times:				
Restaurant				
Fast-food				
Café				
Pub				

<b>Q2</b> . Indicate (1 - 4) w	here you most re	egularly dine with 4	being most often and	being never.
Restaurant				
Fast-food				
Café				
Pub				
Q3. When do you p	oredominantly vi	sit these eating estal	blishments?	
	Daytime	Evening D	ay and evening equally	
Restaurant				
Fast-food				
Café				
Pub				
		_	_	
Q4. How many peo	ple do you eat w	vith on average?		
		Are others	s mainly (please tick)	
	Number:	Family	Friends Both	
Restaurant				
Fast-food				
Café				
Pub				

i]	
ii]	
iii]	
iv]	
<b>Q6</b> . Do	you ever combine other activities with eating out?
	lease place activity letter/s against relevant eating out category.
Restaur	ant
	od
Café	
<b>.</b> .	
Pub	<del></del>
	Shopping Theatre
c. d.	Cinema Work
e.	Travelling
f. g.	Dinking (elsewhere) Attending an event
h.	Other (please state)
<b>Q7</b> . I	List 3 words or thoughts that come to mind when thinking about eating a meal outside the home.
	i]
	ii]
	iii]

List 4 reason why you are most likely to eat a meal outside the home.

**Q5**.

Q8.	List 4 places you know of to eat. These do not have to eating establishments that you have visited and they can be local to you, national, or global.
i]	
ii]	
iii]	
iv]	
<b>Q9</b> .	Which 4 aspects from the following list are most important to you when eating away from the home?
a.	Fits into time limitations
b. c.	To have a meal different to that had in the home  To have a meal different to that had in the home
d. e.	Friends accommodated Family accommodated
f. g.	To provide a positive memory To experience new foods
h.	The social aspect
Q10.	How did you initially find out about the place that you consider your favourite place to eat?
	prace to eat:
	<del></del>
Q11.	Do you ever use guides to choose a place to eat?
QII.	
	Yes No

Q12.	If yes to question 9, which categories of eating out establishments do you use a guide to help you with your choice?
	(please tick)
Restau	ırant
Fast-fo	ood
Café	
Pub	
Q14.	List 2 reasons why you would choose to eat at one of the following eating establishments? (answer can be assumed if you do not actually eat in eating out category).
Restau	arant i]
	ii]
Fast-fo	ood i]
	ii]
G 64	
Café	i]
	ii]
Pub	i]
	ii]
Q15.	If you have returned to a food establishment for another meal, what 3 factors encouraged your repeat visit?
	i]
	ii]
	iii]

Q16.	List 3 factors that make you want to visit a ne	ew place to eat.			
	i]				
	ii]				
	iii]				
Q17.	Which of the following are most important for the same category? For example, a basic restar or a local fast food outlet compared with a glo	aurant compare	_	_	
		Restaurant	Pub	Café	Fast-food
Cost -					
Locati	on				
Adver	tising				
Word	of mouth				
Reput	ation/chef				
Servic	e (style)				
Food-					
Time of	expected to spend consuming meal				
Visit p	oreparation (getting ready and so on)				
Know	ledge of restaurant décor				
Staff a	appearance and attitude				
Cleanl	liness				
Attent	ion to detail				
Speed	of service				
Reput	ation				

Restau	nrant		
Fast-fo	bod		
Café			
Pub			
010	XX 1 (1 C 11 ' C ) 1		
Q19.	How do you rate the following factors when	eating out?	
		1 not very important – 5 very important	
	Speed of service	1 not very important – 5 very important	
		1 not very important – 5 very important	
	Speed of service	1 not very important – 5 very important	
	Speed of service Cleanliness	1 not very important – 5 very important	
	Speed of service Cleanliness Ambiance of restaurant	1 not very important – 5 very important	
	Speed of service Cleanliness Ambiance of restaurant Food	1 not very important – 5 very important	
	Speed of service Cleanliness Ambiance of restaurant Food Other guests in restaurant	1 not very important – 5 very important	
	Speed of service Cleanliness Ambiance of restaurant Food Other guests in restaurant Menu choice Cost Staff competence	1 not very important – 5 very important	
	Speed of service Cleanliness Ambiance of restaurant Food Other guests in restaurant Menu choice Cost Staff competence Restaurants ability to resolve any issues	1 not very important – 5 very important	
	Speed of service Cleanliness Ambiance of restaurant Food Other guests in restaurant Menu choice Cost Staff competence	1 not very important – 5 very important	
	Speed of service Cleanliness Ambiance of restaurant Food Other guests in restaurant Menu choice Cost Staff competence Restaurants ability to resolve any issues	1 not very important – 5 very important	
	Speed of service Cleanliness Ambiance of restaurant Food Other guests in restaurant Menu choice Cost Staff competence Restaurants ability to resolve any issues Children's facilities		
Other	Speed of service Cleanliness Ambiance of restaurant Food Other guests in restaurant Menu choice Cost Staff competence Restaurants ability to resolve any issues		
Other	Speed of service Cleanliness Ambiance of restaurant Food Other guests in restaurant Menu choice Cost Staff competence Restaurants ability to resolve any issues Children's facilities		
Other	Speed of service Cleanliness Ambiance of restaurant Food Other guests in restaurant Menu choice Cost Staff competence Restaurants ability to resolve any issues Children's facilities		
Other	Speed of service Cleanliness Ambiance of restaurant Food Other guests in restaurant Menu choice Cost Staff competence Restaurants ability to resolve any issues Children's facilities		
Other	Speed of service Cleanliness Ambiance of restaurant Food Other guests in restaurant Menu choice Cost Staff competence Restaurants ability to resolve any issues Children's facilities		
Other	Speed of service Cleanliness Ambiance of restaurant Food Other guests in restaurant Menu choice Cost Staff competence Restaurants ability to resolve any issues Children's facilities		
Other	Speed of service Cleanliness Ambiance of restaurant Food Other guests in restaurant Menu choice Cost Staff competence Restaurants ability to resolve any issues Children's facilities		

Q18. Describe the atmosphere that you expect to find in the following food establishments

**Q20**. When looking at these 4 pictures what 4 comments do they make you think regarding the category of eating establishment that they are portraying?

### a. Fast-food outlet



i]	 	 
ii]	 	 
ii]		 
iv]		

### b. Pub restaurant



i]	 		 
ii]	 	 	
ii]	 	 	
iv]	 		 

### c. café



i]	
ii]	
iii]	
iv]	

### d. Restaurant



i]			
ii]		 	
iii]		 	
iv]			

Q21.	From the list below what are the 5 most likely be ruined?	y reasons that your meal experience would
a. b. c. d. e. f. g. h. i. j. k. l. m. o. p. q.	Issue with staff  Time for food to be served  Restaurant not what was expected  Unclean/untidy  Other diners casing a problem  Incorrect orders being served  Limited menu  Overly expensive  Too hot/too cold  Noisy  A long wait to be seated  No provision for children  Dishes on menu not available  Table poorly laid  Waiting a long time for the bill  Unclean toilets  Other/s (please specify)	
Q22.	From the 5 you have chosen please list in or	der of importance to you
Most i	mportant 1	
	2	
	3	
	4	
Least i	mportant 5	
i]	List 3 actions that you would take if you were	

Q24.	If you had never visited an eating establishment previously what are the 4 main factors							
	that you have preconceived ideas about?							
a. b. c. d. e.	Ambience  Food  Other diners  Décor  Service style							
f.	Cost							
g.	Speed of service							
h. i.	Theme of easting establishment Staff attitude							
Q25.	How many of these factors would you need to have imagined wrongly before you were disappointed?							
	(please tick)							
	1							
	2							
	3							
	4							
Q26.	What 4 factors from the list in Q24 that you either saw or heard about would make you think positively about an eating establishment that you had never visited before?  1  2  3  4							
Q27.	On a scale of 1-10 (1 being slightly disappointing and 10 being appalled) at what disappointment level (1-10) would you not consider returning to a restaurant whatever reasonable apologetic measures were implemented by the restaurant?  1-10:							

Q28.	If you were disappointed by your restaurant experience, for example, you experienced a cold meal or service was slow, what factors would improve your opinion of the experience?						
	a. Free drinks						
	b. An apology						
	c. Money/refund						
	d. Replacement food						
	e. Nothing						
	f. Other (please specify)						
Q29.	Are you Male Female						
Q30.	What age are you?  18-25 26-35 36-45 46-55 56-65 65+						
Q31.	How many people live in your household?						
Q32.	How many people in your household are under 18 years of age?						
Q33.	What is your nationality?						
Q34.	What is your occupation?						
All ir	nformation contained in this questionnaire will be treated in the strictest confidence.						
Than	k you for taking the time to complete this questionnaire.						

### Pilot Questionnaire II

### **Eating Out Expectations Survey**

This survey is to assist with the data collection for a study by the University of Plymouth looking at peoples eating out patterns and expectations. Names or addresses are not required unless you wish to provide them and the questionnaire is strictly confidential.

Q1. Approximately how many times in the past 3 months have you eaten at the following eating establishments?									
Restaurant (establishment defined by food being brought to the table)									
Fast-food (establishment with limited seating - food usually taken off the premises to consume)									
Café (food taken to table by customer. Can be stand alone establishment or within other facility, such as, a shop)									
Pub (establishment serving food either in or separate to bar area)									
Q2. When do your visits normally take place to the following eating establishments?									
	Daytime	Evening	Day and eve	ening equally	Never visit				
Restaurant									
Fast-food									
Café									
Pub									
Q3. How many people on average do you eat with?									
Are others mainly (please tick)									
	Number:		Family	Friends	Both				
Restaurant									
Fast-food									
Café									
Pub									
<b>Q4</b> . What is the most important reason that would make you eat a meal outside the home?									
il									

 $\textbf{Q5}. \ \ Please tick any other activities you would normally combine with eating out?$ 

Rest	taurant	Fast-food	Café		Pub
The Cin Wo Tra Din Atte See Hol	opping eatre nema ork evelling eking (elsewhere) ending an event eing friends/relatives lidaying ying sports	Shopping Theatre Cinema Work Travelling Dinking (elsewhere)_ Attending an event Seeing friends/relativ Holidaying Plaving sports	- Attending an	event s/relatives	Shopping Theatre Cinema Work Travelling Dinking (elsewhere) Attending an event Seeing friends/relatives_ Holidaying
Q6.  i. j. k. l. m. o. p. q.	Fits into time limit To have a meal di Friends accommod Family accommod To provide a posit To experience new The social aspect-	tations milar to that had in the fferent to that had in the dated	the homethe homethe homethe home		ating away
Q7.	If you have a favo	urite place to eat, he	ow did you initially fin	d out about it?	?
Q8.	all that apply.		ever been influenced by		g? Please tick
_	г	uide book	Magazine	Internet	
Restau	_				
Fast-fo	od [				
Café	[				
Pub	[				

<b>Q9</b> .	Describe the main reason why you choose to eat at the following. (Please leave blank the categories that you do not eat at).
Restai	orant
Fast-fo	ood
Café	
Pub	
Q10.	If you are going to return to somewhere you have eaten before what encourages you to go back?
Q11.	What makes you want to visit a new place to eat?.
Q12.	Which 3 statements best describe what you would you would pay a premium for when dining in the following places?
The lo	ocation is convenient
Adver	tising is memorable
	one speaks highly of the place
I've h	eard of the chef

Service is very professional		
The food is delicious		
I can spend as long as I like eating the meal		
It's the type of place that I like to dress smartly for		
The décor is well done		
Staff have a smart appearance and a good attitude		
There is never an issue over cleanliness		
Attention to detail is very good		
Service is fast and friendly		
The place has a good reputation	. 🗆 🗆	
Q13. Describe the atmosphere that you expect to fin	-	od establishments
Restaurant		_
Fast-food		_
Café		
Pub		
		<del></del>
Q14. How do you rate the following factors when eat	ing out?	
	1 not very important –	- 5 very important
Speed of service		
Cleanliness		
Ambiance of restaurant		
Food		
Other guests in restaurant		
Menu choice		
Cost		
Staff attitude – welcoming/enthusiastic/helpful		
Staff competence – food & drink knowledge  Staff service – skill/manner		
Restaurants ability to resolve any issues		
Children's facilities		
Location		
Other important factors to you not listed		

Q15.	From the following list which 3 are likely to cause you most concern?						
	Restaurant		Pub	Café	Fast food outlet		
s.	Food not meeting expectations						
t.	Service not meeting expectations	П					
u.	Time for food to be served						
v.	Interior not what was expected	П					
w.	Unclean/untidy looking eating area	H					
х.	Other diners causing a problem	H					
у.	Incorrect orders being served	Н					
z.	Limited menu	H					
	Overly expensive	Н					
	Restaurant too hot/too cold	Ш					
	Noisy	Ш					
	A long wait to be seated	Ш					
	No provision for children	Ш					
	Dishes on menu not available	Ш					
	Table poorly laid	Ш					
	Waiting a long time for the bill	Ш					
11.	Unclean/untidy toilets						
First I	What would you do if you were unhappy with would						
hirdly	y, I would						
<b>)18</b> .	Please tick up to 3 factors that you have prec visit an eating establishment for the first time		ved ide	as about v	when choosing		
j.	Ambience						
k.	Food						
1.	Other diners						
m.	Décor						
n.	Service style						
ο.	Cost						
p.	Speed of service	Щ					
q.	Theme of eating establishment						
r.	Staff attitude	1					

Q19.	How many of the above factors would it take to cause you <b>disappointment</b> if you preconceptions were not met?	our
	(please tick)	
	<u> </u>	5+
Q20.	Which 3 factors from the list in Q18 would make you think positively about an establishment that you had never visited before?	eating
	Letters from Q18:	
	1	
	2	
	3	
Q21.	On a scale of 1-10 (1 being slightly disappointing and 10 being appalled) at approximately what number (1-10) would you consider <i>not</i> returning to a restaur whatever reasonable apologetic measures were implemented by the restaurant?	rant,
	1-10:	
Q22.	If you were disappointed by your restaurant experience, for example, you experienced meal or service was slow, which 2 options, if offered, would improve your of the experience?	
	(please tick 2)	
	a. Free drinks	
	b. An apology	
	c. Money/refund	
	d. Replacement food	
	e. Other (please specify)	
	f. Nothing would change your opinion	

# **Q23**. Please indicate how you feel about the following statements:

		Agree Strongly	$\longleftrightarrow$	Disagre	e Strongly
I like to try new and diff	Perent things				
It's very important to me	e to feel part of a group				
I am a 'spender' rather t	han a 'saver'				
I would rather have a qu than go out to a party	iet evening at home				
My family is important	to me				
My friends are importan	t to me				
Eating out with the fami	ly is important				
I would class myself as	a 'foodie'				
I buy food related maga:	zines				
I like to watch cookery s	shows on television				
I visit food festivals and	events				
Q24. From your home 20 minute walk  Restaurants: $0 \square 1-2$ Pubs: $0 \square 1-1 \square 3-5$		G. S.	0 1-2 0	3-5 6-10	6-10
Q25. What newspape	r/s do you regularly read?	(please tick all tl	nat apply) S	unday pap	ers?
Times	Independent		Sunday	Times	
Telegraph	Daily Mail				
Mail on Sunday	Mirror				
Sun	Local paper				
None					
Other newspaper (please	e specify)				

<b>Q26.</b> Please indicate how many hours	a week on average you spend watching television
Number of hours:	
Q27. Which interests and activities	do you participate in on a regular basis?
Bicycling	
Golf	
Gym	
Running (outdoors)	
Skiing	
Tennis	
Camping/hiking	
Fishing	
Sailing	ontinued
Horse riding	
Gardening	
Reading	
Needlework/knitting	
Time with Children	
Time with Grandchildren	
Crafts	
DIY	
Photography	
Attending cultural/arts events	
Fashion	
Art/antiques	
Foreign travel	
Cruise ship holidays	
Cooking	330

Wines				
Visiting Trust Properties				
Dieting				
Wildlife/environmental issues				
Eating out				
Science/new technology				
Computers and/or games				
Community work				
Gourmet/fine food				
Q28. Please indicate your gender	Male	ale		
Q31. What is your age?				
Q32. The approximate ages of all	others (in years)	(in years) (in	years)	
living in your household	(no others)	(in years) n ye	ears) vears)	
	_			
Q33. Which best describes the occu wage earner in your household?	pation of the principal			
Traditional occupation(for example labour	rer, packer, cleaner, storeman,	farm worker)		
Process, plant and machine operative	(for example factory operativ	re, manufacture, assembly)		
Sales and customer service (for example	retail assistant, cashier, call ce	entre, check out operator)		
Personal and service occupation(for ex	ample hairdresser, travel agent	t, lorry driver, care assistant)		
Skilled trade (for example mechanic, carpente	er, roofer, welder, electrical, plu	umber)		

Administrative or secretarial (for example office worker, civil service, finance)	
Semi-professional and technical (for example engineering, design, nursing)	
Professional (for example teacher, lawyer, accountant, bank manager, doctor)	
Manager or senior official (for example director, company manager)	
Retired or other (for example student, long-term unemployed)	Γ
	_
Q34. What is your annual household income? (Select one)	
Less than £15,000 £16,000-25,000	
£26,000-£35,000 £36,000-£45,000	
£46,000-£55,000 more than £55,000	
Q35. What is you nationality?	
Q36. If you are interested in this study and wish to participate further at a later stage please	
provide your name and address and or email address:	
<del></del>	
All information contained in this questionnaire will be treated in the strictest confidence	

Thank you for taking the time to complete this questionnaire.

# Appendix 4 – Quantitative Data Analysis

# 4.1 Correlation Tables for Age by Factor Group

CORRELATIONS
/VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 age
/PRINT=TWOTAIL NOSIG
/MISSING=PAIRWISE.

#### Correlations

			REGR factor score 1 for analysis 1	REGR factor score 2 for analysis 1	REGR factor score 3 for analysis 1
REGR factor score	1 for	Pearson Correlation	1	.000	.000
analysis 1		Sig. (2-tailed)		1.000	1.000
		N	1885	1885	1885
REGR factor score	2 for	Pearson Correlation	.000	1	.000
analysis 1		Sig. (2-tailed)	1.000		1.000
		N	1885	1885	1885
REGR factor score	3 for	Pearson Correlation	.000	.000	1
analysis 1		Sig. (2-tailed)	1.000	1.000	
		N	1885	1885	1885
REGR factor score	4 for	Pearson Correlation	.000	.000	.000
analysis 1		Sig. (2-tailed)	1.000	1.000	1.000
		N	1885	1885	1885
age of respondent		Pearson Correlation	.170**	.019	007
		Sig. (2-tailed)	.000	.401	.778
		N	1862	1862	1862

#### Correlations

			REGR factor score 4 for	
			analysis 1	age of respondent
REGR factor score	1 for	Pearson Correlation	.000	.170**
analysis 1		Sig. (2-tailed)	1.000	.000
		N	1885	1862
REGR factor score	2 for	Pearson Correlation	.000	.019
analysis 1		Sig. (2-tailed)	1.000	.401
		N	1885	1862
REGR factor score	3 for	Pearson Correlation	.000	007
analysis 1		Sig. (2-tailed)	1.000	.778
		N	1885	1862
REGR factor score	4 for	Pearson Correlation	1	062**
analysis 1		Sig. (2-tailed)		.008
		N	1885	1862
age of respondent		Pearson Correlation	062	1
		Sig. (2-tailed)	.008	
		N	1862	2192

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

# **4.2** Correlation Tables for Occupation by Factor Group

ONEWAY FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 BY occup /MISSING ANALYSIS /POSTHOC=TUKEY ALPHA(0.05).

### Oneway

### **ANOVA**

			Sum of Squares	df	Mean Square
REGR factor score	1 for	Between Groups	39.110	9	4.346
analysis 1		Within Groups	1844.890	1875	.984
		Total	1884.000	1884	II.
REGR factor score	2 for	Between Groups	18.715	9	2.079
analysis 1		Within Groups	1865.285	1875	.995
		Total	1884.000	1884	
REGR factor score	3 for	Between Groups	13.658	9	1.518
analysis 1		Within Groups	1870.342	1875	.998
		Total	1884.000	1884	
REGR factor score	4 for	Between Groups	30.620	9	3.402
analysis 1		Within Groups	1853.380	1875	.988
		Total	1884.000	1884	

# ANOVA

			F	Sig.
REGR factor score 1	l for	Between Groups	4.416	.000
analysis 1		Within Groups		
		Total		
REGR factor score 2 analysis 1	2 for	Between Groups Within Groups Total	2.090	.027
REGR factor score 3 analysis 1	3 for	Between Groups Within Groups Total	1.521	.135
REGR factor score 4 analysis 1	1 for	Between Groups Within Groups Total	3.442	.000

# **Post Hoc Tests**

# **Multiple Comparisons**

# Tukey HSD

Dependent Variable	(I) main	(J) main	Mean			95% Confide	ence Interval
	occupation	occupation	Difference			Lower	Upper
			(I-J)	Std. Error	Sig.	Bound	Bound
REGR factor score 1	traditional	processor	52079832	.27051139	.652	-1.3776486	.3360520
for analysis 1		sales	02006370	.19112191	1.000	6254462	.5853188
		individual	.01656312	.24338020	1.000	7543486	.7874748
		skilled	15148799	.16758134	.996	6823053	.3793293
		admin	06058442	.15976306	1.000	5666371	.4454683
		semi-	05161294	.16475458	1.000	5734764	.4702505
		professional					
		professional	.12004224	.15353083	.999	3662698	.6063543
		manager	01086992	.15382591	1.000	4981166	.4763768
		retired/other	30887428	.15746323	.626	8076422	.1898937
	processor	traditional	.52079832	.27051139	.652	3360520	1.3776486
		sales	.50073462	.25869662	.645	3186922	1.3201614
		individual	.53736144	.29938316	.739	4109408	1.4856637
		skilled	.36931033	.24182610	.881	3966787	1.1352994
		admin	.46021390	.23647535	.637	2888265	1.2092543

	_ 	46040500	22007505	600	2906262	1.2289970
	semi- professional	.46918538	.23987585	.630	2900202	1.22099/0
	professional	.64084056	.23231029	.152	0950070	1.3766881
	manager	.50992840	.23250541	.462	2265372	1.2463940
sales	retired/other traditional	.02006370	.23492770	.996 1.000	5322142 5853188	.9560623 .6254462
Sales	processor	50073462	.25869662	.645	-1.3201614	.3186922
	individual	.03662682	.23017700	1.000	6924635	.7657171
	skilled	13142429	.14775329	.997	5994358	.3365873
	admin	04052072	.13882278	1.000	4802447	.3992033
	semi-	03154924	.14453927	1.000	4893803	.4262818
	professional professional	.14010594	.13160261	.988	2767480	.5569599
	manager	.00919378	.13194673	1.000	4087502	.4271377
	retired/other	28881058	.13616974	.513	7201310	.1425098
individual	traditional	01656312	.24338020	1.000	7874748	.7543486
	processor	53736144	.29938316	.739	-1.4856637	.4109408
	sales	03662682	.23017700	1.000	7657171	.6924635
	skilled	16805111	.21103880	.999	8365208	.5004185
	admin semi-	07714754 06817606	.20488558	1.000 1.000	7261268 7295581	.5718317 .5932059
	professional	00017000	.20000118	1.000	1 233301	.0302003
	professional	.10347912	.20006395	1.000	5302275	.7371857
	manager	02743304	.20029048	1.000	6618572	.6069911
	retired/other	32543740	.20309736	.847	9687524	.3178776
skilled	traditional	.15148799	.16758134 .24182610	.996	3793293	.6823053 .3966787
	processor sales	36931033 .13142429	.14775329	.881 .997	-1.1352994 3365873	.5994358
	individual	.16805111	.21103880	.999	5004185	.8365208
	admin	.09090357	.10405616	.997	2386964	.4205036
	semi-	.09987506	.11156846	.997	2535203	.4532704
	professional	07450000	00400040	444	0000750	5000000
	professional	.27153023 .14061807	.09420810	.111 .898	0268758 1593088	.5699363 .4405449
	manager retired/other	15738629	.10048940	.864	4756885	.1609159
admin	traditional	.06058442	.15976306	1.000	4454683	.5666371
	processor	46021390	.23647535	.637	-1.2092543	.2888265
	sales	.04052072	.13882278	1.000	3992033	.4802447
	individual	.07714754	.20488558	1.000	5718317	.7261268
	skilled	09090357	.10405616	.997	4205036	.2386964
	semi- professional	.00897148	.09943968	1.000	3060057	.3239487
	professional	.18062666	.07947261	.407	0711044	.4323577
	manager	.04971450	.08004117	1.000	2038175	.3032465
	retired/other	24828986	.08682654	.118	5233147	.0267350
semi- professional	traditional processor	.05161294 46918538	.16475458 .23987585	1.000 .630	4702505 -1.2289970	.5734764 .2906262
,	sales	.03154924	.23967565	1.000	4262818	.4893803
	individual	.06817606	.20880119	1.000	5932059	.7295581
	skilled	09987506	.11156846	.997	4532704	.2535203
	admin	00897148	.09943968	1.000	3239487	.3060057
	professional	.17165518	.08908272	.651	1105161	.4538265
	manager	.04074302	.08959031	1.000	2430361	.3245221
professional	retired/other traditional	25726134 12004224	.09570101	.179	5603962 6063543	.3662698
hiniessiniigi	processor	12004224 64084056	.15353083	.999	-1.3766881	.0950070
	sales	14010594	.13160261	.988	5569599	.2767480
	individual	10347912	.20006395	1.000	7371857	.5302275
	skilled	27153023	.09420810	.111	5699363	.0268758
	admin	18062666	.07947261	.407	4323577	.0711044
	semi- professional	17165518	.08908272	.651	4538265	.1105161
	manager	13091216	.06673882	.626	3423087	.0804844
	retired/other	42891652 <sup>*</sup>	.07474175	.000	6656625	1921705

	_						
	manager	traditional	.01086992	.15382591	1.000	4763768	.4981166
		processor	50992840	.23250541	.462	-1.2463940	.2265372
		sales	00919378	.13194673	1.000	4271377	.4087502
		individual	.02743304	.20029048	1.000	6069911	.6618572
		skilled	14061807	.09468822	.898	4405449	.1593088
		admin	04971450	.08004117	1.000	3032465	.2038175
		semi-	04074302	.08959031	1.000	3245221	.2430361
		professional					
		professional	.13091216	.06673882	.626	0804844	.3423087
		retired/other	29800436 <sup>-</sup>	.07534602	.003	5366644	0593443
	retired/other	traditional	.30887428	.15746323	.626	1898937	.8076422
		processor	21192404	.23492770	.996	9560623	.5322142
		sales	.28881058	.13616974	.513	1425098	.7201310
		individual	.32543740	.20309736	.847	3178776	.9687524
		skilled	.15738629	.10048940	.864	1609159	.4756885
		admin	.24828986	.08682654	.118	0267350	.5233147
		semi-	.25726134	.09570101	.179	0458735	.5603962
		professional					
		professional	.42891652	.07474175	.000	.1921705	.6656625
		manager	.29800436 <sup>*</sup>	.07534602	.003	.0593443	.5366644
REGR factor score 2	traditional	processor	53259392	.27200251	.629	-1.3941674	.3289795
for analysis 1		sales	43754223	.19217543	.405	-1.0462618	.1711773
		individual skilled	39574654	.24472178 .16850509	.840	-1.1709077 9873941	.3794146 .0800924
		skilled admin	45365085 39754491	.16850509	.177 .283	9873941 9063871	.0800924
		semi-	54021961 <sup>*</sup>	.16566274	.203	-1.0649597	0154795
		professional	.0 102 1001	.10000214	.000	1.0040007	.515-100
		professional	49135020 <sup>*</sup>	.15437713	.048	9803429	0023575
		manager	58663129 <sup>*</sup>	.15467383	.006	-1.0765638	0966988
		retired/other	44093816	.15833121	.142	9424555	.0605791
	processor	traditional	.53259392	.27200251	.629	3289795	1.3941674
		sales	.09505169	.26012262	1.000	7288920	.9189954
		individual	.13684739	.30103344	1.000	8166821	1.0903769
		skilled admin	.07894308 .13504901	.24315910 .23777886	1.000 1.000	6912683 6181203	.8491545 .8882184
		semi-	00762568	.23777666	1.000	7716256	.7563742
		professional	.007.02000	.2.110011			., 000172
		professional	.04124372	.23359084	1.000	6986600	.7811474
		manager	05403737	.23378704	1.000	7945625	.6864878
	-	retired/other	.09165577	.23622268	1.000	6565844	.8398959
	sales	traditional	.43754223	.19217543	.405	1711773	1.0462618
		processor	09505169	.26012262	1.000	9189954	.7288920
		individual	.04179570	.23144580	1.000	6913136	.7749050
		skilled admin	01610861 .03999732	.14856775 .13958801	1.000 1.000	4867000 4021505	.4544827 .4821452
		admin semi-	10267737	.13958801	.999	4021505	.3576774
		professional	.10201101	. 1-000001	.555	.0000021	.0010114
		professional	05380797	.13232803	1.000	4729597	.3653438
		manager	14908906	.13267405	.982	5693368	.2711587
		retired/other	00339592	.13692035	1.000	4370939	.4303020
	individual	traditional	.39574654	.24472178	.840	3794146	1.1709077
		processor	13684739	.30103344	1.000	-1.0903769	.8166821
		sales	04179570	.23144580	1.000	7749050	.6913136
		skilled	05790431	.21220209	1.000	7300587 6543540	.6142501
		admin semi-	00179838 14447307	.20601496	1.000 1.000	6543549 8095008	.6507582 .5205546
		professional	14447307	.20330210	1.000	0093006	.5205546
		professional	09560366	.20116675	1.000	7328034	.5415961
		manager	19088476	.20139453	.995	8288060	.4470365
		retired/other	04519162	.20421688	1.000	6920527	.6016695
	skilled	traditional	.45365085	.16850509	.177	0800924	.9873941
		processor	07894308	.24315910	1.000	8491545	.6912683
		sales	.01610861	.14856775	1.000	4544827	.4867000
		individual	.05790431	.21220209	1.000	6142501	.7300587
		admin	.05610594	.10462975	1.000	2753109	.3875228
		semi- professional	08656876	.11218345	.999	4419121	.2687746
		professional	03769935	.09472740	1.000	3377503	.2623516
		manager	13298045		.928	4345606	.1685997
					5		

		retired/other	.01271269	.10104332	1.000	3073441	.3327695
	admin	traditional	.39754491	.16064371	.283	1112973	.9063871
		processor	13504901	.23777886	1.000	8882184	.6181203
		sales	03999732	.13958801	1.000	4821452	.4021505
		individual	.00179838	.20601496	1.000	6507582	.6543549
		skilled	05610594	.10462975	1.000	3875228	.2753109
		semi-	14267470	.09998781	.919	4593881	.1740387
		professional	00000500	07004000	070	0.4000.40	4500404
		professional	09380529	.07991068	.976	3469240	.1593134
		manager retired/other	18908638	.08048238	.357	4440159	.0658432
	semi-	traditional	04339325 .54021961	.08730515	1.000	3199341 .0154795	.2331476 1.0649597
	professional	processor	.00762568	.24119811	1.000	7563742	.7716256
	professional	sales	.10267737	.14533601	.999	3576774	.5630321
		individual	.14447307	.20995216	1.000	5205546	.8095008
		skilled	.08656876	.11218345	.999	2687746	.4419121
		admin	.14267470	.09998781	.919	1740387	.4593881
		professional	.04886941	.08957376	1.000	2348573	.3325961
		manager	04641169	.09008416	1.000	3317551	.2389317
		retired/other	.09928145	.09622854	.990	2055244	.4040873
	professional	traditional	.49135020	.15437713	.048	.0023575	.9803429
		processor	04124372	.23359084	1.000	7811474	.6986600
		sales	.05380797	.13232803	1.000	3653438	.4729597
		individual	.09560366	.20116675	1.000	5415961	.7328034
		skilled	.03769935	.09472740	1.000	2623516	.3377503
		admin	.09380529	.07991068	.976	1593134	.3469240
		semi- professional	04886941	.08957376	1.000	3325961	.2348573
		manager	09528109	.06710670	.921	3078429	.1172807
		retired/other	.05041204	.07515374	1.000	1876390	.2884630
	manager	traditional	.58663129	.15467383	.006	.0966988	1.0765638
		processor	.05403737	.23378704	1.000	6864878	.7945625
		sales	.14908906	.13267405	.982	2711587	.5693368
		individual	.19088476	.20139453	.995	4470365	.8288060
		skilled	.13298045	.09521017	.928	1685997	.4345606
		admin	.18908638	.08048238	.357	0658432	.4440159
		semi-	.04641169	.09008416	1.000	2389317	.3317551
		professional			221		
		professional	.09528109	.06710670	.921	1172807	.3078429
	retired/other	retired/other	.14569314	.07576135	.653	0942825	.3856687
	retired/other	traditional processor	.44093816 09165577	.15833121 .23622268	.142 1.000	0605791 8398959	.9424555 .6565844
		sales	.00339592	.13692035	1.000	4303020	.4370939
		individual	.00559592		1.000	6016695	.6920527
		skilled	01271269	.10104332	1.000	3327695	.3073441
		admin	.04339325	.08730515	1.000	2331476	.3199341
		semi-	09928145	.09622854	.990	4040873	.2055244
		professional					
		professional	05041204	.07515374	1.000	2884630	.1876390
		manager	14569314	.07576135	.653	3856687	.0942825
REGR factor score 3	traditional	processor	73139131	.27237098	.180	-1.5941319	.1313493
for analysis 1		sales	19162821	.19243575	.993	8011724	.4179159
		individual	20378374	.24505328	.998	9799950	.5724275
		skilled	29874058	.16873335	.754	8332069	.2357257
ĺ		admin	25017905	.16086132	.869	7597105	.2593525
ĺ		semi- professional	31134646	.16588716	.685	8367974	.2141045
		professional	28514729	.15458625	.706	7748024	.2045078
		manager	24181245	.15488336	.867	7324086	.2487837
		retired/other	40491905	.15854569	.241	9071157	.0972776
	processor	traditional	.73139131	.27237098	.180	1313493	1.5941319
		sales	.53976310	.26047499	.548	2852967	1.3648229
ĺ		individual	.52760758	.30144123	.766	4272136	1.4824288
		skilled	.43265073	.24348849	.750	3386040	1.2039055
		admin	.48121227	.23810096	.584	2729773	1.2354019
		semi-	.42004485	.24152484	.773	3449900	1.1850797
		professional					
_		professional	.44624402	.23390727	.664	2946620	1.1871500
		•					
		manager	.48957886	.23410373	.534	2519494	1.2311072
	sales	manager retired/other traditional	.32647227	.23410373 .23654267 .19243575	.933	2519494 4227814 4179159	1.2311072 1.0757260 .8011724

		_				·	
		processor	53976310	.26047499	.548	-1.3648229	.2852967
		individual	01215552	.23175932	1.000	7462579	.7219468
		skilled	10711237	.14876900	.999	5783412	.3641165
		admin	05855083	.13977710	1.000	5012976	.3841960
		semi- professional	11971825	.14553288	.998	5806966	.3412601
		professional	09351908	.13250729	.999	5132386	.3262004
		•	05018424	.13250729	1.000	4710013	.3706328
		manager					
	individual	retired/other traditional	21329083 .20378374	.13710582	.869	6475763	.2209946
	maividuai		52760758		.998	5724275	.9799950 .4272136
		processor sales	.01215552	.30144123 .23175932	.766 1.000	-1.4824288 7219468	.7462579
		skilled	09495684	.21248955	1.000	7680218	.5781081
		admin	04639531	.20629404	1.000	6998358	.6070452
		semi-	10756272	.21023656	1.000	7734913	.5583659
		professional	10730272	.21023030	1.000	1134813	.5565659
		professional	08136355	.20143926	1.000	7194265	.5566994
		manager	03802871	.20166735	1.000	6768141	.6007567
		retired/other	20113531	.20449352	.993	8488727	.4466021
	skilled	traditional	.29874058	.16873335	.754	2357257	.8332069
	Skilled	processor	43265073	.24348849	.750	-1.2039055	.3386040
		sales	.10711237	.14876900	.999	3641165	.5783412
ĺ		individual	.09495684	.21248955	1.000	5781081	.7680218
		admin	.04856154	.10477148	1.000	2833043	.3804273
		semi-	01260588	.11233542	1.000	3684306	.3432188
		professional	01200000	.11200042	1.000	5004500	.0402100
		professional	.01359329	.09485572	1.000	2868641	.3140507
		manager	.05692813	.09533914	1.000	2450605	.3589168
		retired/other	10617847	.10118020	.989	4266688	.2143119
	admin	traditional	.25017905	.16086132	.869	2593525	.7597105
	admin	processor	48121227	.23810096	.584	-1.2354019	.2729773
		sales	.05855083	.13977710	1.000	3841960	.5012976
		individual	.04639531	.20629404	1.000	6070452	.6998358
		skilled	04856154	.10477148	1.000	3804273	.2833043
		semi-	06116741	.10012326	1.000	3783099	.2559750
		professional	00110741	.10012320	1.000	.57 05055	.2333730
		professional	03496825	.08001893	1.000	2884298	.2184933
		manager	.00836660	.08059140	1.000	2469083	.2636415
		retired/other	15474000	.08742342	.754	4316554	.1221754
	semi-	traditional	.31134646	.16588716	.685	2141045	.8367974
	professional	processor	42004485	.24152484	.773	-1.1850797	.3449900
	p	sales	.11971825	.14553288	.998	3412601	.5806966
		individual	.10756272	.21023656	1.000	5583659	.7734913
		skilled	.01260588	.11233542	1.000	3432188	.3684306
		admin	.06116741	.10012326	1.000	2559750	.3783099
ĺ		professional	.02619917	.08969510	1.000	2579119	.3103102
		manager	.06953401	.09020619	.999	2161959	.3552639
		retired/other	09357259	.09020619	.999	3987913	.2116462
	professional	traditional			.⊍⊍+		.4 1 10404
1			2851472a	15458625	706	- 2045078	
	proressional		.28514729 - 44624402	.15458625	.706 664	2045078 -1 1871500	.7748024
	prorecosional	processor	44624402	.23390727	.664	-1.1871500	.7748024 .2946620
	prorossional	processor sales	44624402 .09351908	.23390727 .13250729	.664 .999	-1.1871500 3262004	.7748024 .2946620 .5132386
	proressional	processor sales individual	44624402 .09351908 .08136355	.23390727 .13250729 .20143926	.664 .999 1.000	-1.1871500 3262004 5566994	.7748024 .2946620 .5132386 .7194265
	proressional	processor sales individual skilled	44624402 .09351908 .08136355 01359329	.23390727 .13250729 .20143926 .09485572	.664 .999 1.000 1.000	-1.1871500 3262004 5566994 3140507	.7748024 .2946620 .5132386 .7194265 .2868641
	processional	processor sales individual skilled admin	44624402 .09351908 .08136355 01359329 .03496825	.23390727 .13250729 .20143926 .09485572 .08001893	.664 .999 1.000 1.000	-1.1871500 3262004 5566994 3140507 2184933	.7748024 .2946620 .5132386 .7194265 .2868641 .2884298
	processional	processor sales individual skilled admin semi-	44624402 .09351908 .08136355 01359329	.23390727 .13250729 .20143926 .09485572	.664 .999 1.000 1.000	-1.1871500 3262004 5566994 3140507	.7748024 .2946620 .5132386 .7194265 .2868641
	processional	processor sales individual skilled admin semi- professional	44624402 .09351908 .08136355 01359329 .03496825 02619917	.23390727 .13250729 .20143926 .09485572 .08001893 .08969510	.664 .999 1.000 1.000 1.000	-1.1871500 3262004 5566994 3140507 2184933 3103102	.7748024 .2946620 .5132386 .7194265 .2868641 .2884298 .2579119
	processional	processor sales individual skilled admin semi- professional manager	44624402 .09351908 .08136355 01359329 .03496825 02619917	.23390727 .13250729 .20143926 .09485572 .08001893 .08969510	.664 .999 1.000 1.000 1.000 1.000	-1.1871500 3262004 5566994 3140507 2184933 3103102 1695149	.7748024 .2946620 .5132386 .7194265 .2868641 .2884298 .2579119
		processor sales individual skilled admin semi- professional manager retired/other	44624402 .09351908 .08136355 01359329 .03496825 02619917 .04333484 11977175	.23390727 .13250729 .20143926 .09485572 .08001893 .08969510 .06719760 .07525555	.664 .999 1.000 1.000 1.000 1.000 1.000 .852	-1.1871500 3262004 5566994 3140507 2184933 3103102 1695149 3581452	.7748024 .2946620 .5132386 .7194265 .2868641 .2884298 .2579119 .2561846 .1186017
	manager	processor sales individual skilled admin semi- professional manager retired/other	44624402 .09351908 .08136355 01359329 .03496825 02619917 .04333484 11977175	.23390727 .13250729 .20143926 .09485572 .08001893 .08969510 .06719760 .07525555 .15488336	.664 .999 1.000 1.000 1.000 1.000 1.000 .852	-1.1871500 3262004 5566994 3140507 2184933 3103102 1695149 3581452 2487837	.7748024 .2946620 .5132386 .7194265 .2868641 .2884298 .2579119 .2561846 .1186017
		processor sales individual skilled admin semi- professional manager retired/other traditional processor	44624402 .09351908 .08136355 01359329 .03496825 02619917 .04333484 11977175 .24181245 48957886	.23390727 .13250729 .20143926 .09485572 .08001893 .08969510 .06719760 .07525555 .15488336 .23410373	.664 .999 1.000 1.000 1.000 1.000 1.000 .852 .867 .534	-1.1871500 3262004 5566994 3140507 2184933 3103102 1695149 3581452 2487837 -1.2311072	.7748024 .2946620 .5132386 .7194265 .2868641 .2884298 .2579119 .2561846 .1186017 .7324086 .2519494
		processor sales individual skilled admin semi- professional manager retired/other traditional processor sales	44624402 .09351908 .08136355 01359329 .03496825 02619917 .04333484 11977175 .24181245 48957886 .05018424	.23390727 .13250729 .20143926 .09485572 .08001893 .08969510 .06719760 .07525555 .15488336 .23410373 .13285378	.664 .999 1.000 1.000 1.000 1.000 .852 .867 .534 1.000	-1.1871500 3262004 5566994 3140507 2184933 3103102 1695149 3581452 2487837 -1.2311072 3706328	.7748024 .2946620 .5132386 .7194265 .2868641 .2884298 .2579119 .2561846 .1186017 .7324086 .2519494 .4710013
		processor sales individual skilled admin semi- professional manager retired/other traditional processor sales individual	44624402 .09351908 .08136355 01359329 .03496825 02619917 .04333484 11977175 .24181245 48957886 .05018424 .03802871	.23390727 .13250729 .20143926 .09485572 .08001893 .08969510 .06719760 .07525555 .15488336 .23410373 .13285378 .20166735	.664 .999 1.000 1.000 1.000 1.000 .852 .867 .534 1.000 1.000	-1.1871500 3262004 5566994 3140507 2184933 3103102 1695149 3581452 2487837 -1.2311072 3706328 6007567	.7748024 .2946620 .5132386 .7194265 .2868641 .2884298 .2579119 .2561846 .1186017 .7324086 .2519494 .4710013 .6768141
		processor sales individual skilled admin semi- professional manager retired/other traditional processor sales individual skilled	44624402 .09351908 .08136355 01359329 .03496825 02619917 .04333484 11977175 .24181245 48957886 .05018424 .03802871 05692813	.23390727 .13250729 .20143926 .09485572 .08001893 .08969510 .06719760 .07525555 .15488336 .23410373 .13285378 .20166735 .09533914	.664 .999 1.000 1.000 1.000 1.000 .852 .867 .534 1.000 1.000	-1.1871500 3262004 5566994 3140507 2184933 3103102 1695149 3581452 2487837 -1.2311072 3706328 6007567 3589168	.7748024 .2946620 .5132386 .7194265 .2868641 .2884298 .2579119 .2561846 .1186017 .7324086 .2519494 .4710013 .6768141 .2450605
		processor sales individual skilled admin semi- professional manager retired/other traditional processor sales individual skilled admin	44624402 .09351908 .08136355 01359329 .03496825 02619917 .04333484 11977175 .24181245 48957886 .05018424 .03802871 05692813 00836660	.23390727 .13250729 .20143926 .09485572 .08001893 .08969510 .06719760 .07525555 .15488336 .23410373 .13285378 .20166735 .09533914 .08059140	.664 .999 1.000 1.000 1.000 1.000 .852 .867 .534 1.000 1.000 1.000	-1.1871500 3262004 5566994 3140507 2184933 3103102 1695149 3581452 2487837 -1.2311072 3706328 6007567 3589168 2636415	.7748024 .2946620 .5132386 .7194265 .2868641 .2884298 .2579119 .2561846 .1186017 .7324086 .2519494 .4710013 .6768141 .2450605 .2469083
		processor sales individual skilled admin semi- professional manager retired/other traditional processor sales individual skilled admin semi-	44624402 .09351908 .08136355 01359329 .03496825 02619917 .04333484 11977175 .24181245 48957886 .05018424 .03802871 05692813	.23390727 .13250729 .20143926 .09485572 .08001893 .08969510 .06719760 .07525555 .15488336 .23410373 .13285378 .20166735 .09533914	.664 .999 1.000 1.000 1.000 1.000 .852 .867 .534 1.000 1.000	-1.1871500 3262004 5566994 3140507 2184933 3103102 1695149 3581452 2487837 -1.2311072 3706328 6007567 3589168	.7748024 .2946620 .5132386 .7194265 .2868641 .2884298 .2579119 .2561846 .1186017 .7324086 .2519494 .4710013 .6768141 .2450605
		processor sales individual skilled admin semi- professional manager retired/other traditional processor sales individual skilled admin semi- professional	44624402 .09351908 .08136355 01359329 .03496825 02619917 .04333484 11977175 .24181245 48957886 .05018424 .03802871 05692813 00836660 06953401	.23390727 .13250729 .20143926 .09485572 .08001893 .08969510 .06719760 .07525555 .15488336 .23410373 .13285378 .20166735 .09533914 .08059140 .09020619	.664 .999 1.000 1.000 1.000 1.000 .852 .867 .534 1.000 1.000 1.000 1.000	-1.1871500 3262004 5566994 3140507 2184933 3103102 1695149 3581452 2487837 -1.2311072 3706328 6007567 3589168 2636415 3552639	.7748024 .2946620 .5132386 .7194265 .2868641 .2884298 .2579119 .2561846 .1186017 .7324086 .2519494 .4710013 .6768141 .2450605 .2469083 .2161959
		processor sales individual skilled admin semi- professional manager retired/other traditional processor sales individual skilled admin semi- professional professional	44624402 .09351908 .08136355 01359329 .03496825 02619917 .04333484 11977175 .24181245 48957886 .05018424 .03802871 05692813 06953401 06953401	.23390727 .13250729 .20143926 .09485572 .08001893 .08969510 .06719760 .07525555 .15488336 .23410373 .13285378 .20166735 .09533914 .08059140 .09020619	.664 .999 1.000 1.000 1.000 1.000 .852 .867 .534 1.000 1.000 1.000 .999	-1.1871500 3262004 5566994 3140507 2184933 3103102 1695149 3581452 2487837 -1.2311072 3706328 6007567 3589168 2636415 3552639 2561846	.7748024 .2946620 .5132386 .7194265 .2868641 .2884298 .2579119 .2561846 .1186017 .7324086 .2519494 .4710013 .6768141 .2450605 .2469083 .2161959
	manager	processor sales individual skilled admin semi- professional manager retired/other traditional processor sales individual skilled admin semi- professional professional professional retired/other	44624402 .09351908 .08136355 01359329 .03496825 02619917 .04333484 11977175 .24181245 48957886 .05018424 .03802871 05692813 00836660 06953401 04333484 16310660	.23390727 .13250729 .20143926 .09485572 .08001893 .08969510 .06719760 .07525555 .15488336 .23410373 .13285378 .20166735 .09533914 .08059140 .09020619 .06719760 .07586398	.664 .999 1.000 1.000 1.000 1.000 .852 .867 .534 1.000 1.000 1.000 .999	-1.1871500 3262004 5566994 3140507 2184933 3103102 1695149 3581452 2487837 -1.2311072 3706328 6007567 3589168 2636415 3552639 2561846 4034073	.7748024 .2946620 .5132386 .7194265 .2868641 .2884298 .2579119 .2561846 .1186017 .7324086 .2519494 .4710013 .6768141 .2450605 .2469083 .2161959 .1695149 .0771941
		processor sales individual skilled admin semi- professional manager retired/other traditional processor sales individual skilled admin semi- professional professional professional retired/other traditional	44624402 .09351908 .08136355 01359329 .03496825 02619917 .04333484 11977175 .24181245 48957886 .05018424 .03802871 05692813 00836660 06953401 04333484 16310660 .40491905	.23390727 .13250729 .20143926 .09485572 .08001893 .08969510 .06719760 .07525555 .15488336 .23410373 .13285378 .20166735 .09533914 .08059140 .09020619 .06719760 .07586398 .15854569	.664 .999 1.000 1.000 1.000 1.000 1.000 .852 .867 .534 1.000 1.000 1.000 .999 1.000 .492	-1.1871500 3262004 5566994 3140507 2184933 3103102 1695149 3581452 2487837 -1.2311072 3706328 6007567 3589168 2636415 3552639 2561846 4034073 0972776	.7748024 .2946620 .5132386 .7194265 .2868641 .2884298 .2579119 .2561846 .1186017 .7324086 .2519494 .4710013 .6768141 .2450605 .2469083 .2161959 .1695149 .0771941
	manager	processor sales individual skilled admin semi- professional manager retired/other traditional processor sales individual skilled admin semi- professional professional professional retired/other	44624402 .09351908 .08136355 01359329 .03496825 02619917 .04333484 11977175 .24181245 48957886 .05018424 .03802871 05692813 00836660 06953401 04333484 16310660 .40491905 32647227	.23390727 .13250729 .20143926 .09485572 .08001893 .08969510 .06719760 .07525555 .15488336 .23410373 .13285378 .20166735 .09533914 .08059140 .09020619 .06719760 .07586398	.664 .999 1.000 1.000 1.000 1.000 .852 .867 .534 1.000 1.000 1.000 .999	-1.1871500 3262004 5566994 3140507 2184933 3103102 1695149 3581452 2487837 -1.2311072 3706328 6007567 3589168 2636415 3552639 2561846 4034073	.7748024 .2946620 .5132386 .7194265 .2868641 .2884298 .2579119 .2561846 .1186017 .7324086 .2519494 .4710013 .6768141 .2450605 .2469083 .2161959 .1695149 .0771941

		<del>_</del>		l			ı
		individual	.20113531	.20449352	.993	4466021	.8488727 .4266688
		skilled admin	.10617847 .15474000	.08742342	.989 .754	2143119 1221754	.4266688
		semi-	.09357259	.09635889	.754	1221734	.3987913
		professional	.00007200	.00000000	.554	2110402	.5507515
		professional	.11977175	.07525555	.852	1186017	.3581452
		manager	.16310660	.07586398	.492	0771941	.4034073
REGR factor score 4	traditional	processor	.13560638	.27113310	1.000	7232132	.9944260
for analysis 1		sales	.21724433	.19156117	.981	3895295	.8240182
		individual	.16054472	.24393956	1.000	6121388	.9332282
		skilled	.26896916	.16796649	.848	2630681	.8010064
		admin	.31331679	.16013024	.630	1938990	.8205326
		semi-	.39644044	.16513323	.326	1266224	.9195033
		professional					
		professional	.54030609	.15388369	.016	.0528764	1.0277358
		manager	.51105714	.15417944	.032	.0226906	.9994236
		retired/other	.45198802	.15782513	.117	0479263	.9519023
	processor	traditional	13560638	.27113310	1.000	9944260	.7232132
		sales	.08163795	.25929118	1.000	7396721	.9029480
		individual	.02493834	.30007123	1.000	9255434	.9754200
		skilled	.13336278	.24238188	1.000	6343867	.9011123
		admin	.17771041	.23701883	.999	5730515	.9284724
		semi-	.26083405	.24042716	.986	5007238	1.0223919
		professional	40.460070	22204400	774	222222	1 1 4 0 0 0 0 4
		professional	.40469970	.23284420	.774	3328390 3627074	1.1422384 1.1136089
		manager	.37545075		.843		
	aalaa	retired/other traditional	.31638163	.23546763	.943	4294669	1.0622301
	sales		21724433	.19156117	.981 1.000	8240182	.3895295
		processor individual	08163795 05669961	.25929118	1.000	9029480 7874656	.7396721 .6740664
		skilled		.14809287			
			.05172483		1.000	4173623	.5208120
		admin semi-	.09607246	.13914184	1.000	3446621	.5368070
		professional	.17919611	.14487146	.966	2796872	.6380794
		professional	.32306176	.13190507	.297	0947502	.7408737
		manager	.29381281	.13224998	.442	1250917	.7127173
		retired/other	.23474369	.13648270	.784	1975680	.6670554
	individual	traditional	16054472	.24393956	1.000	9332282	.6121388
	marviadai	processor	02493834	.30007123	1.000	9754200	.9255434
		sales	.05669961	.23070602	1.000	6740664	.7874656
		skilled	.10842444	.21152382	1.000	5615816	.7784304
		admin	.15277207	.20535647	.999	4976987	.8032428
		semi-	.23589572	.20333047	.982	4270063	.8987978
		professional	.20003012	.20020100	.502	.7210000	.0001910
		professional	.37976136	.20052375	.673	2554017	1.0149244
		manager	.35051242	.20075081	.769	2853698	.9863947
		retired/other	.29144330	.20356413	.917	3533502	.9362368
	skilled	traditional	26896916	.16796649	.848	8010064	.2630681
		processor	13336278	.24238188	1.000	9011123	.6343867
		sales	05172483	.14809287	1.000	5208120	.4173623
		individual	10842444	.21152382	1.000	7784304	.5615816
		admin	.04434763	.10429531	1.000	2860099	.3747051
		semi-	.12747128	.11182487	.981	2267363	.4816788
		professional					
		professional	.27133692	.09442462	.114	0277550	.5704288
		manager	.24208798	.09490584	.242	0585282	.5427042
		retired/other	.18301886	.10072035	.724	1360149	.5020526
	admin	traditional	31331679	.16013024	.630	8205326	.1938990
		processor	17771041	.23701883	.999	9284724	.5730515
		sales	09607246	.13914184	1.000	5368070	.3446621
		individual	15277207	.20535647	.999	8032428	.4976987
		skilled	04434763	.10429531	1.000	3747051	.2860099
		semi-	.08312364	.09966822	.998	2325775	.3988247
		professional					ļ
		professional	.22698929	.07965526	.121	0253203	.4792989
	-						

	manager	.19774034	.08022513	.288	0563744	.4518551
	retired/other	.13867122	.08702609	.852	1369857	.4143281
semi-	traditional	39644044	.16513323	.326	9195033	.1266224
professional	processor	26083405	.24042716	.986	-1.0223919	.5007238
	sales	17919611	.14487146	.966	6380794	.2796872
	individual	23589572	.20928108	.982	8987978	.4270063
	skilled	12747128	.11182487	.981	4816788	.2267363
	admin	08312364	.09966822	.998	3988247	.2325775
	professional	.14386565	.08928745	.843	1389542	.4266855
	manager	.11461670	.08979622	.959	1698146	.3990480
	retired/other	.05554758	.09592096	1.000	2482840	.3593792
professional	traditional	54030609 <sup>*</sup>	.15388369	.016	-1.0277358	0528764
	processor	40469970	.23284420	.774	-1.1422384	.3328390
	sales	32306176	.13190507	.297	7408737	.0947502
	individual	37976136	.20052375	.673	-1.0149244	.2554017
	skilled	27133692	.09442462	.114	5704288	.0277550
	admin	22698929	.07965526	.121	4792989	.0253203
	semi- professional	14386565	.08928745	.843	4266855	.1389542
	manager	02924895	.06689220	1.000	2411314	.1826335
-	retired/other	08831807	.07491353	.976	3256082	.1489720
manager	traditional	51105714 <sup>*</sup>	.15417944	.032	9994236	0226906
	processor	37545075	.23303977	.843	-1.1136089	.3627074
	sales	29381281	.13224998	.442	7127173	.1250917
	individual	35051242	.20075081	.769	9863947	.2853698
	skilled	24208798	.09490584	.242	5427042	.0585282
	admin	19774034	.08022513	.288	4518551	.0563744
	semi- professional	11461670	.08979622	.959	3990480	.1698146
	professional	.02924895	.06689220	1.000	1826335	.2411314
	retired/other	05906912	.07551919	.999	2982777	.1801394
retired/other	traditional	45198802	.15782513	.117	9519023	.0479263
	processor	31638163	.23546763	.943	-1.0622301	.4294669
	sales	23474369	.13648270	.784	6670554	.1975680
	individual	29144330	.20356413	.917	9362368	.3533502
	skilled	18301886	.10072035	.724	5020526	.1360149
	admin	13867122	.08702609	.852	4143281	.1369857
	semi- professional	05554758	.09592096	1.000	3593792	.2482840
	professional	.08831807	.07491353	.976	1489720	.3256082
	manager	.05906912	.07551919	.999	1801394	.2982777

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

# **Homogeneous Subsets**

# REGR factor score 1 for analysis 1

_ Tukey HSD <sup>a,a</sup>				
		Subset for alpha = 0.05		
main occupation	N	1	2	
professional	451	1710314		
individual	26	0675523	0675523	
traditional	46	0509892	0509892	
manager	433	0401193	0401193	
sales	65	0309255	0309255	
semi-professional	171	.0006238	.0006238	
admin	238	.0095952	.0095952	
skilled	147	.1004988	.1004988	
retired/other	289	.2578851	.2578851	
processor	19		.4698091	
Sig.		.285	.062	

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 65.335.
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

REGR factor score 2 for analysis 1

Tukey HSD<sup>a,b</sup>

		Subset for alpha = 0.05		
main occupation	N	1	2	
traditional	46	4804086		
individual	26	0846621	0846621	
admin	238	0828637	0828637	
sales	65	0428664	0428664	
retired/other	289	0394705	0394705	
skilled	147	0267578	0267578	
professional	451	.0109416	.0109416	
processor	19	.0521853	.0521853	
semi-professional	171	.0598110	.0598110	
manager	433		.1062227	
Sig.		.062	.985	

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 65.335.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

REGR factor score 3 for analysis 1

Tukev HSD<sup>a,b</sup>

ĺ		Subset for alpha = 0.05		
main occupation	N	1	2	
traditional	46	2857699		
sales	65	0941416	0941416	
individual	26	0819861	0819861	
manager	433	0439574	0439574	
admin	238	0355908	0355908	
professional	451	0006226	0006226	
skilled	147	.0129707	.0129707	
semi-professional	171	.0255766	.0255766	
retired/other	289	.1191492	.1191492	
processor	19		.4456214	
Sig.		.378	.063	

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 65.335.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

REGR factor score 4 for analysis 1

Tukey HSD<sup>a,b</sup>

rakey riob		
		Subset for alpha = 0.05
main occupation	N	1
professional	451	1167724
manager	433	0875234
retired/other	289	0284543
semi-professional	171	.0270933
admin	238	.1102169
skilled	147	.1545646
sales	65	.2062894
individual	26	.2629890
processor	19	.2879273
traditional	46	.4235337
Sig.		.060

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 65.335.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

# 4.3 ANOVA for Others in Household by Factor Group

ONEWAY FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 BY houseage1940 /MISSING ANALYSIS /POSTHOC=TUKEY ALPHA(0.05).

### Oneway

# **ANOVA**

		Sum of Squares	df	Mean Square
REGR factor score 1 for	Between Groups	2.090	4	.523
analysis 1	Within Groups	769.046	816	.942
	Total	771.136	820	
REGR factor score 2 for	Between Groups	5.491	4	1.373
analysis 1	Within Groups	751.252	816	.921
	Total	756.743	820	
REGR factor score 3 for	Between Groups	5.682	4	1.420
analysis 1	Within Groups	862.608	816	1.057
	Total	868.290	820	
REGR factor score 4 for	Between Groups	2.411	4	.603
analysis 1	Within Groups	788.084	816	.966
	Total	790.495	820	

# ANOVA

			F	Sig.
REGR factor score	1 for	Between Groups	.554	.696
analysis 1		Within Groups		
		Total		
REGR factor score	2 for	Between Groups	1.491	.203
analysis 1		Within Groups		
		Total		
REGR factor score	3 for	Between Groups	1.344	.252
analysis 1		Within Groups		
		Total		
REGR factor score	4 for	Between Groups	.624	.645
analysis 1		Within Groups		
		Total		

# **Post Hoc Tests**

# **Multiple Comparisons**

# Tukey HSD

Dependent Variable	(I) others in house	(J) others	Mean			95% Confider	ce Interval
	aged 19-40	in house	Difference (I-				Upper
		aged 19-40	J)	Std. Error	Sig.	Lower Bound	Bound
REGR factor score	1	2	07789424	.09910330	.935	3488314	.1930429
1 for analysis 1		3	03569933	.18413372	1.000	5391000	.4677013
		4	44260651	.34527377	.702	-1.3865458	.5013328
		6	12239809	.68748524	1.000	-2.0019047	1.7571085
	2	1	.07789424	.09910330	.935	1930429	.3488314
		3	.04219490	.20227056	1.000	5107899	.5951797
		4	36471227	.35527754	.843	-1.3360007	.6065762
		6	04450385	.69256343	1.000	-1.9378936	1.8488859
	3	1	.03569933	.18413372	1.000	4677013	.5391000
		2	04219490	.20227056	1.000	5951797	.5107899
		4	40690718	.38769304	.832	-1.4668159	.6530016
		6	08669875	.70973789	1.000	-2.0270415	1.8536440
	4	1	.44260651	.34527377	.702	5013328	1.3865458
		2	.36471227	.35527754	.843	6065762	1.3360007

	<u> </u>	3	.40690718	.38769304	.832	6530016	1.4668159
		6	.32020842	.76748721	.994	-1.7780145	2.4184313
	6	1	.12239809	.68748524	1.000	-1.7571085	2.0019047
		2	.04450385	.69256343	1.000	-1.8488859	1.9378936
		3	.08669875	.70973789	1.000	-1.8536440	2.0270415
		4	32020842	.76748721	.994	-2.4184313	1.7780145
REGR factor score	1	2	13954498	.09795005	.612	4073293	.1282393
2 for analysis 1		3	.20841093	.18199100	.782	2891318	.7059537
		4	.50032466	.34125590	.585	4326302	1.4332795
		6	.20073059	.67948513	.998	-1.6569046	2.0583658
	2	1	.13954498	.09795005	.612	1282393	.4073293
		3	.34795591	.19991679	.410	1985939	.8945057
		4	.63986963	.35114326	.361	3201162	1.5998554
		6	.34027557	.68450423	.988	-1.5310813	2.2116324
	3	1	20841093	.18199100	.782	7059537	.2891318
		2	34795591	.19991679	.410	8945057	.1985939
		4	.29191373	.38318155	.941	7556611	1.3394886
	4	6 1	00768034 50032466	.70147883 .34125590	1.000	-1.9254438 -1.4332795	1.9100831 .4326302
	4	2	63986963	.35114326	.585 .361	-1.4332795	.3201162
		3	03966963	.38318155	.361	-1.3394886	.7556611
		5 6	29191373	.75855614	.941	-2.3734004	1.7742123
	6	1	20073059	.67948513	.998	-2.0583658	1.6569046
	Ü	2	34027557	.68450423	.988	-2.2116324	1.5310813
		3	.00768034	.70147883	1.000	-1.9100831	1.9254438
		4	.29959407	.75855614	.995	-1.7742123	2.3734004
REGR factor score	1	2	.18347536	.10495875	.405	1034699	.4704207
3 for analysis 1		3	.02143003	.19501313	1.000	5117137	.5545738
		4	.07522015	.36567403	1.000	9244911	1.0749314
		6	-1.07736062	.72810483	.576	-3.0679165	.9131953
	2	1	18347536	.10495875	.405	4704207	.1034699
		3	16204533	.21422158	.943	7477028	.4236121
		4	10825521	.37626887	.999	-1.1369316	.9204212
		6	-1.26083598	.73348306	.423	-3.2660954	.7444234
	3	1	02143003	.19501313	1.000	5545738	.5117137
		2	.16204533	.21422158	.943	4236121	.7477028
		4 6	.05379012 -1.09879065	.41059962	1.000 .588	-1.0687426	1.1763228
	4	1	07522015	.75167226 .36567403	1.000	-3.1537773 -1.0749314	.9561960 .9244911
	4	2	.10825521	.37626887	.999	9204212	1.1369316
		3	05379012	.41059962	1.000	-1.1763228	1.0687426
		6	-1.15258076	.81283366	.616	-3.3747757	1.0696142
	6	1	1.07736062	.72810483	.576	9131953	3.0679165
		2	1.26083598	.73348306	.423	7444234	3.2660954
ĺ		3	1.09879065	.75167226	.588	9561960	3.1537773
		4	1.15258076	.81283366	.616	-1.0696142	3.3747757
REGR factor score	1	2	12419302	.10032247	.729	3984633	.1500772
4 for analysis 1		3	11558184	.18639894	.972	6251754	.3940117
		4	.21194789	.34952135	.974	7436038	1.1674996
ĺ		6	36015302	.69594271	.986	-2.2627814	1.5424753
ĺ	2	1	.12419302	.10032247	.729	1500772	.3984633
ĺ	-	3	.00861118	.20475891	1.000	5511764	.5683988
		4	.33614090	.35964819	.883	6470964	1.3193782
ĺ		6	23596000	.70108338	.997	-2.1526424	1.6807224
ĺ	3	1	.11558184	.18639894	.972	3940117	.6251754
	3			[			
		2	00861118	.20475891	1.000	5683988	.5511764
		4	.32752972	.39246246	.920	7454181	1.4004775
		6	24457118	.71846912	.997	-2.2087842	1.7196418
	4	1	21194789	.34952135	.974	-1.1674996	.7436038
		2	33614090	.35964819	.883	-1.3193782	.6470964
		3	32752972	.39246246	.920	-1.4004775	.7454181
		6	57210090	.77692888	.948	-2.6961362	1.5519344
	6	1	.36015302	.69594271	.986	-1.5424753	2.2627814
		2	.23596000	.70108338	.997	-1.6807224	2.1526424
		3	.24457118	.71846912	.997	-1.7196418	2.2087842
ĺ		4	.57210090	.77692888	.948	-1.5519344	2.6961362
		T	.01210000	002000	.570	1.0010074	000 100Z

#### **Homogeneous Subsets**

REGR factor score 1 for analysis 1

Tukev HSD<sup>a,b</sup>

TukcyTioD		
others in house aged 19-40		Subset for alpha = 0.05
	N	1
1	670	0984167
3	29	0627173
2	112	0205224
6	2	.0239814
4	8	.3441898
Sig.		.904

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 7.464.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

REGR factor score 2 for analysis 1

Tukey HSD<sup>a,b</sup>

		Subset for alpha = 0.05
others in house aged 19-40	N	1
4	8	5306927
3	29	2387789
6	2	2310986
1	670	0303680
2	112	.1091770
Sig.		.699

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 7.464.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

REGR factor score 3 for analysis 1 Tukey HSD<sup>a,b</sup>

Takey Hob		
		Subset for alpha = 0.05
others in house aged 19-40	N	1
2	112	1493878
4	8	0411325
3	29	.0126576
1	670	.0340876
6	2	1.1114482
Sig.		.125

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 7.464.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

REGR factor score 4 for analysis 1

Tukey HSD		
others in house aged 19-40		Subset for alpha = 0.05
	N	1
4	8	1742540
1	670	.0376939
3	29	.1532758
2	112	.1618869
6	2	.3978469
Sig.		.794

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 7.464.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

# 4.4 ANOVA for Ages in Household (41-65) by Factor Group

ONEWAY FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 BY houseage4165 /MISSING ANALYSIS /POSTHOC=TUKEY ALPHA(0.05).

# Oneway

# **ANOVA**

		Sum of Squares	df	Mean Square
REGR factor score 1 for	Between Groups	2.073	3	.691
analysis 1	Within Groups	920.323	903	1.019
	Total	922.396	906	
REGR factor score 2 for	Between Groups	3.796	3	1.265
analysis 1	Within Groups	946.538	903	1.048
	Total	950.334	906	
REGR factor score 3 for	Between Groups	6.591	3	2.197
analysis 1	Within Groups	888.240	903	.984
	Total	894.831	906	
REGR factor score 4 for	Between Groups	3.445	3	1.148
analysis 1	Within Groups	893.802	903	.990
	Total	897.247	906	

# ANOVA

		F	Sig.
REGR factor score 1 for	Between Groups	.678	.566
analysis 1	Within Groups		
	Total		
REGR factor score 2 for	Between Groups	1.207	.306
analysis 1	Within Groups		
	Total		
REGR factor score 3 for	Between Groups	2.233	.083
analysis 1	Within Groups		
	Total		
REGR factor score 4 for	Between Groups	1.160	.324
analysis 1	Within Groups		
	Total		

# 4.5 ANOVA for Ages in Household (65+) by Factor Group

ONEWAY FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 BY houseage65 /MISSING ANALYSIS /POSTHOC=TUKEY ALPHA(0.05).

### Oneway

#### **ANOVA**

		Sum of Squares	df	Mean Square
REGR factor score 1 for	Between Groups	.234	1	.234
analysis 1	Within Groups	147.244	138	1.067
	Total	147.478	139	
REGR factor score 2 for	Between Groups	2.848	1	2.848
analysis 1	Within Groups	150.044	138	1.087
	Total	152.892	139	
REGR factor score 3 for	Between Groups	1.075	1	1.075
analysis 1	Within Groups	152.341	138	1.104
	Total	153.416	139	
REGR factor score 4 for	Between Groups	2.027	1	2.027
analysis 1	Within Groups	154.583	138	1.120
	Total	156.610	139	

# ANOVA

			F	Sig.
REGR factor score	1 for	Between Groups	.219	.640
analysis 1		Within Groups		
		Total		
REGR factor score	2 for	Between Groups	2.620	.108
analysis 1		Within Groups		
		Total		
REGR factor score	3 for	Between Groups	.974	.325
analysis 1		Within Groups		
		Total		
REGR factor score	4 for	Between Groups	1.810	.181
analysis 1		Within Groups		
		Total		

# **4.6** Correlations for Number of Visits to Pubs, Cafes and Restaurants in the Past 6 Months by Factor Group

GET
FILE='F:\301109.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
CORRELATIONS
/VARIABLES=pubeat cafeeat resteat FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1
/PRINT=TWOTAIL NOSIG
/MISSING=PAIRWISE.

#### Correlations

### Correlations

		Pub 6 months	Cafe 6 months	Restaurant 6 months
Pub 6 months	Pearson Correlation	1	.247	.304
	Sig. (2-tailed)		.000	.000
	N	2173	2173	2173
Cafe 6 months	Pearson Correlation	.247**	1	.270 <sup>**</sup>
	Sig. (2-tailed)	.000		.000
	N	2173	2173	2173
Restaurant 6 months	Pearson Correlation	.304	.270	1
	Sig. (2-tailed)	.000	.000	
	N	2173	2173	2173
REGR factor score 1 for	Pearson Correlation	.038	041	017
analysis 1	Sig. (2-tailed)	.101	.078	.456
	N	1842	1842	1842
REGR factor score 2 for	Pearson Correlation	.035	.041	.015
analysis 1	Sig. (2-tailed)	.134	.079	.513
	N	1842	1842	1842
REGR factor score 3 for	Pearson Correlation	.010	.053	.039
analysis 1	Sig. (2-tailed)	.671	.023	.091
	N	1842	1842	1842
REGR factor score 4 for	Pearson Correlation	111**	039	176 <sup>**</sup>
analysis 1	Sig. (2-tailed)	.000	.095	.000
	N	1842	1842	1842

#### Correlations

	Correlations		
		REGR factor score 1 for analysis 1	REGR factor score 2 for analysis 1
Pub 6 months	Pearson Correlation	.038	.035
	Sig. (2-tailed)	.101	.134
	N	1842	1842
Cafe 6 months	Pearson Correlation	041	.041
	Sig. (2-tailed)	.078	.079
	N	1842	1842
Restaurant 6 months	Pearson Correlation	017	.015
	Sig. (2-tailed)	.456	.513
	N	1842	1842
REGR factor score 1 for	Pearson Correlation	1	.000
analysis 1	Sig. (2-tailed)		1.000
	N	1885	1885
REGR factor score 2 for	Pearson Correlation	.000	1
analysis 1	Sig. (2-tailed)	1.000	
	N	1885	1885
REGR factor score 3 for	Pearson Correlation	.000	.000
analysis 1	Sig. (2-tailed)	1.000	1.000
	N	1885	1885
REGR factor score 4 for	Pearson Correlation	.000	.000
analysis 1	Sig. (2-tailed)	1.000	1.000
	N	1885	1885

# Correlations

		REGR factor score 3 for analysis 1	REGR factor score 4 for analysis 1
Pub 6 months	Pearson Correlation	.010	111**
	Sig. (2-tailed)	.671	.000
	N	1842	1842
Cafe 6 months	Pearson Correlation	.053	039
	Sig. (2-tailed)	.023	.095
	N	1842	1842
Restaurant 6 months	Pearson Correlation	.039	176 <sup>**</sup>
	Sig. (2-tailed)	.091	.000
	N	1842	1842
REGR factor score 1 for	Pearson Correlation	.000	.000
analysis 1	Sig. (2-tailed)	1.000	1.000
	N	1885	1885
REGR factor score 2 for	Pearson Correlation	.000	.000
analysis 1	Sig. (2-tailed)	1.000	1.000
	N	1885	1885
REGR factor score 3 for	Pearson Correlation	1	.000
analysis 1	Sig. (2-tailed)		1.000
	N	1885	1885
REGR factor score 4 for	Pearson Correlation	.000	1
analysis 1	Sig. (2-tailed)	1.000	
	N	1885	1885

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).
\*. Correlation is significant at the 0.05 level (2-tailed).

# **4.7** Correlations for the Number of Dining Establishments within a **10** Minute Walk from Home

CORRELATIONS
/VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 walkrest walkpub walkfast
/PRINT=TWOTAIL NOSIG
/MISSING=PAIRWISE.

#### Correlations

#### Correlations

Correlations				
		REGR factor	REGR factor	REGR factor
		score 1 for	score 2 for	score 3 for
		analysis 1	analysis 1	analysis 1
REGR factor score 1 for	Pearson Correlation	1	.000	.000
analysis 1	Sig. (2-tailed)		1.000	1.000
	N	1885	1885	1885
REGR factor score 2 for	Pearson Correlation	.000	1	.000
analysis 1	Sig. (2-tailed)	1.000		1.000
	N	1885	1885	1885
REGR factor score 3 for	Pearson Correlation	.000	.000	1
analysis 1	Sig. (2-tailed)	1.000	1.000	
	N	1885	1885	1885
REGR factor score 4 for	Pearson Correlation	.000	.000	.000
analysis 1	Sig. (2-tailed)	1.000	1.000	1.000
	N	1885	1885	1885
restaurants 10 min walk	Pearson Correlation	030	.012	.010
	Sig. (2-tailed)	.189	.597	.657
	N	1860	1860	1860
pub 10 minute walk	Pearson Correlation	.012	007	.014
	Sig. (2-tailed)	.589	.763	.534
	N	1879	1879	1879
fastfood 10 minute walk	Pearson Correlation	015	018	.011
	Sig. (2-tailed)	.532	.447	.643
	N	1855	1855	1855

# Correlations

		REGR factor score 4 for analysis 1	restaurants 10 min walk
REGR factor score 1 for	Pearson Correlation	.000	030
analysis 1	Sig. (2-tailed)	1.000	.189
	N	1885	1860
REGR factor score 2 for	Pearson Correlation	.000	.012
analysis 1	Sig. (2-tailed)	1.000	.597
	N	1885	1860
REGR factor score 3 for	Pearson Correlation	.000	.010
analysis 1	Sig. (2-tailed)	1.000	.657
	N	1885	1860
REGR factor score 4 for	Pearson Correlation	1	067
analysis 1	Sig. (2-tailed)		.004
	N	1885	1860
restaurants 10 min walk	Pearson Correlation	067	1
	Sig. (2-tailed)	.004	
	N	1860	2186
pub 10 minute walk	Pearson Correlation	041	.644
	Sig. (2-tailed)	.074	.000
	N	1879	2178
fastfood 10 minute walk	Pearson Correlation	002	.549
	Sig. (2-tailed)	.931	.000
	N	1855	2169

### Correlations

		pub 10 minute walk	fastfood 10 minute walk
REGR factor score 1 for	Pearson Correlation	.012	015
analysis 1	Sig. (2-tailed)	.589	.532
	N	1879	1855
REGR factor score 2 for	Pearson Correlation	007	018
analysis 1	Sig. (2-tailed)	.763	.447
	N	1879	1855
REGR factor score 3 for	Pearson Correlation	.014	.011
analysis 1	Sig. (2-tailed)	.534	.643
	N	1879	1855
REGR factor score 4 for	Pearson Correlation	041	002
analysis 1	Sig. (2-tailed)	.074	.931
	N	1879	1855
restaurants 10 min walk	Pearson Correlation	.644	.549
	Sig. (2-tailed)	.000	.000
	N	2178	2169
pub 10 minute walk	Pearson Correlation	1	.557
	Sig. (2-tailed)		.000
	N	2210	2174
fastfood 10 minute walk	Pearson Correlation	.557**	1
	Sig. (2-tailed)	.000	
	N	2174	2178

 $<sup>^{\</sup>star\star}.$  Correlation is significant at the 0.01 level (2-tailed).

# **4.8** T-tests for Activities by Factor Group

T-TEST GROUPS=cultural(0 1)
/MISSING=ANALYSIS
/VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1
/CRITERIA=CI(.95).

# T-test

**Group Statistics** 

Cloup clatistics					
	Cultural Events	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score 1 for	No	1141	.0266059	.99523038	.02946326
analysis 1	Yes	744	0408029	1.00657492	.03690283
REGR factor score 2 for	No	1141	0197634	1.04861576	.03104371
analysis 1	Yes	744	.0303092	.92033447	.03374110
REGR factor score 3 for	No	1141	0449361	1.02809258	.03043613
analysis 1	Yes	744	.0689141	.95187843	.03489756
REGR factor score 4 for analysis 1	No	1141	.0638831	.98182756	.02906648
	Yes	744	0979713	1.02015953	.03740086

**Independent Samples Test** 

		independent dampies res	-	
			Levene's Test Varia	
			F	Sig.
REGR factor score	1 for	Equal variances assumed	1.409	.235
analysis 1		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	6.768	.009
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	4.879	.027
analysis 1		Equal variances not assumed		
REGR factor score 4 f	4 for	Equal variances assumed	.895	.344
analysis 1		Equal variances not assumed		

**Independent Samples Test** 

		T-test for Equality of Means		
		t	df	Sig. (2-tailed)
REGR factor score 1 for	Equal variances assumed	1.431	1883	.153
analysis 1	Equal variances not assumed	1.427	1575.032	.154
REGR factor score 2 for	Equal variances assumed	-1.063	1883	.288
analysis 1	Equal variances not assumed	-1.092	1726.836	.275
REGR factor score 3 for	Equal variances assumed	-2.419	1883	.016
analysis 1	Equal variances not assumed	-2.459	1672.520	.014
REGR factor score 4 for	Equal variances assumed	3.445	1883	.001
analysis 1	Equal variances not assumed	3.417	1544.371	.001

**Independent Samples Test** 

			T-test for Equality of Means	
				Std. Error
			Mean Difference	Difference
REGR factor score	1 for	Equal variances assumed	.06740888	.04710920
analysis 1		Equal variances not assumed	.06740888	.04722184
REGR factor score	2 for	Equal variances assumed	05007262	.04712067
analysis 1		Equal variances not assumed	05007262	.04584946
REGR factor score	3 for	Equal variances assumed	11385022	.04706172
analysis 1		Equal variances not assumed	11385022	.04630548
REGR factor score	4 for	Equal variances assumed	.16185440	.04698699
analysis 1		Equal variances not assumed	.16185440	.04736755

T-test for Equality of Means

			95% Confidence Differ	
			Lower	Upper
REGR factor score	1 for	Equal variances assumed	02498283	.15980060
analysis 1		Equal variances not assumed	02521541	.16003317
REGR factor score	2 for	Equal variances assumed	14248685	.04234160
analysis 1		Equal variances not assumed	13999895	.03985371
REGR factor score	3 for	Equal variances assumed	20614883	02155161
analysis 1		Equal variances not assumed	20467302	02302743
REGR factor score	4 for	Equal variances assumed	.06970236	.25400644
analysis 1		Equal variances not assumed	.06894290	.25476591

# T-test

# **Group Statistics**

		Camping	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score	1 for	No	1399	.0094472	1.00391203	.02684027
analysis 1		Yes	486	0271948	.98917468	.04486987
REGR factor score	2 for	no	1399	.0168219	.97547434	.02607996
analysis 1		yes	486	0484234	1.06702919	.04840143
REGR factor score	3 for	no	1399	.0055822	.99503424	.02660291
analysis 1		yes	486	0160690	1.01502193	.04604233
REGR factor score	4 for	no	1399	.0044202	.99624979	.02663541
analysis 1		yes	486	0127239	1.01164347	.04588908

**Independent Samples Test** 

independent dampies rest					
			Levene's Test for Equality of Variances		
			F	Sig.	
REGR factor score	1 for	Equal variances assumed	.015	.902	
analysis 1		Equal variances not assumed			
REGR factor score	2 for	Equal variances assumed	1.036	.309	
analysis 1		Equal variances not assumed			
REGR factor score	3 for	Equal variances assumed	.032	.859	
analysis 1		Equal variances not assumed			
REGR factor score	4 for	Equal variances assumed	.001	.970	
analysis 1		Equal variances not assumed			

independent Samples Test					
			T-te	st for Equality	of Means
			t	df	Sig. (2-tailed)
REGR factor score	1 for	Equal variances assumed	.696	1883	.487
analysis 1		Equal variances not assumed	.701	856.153	.484
REGR factor score	2 for	Equal variances assumed	1.239	1883	.215
analysis 1		Equal variances not assumed	1.187	784.563	.236
REGR factor score	3 for	Equal variances assumed	.411	1883	.681
analysis 1		Equal variances not assumed	.407	830.761	.684
REGR factor score	4 for	Equal variances assumed	.326	1883	.745
analysis 1		Equal variances not assumed	.323	834.000	.747

mucpendent Campies Test					
			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score	1 for	Equal variances assumed	.03664207	.05266088	
analysis 1		Equal variances not assumed	.03664207	.05228485	
REGR factor score	2 for	Equal variances assumed	.06524525	.05264619	
analysis 1		Equal variances not assumed	.06524525	.05498057	
REGR factor score	3 for	Equal variances assumed	.02165128	.05266529	
analysis 1		Equal variances not assumed	.02165128	.05317529	
REGR factor score	4 for	Equal variances assumed	.01714403	.05266617	
analysis 1	Equal variances not assumed		.01714403	.05305896	

**Independent Samples Test** 

independent Samples Test					
			T-test for Equa	ality of Means	
			95% Confidence Differ		
			Lower	Upper	
REGR factor score	1 for	Equal variances assumed	06663776	.13992189	
analysis 1		Equal variances not assumed	06597943	.13926356	
REGR factor score	2 for	Equal variances assumed	03800575	.16849625	
analysis 1		Equal variances not assumed	04268117	.17317168	
REGR factor score	3 for	Equal variances assumed	08163719	.12493974	
analysis 1		Equal variances not assumed	08272243	.12602498	
REGR factor score	4 for	Equal variances assumed	08614616	.12043423	
analysis 1		Equal variances not assumed	08700075	.12128881	

# T-test

**Group Statistics** 

		Group Gtati			
		Community Work	N	Mean	Std. Deviation
REGR factor score	1 for	No	1673	.0003500	1.00374322
analysis 1		yes	212	0027619	.97226322
REGR factor score	2 for	No	1673	.0044230	.99982028
analysis 1		yes	212	0349042	1.00309926
REGR factor score	3 for	No	1673	0094319	1.00095685
analysis 1		yes	212	.0744322	.99161270
REGR factor score	4 for	No	1673	.0043012	.99553758
analysis 1		yes	212	0339432	1.03633935

**Group Statistics** 

		community work	Std. Error Mean
REGR factor score	1 for	No	.02454001
analysis 1		yes	.06677531
REGR factor score	2 for	No	.02444410
analysis 1		yes	.06889314
REGR factor score	3 for	No	.02447188
analysis 1		yes	.06810424
REGR factor score	4 for	No	.02433939
analysis 1		yes	.07117608

			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score	1 for	Equal variances assumed	.006	.936
analysis 1		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	1.549	.213
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	.252	.616
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	.768	.381
analysis 1		Equal variances not assumed		

**Independent Samples Test** 

			T-te	T-test for Equality of Means			
			t	df	Sig. (2-tailed)		
REGR factor score	1 for	Equal variances assumed	.043	1883	.966		
analysis 1		Equal variances not assumed	.044	271.219	.965		
REGR factor score	2 for	Equal variances assumed	.539	1883	.590		
analysis 1		Equal variances not assumed	.538	266.936	.591		
REGR factor score	3 for	Equal variances assumed	-1.150	1883	.250		
analysis 1		Equal variances not assumed	-1.159	268.441	.248		
REGR factor score	4 for	Equal variances assumed	.524	1883	.600		
analysis 1		Equal variances not assumed	.508	262.779	.612		

**Independent Samples Test** 

masponasm samples rest					
			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score	1 for	Equal variances assumed	.00311192	.07292138	
analysis 1		Equal variances not assumed	.00311192	.07114179	
REGR factor score	2 for	Equal variances assumed	.03932716	.07291578	
analysis 1		Equal variances not assumed	.03932716	.07310115	
REGR factor score	3 for	Equal variances assumed	08386414	.07289580	
analysis 1		Equal variances not assumed	08386414	.07236754	
REGR factor score	4 for	Equal variances assumed	.03824440	.07291609	
analysis 1		Equal variances not assumed	.03824440	.07522260	

**Independent Samples Test** 

				ality of Means
			95% Confidence Interval of the Difference	
			Lower	Upper
REGR factor score	1 for	Equal variances assumed	13990327	.14612712
analysis 1		Equal variances not assumed	13694842	.14317226
REGR factor score		Equal variances assumed	10367706	.18233138
analysis 1		Equal variances not assumed	10460103	.18325534
REGR factor score	3 for	Equal variances assumed	22682917	.05910089
analysis 1		Equal variances not assumed	22634428	.05861600
REGR factor score	4 for	Equal variances assumed	10476043	.18124922
analysis 1		Equal variances not assumed	10987136	.18636016

### T-test

**Group Statistics** 

Group Statistics							
	Cooking	N	Mean	Std. Deviation	Std. Error Mean		
REGR factor score 1 for	No	260	0162891	1.02677478	.06367787		
analysis 1	yes	1625	.0026063	.99594775	.02470642		
REGR factor score 2 for	No	260	1824165	1.29202315	.08012787		
analysis 1	yes	1625	.0291866	.94217321	.02337244		
REGR factor score 3 for	No	260	1883083	1.03451887	.06415814		
analysis 1	yes	1625	.0301293	.99137782	.02459306		
REGR factor score 4 for	No	260	.1679842	.96417721	.05979573		
analysis 1	yes	1625	0268775	1.00329294	.02488863		

		independent dampies res		
				for Equality of inces
			F	Sig.
REGR factor score	1 for	Equal variances assumed	.028	.866
analysis 1		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	30.466	.000
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	.687	.407
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	.122	.727
analysis 1		Equal variances not assumed		

**Independent Samples Test** 

masponaem sumples tost					
		T-test for Equality of Means			
		t	df	Sig. (2-tailed)	
REGR factor score 1 for	Equal variances assumed	283	1883	.777	
analysis 1	Equal variances not assumed	277	341.613	.782	
REGR factor score 2 for	Equal variances assumed	-3.176	1883	.002	
analysis 1	Equal variances not assumed	-2.535	304.596	.012	
REGR factor score 3 for	Equal variances assumed	-3.279	1883	.001	
analysis 1	Equal variances not assumed	-3.179	339.534	.002	
REGR factor score 4 for	Equal variances assumed	2.923	1883	.004	
analysis 1	Equal variances not assumed	3.009	354.816	.003	

**Independent Samples Test** 

macpendent Campies Test					
			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score	1 for	Equal variances assumed	01889537	.06681106	
analysis 1		Equal variances not assumed	01889537	.06830284	
REGR factor score	2 for	Equal variances assumed	21160317	.06663429	
analysis 1		Equal variances not assumed	21160317	.08346704	
REGR factor score	3 for	Equal variances assumed	21843761	.06662258	
analysis 1		Equal variances not assumed	21843761	.06871015	
REGR factor score	4 for	Equal variances assumed	.19486162	.06666140	
analysis 1		Equal variances not assumed	.19486162	.06476862	

_		independent Samples Tes	•	
			T-test for Equ	ality of Means
			95% Confidenc Differ	
			Lower	Upper
REGR factor score	1 for	Equal variances assumed	14992687	.11213614
analysis 1		Equal variances not assumed	15324245	.11545172
REGR factor score	2 for	Equal variances assumed	34228798	08091835
analysis 1		Equal variances not assumed	37584817	04735816
REGR factor score	3 for	Equal variances assumed	34909945	08777577
analysis 1		Equal variances not assumed	35358879	08328643
REGR factor score	4 for	Equal variances assumed	.06412363	.32559960
analysis 1		Equal variances not assumed	.06748297	.32224027

**Group Statistics** 

	Computer/games	N	Mean	Std. Deviation
REGR factor score 1 for	no	1188	0291535	1.01033427
analysis 1	yes	697	.0496907	.98085770
REGR factor score 2 for	no	1188	.0255694	.95607465
analysis 1	yes	697	0435818	1.07002522
REGR factor score 3 for	no	1188	.0029535	1.00146853
analysis 1	yes	697	0050341	.99819026
REGR factor score 4 for	no	1188	0359868	.99281473
analysis 1	yes	697	.0613377	1.00989052

**Group Statistics** 

_		computer/games	Std. Error Mean
DECD factor coors	4 6	<del>-</del> '	
REGR factor score	1 101	no	.02931277
analysis 1		yes	.03715263
REGR factor score	2 for	no	.02773854
analysis 1		yes	.04053010
REGR factor score	3 for	no	.02905555
analysis 1		yes	.03780915
REGR factor score	4 for	no	.02880448
analysis 1		yes	.03825233

**Independent Samples Test** 

	independent Samples Test	L	
			for Equality of inces
		F	Sig.
REGR factor score 1 for	Equal variances assumed	.319	.572
analysis 1	Equal variances not assumed		
REGR factor score 2 for	Equal variances assumed	3.870	.049
analysis 1	Equal variances not assumed		
REGR factor score 3 for	Equal variances assumed	.016	.899
analysis 1	Equal variances not assumed		
REGR factor score 4 for	Equal variances assumed	.285	.594
analysis 1	Equal variances not assumed		

**Independent Samples Test** 

macpendent campies rest					
		T-te	T-test for Equality of Means		
		t	df	Sig. (2-tailed)	
REGR factor score 1 for	Equal variances assumed	-1.653	1883	.098	
analysis 1	Equal variances not assumed	-1.666	1492.987	.096	
REGR factor score 2 for	Equal variances assumed	1.450	1883	.147	
analysis 1	Equal variances not assumed	1.408	1329.654	.159	
REGR factor score 3 for	Equal variances assumed	.167	1883	.867	
analysis 1	Equal variances not assumed	.168	1461.853	.867	
REGR factor score 4 for	Equal variances assumed	-2.042	1883	.041	
analysis 1	Equal variances not assumed	-2.032	1437.986	.042	

			T-test for Equa	ality of Means
			Mean Difference	Std. Error Difference
REGR factor score	1 for	Equal variances assumed	07884419	.04769045
analysis 1		Equal variances not assumed	07884419	.04732396
REGR factor score	2 for	Equal variances assumed	.06915122	.04769843
analysis 1		Equal variances not assumed	.06915122	.04911329
REGR factor score	3 for	Equal variances assumed	.00798759	.04772469
analysis 1		Equal variances not assumed	.00798759	.04768393
REGR factor score	4 for	Equal variances assumed	09732454	.04767232
analysis 1		Equal variances not assumed	09732454	.04788464

			T-test for Equa	ality of Means
			95% Confidence Differ	
			Lower	Upper
REGR factor score	1 for	Equal variances assumed	17237587	.01468749
analysis 1		Equal variances not assumed	17167269	.01398432
REGR factor score	2 for	Equal variances assumed	02439612	.16269856
analysis 1		Equal variances not assumed	02719676	.16549920
REGR factor score	3 for	Equal variances assumed	08561125	.10158643
analysis 1		Equal variances not assumed	08554864	.10152381
REGR factor score	4 for	Equal variances assumed	19082066	00382842
analysis 1		Equal variances not assumed	19125577	00339331

T-test

**Group Statistics** 

0.04p 0.0000						
	Crafts	N	Mean	Std. Deviation	Std. Error Mean	
REGR factor score 1 for	no	1296	0201866	.99141657	.02753935	
analysis 1	yes	589	.0444175	1.01807267	.04194895	
REGR factor score 2 for	no	1296	0313979	1.04882154	.02913393	
analysis 1	yes	589	.0690860	.88002848	.03626094	
REGR factor score 3 for	no	1296	0468070	1.01532582	.02820350	
analysis 1	yes	589	.1029913	.95823933	.03948356	
REGR factor score 4 for	no	1296	0365440	1.01091877	.02808108	
analysis 1	yes	589	.0804093	.97155720	.04003232	

**Independent Samples Test** 

			t for Equality of ances
		F	Sig.
REGR factor score 1	for Equal variances assu	med .869	.351
analysis 1	Equal variances not a	ssumed	
REGR factor score 2	for Equal variances assu	med 9.791	.002
analysis 1	Equal variances not a	ssumed	
REGR factor score 3	for Equal variances assu	med 2.577	.109
analysis 1	Equal variances not a	ssumed	
REGR factor score 4	for Equal variances assu	med .905	.342
analysis 1	Equal variances not a	ssumed	

		T-test for Equality of Means			
		t	df	Sig. (2-tailed)	
REGR factor score 1 for	Equal variances assumed	-1.300	1883	.194	
analysis 1	Equal variances not assumed	-1.287	1110.410	.198	
REGR factor score 2 for	Equal variances assumed	-2.024	1883	.043	
analysis 1	Equal variances not assumed	-2.160	1338.852	.031	
REGR factor score 3 for	Equal variances assumed	-3.021	1883	.003	
analysis 1	Equal variances not assumed	-3.087	1199.347	.002	
REGR factor score 4 for	Equal variances assumed	-2.356	1883	.019	
analysis 1	Equal variances not assumed	-2.392	1179.359	.017	

			T-test for Equa	ality of Means
			Mean Difference	Std. Error Difference
REGR factor score	1 for	Equal variances assumed	06460409	.04968393
analysis 1	Ed	Equal variances not assumed	06460409	.05018098
REGR factor score analysis 1	2 for	Equal variances assumed	10048384	.04965226
		Equal variances not assumed	10048384	.04651496
REGR factor score	3 for	Equal variances assumed	14979834	.04958621
analysis 1		Equal variances not assumed	14979834	.04852205
REGR factor score analysis 1	4 for	Equal variances assumed	11695331	.04963311
	Equal variances not assumed		11695331	.04889922

**Independent Samples Test** 

			T-test for Equa	ality of Means
			95% Confidence Interval of the Difference	
			Lower	Upper
REGR factor score	1 for	Equal variances assumed	16204543	.03283725
analysis 1		Equal variances not assumed	16306432	.03385614
REGR factor score	2 for	Equal variances assumed	19786308	00310461
analysis 1		Equal variances not assumed	19173399	00923370
REGR factor score	3 for	Equal variances assumed	24704804	05254864
analysis 1		Equal variances not assumed	24499588	05460081
REGR factor score analysis 1	4 for	Equal variances assumed	21429498	01961164
		Equal variances not assumed	21289247	02101415

# T-test

**Group Statistics** 

	Cruise Holidays	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score 1 for	no	1730	0170707	.99790939	.02399209
analysis 1	yes	155	.1905312	1.00676545	.08086535
REGR factor score 2 for	no	1730	.0012240	1.00028934	.02404931
analysis 1	yes	155	0136619	.99989545	.08031353
REGR factor score 3 for	no	1730	.0049400	.99683053	.02396615
analysis 1	yes	155	0551368	1.03644386	.08324917
REGR factor score 4 for	no	1730	0016791	1.00227925	.02409715
analysis 1	yes	155	.0187409	.97717474	.07848856

		macpenaem oampies res	-		
			Levene's Test for Equality of Variances		
			F	Sig.	
REGR factor score	1 for	Equal variances assumed	.010	.922	
analysis 1		Equal variances not assumed			
REGR factor score analysis 1	2 for	Equal variances assumed	.184	.668	
		Equal variances not assumed			
REGR factor score	3 for	Equal variances assumed	.229	.632	
analysis 1		Equal variances not assumed			
REGR factor score	4 for	Equal variances assumed	.080	.777	
analysis 1		Equal variances not assumed			

		T-test for Equality of Means		
		t	df	Sig. (2-tailed)
REGR factor score 1 for	Equal variances assumed	-2.479	1883	.013
analysis 1	Equal variances not assumed	-2.461	182.180	.015
REGR factor score 2 for	Equal variances assumed	.178	1883	.859
analysis 1	Equal variances not assumed	.178	182.724	.859
REGR factor score 3 for	Equal variances assumed	.716	1883	.474
analysis 1	Equal variances not assumed	.693	180.474	.489
REGR factor score 4 for	Equal variances assumed	243	1883	.808
analysis 1	Equal variances not assumed	249	184.254	.804

**Independent Samples Test** 

		maspenaem eamples res	-		
			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score analysis 1	1 for	Equal variances assumed	20760191	.08372868	
		Equal variances not assumed	20760191	.08434942	
REGR factor score	2 for	Equal variances assumed	.01488597	.08386455	
analysis 1		Equal variances not assumed	.01488597	.08383694	
REGR factor score	3 for	Equal variances assumed	.06007679	.08385383	
analysis 1		Equal variances not assumed	.06007679	.08663026	
REGR factor score analysis 1	4 for	Equal variances assumed	02042002	.08386393	
		Equal variances not assumed	02042002	.08210437	

**Independent Samples Test** 

		macpenaem oampies res			
			T-test for Equality of Means		
			95% Confidence Interval of Difference		
			Lower	Upper	
REGR factor score analysis 1	1 for	Equal variances assumed	37181266	04339115	
		Equal variances not assumed	37402931	04117451	
REGR factor score	2 for	Equal variances assumed	14959125	.17936320	
analysis 1		Equal variances not assumed	15052698	.18029892	
REGR factor score	3 for	Equal variances assumed	10437939	.22453298	
analysis 1		Equal variances not assumed	11086166	.23101525	
REGR factor score analysis 1	4 for	Equal variances assumed	18489603	.14405599	
	Equal variances not assumed		18240558	.14156554	

# T-test

**Group Statistics** 

			Group Gte	tiotioo		
		Cycling	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score	1 for	no	1561	0072512	1.00299681	.02538622
analysis 1		yes	324	.0349355	.98621839	.05478991
REGR factor score 2	2 for	no	1561	.0171977	.96947873	.02453787
analysis 1		yes	324	0828571	1.13362227	.06297901
REGR factor score 3	3 for	no	1561	0110453	.99811384	.02526263
analysis 1		yes	324	.0532152	1.00889436	.05604969
REGR factor score 4	4 for	no	1561	.0073725	.98885948	.02502840
analysis 1		yes	324	0355201	1.05289102	.05849395

		macpenaem oampies res	-	
			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score	1 for	Equal variances assumed	.153	.696
analysis 1		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	2.714	.100
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	.022	.881
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	2.694	.101
analysis 1		Equal variances not assumed		

**Independent Samples Test** 

-		T-te	T-test for Equality of Means		
		t	df	Sig. (2-tailed)	
REGR factor score 1 for	Equal variances assumed	691	1883	.490	
analysis 1	Equal variances not assumed	699	472.066	.485	
REGR factor score 2 for	Equal variances assumed	1.640	1883	.101	
analysis 1	Equal variances not assumed	1.480	426.474	.140	
REGR factor score 3 for	Equal variances assumed	-1.053	1883	.293	
analysis 1	Equal variances not assumed	-1.045	463.602	.296	
REGR factor score 4 for	Equal variances assumed	.702	1883	.482	
analysis 1	Equal variances not assumed	.674	448.981	.501	

**Independent Samples Test** 

independent Samples Test					
			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score	1 for	Equal variances assumed	04218668	.06105791	
analysis 1		Equal variances not assumed	04218668	.06038538	
REGR factor score	2 for	Equal variances assumed	.10005480	.06102211	
analysis 1		Equal variances not assumed	.10005480	.06759041	
REGR factor score	3 for	Equal variances assumed	06426052	.06104769	
analysis 1		Equal variances not assumed	06426052	.06147982	
REGR factor score	4 for	Equal variances assumed	.04289265	.06105765	
analysis 1		Equal variances not assumed	.04289265	.06362360	

independent Samples Test					
			T-test for Equality of Means		
			95% Confidence Interval of the Difference		
			Lower	Upper	
REGR factor score analysis 1	1 for	Equal variances assumed	16193497	.07756160	
		Equal variances not assumed	16084408	.07647072	
REGR factor score	•	Equal variances assumed	01962326	.21973286	
analysis 1		Equal variances not assumed	03279699	.23290659	
REGR factor score	3 for	Equal variances assumed	18398876	.05546772	
analysis 1		Equal variances not assumed	18507416	.05655311	
REGR factor score	4 for	Equal variances assumed	07685512	.16264043	
analysis 1		Equal variances not assumed	08214437	.16792968	

**Group Statistics** 

		Dieting	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score	1 for	no	1622	0145102	.98594214	.02448082
analysis 1		yes	263	.0894890	1.08037233	.06661861
REGR factor score	2 for	no	1622	0113958	1.01580810	.02522239
analysis 1		yes	263	.0702813	.89492918	.05518370
REGR factor score	3 for	no	1622	0072025	1.01026331	.02508471
analysis 1		yes	263	.0444200	.93480723	.05764268
REGR factor score	4 for	no	1622	0090420	1.00110902	.02485741
analysis 1		yes	263	.0557645	.99320612	.06124371

**Independent Samples Test** 

			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score 1 analysis 1	1 for	Equal variances assumed	2.844	.092
		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	5.183	.023
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	2.692	.101
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	.004	.949
analysis 1		Equal variances not assumed		

**Independent Samples Test** 

			T-te	T-test for Equality of Means		
			t	df	Sig. (2-tailed)	
REGR factor score	1 for	Equal variances assumed	-1.565	1883	.118	
analysis 1		Equal variances not assumed	-1.465	336.547	.144	
REGR factor score	2 for	Equal variances assumed	-1.229	1883	.219	
analysis 1		Equal variances not assumed	-1.346	380.219	.179	
REGR factor score 31 analysis 1	3 for	Equal variances assumed	776	1883	.438	
		Equal variances not assumed	821	368.495	.412	
REGR factor score	4 for	Equal variances assumed	975	1883	.330	
analysis 1		Equal variances not assumed	980	353.880	.328	

**Independent Samples Test** 

independent dampies rest					
			T-test for Equality of Means		
				Std. Error	
			Mean Difference	Difference	
REGR factor score 1 analysis 1	1 for	Equal variances assumed	10399923	.06644853	
		Equal variances not assumed	10399923	.07097429	
REGR factor score	2 for	Equal variances assumed	08167710	.06646509	
analysis 1		Equal variances not assumed	08167710	.06067462	
REGR factor score	3 for	Equal variances assumed	05162255	.06648109	
analysis 1		Equal variances not assumed	05162255	.06286431	
REGR factor score	4 for	Equal variances assumed	06480652	.06647496	
analysis 1		Equal variances not assumed	06480652	.06609602	

		independent dampies res	-	
			T-test for Equa	ality of Means
			95% Confidence Interval of the Difference	
			Lower	Upper
REGR factor score analysis 1	1 for	Equal variances assumed	23431972	.02632126
		Equal variances not assumed	24360835	.03560989
REGR factor score	2 for	Equal variances assumed	21203007	.04867587
analysis 1		Equal variances not assumed	20097692	.03762272
REGR factor score	3 for	Equal variances assumed	18200690	.07876180
analysis 1		Equal variances not assumed	17524035	.07199525
REGR factor score	4 for	Equal variances assumed	19517885	.06556581
analysis 1		Equal variances not assumed	19479691	.06518387

# T-test

**Group Statistics** 

Group Guardines						
	DIY	N	Mean	Std. Deviation	Std. Error Mean	
REGR factor score 1 for	no	1548	0316967	.99074696	.02518125	
analysis 1	yes	337	.1455978	1.03048367	.05613402	
REGR factor score 2 for	no	1548	.0090397	.96872693	.02462158	
analysis 1	yes	337	0415238	1.13328741	.06173410	
REGR factor score 3 for	no	1548	0067527	1.00454060	.02553183	
analysis 1	yes	337	.0310182	.97974223	.05336996	
REGR factor score 4 for	no	1548	0230439	.99887513	.02538784	
analysis 1	yes	337	.1058514	.99982208	.05446378	

Independent Samples Test

independent Samples Test					
			Levene's Test for Equality of Variances		
			F	Sig.	
REGR factor score 1 f analysis 1	1 for	Equal variances assumed	.553	.457	
		Equal variances not assumed			
REGR factor score	2 for	Equal variances assumed	1.105	.293	
analysis 1		Equal variances not assumed			
REGR factor score	3 for	Equal variances assumed	.004	.948	
analysis 1		Equal variances not assumed			
REGR factor score	4 for	Equal variances assumed	.279	.598	
analysis 1		Equal variances not assumed			

Independent Samples Test

			T-te	st for Equality	of Means
			t	df	Sig. (2-tailed)
REGR factor score	1 for	Equal variances assumed	-2.955	1883	.003
analysis 1		Equal variances not assumed	-2.882	480.609	.004
REGR factor score	2 for	Equal variances assumed	.841	1883	.400
analysis 1		Equal variances not assumed	.761	448.928	.447
REGR factor score 3 for analysis 1	3 for	Equal variances assumed	628	1883	.530
		Equal variances not assumed	638	501.686	.523
REGR factor score 4	4 for	Equal variances assumed	-2.146	1883	.032
analysis 1		Equal variances not assumed	-2.145	492.828	.032

			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score	1 for	Equal variances assumed	17729446	.05998816	
analysis 1		Equal variances not assumed	17729446	.06152336	
REGR factor score	2 for	Equal variances assumed	.05056356	.06011585	
analysis 1		Equal variances not assumed	.05056356	.06646293	
REGR factor score	3 for	Equal variances assumed	03777086	.06012084	
analysis 1		Equal variances not assumed	03777086	.05916272	
REGR factor score	4 for	Equal variances assumed	12889532	.06005372	
analysis 1		Equal variances not assumed	12889532	.06009031	

			T-test for Equality of Means		
			95% Confidence Interval of the Difference		
			Lower	Upper	
REGR factor score analysis 1	1 for	Equal variances assumed	29494472	05964419	
		Equal variances not assumed	29818245	05640646	
REGR factor score	2 for	Equal variances assumed	06733711	.16846424	
analysis 1		Equal variances not assumed	08005353	.18118066	
REGR factor score	3 for	Equal variances assumed	15568132	.08013961	
analysis 1		Equal variances not assumed	15400807	.07846636	
REGR factor score	4 for	Equal variances assumed	24667416	01111648	
analysis 1		Equal variances not assumed	24696012	01083053	

#### T-test

**Group Statistics** 

		Eating out	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score	1 for	no	243	.0758272	1.02772612	.06592866
analysis 1		yes	1642	0112217	.99566108	.02457112
REGR factor score	2 for	no	243	1603928	1.31049435	.08406825
analysis 1		yes	1642	.0237366	.94363185	.02328713
REGR factor score	3 for	no	243	1054520	1.06131564	.06808343
analysis 1		yes	1642	.0156059	.98998991	.02443117
REGR factor score 4 f analysis 1	4 for	no	243	.2988255	.91666891	.05880434
		yes	1642	0442233	1.00448156	.02478879

**Independent Samples Test** 

			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score	1 for	Equal variances assumed	.214	.643
analysis 1		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	24.089	.000
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	1.978	.160
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	3.132	.077
analysis 1		Equal variances not assumed		

Independent Samples Test

maspernaent samples toot						
			T-te	T-test for Equality of Means		
			t	df	Sig. (2-tailed)	
REGR factor score 1	for	Equal variances assumed	1.267	1883	.205	
analysis 1		Equal variances not assumed	1.237	313.006	.217	
REGR factor score 2	2 for	Equal variances assumed	-2.683	1883	.007	
analysis 1		Equal variances not assumed	-2.111	280.319	.036	
REGR factor score 3	3 for	Equal variances assumed	-1.762	1883	.078	
analysis 1		Equal variances not assumed	-1.674	307.584	.095	
REGR factor score 4	l for	Equal variances assumed	5.023	1883	.000	
analysis 1		Equal variances not assumed	5.376	334.094	.000	

			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score	1 for	Equal variances assumed	.08704890	.06872208	
analysis 1		Equal variances not assumed	.08704890	.07035857	
REGR factor score	2 for	Equal variances assumed	18412934	.06862029	
analysis 1		Equal variances not assumed	18412934	.08723395	
REGR factor score	3 for	Equal variances assumed	12105788	.06869473	
analysis 1		Equal variances not assumed	12105788	.07233419	
REGR factor score	4 for	Equal variances assumed	.34304878	.06829532	
analysis 1		Equal variances not assumed	.34304878	.06381563	

			T-test for Equ	ality of Means
			95% Confidence Interval of the Difference	
			Lower	Upper
REGR factor score analysis 1	1 for	Equal variances assumed	04773054	.22182834
		Equal variances not assumed	05138665	.22548444
REGR factor score	2 for	Equal variances assumed	31870913	04954955
analysis 1		Equal variances not assumed	35584612	01241256
REGR factor score	3 for	Equal variances assumed	25578367	.01366791
analysis 1		Equal variances not assumed	26339034	.02127458
REGR factor score	4 for	Equal variances assumed	.20910631	.47699125
analysis 1		Equal variances not assumed	.21751769	.46857986

#### T-test

**Group Statistics** 

			Croup or			
		Trave				
		I	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score 1	for	no	682	0208299	.99317009	.03803045
analysis 1		yes	1203	.0118088	1.00407113	.02894887
REGR factor score 2	2 for	no	682	0798331	1.14827135	.04396958
analysis 1		yes	1203	.0452586	.90260867	.02602356
REGR factor score 3	3 for	no	682	0816337	1.05130492	.04025655
analysis 1		yes	1203	.0462795	.96709968	.02788293
REGR factor score 4	l for	no	682	.2081297	.94891164	.03633570
analysis 1		yes	1203	1179921	1.00932166	.02910025

**Independent Samples Test** 

independent damples rest					
			Levene's Test for Equality of Variances		
			F	Sig.	
REGR factor score analysis 1	1 for	Equal variances assumed	.020	.888	
		Equal variances not assumed			
REGR factor score	2 for	Equal variances assumed	19.913	.000	
analysis 1		Equal variances not assumed			
REGR factor score	3 for	Equal variances assumed	3.667	.056	
analysis 1		Equal variances not assumed			
REGR factor score	4 for	Equal variances assumed	4.689	.030	
analysis 1		Equal variances not assumed			

masponaem campico reci						
			T-te	T-test for Equality of Means		
			t	df	Sig. (2-tailed)	
REGR factor score	1 for	Equal variances assumed	681	1883	.496	
analysis 1		Equal variances not assumed	683	1427.323	.495	
REGR factor score	2 for	Equal variances assumed	-2.614	1883	.009	
analysis 1		Equal variances not assumed	-2.448	1160.950	.015	
REGR factor score	3 for	Equal variances assumed	-2.673	1883	.008	
analysis 1		Equal variances not assumed	-2.612	1319.130	.009	
REGR factor score	4 for	Equal variances assumed	6.887	1883	.000	
analysis 1		Equal variances not assumed	7.006	1487.937	.000	

macpenaem oampi	00 .000			
			T-test for Equality of Means	
			Mean Difference	Std. Error Difference
REGR factor score	1 for	Equal variances assumed	03263866	.04793939
analysis 1		Equal variances not assumed	03263866	.04779490
REGR factor score	2 for	Equal variances assumed	12509169	.04785855
analysis 1		Equal variances not assumed	12509169	.05109354
REGR factor score	3 for	Equal variances assumed	12791315	.04785459
analysis 1		Equal variances not assumed	12791315	.04896986
REGR factor score	4 for	Equal variances assumed	.32612184	.04735260
analysis 1		Equal variances not assumed	.32612184	.04655221

**Independent Samples Test** 

independent dampies rest					
			T-test for Equa	ality of Means	
			95% Confidence Interval of the Difference		
			Lower	Upper	
REGR factor score analysis 1	1 for	Equal variances assumed	12665858	.06138125	
		Equal variances not assumed	12639444	.06111712	
REGR factor score	2 for	Equal variances assumed	21895306	03123032	
analysis 1		Equal variances not assumed	22533770	02484568	
REGR factor score	3 for	Equal variances assumed	22176675	03405955	
analysis 1		Equal variances not assumed	22398046	03184584	
REGR factor score	4 for	Equal variances assumed	.23325275	.41899093	
analysis 1		Equal variances not assumed	.23480691	.41743677	

T-test

**Group Statistics** 

Group Statistics						
	Fishing	N	Mean	Std. Deviation	Std. Error Mean	
REGR factor score 1 for	no	1795	0190694	.99678254	.02352709	
analysis 1	yes	90	.3803290	.99354339	.10472867	
REGR factor score 2 for	no	1795	.0041647	.99044639	.02337754	
analysis 1	yes	90	0830621	1.17780280	.12415132	
REGR factor score 3 for	no	1795	0015283	1.00249809	.02366199	
analysis 1	yes	90	.0304806	.95363196	.10052163	
REGR factor score 4 for	no	1795	.0004033	.99228617	.02342096	
analysis 1	yes	90	0080430	1.14932503	.12114950	

			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score analysis 1	1 for	Equal variances assumed	.050	.823
		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	.927	.336
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	.439	.508
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	5.638	.018
analysis 1		Equal variances not assumed		

			T-test for Equality of Means		
			t	df	Sig. (2-tailed)
REGR factor score	1 for	Equal variances assumed	-3.710	1883	.000
analysis 1		Equal variances not assumed	-3.721	98.197	.000
REGR factor score	2 for	Equal variances assumed	.807	1883	.420
analysis 1		Equal variances not assumed	.690	95.417	.492
REGR factor score	3 for	Equal variances assumed	296	1883	.767
analysis 1		Equal variances not assumed	310	99.121	.757
REGR factor score	4 for	Equal variances assumed	.078	1883	.938
analysis 1		Equal variances not assumed	.068	95.770	.946

**Independent Samples Test** 

			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score	1 for	Equal variances assumed	39939841	.10765545	
analysis 1		Equal variances not assumed	39939841	.10733880	
REGR factor score	2 for	Equal variances assumed	.08722672	.10802949	
analysis 1		Equal variances not assumed	.08722672	.12633312	
REGR factor score	3 for	Equal variances assumed	03200891	.10804567	
analysis 1		Equal variances not assumed	03200891	.10326901	
REGR factor score	4 for	Equal variances assumed	.00844625	.10804801	
analysis 1		Equal variances not assumed	.00844625	.12339263	

**Independent Samples Test** 

independent Samples Test						
			T-test for Equa	ality of Means		
			95% Confidence Interval of the Difference			
			Lower	Upper		
REGR factor score	1 for	Equal variances assumed	61053493	18826190		
analysis 1		Equal variances not assumed	61240342	18639341		
REGR factor score	2 for	Equal variances assumed	12464337	.29909681		
analysis 1		Equal variances not assumed	16356210	.33801554		
REGR factor score	3 for	Equal variances assumed	24391074	.17989292		
analysis 1		Equal variances not assumed	23691394	.17289612		
REGR factor score	4 for	Equal variances assumed	20346017	.22035267		
analysis 1		Equal variances not assumed	23649369	.25338619		

# T-test

**Group Statistics** 

Group Statistics						
		gardening	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score	1 for	no	1076	0443475	1.00258355	.03056430
analysis 1		yes	809	.0589838	.99410853	.03495099
REGR factor score analysis 1	2 for	no	1076	0310473	1.01585190	.03096879
		yes	809	.0412941	.97761555	.03437113
REGR factor score	3 for	no	1076	0491868	1.01848712	.03104913
analysis 1		yes	809	.0654203	.97163975	.03416103
REGR factor score	4 for	no	1076	0145075	1.01479981	.03093672
analysis 1		yes	809	.0192955	.98026143	.03446416

**Independent Samples Test** 

		·	Levene's Test	for Equality of
				ances
			F	Sig.
REGR factor score	1 for	Equal variances assumed	.027	.869
analysis 1		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	4.855	.028
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	1.008	.316
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	1.235	.267
analysis 1		Equal variances not assumed		

		T-test for Equality of Means		
		t	df	Sig. (2-tailed)
REGR factor score 1 for	Equal variances assumed	-2.223	1883	.026
analysis 1	Equal variances not assumed	-2.226	1747.987	.026
REGR factor score 2 for	Equal variances assumed	-1.555	1883	.120
analysis 1	Equal variances not assumed	-1.564	1773.763	.118
REGR factor score 3 for	Equal variances assumed	-2.466	1883	.014
analysis 1	Equal variances not assumed	-2.483	1780.899	.013
REGR factor score 4 for	Equal variances assumed	726	1883	.468
analysis 1	Equal variances not assumed	730	1770.647	.466

**Independent Samples Test** 

			T-test for Equa	ality of Means
			Mean Difference	Std. Error Difference
REGR factor score	1 for	Equal variances assumed	10333133	.04648593
analysis 1		Equal variances not assumed	10333133	.04643004
REGR factor score	2 for	Equal variances assumed	07234143	.04651702
analysis 1		Equal variances not assumed	07234143	.04626490
REGR factor score	3 for	Equal variances assumed	11460707	.04647189
analysis 1		Equal variances not assumed	11460707	.04616302
REGR factor score	4 for	Equal variances assumed	03380300	.04654036
analysis 1		Equal variances not assumed	03380300	.04631262

**Independent Samples Test** 

		masperiating samples res				
				T-test for Equality of Means		
			95% Confidence Interval of the Difference			
			Lower	Upper		
REGR factor score 1 analysis 1	1 for	Equal variances assumed	19450068	01216198		
		Equal variances not assumed	19439558	01226707		
REGR factor score	2 for	Equal variances assumed	16357175	.01888888		
analysis 1		Equal variances not assumed	16308088	.01839802		
REGR factor score	3 for	Equal variances assumed	20574889	02346526		
analysis 1		Equal variances not assumed	20514647	02406768		
REGR factor score	4 for	Equal variances assumed	12507911	.05747310		
analysis 1		Equal variances not assumed	12463616	.05703015		

T-TEST GROUPS=golf(0 1) /MISSING=ANALYSIS /VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 /CRITERIA=CI(.95).

#### T-test

[DataSet1] F:\301109.sav

**Group Statistics** 

Croup classics						
		golf	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score	1 for	no	1764	.0017436	1.00037280	.02381840
analysis 1		yes	121	0254187	.99833919	.09075811
REGR factor score	2 for	no	1764	.0039504	1.00064120	.02382479
analysis 1		yes	121	0575909	.99293148	.09026650
REGR factor score	3 for	no	1764	.0118010	.99256528	.02363251
analysis 1		yes	121	1720408	1.09274257	.09934023
REGR factor score	4 for	no	1764	.0171721	.99461305	.02368126
analysis 1		yes	121	2503438	1.04817201	.09528836

			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score	1 for	Equal variances assumed	.022	.882
analysis 1		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	3.088	.079
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	.883	.347
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	.275	.600
analysis 1		Equal variances not assumed		

		T-te	T-test for Equality of Means		
		t	df	Sig. (2-tailed)	
REGR factor score 1 for	Equal variances assumed	.289	1883	.773	
analysis 1	Equal variances not assumed	.289	137.055	.773	
REGR factor score 2 for	Equal variances assumed	.655	1883	.513	
analysis 1	Equal variances not assumed	.659	137.256	.511	
REGR factor score 3 for	Equal variances assumed	1.958	1883	.050	
analysis 1	Equal variances not assumed	1.800	133.938	.074	
REGR factor score 4 for	Equal variances assumed	2.852	1883	.004	
analysis 1	Equal variances not assumed	2.725	135.246	.007	

**Independent Samples Test** 

independent Gamples Test						
			T-test for Equality of Means			
			Mean Difference	Std. Error Difference		
REGR factor score	1 for	Equal variances assumed	.02716224	.09399816		
analysis 1		Equal variances not assumed	.02716224	.09383150		
REGR factor score	2 for	Equal variances assumed	.06154134	.09398955		
analysis 1		Equal variances not assumed	.06154134	.09335771		
REGR factor score	3 for	Equal variances assumed	.18384176	.09390472		
analysis 1		Equal variances not assumed	.18384176	.10211257		
REGR factor score	4 for	Equal variances assumed	.26751592	.09379787		
analysis 1		Equal variances not assumed	.26751592	.09818694		

masponasm samples rest						
				T-test for Equality of Means		
			95% Confidence Interval of the Difference			
			Lower	Upper		
REGR factor score analysis 1	1 for	Equal variances assumed	15718927	.21151375		
		Equal variances not assumed	15838244	.21270691		
REGR factor score	2 for E	Equal variances assumed	12279327	.24587595		
analysis 1		Equal variances not assumed	12306403	.24614671		
REGR factor score	3 for	Equal variances assumed	00032649	.36801002		
analysis 1		Equal variances not assumed	01811997	.38580350		
REGR factor score	4 for	Equal variances assumed	.08355723	.45147462		
analysis 1		Equal variances not assumed	.07333557	.46169628		

T-TEST GROUPS=gourmfood(0 1)
/MISSING=ANALYSIS
/VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1
/CRITERIA=CI(.95).

# T-test

[DataSet1] F:\301109.sav

**Group Statistics** 

		gourmet food	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score 1	for	no	870	0315318	.98859273	.03351643
analysis 1		yes	1015	.0270273	1.00937730	.03168258
REGR factor score 2 fo	2 for	no	870	0886569	1.15771969	.03925037
analysis 1		yes	1015	.0759917	.83475230	.02620141
REGR factor score 3 for analysis 1	3 for	no	870	0806418	1.01631959	.03445646
		yes	1015	.0691215	.98103213	.03079287
REGR factor score	for	no	870	.1452019	.91814790	.03112813
analysis 1		yes	1015	1244587	1.04973548	.03294935

Independent Samples Test

independent damples rest					
			Levene's Test for Equality of Variances		
			F	Sig.	
REGR factor score	1 for	Equal variances assumed	1.080	.299	
analysis 1		Equal variances not assumed			
REGR factor score	2 for	Equal variances assumed	33.894	.000	
analysis 1		Equal variances not assumed			
REGR factor score	3 for	Equal variances assumed	1.341	.247	
analysis 1		Equal variances not assumed			
REGR factor score	4 for	Equal variances assumed	18.301	.000	
analysis 1		Equal variances not assumed			

**Independent Samples Test** 

			T-test for Equality of Means		
			t	df	Sig. (2-tailed)
REGR factor score 1	1 for	Equal variances assumed	-1.268	1883	.205
analysis 1		Equal variances not assumed	-1.270	1849.974	.204
REGR factor score 2	2 for	Equal variances assumed	-3.575	1883	.000
analysis 1		Equal variances not assumed	-3.489	1551.937	.000
REGR factor score 3	3 for	Equal variances assumed	-3.250	1883	.001
analysis 1		Equal variances not assumed	-3.241	1817.719	.001
REGR factor score 4	4 for	Equal variances assumed	5.888	1883	.000
analysis 1		Equal variances not assumed	5.949	1882.227	.000

			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score	1 for	Equal variances assumed	05855913	.04619480	
analysis 1		Equal variances not assumed	05855913	.04612090	
REGR factor score	2 for	Equal variances assumed	16464858	.04605848	
analysis 1		Equal variances not assumed	16464858	.04719222	
REGR factor score	3 for	Equal variances assumed	14976326	.04608546	
analysis 1		Equal variances not assumed	14976326	.04621092	
REGR factor score	4 for	Equal variances assumed	.26966060	.04579479	
analysis 1		Equal variances not assumed	.26966060	.04532792	

independent damples rest					
			T-test for Equa	ality of Means	
			95% Confidence Differ		
			Lower	Upper	
REGR factor score	1 for	Equal variances assumed	14915751	.03203925	
analysis 1		Equal variances not assumed	14901360	.03189534	
REGR factor score	2 for	Equal variances assumed	25497961	07431755	
analysis 1		Equal variances not assumed	25721582	07208134	
REGR factor score	3 for	Equal variances assumed	24014719	05937933	
analysis 1		Equal variances not assumed	24039534	05913118	
REGR factor score	4 for	Equal variances assumed	.17984672	.35947447	
analysis 1		Equal variances not assumed	.18076235	.35855885	

T-TEST GROUPS=gym(0 1) /MISSING=ANALYSIS /VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 /CRITERIA=CI(.95).

# T-test

[DataSet1] F:\301109.sav

**Group Statistics** 

	gym	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score 1 for	no	1483	.0156156	.99310737	.02578847
analysis 1	yes	402	0576070	1.02422486	.05108369
REGR factor score 2 for	no	1483	0064193	1.02120145	.02651800
analysis 1	yes	402	.0236813	.91837189	.04580423
REGR factor score 3 for	no	1483	0002191	.99555413	.02585201
analysis 1	yes	402	.0008083	1.01748791	.05074768
REGR factor score 4 for	no	1483	.0229740	1.00474428	.02609065
analysis 1	yes	402	0847522	.97887198	.04882170

**Independent Samples Test** 

			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score	1 for	Equal variances assumed	.364	.546
analysis 1		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	.833	.361
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	.006	.940
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	.465	.495
analysis 1		Equal variances not assumed		

Independent Samples Test

independent Samples Test						
			T-te	T-test for Equality of Means		
			t	df	Sig. (2-tailed)	
REGR factor score	1 for	Equal variances assumed	1.302	1883	.193	
analysis 1		Equal variances not assumed	1.280	620.530	.201	
REGR factor score	2 for	Equal variances assumed	535	1883	.593	
analysis 1		Equal variances not assumed	569	693.770	.570	
REGR factor score	3 for	Equal variances assumed	018	1883	.985	
analysis 1		Equal variances not assumed	018	624.749	.986	
REGR factor score	4 for	Equal variances assumed	1.917	1883	.055	
analysis 1		Equal variances not assumed	1.946	648.440	.052	

		•	T-test for Equa	ality of Means
			Mean Difference	Std. Error Difference
REGR factor score	1 for	Equal variances assumed	.07322262	.05622013
analysis 1		Equal variances not assumed	.07322262	.05722403
REGR factor score	2 for	Equal variances assumed	03010060	.05624117
analysis 1		Equal variances not assumed	03010060	.05292666
REGR factor score	3 for	Equal variances assumed	00102738	.05624544
analysis 1		Equal variances not assumed	00102738	.05695308
REGR factor score	4 for	Equal variances assumed	.10772622	.05619063
analysis 1		Equal variances not assumed	.10772622	.05535594

**Independent Samples Test** 

			T-test for Equality of Means		
			95% Confidence Differ		
			Lower	Upper	
REGR factor score	1 for	Equal variances assumed	03703768	.18348292	
analysis 1		Equal variances not assumed	03915359	.18559884	
REGR factor score	2 for	Equal variances assumed	14040216	.08020096	
analysis 1		Equal variances not assumed	13401624	.07381504	
REGR factor score	3 for	Equal variances assumed	11133733	.10928256	
analysis 1	Equal variances not assu	Equal variances not assumed	11287005	.11081528	
REGR factor score	4 for	Equal variances assumed	00247623	.21792867	
analysis 1	Equal variances not assumed		00097232	.21642476	

T-TEST GROUPS=horserid(0 1) /MISSING=ANALYSIS /VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 /CRITERIA=CI(.95).

# T-test

[DataSet1] F:\301109.sav

**Group Statistics** 

	horseriding	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score 1 for	no	1754	0081602	.99869467	.02384613
analysis 1	yes	131	.1092596	1.01486213	.08866892
REGR factor score 2 for	no	1754	0010850	.99288148	.02370733
analysis 1	yes	131	.0145268	1.09487965	.09566008
REGR factor score 3 for	no	1754	0102937	1.00462177	.02398765
analysis 1	yes	131	.1378253	.92854037	.08112695
REGR factor score 4 for	no	1754	.0084326	.99416861	.02373806
analysis 1	yes	131	1129069	1.07270519	.09372269

Independent Samples Test

		independent dampies res	-	
			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score analysis 1	1 for	Equal variances assumed	.240	.625
		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	.184	.668
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	.871	.351
analysis 1		Equal variances not assumed		
REGR factor score analysis 1	4 for	Equal variances assumed	2.598	.107
		Equal variances not assumed		

			T-test for Equality of Means		
			t	df	Sig. (2-tailed)
REGR factor score	1 for	Equal variances assumed	-1.297	1883	.195
analysis 1		Equal variances not assumed	-1.279	149.427	.203
REGR factor score	2 for	Equal variances assumed	172	1883	.863
analysis 1		Equal variances not assumed	158	146.418	.874
REGR factor score analysis 1	3 for	Equal variances assumed	-1.636	1883	.102
		Equal variances not assumed	-1.751	153.638	.082
REGR factor score	4 for	Equal variances assumed	1.340	1883	.180
analysis 1		Equal variances not assumed	1.255	147.169	.211

**Independent Samples Test** 

		·			
			T-test for Equality of Means		
				Std. Error	
			Mean Difference	Difference	
REGR factor score analysis 1	1 for	Equal variances assumed	11741984	.09055798	
		Equal variances not assumed	11741984	.09181947	
REGR factor score	2 for	Equal variances assumed	01561177	.09059768	
analysis 1		Equal variances not assumed	01561177	.09855399	
REGR factor score analysis 1	3 for	Equal variances assumed	14811900	.09053407	
		Equal variances not assumed	14811900	.08459899	
REGR factor score	4 for	Equal variances assumed	.12133947	.09055524	
analysis 1		Equal variances not assumed	.12133947	.09668215	

**Independent Samples Test** 

independent dampies rest						
				T-test for Equality of Means		
			95% Confidence Interval of the Difference			
			Lower	Upper		
REGR factor score analysis 1	1 for	Equal variances assumed	29502438	.06018471		
		Equal variances not assumed	29885207	.06401240		
REGR factor score	2 for	Equal variances assumed	19329418	.16207064		
analysis 1		Equal variances not assumed	21038386	.17916032		
REGR factor score	3 for	Equal variances assumed	32567666	.02943866		
analysis 1		Equal variances not assumed	31524642	.01900842		
REGR factor score	4 for	Equal variances assumed	05625969	.29893863		
analysis 1		Equal variances not assumed	06972518	.31240413		

T-TEST GROUPS=photo(0 1) /MISSING=ANALYSIS /VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 /CRITERIA=CI(.95).

#### T-test

 $[DataSet1] \ F: \backslash 301109.sav$ 

**Group Statistics** 

Group Statistics							
	photography	N	Mean	Std. Deviation	Std. Error Mean		
REGR factor score 1 fo	or no	1369	0110999	.99990448	.02702445		
analysis 1	yes	516	.0294490	1.00062618	.04405011		
REGR factor score 2 fo	or no	1369	.0138698	.94802860	.02562239		
analysis 1	yes	516	0367980	1.12650044	.04959142		
REGR factor score 3 fo	or no	1369	0138307	1.00188142	.02707788		
analysis 1	yes	516	.0366941	.99502740	.04380364		
REGR factor score 4 fo	or no	1369	.0135716	.99704108	.02694706		
analysis 1	yes	516	0360068	1.00789358	.04437004		

		independent dampies res	•	
			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score analysis 1	1 for	Equal variances assumed	.046	.830
	Equal v	Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	5.415	.020
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	1.093	.296
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	.172	.679
analysis 1		Equal variances not assumed		

**Independent Samples Test** 

		T-test for Equality of Means			
		t	df	Sig. (2-tailed)	
REGR factor score 1 fo	r Equal variances assumed	785	1883	.433	
analysis 1	Equal variances not assumed	785	926.224	.433	
REGR factor score 2 fo	r Equal variances assumed	.981	1883	.327	
analysis 1	Equal variances not assumed	.908	805.058	.364	
REGR factor score 3 fo	r Equal variances assumed	978	1883	.328	
analysis 1	Equal variances not assumed	981	932.530	.327	
REGR factor score 4 fo	r Equal variances assumed	.960	1883	.337	
analysis 1	Equal variances not assumed	.955	917.959	.340	

**Independent Samples Test** 

			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score	1 for	Equal variances assumed	04054888	.05166226	
analysis 1		Equal variances not assumed	04054888	.05167913	
REGR factor score	2 for	Equal variances assumed	.05066778	.05165751	
analysis 1		Equal variances not assumed	.05066778	.05581949	
REGR factor score	3 for	Equal variances assumed	05052479	.05165759	
analysis 1		Equal variances not assumed	05052479	.05149728	
REGR factor score	4 for	Equal variances assumed	.04957838	.05165807	
analysis 1		Equal variances not assumed	.04957838	.05191189	

		macpenaem dampies res	•			
				T-test for Equality of Means		
			95% Confidence Interval of the Difference			
		Lower	Upper			
REGR factor score analysis 1	1 for	Equal variances assumed	14187017	.06077240		
		Equal variances not assumed	14197066	.06087289		
REGR factor score	2 for	Equal variances assumed	05064421	.15197976		
analysis 1		Equal variances not assumed	05890115	.16023670		
REGR factor score		Equal variances assumed	15183692	.05078734		
analysis 1		Equal variances not assumed	15158878	.05053920		
REGR factor score	4 for	Equal variances assumed	05173470	.15089146		
analysis 1		Equal variances not assumed	05230138	.15145815		

T-TEST GROUPS=read(0 1) /MISSING=ANALYSIS /VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 /CRITERIA=CI(.95).

# T-test

[DataSet1] F:\301109.sav

#### **Group Statistics**

			Group Glu			
		reading	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score	1 for	No	477	0116237	1.02821807	.04707887
analysis 1		Yes	1408	.0039379	.99059942	.02639956
REGR factor score	2 for	No	477	1751781	1.22136718	.05592256
analysis 1		Yes	1408	.0593465	.90577236	.02413891
REGR factor score	3 for	no	477	0996695	1.05055138	.04810144
analysis 1		yes	1408	.0337659	.98037417	.02612706
REGR factor score	4 for	no	477	.0911713	1.01822672	.04662140
analysis 1		yes	1408	0308869	.99221629	.02644265

**Independent Samples Test** 

macpenaent Campies Test				
			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score analysis 1	1 for	Equal variances assumed	.366	.545
		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	39.474	.000
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	3.211	.073
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	.586	.444
analysis 1		Equal variances not assumed		

Independent Samples Test

			T-test for Equality of Means		
			t	df	Sig. (2-tailed)
REGR factor score	1 for	Equal variances assumed	294	1883	.769
analysis 1		Equal variances not assumed	288	795.794	.773
REGR factor score	2 for	Equal variances assumed	-4.449	1883	.000
analysis 1		Equal variances not assumed	-3.850	662.126	.000
REGR factor score	3 for	Equal variances assumed	-2.522	1883	.012
analysis 1		Equal variances not assumed	-2.438	775.465	.015
REGR factor score	4 for	Equal variances assumed	2.307	1883	.021
analysis 1		Equal variances not assumed	2.277	803.383	.023

madponadin dampide 1000					
			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score	1 for	Equal variances assumed	01556154	.05299080	
analysis 1		Equal variances not assumed	01556154	.05397552	
REGR factor score	2 for	Equal variances assumed	23452459	.05271569	
analysis 1		Equal variances not assumed	23452459	.06090993	
REGR factor score	3 for	Equal variances assumed	13343540	.05290272	
analysis 1		Equal variances not assumed	13343540	.05473913	
REGR factor score	4 for	Equal variances assumed	.12205823	.05291731	
analysis 1		Equal variances not assumed	.12205823	.05359822	

		macpenaem campies res		
			T-test for Equ	ality of Means
			95% Confidence Interval of the Difference	
				Upper
REGR factor score analysis 1	1 for	Equal variances assumed	11948840	.08836533
		Equal variances not assumed	12151276	.09038969
REGR factor score	2 for	Equal variances assumed	33791191	13113728
analysis 1		Equal variances not assumed	35412449	11492469
REGR factor score	3 for	Equal variances assumed	23718953	02968128
analysis 1		Equal variances not assumed	24088984	02598097
REGR factor score	4 for	Equal variances assumed	.01827549	.22584096
analysis 1		Equal variances not assumed	.01684915	.22726730

T-TEST GROUPS=running(0 1) /MISSING=ANALYSIS /VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 /CRITERIA=CI(.95).

#### T-test

[DataSet1] F:\301109.sav

**Group Statistics** 

		running	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score	1 for	no	1684	.0185624	1.00266572	.02443347
analysis 1		yes	201	1555177	.96585108	.06812588
REGR factor score	2 for	no	1684	.0030158	1.01120868	.02464165
analysis 1		yes	201	0252665	.90254223	.06366042
REGR factor score	3 for	no	1684	0060531	1.00375870	.02446010
analysis 1		yes	201	.0507135	.96888024	.06833954
REGR factor score	4 for	no	1684	.0276207	.98877981	.02409509
analysis 1		yes	201	2314096	1.06420609	.07506331

Independent Samples Test

macpenaent campies rest				
			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score analysis 1	1 for	Equal variances assumed	1.331	.249
		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	.613	.434
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	.670	.413
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	2.899	.089
analysis 1		Equal variances not assumed		

**Independent Samples Test** 

independent Samples Test						
			T-te:	T-test for Equality of Means		
			t	df	Sig. (2-tailed)	
REGR factor score	1 for	Equal variances assumed	2.335	1883	.020	
analysis 1		Equal variances not assumed	2.405	254.262	.017	
REGR factor score	2 for	Equal variances assumed	.379	1883	.705	
analysis 1		Equal variances not assumed	.414	263.719	.679	
REGR factor score	3 for	Equal variances assumed	761	1883	.447	
analysis 1		Equal variances not assumed	782	254.030	.435	
REGR factor score	4 for	Equal variances assumed	3.481	1883	.001	
analysis 1		Equal variances not assumed	3.286	243.032	.001	

			T-test for Equa	ality of Means
			Mean Difference	Std. Error Difference
REGR factor score	1 for	Equal variances assumed	.17408011	.07453732
analysis 1		Equal variances not assumed	.17408011	.07237493
REGR factor score	2 for	Equal variances assumed	.02828227	.07464236
analysis 1		Equal variances not assumed	.02828227	.06826317
REGR factor score	3 for	Equal variances assumed	05676659	.07463374
analysis 1		Equal variances not assumed	05676659	.07258505
REGR factor score	4 for	Equal variances assumed	.25903030	.07440614
analysis 1		Equal variances not assumed	.25903030	.07883574

**Independent Samples Test** 

independent dampies rest					
			T-test for Equ	ality of Means	
			95% Confidence Interval of the Difference		
			Lower	Upper	
REGR factor score analysis 1	1 for	Equal variances assumed	.02789568	.32026455	
		Equal variances not assumed	.03154943	.31661080	
REGR factor score	2 for	Equal variances assumed	11810816	.17467269	
analysis 1		Equal variances not assumed	10612792	.16269245	
REGR factor score	3 for	Equal variances assumed	20314012	.08960693	
analysis 1		Equal variances not assumed	19971171	.08617852	
REGR factor score	4 for	Equal variances assumed	.11310315	.40495744	
analysis 1		Equal variances not assumed	.10374178	.41431881	

T-TEST GROUPS=sailing(0 1) /MISSING=ANALYSIS /VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 /CRITERIA=CI(.95).

# T-test

[DataSet1] F:\301109.sav

**Group Statistics** 

Group Statistics						
	sailing	N	Mean	Std. Deviation	Std. Error Mean	
REGR factor score 1 fo	or no	1806	.0034322	.99509573	.02341564	
analysis 1	yes	79	0784638	1.11028606	.12491694	
REGR factor score 2 fo	or no	1806	0004356	.99860312	.02349817	
analysis 1	yes	79	.0099591	1.03794070	.11677745	
REGR factor score 3 fo	or no	1806	0025146	1.00501892	.02364914	
analysis 1	yes	79	.0574852	.88116881	.09913924	
REGR factor score 4 fo	or no	1806	.0049126	.99837672	.02349284	
analysis 1	yes	79	1123056	1.03660760	.11662747	

Independent Samples Test

		macpenaciii oampies res		
			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score	1 for	Equal variances assumed	2.357	.125
analysis 1		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	.029	.865
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	1.987	.159
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	.252	.616
analysis 1		Equal variances not assumed		

			T-test for Equality of Means		
			t	df	Sig. (2-tailed)
REGR factor score	1 for	Equal variances assumed	.712	1883	.476
analysis 1		Equal variances not assumed	.644	83.573	.521
REGR factor score	2 for	Equal variances assumed	090	1883	.928
analysis 1		Equal variances not assumed	087	84.438	.931
REGR factor score	3 for	Equal variances assumed	522	1883	.602
analysis 1		Equal variances not assumed	589	87.117	.558
REGR factor score	4 for	Equal variances assumed	1.020	1883	.308
analysis 1		Equal variances not assumed	.985	84.452	.327

**Independent Samples Test** 

			T-test for Equa	ality of Means
			Mean Difference	Std. Error Difference
REGR factor score	1 for	Equal variances assumed	.08189608	.11495822
analysis 1		Equal variances not assumed	.08189608	.12709262
REGR factor score	2 for	Equal variances assumed	01039479	.11497346
analysis 1		Equal variances not assumed	01039479	.11911817
REGR factor score	3 for	Equal variances assumed	05999980	.11496540
analysis 1		Equal variances not assumed	05999980	.10192090
REGR factor score	4 for	Equal variances assumed	.11721815	.11494197
analysis 1		Equal variances not assumed	.11721815	.11897008

**Independent Samples Test** 

			T-test for Equa	ality of Means
			95% Confidence Interval of the Difference	
			Lower	Upper
REGR factor score analysis 1	1 for	Equal variances assumed	14356281	.30735497
		Equal variances not assumed	17086039	.33465255
REGR factor score	2 for	Equal variances assumed	23588357	.21509399
analysis 1		Equal variances not assumed	24725636	.22646678
REGR factor score	3 for	Equal variances assumed	28547276	.16547317
analysis 1		Equal variances not assumed	26257478	.14257518
REGR factor score	4 for	Equal variances assumed	10820887	.34264518
analysis 1		Equal variances not assumed	11934839	.35378469

T-TEST GROUPS=science(0 1) /MISSING=ANALYSIS /VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 /CRITERIA=CI(.95).

#### T-test

[DataSet1] F:\301109.sav

**Group Statistics** 

C. Calp Classics					
		science/technology	N	Mean	Std. Deviation
REGR factor score	1 for	no	1671	.0036039	1.00018814
analysis 1		yes	214	0281406	1.00042331
REGR factor score	2 for	no	1671	.0140475	.96777612
analysis 1		yes	214	1096889	1.21992295
REGR factor score	3 for	no	1671	.0032192	1.01011538
analysis 1		yes	214	0251369	.91899932
REGR factor score	4 for	no	1671	.0102132	.99897472
analysis 1		yes	214	0797492	1.00675497

**Group Statistics** 

		science/technology	Std. Error Mean
REGR factor score analysis 1	1 for	no	.02446772
		yes	.06838753
REGR factor score	2 for	no	.02367482
analysis 1		yes	.08339222
REGR factor score	3 for	no	.02471057
analysis 1		yes	.06282150
REGR factor score	4 for	no	.02443803
analysis 1		yes	.06882035

**Independent Samples Test** 

			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score	1 for	Equal variances assumed	.300	.584
analysis 1		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	7.932	.005
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	4.652	.031
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	.015	.904
analysis 1		Equal variances not assumed		

**Independent Samples Test** 

masponaem campios root					
			T-test for Equality of Means		
			t	df	Sig. (2-tailed)
REGR factor score	1 for	Equal variances assumed	.437	1883	.662
analysis 1		Equal variances not assumed	.437	270.456	.662
REGR factor score	2 for	Equal variances assumed	1.705	1883	.088
analysis 1		Equal variances not assumed	1.427	248.512	.155
REGR factor score	3 for	Equal variances assumed	.390	1883	.696
analysis 1		Equal variances not assumed	.420	283.145	.675
REGR factor score	4 for	Equal variances assumed	1.239	1883	.215
analysis 1		Equal variances not assumed	1.232	269.557	.219

**Independent Samples Test** 

			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score	1 for	Equal variances assumed	.03174451	.07261959	
analysis 1		Equal variances not assumed	.03174451	.07263280	
REGR factor score	2 for	Equal variances assumed	.12373642	.07256728	
analysis 1		Equal variances not assumed	.12373642	.08668771	
REGR factor score	3 for	Equal variances assumed	.02835610	.07262034	
analysis 1		Equal variances not assumed	.02835610	.06750669	
REGR factor score	4 for	Equal variances assumed	.08996249	.07259368	
analysis 1		Equal variances not assumed	.08996249	.07303053	

independent Samples Test					
			T-test for Equ	ality of Means	
			95% Confidenc Differ		
			Lower	Upper	
REGR factor score analysis 1	1 for	Equal variances assumed	11067882	.17416785	
		Equal variances not assumed	11125306	.17474209	
REGR factor score	2 for	Equal variances assumed	01858430	.26605715	
analysis 1		Equal variances not assumed	04699985	.29447270	
REGR factor score	3 for	Equal variances assumed	11406869	.17078090	
analysis 1		Equal variances not assumed	10452255	.16123476	
REGR factor score	4 for	Equal variances assumed	05241002	.23233501	
analysis 1		Equal variances not assumed	05382028	.23374526	

T-TEST GROUPS=teamsport(0 1)
/MISSING=ANALYSIS
/VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1
/CRITERIA=CI(.95)

# T-test

[DataSet1] F:\301109.sav

**Group Statistics** 

	sports team	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score 1 for	no	1725	0077232	1.00382775	.02416933
analysis 1	yes	160	.0832655	.95681754	.07564307
REGR factor score 2 for	no	1725	.0024507	1.01282881	.02438605
analysis 1	yes	160	0264215	.85178491	.06733951
REGR factor score 3 for	no	1725	0018502	.99936863	.02406197
analysis 1	yes	160	.0199477	1.00972231	.07982556
REGR factor score 4 for	no	1725	.0123699	.99643831	.02399142
analysis 1	yes	160	1333633	1.03142199	.08154107

**Independent Samples Test** 

		Levene's Test for Equality of Variances	
		F	Sig.
REGR factor score 1 fo	or Equal variances assumed	.070	.792
analysis 1	Equal variances not assumed		
REGR factor score 2 fo	or Equal variances assumed	.098	.754
analysis 1	Equal variances not assumed		
REGR factor score 3 fo	or Equal variances assumed	.320	.571
analysis 1	Equal variances not assumed		
REGR factor score 4 fo	or Equal variances assumed	.147	.701
analysis 1	Equal variances not assumed		

**Independent Samples Test** 

		T-test for Equality of Means		
		t	df	Sig. (2-tailed)
REGR factor score 1 for	Equal variances assumed	-1.101	1883	.271
analysis 1	Equal variances not assumed	-1.146	192.937	.253
REGR factor score 2 for	Equal variances assumed	.349	1883	.727
analysis 1	Equal variances not assumed	.403	203.116	.687
REGR factor score 3 for	Equal variances assumed	264	1883	.792
analysis 1	Equal variances not assumed	261	189.063	.794
REGR factor score 4 for	Equal variances assumed	1.764	1883	.078
analysis 1	Equal variances not assumed	1.715	187.591	.088

			T-test for Equality of Means	
			Mean Difference	Std. Error Difference
REGR factor score	1 for	Equal variances assumed	09098863	.08263740
analysis 1		Equal variances not assumed	09098863	.07941052
REGR factor score	2 for	Equal variances assumed	.02887215	.08266132
analysis 1		Equal variances not assumed	.02887215	.07161906
REGR factor score	3 for	Equal variances assumed	02179792	.08266248
analysis 1		Equal variances not assumed	02179792	.08337324
REGR factor score	4 for	Equal variances assumed	.14573319	.08259575
analysis 1		Equal variances not assumed	.14573319	.08499726

-				ality of Means
			95% Confidence Interval of the Difference	
			Lower	Upper
REGR factor score analysis 1	1 for	Equal variances assumed	25305914	.07108188
		Equal variances not assumed	24761283	.06563557
REGR factor score	2 for	Equal variances assumed	13324527	.19098958
analysis 1		Equal variances not assumed	11234001	.17008431
REGR factor score	3 for	Equal variances assumed	18391760	.14032176
analysis 1		Equal variances not assumed	18625922	.14266338
REGR factor score	4 for	Equal variances assumed	01625563	.30772202
analysis 1		Equal variances not assumed	02194010	.31340648

T-TEST GROUPS=tennis(0 1) /MISSING=ANALYSIS /VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 /CRITERIA=CI(.95).

#### T-test

 $[DataSet1] \ F: \backslash 301109.sav$ 

**Group Statistics** 

		tennis	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score	1 for	no	1706	.0121137	1.00305715	.02428489
analysis 1		yes	179	1154527	.96547968	.07216334
REGR factor score	2 for	no	1706	0017978	1.00056975	.02422467
analysis 1		yes	179	.0171345	.99718291	.07453295
REGR factor score	3 for	no	1706	.0098005	.99388455	.02406281
analysis 1		yes	179	0934056	1.05485597	.07884364
REGR factor score	4 for	no	1706	.0230046	.99828885	.02416945
analysis 1		yes	179	2192509	.99245041	.07417923

**Independent Samples Test** 

			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score	1 for	Equal variances assumed	.085	.771
analysis 1		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	.047	.829
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	.437	.509
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	.130	.719
analysis 1		Equal variances not assumed		

			T-test for Equality of Means		
			t	df	Sig. (2-tailed)
REGR factor score	1 for	Equal variances assumed	1.624	1883	.104
analysis 1		Equal variances not assumed	1.675	220.305	.095
REGR factor score analysis 1	2 for	Equal variances assumed	241	1883	.810
		Equal variances not assumed	242	217.340	.809
REGR factor score	3 for	Equal variances assumed	1.314	1883	.189
analysis 1		Equal variances not assumed	1.252	212.511	.212
REGR factor score	4 for	Equal variances assumed	3.090	1883	.002
analysis 1		Equal variances not assumed	3.105	217.544	.002

			T-test for Equa	ality of Means
			Mean Difference	Std. Error Difference
REGR factor score	1 for	Equal variances assumed	.12756646	.07853276
analysis 1		Equal variances not assumed	.12756646	.07614003
REGR factor score	2 for	Equal variances assumed	01893233	.07858655
analysis 1		Equal variances not assumed	01893233	.07837088
REGR factor score	3 for	Equal variances assumed	.10320602	.07855177
analysis 1		Equal variances not assumed	.10320602	.08243384
REGR factor score	4 for	Equal variances assumed	.24225548	.07838922
analysis 1		Equal variances not assumed	.24225548	.07801743

**Independent Samples Test** 

				T-test for Equality of Means		
			95% Confidence Interval of the Difference			
			Lower	Upper		
REGR factor score analysis 1	1 for	Equal variances assumed	02645393	.28158684		
		Equal variances not assumed	02248958	.27762250		
REGR factor score	2 for	Equal variances assumed	17305821	.13519356		
analysis 1		Equal variances not assumed	17339656	.13553190		
REGR factor score	3 for	Equal variances assumed	05085163	.25726368		
analysis 1		Equal variances not assumed	05928672	.26569877		
REGR factor score	4 for	Equal variances assumed	.08851662	.39599435		
analysis 1		Equal variances not assumed	.08848869	.39602228		

T-TEST GROUPS=ntprops(0 1) /MISSING=ANALYSIS /VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 /CRITERIA=CI(.95).

# T-test

 $[DataSet1] \ F: \backslash 301109.sav$ 

# **Group Statistics**

		nat trust properties	N	Mean	Std. Deviation
REGR factor score	1 for	no	1358	.0020987	1.00126867
analysis 1		yes	527	0054080	.99765243
REGR factor score analysis 1	2 for	no	1358	0106052	1.00657010
		yes	527	.0273281	.98328605
REGR factor score	3 for	no	1358	0192648	1.01656204
analysis 1		yes	527	.0496426	.95514979
REGR factor score	4 for	no	1358	.0130083	1.01270292
analysis 1		yes	527	0335205	.96663283

**Group Statistics** 

		nat trust properties	Std. Error Mean
REGR factor score	1 for	no	.02717069
analysis 1		yes	.04345842
REGR factor score	2 for	no	.02731456
analysis 1		yes	.04283261
REGR factor score	3 for	no	.02758570
analysis 1		yes	.04160698
REGR factor score	4 for	no	.02748098
analysis 1		yes	.04210719

		Levene's Test for Equality of Variances	
		F	Sig.
REGR factor score 1	for Equal variances assumed	.043	.835
analysis 1	Equal variances not assumed		
REGR factor score 2	for Equal variances assumed	1.465	.226
analysis 1	Equal variances not assumed		
REGR factor score 3	for Equal variances assumed	1.151	.283
analysis 1	Equal variances not assumed		
REGR factor score 4	for Equal variances assumed	.441	.507
analysis 1	Equal variances not assumed		

**Independent Samples Test** 

			T-test for Equality of Means		
			t	df	Sig. (2-tailed)
REGR factor score	1 for	Equal variances assumed	.146	1883	.884
analysis 1		Equal variances not assumed	.146	960.687	.884
REGR factor score analysis 1	2 for	Equal variances assumed	739	1883	.460
		Equal variances not assumed	747	978.103	.455
REGR factor score	3 for	Equal variances assumed	-1.343	1883	.179
analysis 1		Equal variances not assumed	-1.380	1014.117	.168
REGR factor score	4 for	Equal variances assumed	.907	1883	.365
analysis 1		Equal variances not assumed	.925	999.251	.355

**Independent Samples Test** 

		maspenasin sampies iss			
			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score	1 for	Equal variances assumed	.00750662	.05133497	
analysis 1		Equal variances not assumed	.00750662	.05125311	
REGR factor score	2 for	Equal variances assumed	03793333	.05132782	
analysis 1		Equal variances not assumed	03793333	.05080076	
REGR factor score	3 for	Equal variances assumed	06890748	.05131069	
analysis 1		Equal variances not assumed	06890748	.04992105	
REGR factor score	4 for	Equal variances assumed	.04652884	.05132406	
analysis 1		Equal variances not assumed	.04652884	.05028140	

				ality of Means
			95% Confidence Interval of the Difference	
			Lower	Upper
REGR factor score analysis 1	1 for	Equal variances assumed	09317279	.10818602
		Equal variances not assumed	09307435	.10808758
REGR factor score	2 for	Equal variances assumed	13859871	.06273205
analysis 1		Equal variances not assumed	13762436	.06175770
REGR factor score	3 for	Equal variances assumed	16953928	.03172432
analysis 1		Equal variances not assumed	16686786	.02905290
REGR factor score	4 for	Equal variances assumed	05412918	.14718685
analysis 1		Equal variances not assumed	05214041	.14519808

T-TEST GROUPS=wildlife(0 1) /MISSING=ANALYSIS /VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 /CRITERIA=CI(.95).

#### T-test

[DataSet1] F:\301109.sav

#### **Group Statistics**

		wildlife/environment	N	Mean	Std. Deviation
REGR factor score	1 for	no	1383	0069508	1.00360402
analysis 1		yes	502	.0191494	.99074523
REGR factor score analysis 1	2 for	no	1383	0151506	1.02276389
		yes	502	.0417397	.93413042
REGR factor score	3 for	no	1383	0115314	1.02194092
analysis 1		yes	502	.0317688	.93714589
REGR factor score	4 for	no	1383	.0005045	1.01255115
analysis 1		yes	502	0013898	.96556438

**Group Statistics** 

		wildlife/environment	Std. Error Mean
REGR factor score	1 for	no	.02698679
analysis 1		yes	.04421912
REGR factor score	2 for	no	.02750200
analysis 1		yes	.04169228
REGR factor score	3 for	no	.02747987
analysis 1		yes	.04182687
REGR factor score	4 for	no	.02722738
analysis 1		yes	.04309525

**Independent Samples Test** 

			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score analysis 1	1 for	Equal variances assumed	.013	.909
		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	4.866	.028
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	3.215	.073
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	2.235	.135
analysis 1		Equal variances not assumed		

			T-test for Equality of Means		
			t	df	Sig. (2-tailed)
REGR factor score	1 for	Equal variances assumed	501	1883	.617
analysis 1		Equal variances not assumed	504	898.522	.615
REGR factor score 2 analysis 1	2 for	Equal variances assumed	-1.092	1883	.275
		Equal variances not assumed	-1.139	965.581	.255
REGR factor score analysis 1	3 for	Equal variances assumed	831	1883	.406
		Equal variances not assumed	865	961.876	.387
REGR factor score	4 for	Equal variances assumed	.036	1883	.971
analysis 1		Equal variances not assumed	.037	927.232	.970

madpondoni dampido roci					
			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score analysis 1	1 for	Equal variances assumed	02610019	.05211696	
		Equal variances not assumed	02610019	.05180365	
REGR factor score	2 for	Equal variances assumed	05689038	.05210394	
analysis 1		Equal variances not assumed	05689038	.04994603	
REGR factor score	3 for	Equal variances assumed	04330026	.05211088	
analysis 1	E	Equal variances not assumed	04330026	.05004628	
REGR factor score	4 for	Equal variances assumed	.00189430	.05212042	
analysis 1		Equal variances not assumed	.00189430	.05097579	

**Independent Samples Test** 

			T-test for Equ	ality of Means
			95% Confidence Interval of the Difference	
			Lower	Upper
REGR factor score analysis 1	1 for	Equal variances assumed	12831326	.07611288
		Equal variances not assumed	12777042	.07557005
REGR factor score	2 for	Equal variances assumed	15907791	.04529715
analysis 1		Equal variances not assumed	15490567	.04112491
REGR factor score	3 for	Equal variances assumed	14550140	.05890088
analysis 1		Equal variances not assumed	14151275	.05491223
REGR factor score	4 for	Equal variances assumed	10032554	.10411415
analysis 1		Equal variances not assumed	09814698	.10193559

T-TEST GROUPS=wine(0 1) /MISSING=ANALYSIS /VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 /CRITERIA=CI(.95).

# T-test

[DataSet1] F:\301109.sav

**Group Statistics** 

Croup Granding						
	wines	N	Mean	Std. Deviation	Std. Error Mean	
REGR factor score 1 for	No	1028	0835156	1.02474539	.03196093	
analysis 1	Yes	857	.1001797	.96053743	.03281133	
REGR factor score 2 for	No	1028	0688199	1.14961334	.03585545	
analysis 1	Yes	857	.0825517	.77640182	.02652138	
REGR factor score 3 for	No	1028	0376546	1.03921388	.03241219	
analysis 1	Yes	857	.0451680	.94946460	.03243309	
REGR factor score 4 for	No	1028	.1203791	.94573688	.02949672	
analysis 1	Yes	857	1443987	1.04382154	.03565626	

		Levene's Test for Equality of Variances	
		F	Sig.
REGR factor score 1	for Equal variances assumed	1.777	.183
analysis 1	Equal variances not assumed		
REGR factor score 2	for Equal variances assumed	32.077	.000
analysis 1	Equal variances not assumed		
REGR factor score 3	for Equal variances assumed	4.426	.036
analysis 1	Equal variances not assumed		
REGR factor score 4	for Equal variances assumed	10.906	.001
analysis 1	Equal variances not assumed		

**Independent Samples Test** 

		T-test for Equality of Means		
		t	df	Sig. (2-tailed)
REGR factor score 1 for	Equal variances assumed	-3.987	1883	.000
analysis 1	Equal variances not assumed	-4.010	1857.334	.000
REGR factor score 2 for	Equal variances assumed	-3.281	1883	.001
analysis 1	Equal variances not assumed	-3.394	1808.650	.001
REGR factor score 3 for	Equal variances assumed	-1.792	1883	.073
analysis 1	Equal variances not assumed	-1.806	1867.252	.071
REGR factor score 4 for	Equal variances assumed	5.773	1883	.000
analysis 1	Equal variances not assumed	5.722	1746.675	.000

**Independent Samples Test** 

maspernasin samples tool					
			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score analysis 1	1 for	Equal variances assumed	18369526	.04607429	
		Equal variances not assumed	18369526	.04580485	
REGR factor score	2 for	Equal variances assumed	15137163	.04613666	
analysis 1		Equal variances not assumed	15137163	.04459818	
REGR factor score	3 for	Equal variances assumed	08282264	.04622896	
analysis 1	E	Equal variances not assumed	08282264	.04585254	
REGR factor score	4 for	Equal variances assumed	.26477785	.04586424	
analysis 1		Equal variances not assumed	.26477785	.04627554	

**Independent Samples Test** 

maoponaoni campico rect						
			T-test for Equality of Means			
			95% Confidence Interval of the Difference			
			Lower	Upper		
REGR factor score analysis 1	1 for	Equal variances assumed	27405728	09333323		
		Equal variances not assumed	27352966	09386085		
REGR factor score	2 for	Equal variances assumed	24185599	06088728		
analysis 1		Equal variances not assumed	23884099	06390228		
REGR factor score	3 for	Equal variances assumed	17348803	.00784274		
analysis 1		Equal variances not assumed	17275027	.00710498		
REGR factor score	4 for	Equal variances assumed	.17482778	.35472792		
analysis 1		Equal variances not assumed	.17401656	.35553914		

#### T-test

**Group Statistics** 

Group Statistics							
		other	N	Mean	Std. Deviation	Std. Error Mean	
REGR factor score	1 for	no	1682	.0020027	.98833359	.02409853	
analysis 1		yes	203	0165939	1.09438492	.07681076	
REGR factor score	2 for	no	1682	0046660	1.01597209	.02477244	
analysis 1		yes	203	.0386616	.85750315	.06018492	
REGR factor score	3 for	no	1682	0282966	1.00521140	.02451006	
analysis 1		yes	203	.2344575	.92524511	.06493948	
REGR factor score	4 for	no	1682	.0082009	1.00233511	.02443993	
analysis 1		yes	203	0679505	.98022469	.06879829	

pro-i-a-i					
			Levene's Test for Equality of Variances		
			F	Sig.	
REGR factor score	1 for	Equal variances assumed	4.372	.037	
analysis 1		Equal variances not assumed			
REGR factor score	2 for	Equal variances assumed	3.945	.047	
analysis 1		Equal variances not assumed			
REGR factor score	3 for	Equal variances assumed	1.758	.185	
analysis 1		Equal variances not assumed			
REGR factor score	4 for	Equal variances assumed	.067	.796	
analysis 1		Equal variances not assumed			

**Independent Samples Test** 

macpointain cumpies root					
			T-test for Equality of Means		
			t	df	Sig. (2-tailed)
REGR factor score	1 for	Equal variances assumed	.250	1883	.802
analysis 1		Equal variances not assumed	.231	243.440	.818
REGR factor score	2 for	Equal variances assumed	583	1883	.560
analysis 1		Equal variances not assumed	666	275.294	.506
REGR factor score	3 for	Equal variances assumed	-3.547	1883	.000
analysis 1		Equal variances not assumed	-3.785	263.009	.000
REGR factor score	4 for	Equal variances assumed	1.025	1883	.306
analysis 1		Equal variances not assumed	1.043	255.711	.298

**Independent Samples Test** 

madpondoni dampido 1001					
			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score	1 for	Equal variances assumed	.01859663	.07431949	
analysis 1		Equal variances not assumed	.01859663	.08050238	
REGR factor score	2 for	Equal variances assumed	04332761	.07431402	
analysis 1		Equal variances not assumed	04332761	.06508378	
REGR factor score	3 for	Equal variances assumed	26275406	.07407365	
analysis 1		Equal variances not assumed	26275406	.06941094	
REGR factor score	4 for	Equal variances assumed	.07615146	.07430001	
analysis 1		Equal variances not assumed	.07615146	.07301037	

independent dampies rest					
			T-test for Equ	ality of Means	
			95% Confidence Interval of the Difference		
			Lower	Upper	
REGR factor score analysis 1	1 for	Equal variances assumed	12716059	.16435384	
		Equal variances not assumed	13997346	.17716671	
REGR factor score	2 for	Equal variances assumed	18907409	.10241888	
analysis 1		Equal variances not assumed	17145275	.08479754	
REGR factor score	3 for	Equal variances assumed	40802913	11747899	
analysis 1		Equal variances not assumed	39942591	12608220	
REGR factor score	4 for	Equal variances assumed	06956754	.22187046	
analysis 1		Equal variances not assumed	06762673	.21992965	

# **4.9**Correlations for Hours Spent watching Television per Week by factor Group

CORRELATIONS
/VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 tvtime
/PRINT=TWOTAIL NOSIG
/MISSING=PAIRWISE.

# Correlations

#### Correlations

Correlations						
		REGR factor	REGR factor	REGR factor		
		score 1 for	score 2 for	score 3 for		
		analysis 1	analysis 1	analysis 1		
REGR factor score 1 for	Pearson Correlation	1	.000	.000		
analysis 1	Sig. (2-tailed)		1.000	1.000		
	N	1885	1885	1885		
REGR factor score 2 for	Pearson Correlation	.000	1	.000		
analysis 1	Sig. (2-tailed)	1.000		1.000		
	N	1885	1885	1885		
REGR factor score 3 for	Pearson Correlation	.000	.000	1		
analysis 1	Sig. (2-tailed)	1.000	1.000			
	N	1885	1885	1885		
REGR factor score 4 for	Pearson Correlation	.000	.000	.000		
analysis 1	Sig. (2-tailed)	1.000	1.000	1.000		
	N	1885	1885	1885		
hours a week tv	Pearson Correlation	.087**	004	.016		
	Sig. (2-tailed)	.000	.869	.486		
	N	1883	1883	1883		

# Correlations

			REGR factor score 4 for analysis 1	hours a week tv
REGR factor score	1 for	Pearson Correlation	.000	.087
analysis 1		Sig. (2-tailed)	1.000	.000
		N	1885	1883
REGR factor score	2 for	Pearson Correlation	.000	004
analysis 1		Sig. (2-tailed)	1.000	.869
		N	1885	1883
REGR factor score	3 for	Pearson Correlation	.000	.016
analysis 1		Sig. (2-tailed)	1.000	.486
		N	1885	1883
REGR factor score	4 for	Pearson Correlation	1	.092**
analysis 1		Sig. (2-tailed)		.000
		N	1885	1883
hours a week tv		Pearson Correlation	.092**	1
		Sig. (2-tailed)	.000	
		N	1883	2221

# 4.10 T-tests to Establish Newspaper preferences by Factor Group

T-TEST GROUPS=dmailread(0 1)
/MISSING=ANALYSIS
/VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1
/CRITERIA=CI(.95).

#### T-test

**Group Statistics** 

Group diameter							
	daily mail	N	Mean	Std. Deviation	Std. Error Mean		
REGR factor score 1 for	no	1426	0546595	.98578832	.02610501		
analysis 1	yes	459	.1698136	1.02556730	.04786938		
REGR factor score 2 for	no	1426	0208106	1.03182034	.02732400		
analysis 1	yes	459	.0646534	.89190065	.04163036		
REGR factor score 3 for	no	1426	0040428	1.00743768	.02667832		
analysis 1	yes	459	.0125600	.97750694	.04562612		
REGR factor score 4 for	no	1426	0208222	1.00125074	.02651448		
analysis 1	yes	459	.0646895	.99441027	.04641510		

Independent Samples Test

independent Samples Test					
			Levene's Test for Equality of Variances		
			F	Sig.	
REGR factor score analysis 1	1 for	Equal variances assumed	2.016	.156	
		Equal variances not assumed			
REGR factor score	2 for	Equal variances assumed	3.320	.069	
analysis 1		Equal variances not assumed			
REGR factor score	3 for	Equal variances assumed	.071	.790	
analysis 1		Equal variances not assumed			
REGR factor score	4 for	Equal variances assumed	.104	.747	
analysis 1		Equal variances not assumed			

**Independent Samples Test** 

			T-test for Equality of Means		
			t	df	Sig. (2-tailed)
REGR factor score	1 for	Equal variances assumed	-4.201	1883	.000
analysis 1		Equal variances not assumed	-4.117	749.611	.000
REGR factor score	2 for	Equal variances assumed	-1.593	1883	.111
analysis 1		Equal variances not assumed	-1.716	884.826	.086
REGR factor score 3 analysis 1	3 for	Equal variances assumed	309	1883	.757
		Equal variances not assumed	314	794.848	.754
REGR factor score	4 for	Equal variances assumed	-1.594	1883	.111
analysis 1		Equal variances not assumed	-1.600	779.021	.110

**Independent Samples Test** 

			T-test for Equ	ality of Means
			Mean Difference	Std. Error Difference
REGR factor score	1 for	Equal variances assumed	22447311	.05342922
analysis 1		Equal variances not assumed	22447311	.05452476
REGR factor score	2 for	Equal variances assumed	08546395	.05364291
analysis 1		Equal variances not assumed	08546395	.04979646
REGR factor score	3 for	Equal variances assumed	01660283	.05367769
analysis 1		Equal variances not assumed	01660283	.05285334
REGR factor score	4 for	Equal variances assumed	08551167	.05364287
analysis 1		Equal variances not assumed	08551167	.05345445

			T-test for Equality of Means 95% Confidence Interval of the		
			Difference Lower Upper		
REGR factor score 1 for analysis 1	1 for	Equal variances assumed	32925981	11968641	
		Equal variances not assumed	33151250	11743372	
REGR factor score	2 for	Equal variances assumed	19066975	.01974185	
analysis 1		Equal variances not assumed	18319691	.01226902	
REGR factor score	3 for	Equal variances assumed	12187684	.08867118	
analysis 1		Equal variances not assumed	12035144	.08714579	
REGR factor score	4 for	Equal variances assumed	19071739	.01969405	
analysis 1	Equal variances not assumed		19044351	.01942016	

T-TEST GROUPS=inderead(0 1) /MISSING=ANALYSIS /VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 /CRITERIA=CI(.95).

#### T-test

[DataSet1] F:\301109.sav

**Group Statistics** 

		independent	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score	1 for	no	1767	.0100490	.99908821	.02376761
analysis 1		yes	118	1504791	1.00583150	.09259429
REGR factor score 2	2 for	no	1767	0023060	1.01475543	.02414032
analysis 1		yes	118	.0345309	.74735554	.06879965
REGR factor score	3 for	no	1767	0065334	1.00479042	.02390326
analysis 1		yes	118	.0978348	.92373655	.08503684
REGR factor score	4 for	no	1767	.0016867	1.00252573	.02384939
analysis 1		yes	118	0252572	.96515150	.08884940

Independent Samples Test

			Levene's Test for Equality of Variances		
			F	Sig.	
REGR factor score	1 for	Equal variances assumed	.361	.548	
analysis 1		Equal variances not assumed			
REGR factor score	2 for	Equal variances assumed	.590	.443	
analysis 1		Equal variances not assumed			
REGR factor score	3 for	Equal variances assumed	.430	.512	
analysis 1		Equal variances not assumed			
REGR factor score	4 for	Equal variances assumed	.622	.430	
analysis 1		Equal variances not assumed			

**Independent Samples Test** 

			T-test for Equality of Means		
			t	df	Sig. (2-tailed)
REGR factor score	1 for	Equal variances assumed	1.689	1883	.091
analysis 1		Equal variances not assumed	1.679	132.887	.095
REGR factor score	2 for	Equal variances assumed	387	1883	.699
analysis 1		Equal variances not assumed	505	147.434	.614
REGR factor score	3 for	Equal variances assumed	-1.098	1883	.272
analysis 1		Equal variances not assumed	-1.182	136.163	.239
REGR factor score	4 for	Equal variances assumed	.283	1883	.777
analysis 1		Equal variances not assumed	.293	134.421	.770

			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score	1 for	Equal variances assumed	.16052810	.09503485	
analysis 1		Equal variances not assumed	.16052810	.09559604	
REGR factor score	2 for	Equal variances assumed	03683691	.09510304	
analysis 1		Equal variances not assumed	03683691	.07291192	
REGR factor score	3 for	Equal variances assumed	10436820	.09507641	
analysis 1		Equal variances not assumed	10436820	.08833250	
REGR factor score	4 for	Equal variances assumed	.02694384	.09510480	
analysis 1		Equal variances not assumed	.02694384	.09199461	

**Independent Samples Test** 

			T-test for Equality of Means		
			95% Confidence Interval of the Difference		
			Lower	Upper	
REGR factor score 1 for analysis 1	1 for	1 for Equal variances assumed	02585660	.34691279	
	Equal variances not assumed	02855864	.34961483		
REGR factor score	2 for	Equal variances assumed	22335533	.14968151	
analysis 1		Equal variances not assumed	18092435	.10725053	
REGR factor score	3 for	Equal variances assumed	29083439	.08209800	
analysis 1		Equal variances not assumed	27904920	.07031281	
REGR factor score	4 for	Equal variances assumed	15957803	.21346571	
analysis 1		Equal variances not assumed	15500028	.20888796	

T-TEST GROUPS=mailsunread(0 1) /MISSING=ANALYSIS /VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 /CRITERIA=CI(.95).

# T-test

[DataSet1] F:\301109.sav

**Group Statistics** 

	mail on Sunday	N	Mean	Std. Deviation	Std. Error Mean		
REGR factor score 1 for	No	1593	0413848	.99129669	.02483681		
analysis 1	Yes	292	.2257741	1.01868794	.05961420		
REGR factor score 2 for	No	1593	0052312	1.00995124	.02530419		
analysis 1	Yes	292	.0285388	.94501075	.05530257		
REGR factor score 3 for	No	1593	.0055816	1.00623977	.02521120		
analysis 1	Yes	292	0304501	.96635889	.05655188		
REGR factor score 4 for	No	1593	.0021477	1.00113009	.02508318		
analysis 1	Yes	292	0117168	.99544031	.05825374		

			Levene's Test for Equality of Variances		
			F	Sig.	
REGR factor score	1 for	Equal variances assumed	.694	.405	
analysis 1		Equal variances not assumed			
REGR factor score	2 for	Equal variances assumed	.343	.558	
analysis 1		Equal variances not assumed			
REGR factor score	3 for	Equal variances assumed	.361	.548	
analysis 1		Equal variances not assumed			
REGR factor score	4 for	Equal variances assumed	.134	.715	
analysis 1		Equal variances not assumed			

**Independent Samples Test** 

			T-test for Equality of Means			
			t	df	Sig. (2-tailed)	
REGR factor score	1 for	Equal variances assumed	-4.215	1883	.000	
analysis 1		Equal variances not assumed	-4.137	398.594	.000	
REGR factor score	2 for	Equal variances assumed	530	1883	.596	
analysis 1		Equal variances not assumed	555	422.220	.579	
REGR factor score	3 for	Equal variances assumed	.566	1883	.572	
analysis 1		Equal variances not assumed	.582	415.165	.561	
REGR factor score 4	4 for	Equal variances assumed	.218	1883	.828	
analysis 1		Equal variances not assumed	.219	406.354	.827	

**Independent Samples Test** 

macponacin campico reci					
			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score	1 for	Equal variances assumed	26715892	.06337706	
analysis 1		Equal variances not assumed	26715892	.06458111	
REGR factor score	2 for	Equal variances assumed	03377002	.06367064	
analysis 1		Equal variances not assumed	03377002	.06081675	
REGR factor score	3 for	Equal variances assumed	.03603169	.06366998	
analysis 1		Equal variances not assumed	.03603169	.06191704	
REGR factor score	4 for	Equal variances assumed	.01386450	.06367459	
analysis 1		Equal variances not assumed	.01386450	.06342447	

			T-test for Equality of Means		
			95% Confidence Interval of the Difference		
			Lower	Upper	
REGR factor score 1 for analysis 1	1 for	Equal variances assumed	39145557	14286227	
	Equal variances not assumed	39412108	14019675		
REGR factor score	2 for	Equal variances assumed	15864245	.09110240	
analysis 1		Equal variances not assumed	15331132	.08577128	
REGR factor score	3 for	Equal variances assumed	08883945	.16090283	
analysis 1		Equal variances not assumed	08567829	.15774167	
REGR factor score	4 for	Equal variances assumed	11101568	.13874468	
analysis 1		Equal variances not assumed	11081654	.13854554	

T-TEST GROUPS=mirrorread(0 1)
/MISSING=ANALYSIS
/VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1
/CRITERIA=CI(.95).

#### T-test

[DataSet1] F:\301109.sav

**Group Statistics** 

Group Glationos						
		mirror	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score 1	for	no	1794	0007642	1.00187521	.02365388
analysis 1		yes	91	.0150651	.96751396	.10142302
REGR factor score 2	for	no	1794	0019446	.99672544	.02353230
analysis 1		yes	91	.0383356	1.06761853	.11191683
REGR factor score 3	for	no	1794	.0045457	.99147241	.02340828
analysis 1		yes	91	0896153	1.15797554	.12138882
REGR factor score 4	for	no	1794	0088978	1.00251578	.02366900
analysis 1		yes	91	.1754129	.93704603	.09822911

**Independent Samples Test** 

				_
			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score	1 for	Equal variances assumed	.000	.991
analysis 1		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	.260	.611
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	5.133	.024
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	1.935	.164
analysis 1		Equal variances not assumed		

**Independent Samples Test** 

			T-te	T-test for Equality of Means		
			t	df	Sig. (2-tailed)	
REGR factor score	1 for	Equal variances assumed	147	1883	.883	
analysis 1		Equal variances not assumed	152	100.042	.879	
REGR factor score 2 for analysis 1	2 for	Equal variances assumed	375	1883	.708	
		Equal variances not assumed	352	98.124	.725	
REGR factor score 3 analysis 1	3 for	Equal variances assumed	.876	1883	.381	
		Equal variances not assumed	.762	96.811	.448	
REGR factor score	4 for	Equal variances assumed	-1.716	1883	.086	
analysis 1		Equal variances not assumed	-1.824	100.737	.071	

-			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score	1 for	Equal variances assumed	01582927	.10748220	
analysis 1		Equal variances not assumed	01582927	.10414478	
REGR factor score	2 for	Equal variances assumed	04028011	.10747881	
analysis 1		Equal variances not assumed	04028011	.11436409	
REGR factor score	3 for	Equal variances assumed	.09416100	.10746091	
analysis 1		Equal variances not assumed	.09416100	.12362521	
REGR factor score	4 for	Equal variances assumed	18431068	.10739886	
analysis 1		Equal variances not assumed	18431068	.10104049	

		macken and cambine in		
			T-test for Equa	ality of Means
			95% Confidence Interval of the Difference	
				Upper
REGR factor score analysis 1	1 for	Equal variances assumed	22662600	.19496747
		Equal variances not assumed	22244849	.19078995
REGR factor score	2 for	Equal variances assumed	25107020	.17050998
analysis 1		Equal variances not assumed	26722834	.18666812
REGR factor score	3 for	Equal variances assumed	11659399	.30491599
analysis 1		Equal variances not assumed	15120686	.33952887
REGR factor score	4 for	Equal variances assumed	39494398	.02632261
analysis 1		Equal variances not assumed	38475418	.01613281

T-TEST GROUPS=suntimread(0 1) /MISSING=ANALYSIS /VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 /CRITERIA=CI(.95).

#### T-test

 $[DataSet1] \; F: \backslash 301109.sav$ 

**Group Statistics** 

		Sunday times	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score	1 for	no	1525	.0130480	.99544723	.02549079
analysis 1		yes	360	0552726	1.01860931	.05368542
REGR factor score	2 for	no	1525	0156428	1.00510999	.02573823
analysis 1	analysis 1	yes	360	.0662645	.97665086	.05147402
REGR factor score	3 for	no	1525	0001483	1.01278460	.02593476
analysis 1	yes	360	.0006283	.94527599	.04982042	
REGR factor score	4 for	no	1525	.0226636	1.01086076	.02588549
analysis 1		yes	360	0960055	.94797130	.04996247

**Independent Samples Test** 

macponatin dampido rodi				
			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score	1 for	Equal variances assumed	1.735	.188
analysis 1		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	2.504	.114
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	3.830	.050
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	2.005	.157
analysis 1		Equal variances not assumed		
		·		

macpenaent campies rest						
			T-te:	T-test for Equality of Means		
			t	df	Sig. (2-tailed)	
REGR factor score	1 for	Equal variances assumed	1.166	1883	.244	
analysis 1		Equal variances not assumed	1.150	532.743	.251	
REGR factor score	2 for	Equal variances assumed	-1.398	1883	.162	
analysis 1		Equal variances not assumed	-1.423	552.818	.155	
REGR factor score	3 for	Equal variances assumed	013	1883	.989	
analysis 1		Equal variances not assumed	014	570.071	.989	
REGR factor score	4 for	Equal variances assumed	2.027	1883	.043	
analysis 1		Equal variances not assumed	2.109	567.957	.035	

			T-test for Equality of Means	
			Mean Difference	Std. Error Difference
REGR factor score	1 for	Equal variances assumed	.06832052	.05859061
analysis 1		Equal variances not assumed	.06832052	.05942983
REGR factor score	2 for	Equal variances assumed	08190723	.05858136
analysis 1		Equal variances not assumed	08190723	.05755025
REGR factor score	3 for	Equal variances assumed	00077663	.05861176
analysis 1		Equal variances not assumed	00077663	.05616659
REGR factor score	4 for	Equal variances assumed	.11866913	.05854793
analysis 1		Equal variances not assumed	.11866913	.05626995

**Independent Samples Test** 

		T-test for Equality of Means			
			95% Confidence Interval of the Difference		
			Lower	Upper	
REGR factor score analysis 1	1 for	Equal variances assumed	04658883	.18322988	
		Equal variances not assumed	04842504	.18506609	
REGR factor score	2 for	Equal variances assumed	19679844	.03298398	
analysis 1		Equal variances not assumed	19495114	.03113668	
REGR factor score	3 for	Equal variances assumed	11572746	.11417420	
analysis 1		Equal variances not assumed	11109534	.10954208	
REGR factor score	4 for	Equal variances assumed	.00384349	.23349478	
analysis 1		Equal variances not assumed	.00814653	.22919174	

T-TEST GROUPS=sunread(0 1)
/MISSING=ANALYSIS
/VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1
/CRITERIA=CI(.95).

# T-test

[DataSet1] F:\301109.sav

**Group Statistics** 

Group Statistics						
	Sun	N	Mean	Std. Deviation	Std. Error Mean	
REGR factor score 1 for	No	1718	0088566	1.00097644	.02414973	
analysis 1	Yes	167	.0911113	.98825691	.07647362	
REGR factor score 2 for	No	1718	.0047406	.97897523	.02361892	
analysis 1	Yes	167	0487688	1.19739747	.09265740	
REGR factor score 3 for	No	1718	.0131083	.99184236	.02392936	
analysis 1	Yes	167	1348504	1.07425248	.08312815	
REGR factor score 4 for	No	1718	0286339	1.00871514	.02433643	
analysis 1	Yes	167	.2945693	.85391532	.06607795	

**Independent Samples Test** 

		independent dampies res	•	
			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score	1 for	Equal variances assumed	.095	.758
analysis 1		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	3.317	.069
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	1.005	.316
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	9.279	.002
analysis 1		Equal variances not assumed		

		T-te	T-test for Equality of Means		
		t	df	Sig. (2-tailed)	
REGR factor score 1 for	Equal variances assumed	-1.233	1883	.218	
analysis 1	Equal variances not assumed	-1.247	200.567	.214	
REGR factor score 2 for	Equal variances assumed	.660	1883	.509	
analysis 1	Equal variances not assumed	.560	188.196	.576	
REGR factor score 3 for	Equal variances assumed	1.827	1883	.068	
analysis 1	Equal variances not assumed	1.710	194.522	.089	
REGR factor score 4 for	Equal variances assumed	-4.003	1883	.000	
analysis 1	Equal variances not assumed	-4.590	213.708	.000	

**Independent Samples Test** 

			T-test for Equality of Means		
				Std. Error	
			Mean Difference	Difference	
REGR factor score	1 for	Equal variances assumed	09996791	.08104491	
analysis 1		Equal variances not assumed	09996791	.08019616	
REGR factor score	2 for	Equal variances assumed	.05350940	.08106827	
analysis 1		Equal variances not assumed	.05350940	.09562033	
REGR factor score	3 for	Equal variances assumed	.14795864	.08100592	
analysis 1		Equal variances not assumed	.14795864	.08650378	
REGR factor score	4 for	Equal variances assumed	32320323	.08073481	
analysis 1		Equal variances not assumed	32320323	.07041703	

**Independent Samples Test** 

aoponaon oumpro root				
			T-test for Equ	ality of Means
			95% Confidence Interval of the Difference	
			Lower	Upper
REGR factor score analysis 1	1 for	Equal variances assumed	25891519	.05897937
		Equal variances not assumed	25810368	.05816787
REGR factor score	2 for	Equal variances assumed	10548369	.21250249
analysis 1		Equal variances not assumed	13511598	.24213478
REGR factor score	3 for	Equal variances assumed	01091217	.30682945
analysis 1		Equal variances not assumed	02264709	.31856436
REGR factor score	4 for	Equal variances assumed	48154233	16486413
analysis 1		Equal variances not assumed	46200410	18440235

T-TEST GROUPS=teleread(0 1)
/MISSING=ANALYSIS
/VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1
/CRITERIA=CI(.95).

#### T-test

 $[DataSet1] \; F: \backslash 301109.sav$ 

**Group Statistics** 

	telegraph	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score 1 for	No	1573	0160114	1.00515139	.02534353
analysis 1	Yes	312	.0807241	.97116951	.05498165
REGR factor score 2 for	No	1573	0196978	1.02576853	.02586336
analysis 1	Yes	312	.0993096	.85293615	.04828800
REGR factor score 3 for	No	1573	.0021818	1.00527777	.02534672
analysis 1	Yes	312	0110001	.97446111	.05516800
REGR factor score 4 for	No	1573	.0456260	.99065277	.02497797
analysis 1	Yes	312	2300309	1.01668798	.05755862

			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score	1 for	Equal variances assumed	.036	.850
analysis 1	Equal variances not assumed			
REGR factor score	2 for	Equal variances assumed	7.753	.005
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	.781	.377
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	.663	.416
analysis 1		Equal variances not assumed		

		T-te	T-test for Equality of Means		
		t	df	Sig. (2-tailed)	
REGR factor score 1 for	Equal variances assumed	-1.561	1883	.119	
analysis 1	Equal variances not assumed	-1.598	453.149	.111	
REGR factor score 2 for	Equal variances assumed	-1.922	1883	.055	
analysis 1	Equal variances not assumed	-2.173	506.779	.030	
REGR factor score 3 for	Equal variances assumed	.213	1883	.832	
analysis 1	Equal variances not assumed	.217	452.170	.828	
REGR factor score 4 for	Equal variances assumed	4.470	1883	.000	
analysis 1	Equal variances not assumed	4.393	436.104	.000	

**Independent Samples Test** 

independent Samples Test					
			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score	1 for	Equal variances assumed	09673555	.06195100	
analysis 1		Equal variances not assumed	09673555	.06054152	
REGR factor score	2 for	Equal variances assumed	11900733	.06193040	
analysis 1		Equal variances not assumed	11900733	.05477814	
REGR factor score	3 for	Equal variances assumed	.01318190	.06199035	
analysis 1		Equal variances not assumed	.01318190	.06071214	
REGR factor score	4 for	Equal variances assumed	.27565692	.06166475	
analysis 1		Equal variances not assumed	.27565692	.06274467	

**Independent Samples Test** 

madponaditi dampido 1001					
			T-test for Equ	ality of Means	
			95% Confidence Interval of the Difference		
			Lower	Upper	
REGR factor score analysis 1	1 for	Equal variances assumed	21823537	.02476428	
		Equal variances not assumed	21571253	.02224143	
REGR factor score	2 for	Equal variances assumed	24046675	.00245210	
analysis 1		Equal variances not assumed	22662753	01138712	
REGR factor score	3 for	Equal variances assumed	10839510	.13475890	
analysis 1		Equal variances not assumed	10613107	.13249487	
REGR factor score	4 for	Equal variances assumed	.15471849	.39659535	
analysis 1		Equal variances not assumed	.15233738	.39897646	

T-TEST GROUPS=timesread(0 1)
/MISSING=ANALYSIS
/VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1
/CRITERIA=CI(.95).

#### T-test

[DataSet1] F:\301109.sav

# **Group Statistics**

	Times	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score 1 for	or No	1582	.0283432	.99966579	.02513342
analysis 1	Yes	303	1479832	.99026770	.05688939
REGR factor score 2 for	or no	1582	.0079595	.98682714	.02481063
analysis 1	yes	303	0415574	1.06689302	.06129140
REGR factor score 3 for	or no	1582	0236550	.99996752	.02514101
analysis 1	yes	303	.1235059	.99268118	.05702804
REGR factor score 4 for	or no	1582	.0267706	.99621362	.02504663
analysis 1	yes	303	1397725	1.00971539	.05800663

**Independent Samples Test** 

independent dumples rest					
			Levene's Test for Equality of Variances		
			F	Sig.	
REGR factor score	1 for	Equal variances assumed	.005	.942	
analysis 1		Equal variances not assumed			
REGR factor score	2 for	Equal variances assumed	.001	.980	
analysis 1		Equal variances not assumed			
REGR factor score	3 for	Equal variances assumed	.653	.419	
analysis 1		Equal variances not assumed			
REGR factor score	4 for	Equal variances assumed	.053	.818	
analysis 1		Equal variances not assumed			

**Independent Samples Test** 

			T-test for Equality of Means		
			t	df	Sig. (2-tailed)
REGR factor score	1 for	Equal variances assumed	2.817	1883	.005
analysis 1		Equal variances not assumed	2.835	428.279	.005
REGR factor score	2 for	Equal variances assumed	.790	1883	.430
analysis 1		Equal variances not assumed	.749	406.994	.454
REGR factor score 3 for analysis 1	3 for	Equal variances assumed	-2.350	1883	.019
		Equal variances not assumed	-2.361	427.710	.019
REGR factor score	4 for	Equal variances assumed	2.660	1883	.008
analysis 1		Equal variances not assumed	2.636	422.304	.009

**Independent Samples Test** 

			T-test for Equa	ality of Means
			Mean Difference	Std. Error Difference
REGR factor score	1 for	Equal variances assumed	.17632642	.06259408
analysis 1		Equal variances not assumed	.17632642	.06219399
REGR factor score	2 for	Equal variances assumed	.04951691	.06271545
analysis 1		Equal variances not assumed	.04951691	.06612264
REGR factor score	3 for	Equal variances assumed	14716093	.06263409
analysis 1		Equal variances not assumed	14716093	.06232390
REGR factor score	4 for	Equal variances assumed	.16654303	.06260830
analysis 1		Equal variances not assumed	.16654303	.06318309

independent Samples Test					
			T-test for Equ	ality of Means	
			95% Confidence Interval of the Difference		
			Lower	Upper	
REGR factor score	1 for	Equal variances assumed	.05356537	.29908746	
analysis 1		Equal variances not assumed	.05408299	.29856985	
REGR factor score	2 for	Equal variances assumed	07348217	.17251600	
analysis 1		Equal variances not assumed	08046762	.17950145	
REGR factor score	3 for	Equal variances assumed	27000044	02432142	
analysis 1		Equal variances not assumed	26966016	02466170	
REGR factor score	4 for	Equal variances assumed	.04375408	.28933198	
analysis 1	Equal variances not assumed		.04235052	.29073554	

T-TEST GROUPS=localread(0 1) /MISSING=ANALYSIS /VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 /CRITERIA=CI(.95).

#### T-test

[DataSet1] F:\301109.sav

**Group Statistics** 

		Local	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score 1	for	No	1199	.0058485	.99360654	.02869491
analysis 1		Yes	686	0102220	1.01172475	.03862783
REGR factor score 2	for	No	1199	0020665	.99908247	.02885305
analysis 1		Yes	686	.0036118	1.00232090	.03826879
REGR factor score 3	for	No	1199	0190993	1.00197947	.02893672
analysis 1		Yes	686	.0333820	.99638080	.03804200
REGR factor score 4	for	No	1199	0063315	1.02667509	.02964991
analysis 1		Yes	686	.0110663	.95221751	.03635583

Independent Samples Test

_		macpenaem oampies res		_
			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score	1 for	Equal variances assumed	.582	.446
analysis 1		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	.609	.435
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	.320	.572
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	4.529	.033
analysis 1		Equal variances not assumed		

**Independent Samples Test** 

			T-test for Equality of Means		
			t	df	Sig. (2-tailed)
REGR factor score	1 for	Equal variances assumed	.336	1883	.737
analysis 1		Equal variances not assumed	.334	1404.975	.738
REGR factor score	2 for	Equal variances assumed	119	1883	.906
analysis 1		Equal variances not assumed	118	1422.331	.906
REGR factor score	3 for	Equal variances assumed	-1.096	1883	.273
analysis 1		Equal variances not assumed	-1.098	1432.738	.272
REGR factor score	4 for	Equal variances assumed	363	1883	.716
analysis 1		Equal variances not assumed	371	1515.820	.711

398

			T-test for Equa	ality of Means
			Mean Difference	Std. Error Difference
REGR factor score	1 for	Equal variances assumed	.01607048	.04788355
analysis 1	E	Equal variances not assumed	.01607048	.04811972
REGR factor score	2 for	Equal variances assumed	00567829	.04788480
analysis 1		Equal variances not assumed	00567829	.04792702
REGR factor score	3 for	Equal variances assumed	05248135	.04786971
analysis 1		Equal variances not assumed	05248135	.04779673
REGR factor score	4 for	Equal variances assumed	01739783	.04788330
analysis 1		Equal variances not assumed	01739783	.04691337

**Independent Samples Test** 

			T-test for Equ	ality of Means
			95% Confidence Interval of the Difference	
			Lower	Upper
REGR factor score	1 for	Equal variances assumed	07783992	.10998087
analysis 1		Equal variances not assumed	07832375	.11046471
REGR factor score	2 for	Equal variances assumed	09959114	.08823456
analysis 1		Equal variances not assumed	09969352	.08833694
REGR factor score	3 for	Equal variances assumed	14636459	.04140190
analysis 1		Equal variances not assumed	14624041	.04127772
REGR factor score	4 for	Equal variances assumed	11130774	.07651208
analysis 1		Equal variances not assumed	10941981	.07462416

T-TEST GROUPS=noneread(0 1) /MISSING=ANALYSIS /VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 /CRITERIA=CI(.95).

# T-test

 $[DataSet1] \; F: \backslash 301109.sav$ 

**Group Statistics** 

		no paper	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score	1 for	no	1550	.0294910	1.00109598	.02542786
analysis 1		yes	335	1364509	.98494266	.05381317
REGR factor score	2 for	no	1550	.0058259	.98521445	.02502447
analysis 1		yes	335	0269555	1.06688168	.05828997
REGR factor score	3 for	no	1550	.0001354	1.00556205	.02554130
analysis 1		yes	335	0006265	.97532535	.05328772
REGR factor score	4 for	no	1550	0246305	.99270119	.02521464
analysis 1		yes	335	.1139619	1.02693971	.05610771

**Independent Samples Test** 

			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score	1 for	Equal variances assumed	3.007	.083
analysis 1		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	.399	.527
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	.003	.955
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	.789	.374
analysis 1		Equal variances not assumed		

			T-test for Equality of Means		
			t	df	Sig. (2-tailed)
REGR factor score	1 for	Equal variances assumed	2.759	1883	.006
analysis 1		Equal variances not assumed	2.788	494.484	.006
REGR factor score	2 for	Equal variances assumed	.544	1883	.587
analysis 1		Equal variances not assumed	.517	465.057	.606
REGR factor score analysis 1	3 for	Equal variances assumed	.013	1883	.990
		Equal variances not assumed	.013	499.409	.990
REGR factor score	4 for	Equal variances assumed	-2.303	1883	.021
analysis 1		Equal variances not assumed	-2.253	478.324	.025

**Independent Samples Test** 

			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score	1 for	Equal variances assumed	.16594185	.06014599	
analysis 1		Equal variances not assumed	.16594185	.05951834	
REGR factor score	2 for	Equal variances assumed	.03278136	.06026270	
analysis 1		Equal variances not assumed	.03278136	.06343457	
REGR factor score	3 for	Equal variances assumed	.00076185	.06026743	
analysis 1		Equal variances not assumed	.00076185	.05909263	
REGR factor score	4 for	Equal variances assumed	13859234	.06018275	
analysis 1		Equal variances not assumed	13859234	.06151303	

**Independent Samples Test** 

			T-test for Equa	ality of Means	
			95% Confidence Interval of the Difference		
			Lower	Upper	
REGR factor score analysis 1	1 for	Equal variances assumed	.04798206	.28390165	
		Equal variances not assumed	.04900182	.28288189	
REGR factor score	2 for	Equal variances assumed	08540733	.15097006	
analysis 1		Equal variances not assumed	09187253	.15743525	
REGR factor score	3 for	Equal variances assumed	11743613	.11895982	
analysis 1		Equal variances not assumed	11533895	.11686264	
REGR factor score	4 for	Equal variances assumed	25662423	02056046	
analysis 1		Equal variances not assumed	25946151	01772318	

T-TEST GROUPS=otherread(0 1) /MISSING=ANALYSIS /VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 /CRITERIA=CI(.95).

#### T-test

 $[DataSet1] \ F: \backslash 301109.sav$ 

**Group Statistics** 

		other paper	N	Mean	Std. Deviation	Std. Error Mean
REGR factor score	1 for	No	1535	.0211791	.98848371	.02522989
analysis 1		Yes	350	0928853	1.04541613	.05587984
REGR factor score	2 for	No	1535	.0086679	1.00402269	.02562650
analysis 1		Yes	350	0380150	.98267579	.05252623
REGR factor score	3 for	No	1535	0142387	1.01892602	.02600689
analysis 1		Yes	350	.0624470	.91110535	.04870063
REGR factor score analysis 1	4 for	No	1535	.0399889	.99498627	.02539586
		Yes	350	1753800	1.00446507	.05369092

			Levene's Test for Equality of Variances	
			F	Sig.
REGR factor score analysis 1	1 for	Equal variances assumed	4.314	.038
		Equal variances not assumed		
REGR factor score	2 for	Equal variances assumed	.000	.998
analysis 1		Equal variances not assumed		
REGR factor score	3 for	Equal variances assumed	4.885	.027
analysis 1		Equal variances not assumed		
REGR factor score	4 for	Equal variances assumed	.096	.756
analysis 1		Equal variances not assumed		

		T-test for Equality of Means			
		t	df	Sig. (2-tailed)	
REGR factor score 1 for	Equal variances assumed	1.927	1883	.054	
analysis 1	Equal variances not assumed	1.860	501.056	.063	
REGR factor score 2 for	Equal variances assumed	.788	1883	.431	
analysis 1	Equal variances not assumed	.799	528.109	.425	
REGR factor score 3 for	Equal variances assumed	-1.295	1883	.196	
analysis 1	Equal variances not assumed	-1.389	565.961	.165	
REGR factor score 4 for	Equal variances assumed	3.648	1883	.000	
analysis 1	Equal variances not assumed	3.626	516.748	.000	

**Independent Samples Test** 

			T-test for Equality of Means		
			Mean Difference	Std. Error Difference	
REGR factor score analysis 1	1 for	Equal variances assumed	.11406434	.05919090	
		Equal variances not assumed	.11406434	.06131153	
REGR factor score	2 for	Equal variances assumed	.04668292	.05923947	
analysis 1		Equal variances not assumed	.04668292	.05844418	
REGR factor score	3 for	Equal variances assumed	07668576	.05922287	
analysis 1		Equal variances not assumed	07668576	.05520969	
REGR factor score	4 for	Equal variances assumed	.21536892	.05904099	
analysis 1		Equal variances not assumed	.21536892	.05939414	

**Independent Samples Test** 

maspernaem campico reci				
			T-test for Equa	ality of Means
			95% Confidence Interval of the Difference	
			Lower	Upper
REGR factor score 1 analysis 1	1 for	Equal variances assumed	00202230	.23015099
		Equal variances not assumed	00639502	.23452371
REGR factor score	2 for	Equal variances assumed	06949898	.16286483
analysis 1		Equal variances not assumed	06812870	.16149454
REGR factor score	3 for	Equal variances assumed	19283512	.03946360
analysis 1		Equal variances not assumed	18512666	.03175515
REGR factor score	4 for	Equal variances assumed	.09957626	.33116157
analysis 1		Equal variances not assumed	.09868524	.33205259

CORRELATIONS
/VARIABLES=FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 inex mid exp
/PRINT=TWOTAIL NOSIG
/MISSING=PAIRWISE.

# Correlations

 $[DataSet1] \ F: \backslash 301109.sav$ 

# Correlations

		REGR factor	REGR factor	REGR factor
		score 1 for	score 2 for	score 3 for
		analysis 1	analysis 1	analysis 1
REGR factor score 1 for	Pearson Correlation	1	.000	.000
analysis 1	Sig. (2-tailed)		1.000	1.000
	N	1885	1885	1885
REGR factor score 2 for	Pearson Correlation	.000	1	.000
analysis 1	Sig. (2-tailed)	1.000		1.000
	N	1885	1885	1885
REGR factor score 3 for	Pearson Correlation	.000	.000	1
analysis 1	Sig. (2-tailed)	1.000	1.000	
	N	1885	1885	1885
REGR factor score 4 for	Pearson Correlation	.000	.000	.000
analysis 1	Sig. (2-tailed)	1.000	1.000	1.000
	N	1885	1885	1885
cost inexp meal	Pearson Correlation	.007	.065	.036
	Sig. (2-tailed)	.777	.005	.118
	N	1885	1885	1885
cost mid meal	Pearson Correlation	076	.070	.046*
	Sig. (2-tailed)	.001	.002	.044
	N	1885	1885	1885
cost exp meal	Pearson Correlation	072	.066	.020
	Sig. (2-tailed)	.002	.004	.393
	N	1885	1885	1885

# Correlations

		REGR factor score 4 for	
		analysis 1	cost inexp meal
REGR factor score 1 fo	or Pearson Correlation	.000	.007
analysis 1	Sig. (2-tailed)	1.000	.777
	N	1885	1885
REGR factor score 2 for	or Pearson Correlation	.000	.065
analysis 1	Sig. (2-tailed)	1.000	.005
	N	1885	1885
REGR factor score 3 for	or Pearson Correlation	.000	.036
analysis 1	Sig. (2-tailed)	1.000	.118
	N	1885	1885
REGR factor score 4 for	or Pearson Correlation	1	113 <sup>^^</sup>
analysis 1	Sig. (2-tailed)		.000
	N	1885	1885
cost inexp meal	Pearson Correlation	113 <sup>***</sup>	1
	Sig. (2-tailed)	.000	
	N	1885	2226
cost mid meal	Pearson Correlation	140 <sup>**</sup>	.804**
	Sig. (2-tailed)	.000	.000
	N	1885	2226
cost exp meal	Pearson Correlation	118 <sup>^^</sup>	.531
	Sig. (2-tailed)	.000	.000
	N	1885	2226

### Correlations

			cost mid meal	cost exp meal
REGR factor score 1	1 for	Pearson Correlation	076 <sup>**</sup>	072**
analysis 1		Sig. (2-tailed)	.001	.002
		N	1885	1885
REGR factor score 2	2 for	Pearson Correlation	.070	.066
analysis 1		Sig. (2-tailed)	.002	.004
		N	1885	1885
REGR factor score 3	3 for	Pearson Correlation	.046	.020
analysis 1		Sig. (2-tailed)	.044	.393
		N	1885	1885
REGR factor score 4	4 for	Pearson Correlation	140 <sup>**</sup>	118**
analysis 1		Sig. (2-tailed)	.000	.000
		N	1885	1885
cost inexp meal		Pearson Correlation	.804**	.531**
		Sig. (2-tailed)	.000	.000
		N	2226	2226
cost mid meal		Pearson Correlation	1	.785
		Sig. (2-tailed)		.000
		N	2226	2226
cost exp meal		Pearson Correlation	.785	1
		Sig. (2-tailed)	.000	
		N	2226	2226

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).
\*. Correlation is significant at the 0.05 level (2-tailed).

# **4.11 ANOVA Tests to Understand Personality Traits by Factor Group**

ONEWAY FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 BY tasks /MISSING ANALYSIS /POSTHOC=TUKEY ALPHA(0.05).

#### Oneway

#### **ANOVA**

			Sum of Squares	df	Mean Square
REGR factor score	1 for	Between Groups	28.810	5	5.762
analysis 1		Within Groups	1855.190	1879	.987
		Total	1884.000	1884	
REGR factor score	2 for	Between Groups	20.889	5	4.178
analysis 1		Within Groups	1863.111	1879	.992
		Total	1884.000	1884	
REGR factor score	3 for	Between Groups	38.896	5	7.779
analysis 1		Within Groups	1845.104	1879	.982
		Total	1884.000	1884	
REGR factor score	4 for	Between Groups	6.949	5	1.390
analysis 1		Within Groups	1877.051	1879	.999
		Total	1884.000	1884	

# ANOVA

			F	Sig.
REGR factor score	1 for	Between Groups	5.836	.000
analysis 1		Within Groups		
		Total		
REGR factor score	2 for	Between Groups	4.213	.001
analysis 1		Within Groups		
		Total		
REGR factor score	3 for	Between Groups	7.922	.000
analysis 1		Within Groups	ļ	
		Total		
REGR factor score	4 for	Between Groups	1.391	.224
analysis 1		Within Groups		
		Total		

#### **Post Hoc Tests**

# **Multiple Comparisons**

Dependent Variable	(I) tasks	(J) tasks	Mean			95% Confide	ence Interval
	efficiently	efficiently	Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
REGR factor score 1	Strongly agree	Agree	.19797022	.04858655	.001	.0593696	.3365708
for analysis 1		Neutral	.27771627 <sup>*</sup>	.08855816	.021	.0250904	.5303421
		Disagree	.36375589	.28917869	.808	4611710	1.1886827
		Strongly disagree	69554130	.35321804	.361	-1.7031503	.3120677
		99	52932497	.40731027	.785	-1.6912404	.6325905
	Agree	Strongly agree	-	.04858655	.001	3365708	0593696
			.19797022*				
		Neutral	.07974605	.08665601	.941	1674536	.3269457

	_						
		Disagree	.16578567	.28860185	.993	6574957	.9890670
		Strongly	89351151	.35274594	.115	-1.8997738	.1127507
		disagree	70700540	40000004	47.4	4 0000400	400.4505
	Navitual	99	72729518	.40690094	.474	-1.8880429	.4334525
	Neutral	Strongly agree	- .27771627 <sup>*</sup>	.08855816	.021	5303421	0250904
		Agree	07974605	.08665601	.941	3269457	.1674536
		Disagree	.08603962	.29794785	1.000	7639026	.9359819
		Strongly	97325756	.36043251	.076	-2.0014469	.0549318
		disagree	.07020700	.50045251	.070	2.0014403	.0040010
		99	80704124	.41358224	.371	-1.9868484	.3727659
	Disagree	Strongly agree	36375589	.28917869	.808	-1.1886827	.4611710
	J	Agree	16578567	.28860185	.993	9890670	.6574957
		Neutral	08603962	.29794785	1.000	9359819	.7639026
		Strongly	_	.45353430	.180	-2.3530738	.2344794
		disagree	1.0592971 8				
	Ctus a sh :	99	89308086	.49682193	.468	-2.3103421	.5241804
	Strongly disagree	Strongly agree	.69554130	.35321804	.361	3120677	1.7031503
	a.	Agree	.89351151	.35274594	.115	1127507	1.8997738
		Neutral	.97325756	.36043251	.076	0549318	2.0014469
		Disagree	1.0592971 8	.45353430	.180	2344794	2.3530738
		99	.16621633	.53662902	1.000	-1.3646008	1.6970334
	99	Strongly agree	.52932497	.40731027	.785	6325905	1.6912404
		Agree	.72729518	.40690094	.474	4334525	1.8880429
		Neutral	.80704124	.41358224	.371	3727659	1.9868484
		Disagree	.89308086	.49682193	.468	5241804	2.3103421
		Strongly disagree	16621633	.53662902	1.000	-1.6970334	1.3646008
REGR factor score 2	Strongly agree	Agree	.09957607	.04869017	.317	0393202	.2384723
for analysis 1		Neutral	.39556888	.08874704	.000	.1424042	.6487335
		Disagree	.12484830	.28979545	.998	7018379	.9515345
		Strongly disagree	01002470	.35397138	1.000	-1.0197827	.9997333
		99	24128093	.40817898	.992	-1.4056745	.9231126
	Agree	Strongly agree	09957607	.04869017	.317	2384723	.0393202
		Neutral	.29599280 <sup>*</sup>	.08684083	.009	.0482659	.5437197
		Disagree	.02527223	.28921738	1.000	7997650	.8503094
		Strongly disagree	10960077	.35349828	1.000	-1.1180092	.8988076
		99	34085701	.40776877	.961	-1.5040804	.8223664
	Neutral	Strongly agree	-	.08874704	.000	6487335	1424042
		Agree	.39556888 <sup>*</sup> -	.08684083	.009	5437197	0482659
		•	.29599280 <sup>*</sup>				
		Disagree	27072057	.29858332	.945	-1.1224756	.5810344
		Strongly disagree	40559358	.36120124	.872	-1.4359759	.6247887
		99	63684981	.41446432	.641	-1.8191733	.5454737
	Disagree	Strongly agree	12484830	.28979545	.998	9515345	.7018379
		Agree	02527223	.28921738 .29858332	1.000	8503094	.7997650
		Neutral Strongly	.27072057 13487300	.45450159	.945 1.000	5810344 -1.4314090	1.1224756 1.1616630
		disagree			.978		
		00			u/8	-1.7864132	1.0541547
	Ctrongly	99 Strongly agree	36612923	.49788155			
	Strongly disagree	Strongly agree	.01002470	.35397138	1.000	9997333	1.0197827
	Strongly disagree	Strongly agree Agree	.01002470 .10960077	.35397138 .35349828	1.000 1.000	9997333 8988076	1.0197827 1.1180092
		Strongly agree	.01002470	.35397138	1.000	9997333	1.0197827
	disagree	Strongly agree Agree Neutral Disagree 99	.01002470 .10960077 .40559358	.35397138 .35349828 .36120124	1.000 1.000 .872	9997333 8988076 6247887	1.0197827 1.1180092 1.4359759
		Strongly agree Agree Neutral Disagree 99 Strongly agree	.01002470 .10960077 .40559358 .13487300 23125623 .24128093	.35397138 .35349828 .36120124 .45450159 .53777354 .40817898	1.000 1.000 .872 1.000 .998	9997333 8988076 6247887 -1.1616630 -1.7653383 9231126	1.0197827 1.1180092 1.4359759 1.4314090 1.3028258 1.4056745
	disagree	Strongly agree Agree Neutral Disagree 99 Strongly agree Agree	.01002470 .10960077 .40559358 .13487300 -23125623 .24128093 .34085701	.35397138 .35349828 .36120124 .45450159 .53777354 .40817898 .40776877	1.000 1.000 .872 1.000 .998 .992 .961	9997333 8988076 6247887 -1.1616630 -1.7653383 9231126 8223664	1.0197827 1.1180092 1.4359759 1.4314090 1.3028258 1.4056745 1.5040804
	disagree	Strongly agree Agree Neutral Disagree 99 Strongly agree Agree Neutral	.01002470 .10960077 .40559358 .13487300 -23125623 .24128093 .34085701 .63684981	.35397138 .35349828 .36120124 .45450159 .53777354 .40817898 .40776877 .41446432	1.000 1.000 .872 1.000 .998 .992 .961 .641	9997333 8988076 6247887 -1.1616630 -1.7653383 9231126 8223664 5454737	1.0197827 1.1180092 1.4359759 1.4314090 1.3028258 1.4056745 1.5040804 1.8191733
	disagree	Strongly agree Agree Neutral Disagree 99 Strongly agree Agree Neutral Disagree	.01002470 .10960077 .40559358 .13487300 -23125623 .24128093 .34085701 .63684981 .36612923	.35397138 .35349828 .36120124 .45450159 .53777354 .40817898 .40776877 .41446432 .49788155	1.000 1.000 .872 1.000 .998 .992 .961 .641	9997333 8988076 6247887 -1.1616630 -1.7653383 9231126 8223664 5454737 -1.0541547	1.0197827 1.1180092 1.4359759 1.4314090 1.3028258 1.4056745 1.5040804 1.8191733 1.7864132
	disagree  99	Strongly agree Agree Neutral Disagree 99 Strongly agree Agree Neutral Disagree Strongly disagree	.01002470 .10960077 .40559358 .13487300 23125623 .24128093 .34085701 .63684981 .36612923 .23125623	.35397138 .35349828 .36120124 .45450159 .53777354 .40817898 .40776877 .41446432 .49788155 .53777354	1.000 1.000 .872 1.000 .998 .992 .961 .641 .978 .998	9997333 8988076 6247887 -1.1616630 -1.7653383 9231126 8223664 5454737 -1.0541547 -1.3028258	1.0197827 1.1180092 1.4359759 1.4314090 1.3028258 1.4056745 1.5040804 1.8191733 1.7864132 1.7653383
REGR factor score 3 for analysis 1	disagree	Strongly agree Agree Neutral Disagree 99 Strongly agree Agree Neutral Disagree Strongly	.01002470 .10960077 .40559358 .13487300 -23125623 .24128093 .34085701 .63684981 .36612923	.35397138 .35349828 .36120124 .45450159 .53777354 .40817898 .40776877 .41446432 .49788155	1.000 1.000 .872 1.000 .998 .992 .961 .641 .978 .998	9997333 8988076 6247887 -1.1616630 -1.7653383 9231126 8223664 5454737 -1.0541547	1.0197827 1.1180092 1.4359759 1.4314090 1.3028258 1.4056745 1.5040804 1.8191733 1.7864132

Strongly agree			_					
Magree   Strongly agree   Strongly agr			-		.28839160	.996		.9647063
Martial   Mart				30615968	.35225665	.954	-1.3110262	.6987068
Neutral   Strongly agree   2.			9	04617260	40620466	1 000	1 2040266	1 1125702
Neutral   1,0075,005   1,005		Agree		04017309				1145563
Disagree   .1107/5501   .28781634   .999   .9.317955   .7102		, .g. 00	on ongry agree	.25277969 <sup>*</sup>	.0 10 10 10 1	.000	.0010001	
Strongly disagree   99			Neutral	.16076355	.08642015	.427	0857633	.4072904
Meutral   Strongly agree   .0883371   .00579344   .977   .1.4565418   .8586   .8654815   .1616   .1616   .8654815   .1616   .1616   .8654815   .1616   .1616   .8654815   .1616   .1616   .8654815   .1616   .1616   .8654815   .1616   .1616   .8654815   .1616   .1616   .8654815   .1616   .1616   .8654815   .1616   .1616   .8654815   .1616   .1616   .8654815   .1616   .1616   .1616   .8654815   .1616								.7102855
Neutral   Strongly agree   Agree   1477   1.4866418   8.898   1.6654815   1.61616				55893937	.35178584	.606	-1.5624628	.4445840
Neutral   Strongly agree			-	20005220	40570244	077	1 /565/10	.8586350
Agree		Neutral		29093339				1616050
Disagree   -27151855   -29713800   -943   -1.1191474   -5.767		Noutiai	Ottorigly agree	.41354324*	.00001710	.000	.000-010	.1010000
Strongly disagree   99			Agree	16076355	.08642015	.427	4072904	.0857633
Disagree			-					.5761103
Page				71970291	.35945149	.341	-1.7450938	.3056879
Disagree			-	- 45071603	11215655	875	-1 6363120	.7168791
Agree		Disagree						.6806569
Strongly disagree   -18819838   .49546969   .999   -1.6016021   1.225/   .6987068   .3110   .301619968   .358226665   .954   .6987068   .3110   .30161968   .35893937   .35178584   .606   .4445840   .1.562   .35893937   .35178584   .606   .4445840   .1.562   .35893937   .35178584   .606   .4445840   .1.562   .35893937   .35178584   .606   .4445840   .1.562   .35893937   .35178584   .606   .4445840   .1.562   .35893937   .35178584   .606   .4445840   .1.562   .35893937   .35178584   .606   .4445840   .1.562   .35893937   .35178584   .606   .4445840   .55893937   .35178584   .606   .445860   .1.7866   .35998599   .53516843   .997   .1.2666646   .1.7866   .35998539   .4.5793344   .977   .35866350   .4.566   .35998539   .4.5793344   .977   .35866350   .4.566   .35998539   .4.5793344   .977   .35866350   .4.566   .3599859   .35316843   .997   .1.7866365   .1.2666   .35998599   .35316843   .997   .1.7866365   .1.2666   .35998599   .35316843   .997   .1.7866365   .1.2666   .35998599   .35316843   .997   .1.7866365   .1.2666   .35998599   .35316843   .997   .1.7866365   .1.2666   .35998599   .35316843   .997   .1.7866365   .1.2666   .35998599   .35316843   .997   .1.7866365   .1.2666   .35998599   .3.3516843   .997   .1.7866365   .1.2666   .35998599   .3.3516843   .997   .1.7866365   .1.2666   .35998599   .3.3516843   .997   .1.7866365   .1.2666   .35998599   .3.3516843   .997   .1.7866365   .1.2666   .3.2666999   .3.266375   .3.262375   .3.		g						.9317955
disagree   99			Neutral	.27151855	.29713690	.943	5761103	1.1191474
Strongly   Strongly agree   30615968   35225665   .954   .6987068   .11255   .665893937   .35178584   .606   .4445840   .15624   .6967068   .3593937   .35178584   .606   .4445840   .15624   .6967068   .445640   .15624   .25986598   .35948149   .341   .3058679   .77450				44818436	.45229987	.921	-1.7384396	.8420708
Strongly disagree			-	10010000	10516060	000	1 6016004	1 2252054
Agree		Strongly						1.2252054 1.3110262
Neutral   7.1970291   3.5945149   3.41   -3.056879   1.7365   99   2.5998598   5.3516843   3.97   -1.266646   1.7866   99   Strongly agree   0.4617369   40620166   1.000   -1.1125792   1.2045   1.204								1.5624628
Disagree   A4818436   A5229987   921   - 3,8420708   1,738-999   Strongly agree   0,4617369   A6020166   1,000   -1,1125792   1,2045   Agree   Agree   2,9985393   A0579344   9,77   - 3,6586350   1,4566   Agree   3,4566969   9,99   -1,2252054   1,6016   Agree   3,6566969   3,997   -1,7866365   1,2666   Agree   3,666969   3,998   -2,2466712   2,135   Agree   3,666969   3,998   -2,2466712   2,135   Agree   3,666969   3,998   -2,2466712   2,135   Agree   3,6669699   3,6669699   3,6669699   3,666969   3,666969   3,666969   3,666969   3,666969   3,666969   3,666969   3,666969   3,6669699   3,6669699   3,6669699   3,6669699   3,6669699   3,6669699   3,6669699   3,6669699   3,6		Ü	U					1.7450938
Strongly agree   .04617369   .40620166   1.000   -1.1125792   1.2045   .40579344   .977   .8586350   1.4565   .10614   .45971693   .41245655   .7168791   1.6365   .16614   .16016   .2046763   .2046712   .16016   .2046712   .2046712   .16016   .2046712   .2046712   .213676   .2046712   .2046712   .213676   .2046712   .213676   .2046712   .213676   .2046712   .213676   .2046712   .20467								1.7384396
Agree								1.7866365
Neutral		99						1.2049266
Disagree   Strongly   -25998598   .39516843   .997   -1.2252054   1.6016   .26666   .26666   .2666   .2666   .26666   .26666   .26666   .26666   .26666   .26666   .26666			•					1.4565418
Strongly   -2.5998598   .53516843   .997   -1.7866365   1.2666   disagree   disagree   Agree   -0.0698025   .04887198   1.000   .1463951   .1324   .1324   .14627   .1463951   .1324   .14627   .1463951   .1324   .14627   .1463951   .1324   .14627   .1463951   .1324   .14627   .1463951   .1324   .14627   .1463951   .1324   .14627   .1463951   .1324   .14627   .1463951   .14627   .1462951   .1462951   .1462951   .14627   .1462951   .14627   .1462951   .14627								1.6016021
REGR factor score 4 Strongly agree Agree00698025			•					1.2666646
Neutral			disagree					
Disagree   .60295936   .29087752   .302   .2268137   1.4327   1.4327   .2526137   1.4327   .2526137   1.4327   .2526137   1.4327   .2526137   1.4327   .2526137   .2526137   1.4327   .2526137   .25		Strongly agree	-	00698025	.04887198	1.000	1463951	.1324346
Strongly disagree   99	for analysis 1							.2135486
Agree			-					1.4327324
99				06464748	.35529308	1.000	-1.0781758	.9488809
Agree Strongly agree Neutral -0.03358106 0.8716508 0.999 -2.822329 0.2150 0.8716508 0.999 -2.822329 0.2150 0.8716508 0.999 -2.822329 0.2150 0.8716508 0.999 0.2822329 0.2150 0.8716508 0.999 0.2822329 0.2150 0.991 0.99			-	- 62023727	.40970309	.655	-1.7889786	.5485040
Neutral		Agree	-					.1463951
Disagree   .60993961   .29029729   .287   .2181782   1.4380   .29029729   .287   .2181782   1.4380   .2914		1.9.77						.2150708
Strongly disagree        05766723         .35481821         1.000         -1.0698409         .9545           Neutral         Strongly agree        61325702         .40929135         .665         -1.7808238         .5543           Neutral         Strongly agree         .04056131         .08907842         .998        2135486         .2944           Agree         .03358106         .08716508         .999        2150708         .2822           Disagree         .64352067         .29969820         .264        2114147         1.4984           Strongly disagree        02408617         .36254994         1.000         -1.0583158         1.0101           Disagree         Strongly agree        60295936         .29087752         .302         -1.4327324         .2266           Agree        60993961         .29029729         .287         -1.4380575         .2187           Neutral        64352067         .29969820         .264         -1.4984561         .2114           Strongly disagree        66760684         .45619867         .688         -1.9689840         .6337           1.2231966         3        49974060         .141         -2.6487838         .2023           Strongly disagr						.287		1.4380575
Disagree   99			J					.9545065
Neutral         Strongly agree         .04056131         .08907842         .998        2135486         .2946           Agree         .03358106         .08716508         .999        2150708         .2822           Disagree         .64352067         .29969820         .264        2114147         1.4984           Strongly        02408617         .36254994         1.000         -1.0583158         1.0101           disagree         99        57967596         .41601190         .731         -1.7664141         .6070           Disagree         Strongly agree        60295936         .29087752         .302         -1.4327324         .2268           Agree        60993961         .29029729         .287         -1.4380575         .2183           Neutral        64352067         .29969820         .264         -1.4984561         .2114           Strongly        66760684         .45619867         .688         -1.9689840         .6337           disagree         99         -         .49974060         .141         -2.6487838         .2023           Strongly         Strongly agree         .06464748         .35529308         1.000        9488809         1.0784           disa								
Agree			99	61325702	.40929135	.665	-1.7808238	.5543097
Disagree		Neutral	Strongly agree			.998		.2946712
Strongly disagree        02408617         .36254994         1.000         -1.0583158         1.0101           Disagree         99        57967596         .41601190         .731         -1.7664141         .6070           Disagree         Strongly agree        60295936         .29087752         .302         -1.4327324         .2268           Agree        60993961         .29029729         .287         -1.4380575         .2184           Neutral        64352067         .29969820         .264         -1.4984561         .2114           Strongly disagree        66760684         .45619867         .688         -1.9689840         .6337           1.2231966			Agree	.03358106	.08716508	.999	2150708	.2822329
disagree 9957967596 .41601190 .731 -1.7664141 .6070 Disagree Strongly agree60295936 .29087752 .302 -1.4327324 .2268 Agree60993961 .29029729 .287 -1.4380575 .2181 Neutral64352067 .29969820 .264 -1.4984561 .2114 Strongly66760684 .45619867 .688 -1.9689840 .6337 disagree 99			Disagree	.64352067	.29969820			1.4984561
9957967596 .41601190 .731 -1.7664141 .6070 Disagree Strongly agree60295936 .29087752 .302 -1.4327324 .2268 Agree60993961 .29029729 .287 -1.4380575 .2181 Neutral64352067 .29969820 .264 -1.4984561 .2114 Strongly66760684 .45619867 .688 -1.9689840 .6337 disagree 9949974060 .141 -2.6487838 .2023  Strongly Strongly agree .06464748 .35529308 1.0009488809 1.0781 disagree Agree .05766723 .35481821 1.0009545065 1.0698 Neutral .02408617 .36254994 1.000 -1.0101435 1.0583 Disagree .66760684 .45619867 .6886337703 1.9688 9955558979 .53978154 .908 -2.0954000 .9842				02408617	.36254994	1.000	-1.0583158	1.0101435
Disagree         Strongly agree        60295936         .29087752         .302         -1.4327324         .2268           Agree        60993961         .29029729         .287         -1.4380575         .2181           Neutral        64352067         .29969820         .264         -1.4984561         .2114           Strongly        66760684         .45619867         .688         -1.9689840         .6337           disagree			•	F700==00	44004:00	<b></b>	4 700 / / /	007000
Agree60993961 .29029729 .287 -1.4380575 .2181   Neutral64352067 .29969820 .264 -1.4984561 .2114   Strongly66760684 .45619867 .688 -1.9689840 .6337   disagree		Diagram						.6070622
Neutral64352067 .29969820 .264 -1.4984561 .2114 Strongly disagree 9949974060 .141 -2.6487838 .2023  Strongly disagree		⊔isagree						.2268137
Strongly disagree 9949974060 .141 -2.6487838 .2023  Strongly disagree								.2181782
disagree 9949974060 .141 -2.6487838 .2023  Strongly Strongly agree								.2114147
9949974060 .141 -2.6487838 .2023  Strongly Strongly agree				00/00084	.4361986/	.୦୪୪	-1.9089840	.6337703
1.2231966   3			•		.49974060	.141	-2.6487838	.2023906
Strongly disagree         Strongly agree         .06464748         .35529308         1.000        9488809         1.0783           Agree         .05766723         .35481821         1.000        9545065         1.0698           Neutral         .02408617         .36254994         1.000         -1.0101435         1.0583           Disagree         .66760684         .45619867         .688        6337703         1.9689           99        55558979         .53978154         .908         -2.0954000         .9842								
disagree         Agree         .05766723         .35481821         1.000        9545065         1.0698           Neutral         .02408617         .36254994         1.000         -1.0101435         1.0583           Disagree         .66760684         .45619867         .688        6337703         1.9689           99        55558979         .53978154         .908         -2.0954000         .9842		<u> </u>	<del></del>					
Neutral .02408617 .36254994 1.000 -1.0101435 1.0583 Disagree .66760684 .45619867 .6886337703 1.9689 9955558979 .53978154 .908 -2.0954000 .9842			0, 0					1.0781758
Disagree       .66760684       .45619867       .688      6337703       1.9689         99      55558979       .53978154       .908       -2.0954000       .9842		uisagree	J					1.0698409
9955558979 .53978154 .908 -2.0954000 .9842								1.0583158
			=					1.9689840
00 00		-00						.9842204
		99						1.7889786
			J					1.7808238
Neutral .57967596 .41601190 .7316070622 1.7664			•	-	.41001190	./31	0070622	1.7664141

Disagr	ree 1.2231966 3	.49974060	.141	2023906	2.6487838
Strong disagr		.53978154	.908	9842204	2.0954000

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

REGR factor score 1 for analysis 1

Tukey HSD<sup>a,b</sup>

- rancy 1102				
tasks efficiently		Subset for alpha = 0.05		
	N	1	2	
Disagree	12	2413895		
Neutral	152	1553499	1553499	
Agree	974	0756038	0756038	
Strongly agree	733	.1223664	.1223664	
99	6	.6516914	.6516914	
Strongly disagree	8		.8179077	
Sig.		.121	.068	

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 15.626.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

REGR factor score 2 for analysis 1

Tukey HSD<sup>a,b</sup>

		Subset for alpha = 0.05
tasks efficiently	N	1
Neutral	152	3122353
Disagree	12	0415147
Agree	974	0162425
Strongly agree	733	.0833336
Strongly disagree	8	.0933583
99	6	.3246145
Sig.		.474

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 15.626.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

#### REGR factor score 3 for analysis 1

Tukey HSD<sup>a,b</sup>

Takey Hob		
		Subset for alpha = 0.05
tasks efficiently	N	1
Neutral	152	2501247
Agree	974	0893611
Disagree	12	.0213939
Strongly agree	733	.1634186
99	6	.2095922
Strongly disagree	8	.4695782
Sig.		.325

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 15.626.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

# REGR factor score 4 for analysis 1

Tukey HSD<sup>a,b</sup>

		Subset for alpha = 0.05		
tasks efficiently	N	1	2	
Disagree	12	6082470		
Strongly agree	733	0052876	0052876	
Agree	974	.0016926	.0016926	
Neutral	152	.0352737	.0352737	
Strongly disagree	8	.0593599	.0593599	
99	6		.6149496	
Sig.		.423	.509	

Means for groups in homogeneous subsets are displayed. a. Uses Harmonic Mean Sample Size = 15.626.

- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

ONEWAY FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 BY family /MISSING ANALYSIS /POSTHOC=TUKEY ALPHA(0.05).

#### Oneway

[DataSet1] F:\301109.sav

# ANOVA

			Sum of Squares	df	Mean Square
REGR factor score	1 for	Between Groups	16.167	5	3.233
analysis 1		Within Groups	1867.833	1879	.994
		Total	1884.000	1884	
REGR factor score	2 for	Between Groups	6.683	5	1.337
analysis 1		Within Groups	1877.317	1879	.999
		Total	1884.000	1884	
REGR factor score	3 for	Between Groups	23.346	5	4.669
analysis 1		Within Groups	1860.654	1879	.990
		Total	1884.000	1884	
REGR factor score	4 for	Between Groups	22.093	5	4.419
analysis 1		Within Groups	1861.907	1879	.991
		Total	1884.000	1884	

# **ANOVA**

			F	Sig.
REGR factor score 1 analysis 1	1 for	Between Groups Within Groups Total	3.253	.006
REGR factor score 2 analysis 1	2 for	Between Groups Within Groups Total	1.338	.245
REGR factor score 3 analysis 1	3 for	Between Groups Within Groups Total	4.715	.000
REGR factor score 4 analysis 1	4 for	Between Groups Within Groups Total	4.459	.000

#### **Multiple Comparisons**

Dependent Variable	(I) family	(J) family	Mean			95% Confide	ence Interval
	important	important	Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
REGR factor score 1	Strongly agree	Agree	.11731240	.0515043	.204	0296116	.2642364
for analysis 1		Neutral	.11951684	.0710837 5	.544	0832605	.3222942
		Disagree	.24547460	.1505505	.578	1839942	.6749433
		Strongly disagree	32713451	.2263143	.699	9727310	.3184620
		99	83331518	.3788448 8	.238	-1.9140287	.2473983
	Agree	Strongly agree	11731240	.0515043 2	.204	2642364	.0296116
		Neutral	.00220444	.0683734 8	1.000	1928415	.1972504
		Disagree	.12816220	.1492900 2	.956	2977106	.5540350
		Strongly disagree	44444690	.2254777 2	.359	-1.0876569	.1987631
		99	95062757	.3783457 1	.121	-2.0299171	.1286620
	Neutral	Strongly agree	11951684	.0710837 5	.544	3222942	.0832605
		Agree	00220444	.0683734 8	1.000	1972504	.1928415
		Disagree	.12595776	.1571232 4	.967	3222605	.5741761
		Strongly disagree	44665135	.2307388	.381	-1.1048695	.2115668
		99	95283202	.3815045 0	.125	-2.0411325	.1354685
	Disagree	Strongly agree	24547460	.1505505 7	.578	6749433	.1839942
		Agree	12816220	.1492900	.956	5540350	.2977106
		Neutral	12595776	.1571232 4	.967	5741761	.3222605
		Strongly disagree	57260911	.2661822 4	.262	-1.3319350	.1867168
		99	1.07878978	.4039285 3	.082	-2.2310583	.0734787
	Strongly disagree	Strongly agree	.32713451	.2263143	.699	3184620	.9727310
	u.oug.oo	Agree	.44444690	.2254777 2	.359	1987631	1.0876569
		Neutral	.44665135	.2307388	.381	2115668	1.1048695
		Disagree	.57260911	.2661822 4	.262	1867168	1.3319350
		99	50618067	.4378480 9	.858	-1.7552099	.7428486
	99	Strongly agree	.83331518	.3788448 8	.238	2473983	1.9140287
		Agree	.95062757	.3783457	.121	1286620	2.0299171
		Neutral	.95283202	.3815045	.125	1354685	2.0411325
		Disagree	1.07878978	.4039285	.082	0734787	2.2310583
		Strongly disagree	.50618067	.4378480	.858	7428486	1.7552099

Neutral   Neut	REGR factor score 2	Strongly agree	Agree	.06968032	.0516349	.757	0776162	.2169769
Strongly disagree   -0.09968032   -0.09968032   -0.09968034   -0.09968034   -0.09968034   -0.09968034   -0.09968034   -0.09968034   -0.09968034   -0.09968034   -0.09968034   -0.09968034   -0.09968034   -0.09968034   -0.09968034   -0.09968034   -0.09968034   -0.000   -0.4569159   -0.3969844   -0.09968034   -0.09968034   -0.000   -0.4569159   -0.3969844   -0.09968034   -0.09968	for analysis 1		Neutral	.08830048	.0712639	.818	1149910	.2915920
Strongly disagree   99			Disagree	.03971710		1.000	3908406	.4702748
Strongly agree   -0.2996322   -0.29668032   -0.29668032   -0.29668032   -0.29668032   -0.29668032   -0.29668032   -0.29668032   -0.29668032   -0.29668032   -0.29668032   -0.29668032   -0.000   -0.7769203   -0.2141606   -0.29668032   -0.2968032   -0.2				.46053493	.2268881	.326	1866986	1.1077684
Neutral			-	31190687	-	.964	-1.3953606	.7715469
Neutral   .01862016   .0685468   .1000   .1769203   .2141606   .2141606   .260494   .313   .2539863   .3969894   .38169719   .39098461   .2260494   .513   .2539863   .10356955   .3818   .2315920   .1149910   .3793050   .318   .2315920   .1149910   .3793050   .318   .2315920   .1149910   .3793050   .318   .2315920   .1149910   .3793050   .318   .2315920   .1149910   .37223445   .313238   .575216   .1000   .4579382   .4007774   .37223445   .2313238   .593   .2876526   .10321215   .3793050		Agree	Strongly agree	06968032		.757	2169769	.0776162
Disagree   -0.0996322   .1496685   1.000  4569159   .3969894   Strongly   .39085461   .2260494   .513  2539663   1.0356955   .3818   .2915920   .1149910   .39085461			Neutral	.01862016	.0685468	1.000	1769203	.2141606
Meutral   Strongly agree   -38158719   3.793050   3.818   -2915920   1.149910			Disagree	02996322	.1496685	1.000	4569159	.3969894
Neutral   Strongly agree  08830048   .0712633   .818  2915920   .1149910   .2084648   .2084648   .2084648   .2084648   .2084648   .2084648   .2084648   .2084648   .2084648   .2084648   .2084648   .2084648   .2084648   .2084648   .2084648   .208468   .2084648   .2084648   .2084648   .2084648   .2084648   .208468   .2084648   .2084648   .2084648   .2084648   .2084648   .208468   .2084648				.39085461	.2260494 4	.513	2539863	1.0356955
Agree			•	38158719		.916	-1.4636134	.7004390
Agree		Neutral	Strongly agree	08830048		.818	2915920	.1149910
Strongly disagree   99			Agree	01862016		1.000	2141606	.1769203
Disagree   99   -40020735   3824718   902   -1.4912673   .6908526   380406   Agree   .02996322   .149685   1.000  4702748   .3908406   Agree   .02996322   .149685   1.000  3969894   .4569159   .4068538   .1575216   1.000  4007714   .4979382   .4049527   .954   .1.5068141   .8035662   .3068667   .614   .3404334   .11820691   .346867			Disagree	04858338	.1575216 4	1.000	4979382	.4007714
Disagree   Strongly agree   -0.03971710   .1509323   1.000  4702748   .3908406   0   0   0  4702748   .3908406   0   0   0  4702748   .3908406   0   0   0  4702748   .3908406   0   0   0  4702748   .4569159   5   1.000  4007714   .4979382   4.4569159   5   1.000  4007714   .4979382   4.4569159   0  46053493   .2668571   .614  3404334   1.1820691   .46053493   .2268881   .326   -1.1077684   .1866986   5   .4049527   .954   -1.5068141   .8035662   .2260494   .513   -1.0356955   .2539863   .2260494   .513   -1.0356955   .2539863   .2260494   .513   -1.0356955   .2539863   .2260494   .513   -1.0356955   .2539863   .2260494   .513   -1.0356955   .2539863   .2260494   .513   -1.0356955   .2539863   .2268881   .22668571   .614   -1.1820691   .3404334   .2668571   .614   -1.1820691   .3404334   .2668571				.37223445		.593	2876526	1.0321215
Agree			•	40020735		.902	-1.4912673	.6908526
Agree		Disagree	Strongly agree	03971710		1.000	4702748	.3908406
Strongly disagree   99			Agree	.02996322		1.000	3969894	.4569159
Strongly disagree   99  35162397   .4049527   .954   -1.5068141   .8035662			Neutral	.04858338	.1575216 4	1.000	4007714	.4979382
Strongly disagree   Strongly agree  46053493   .2268881   .326   -1.1077684   .1866986   .39085461   .2260494   .513   -1.0356955   .2539863   .42260494   .513   -1.0356955   .2539863   .326881   .326   -1.1077684   .1866986   .39085461   .2260494   .513   -1.0356955   .2539863   .3268814   .326   .3268814   .326   .32876526   .3268814   .32888   .393   -1.0321215   .2876526   .3824718   .3268814   .4797545   .3824718   .394   .39488   .3948   .4797545   .3824718   .3948   .39				.42081783		.614	3404334	1.1820691
Agree39085461				35162397		.954	-1.5068141	.8035662
Agree			Strongly agree	46053493		.326	-1.1077684	.1866986
Disagree		•	Agree	39085461	.2260494 4	.513	-1.0356955	.2539863
Per Strongly agree			Neutral	37223445	.2313238 9	.593	-1.0321215	.2876526
REGR factor score of for analysis 1    Regre   Strongly agree   Strongly a			Disagree	42081783	_	.614	-1.1820691	.3404334
Agree .38158719 .3793050 .916 .7004390 1.4636134  Neutral .40020735 .3824718 .9026908526 1.4912673  Disagree .35162397 .4049527 .9548035662 1.5068141  Strongly disagree .77244180 .4389582 .4924797545 2.0246381  REGR factor score 3 Strongly agree for analysis 1  Neutral .16161618 .0709470 .2040407711 .3640035  Disagree .00073966 .1502610 1.0004293824 .4279030  Strongly disagree .0293006 .3781161 1.000 -1.0487048 1.1085649  Agree Strongly agree .24326024 .0514052 .000 .972 .4693994 .8193101  disagree .99 .02993006 .3781161 1.000 -1.0487048 1.1085649  Agree Strongly agree .24326024 .0514052 .000 -38990170966188  Neutral .08164406 .0682419 .8392763148 .1130267			99	77244180		.492	-2.0246381	.4797545
Neutral .40020735 .3824718 .9026908526 1.4912673  Disagree .35162397 .4049527 .9548035662 1.5068141  Strongly disagree .777244180 .4389582 .4924797545 2.0246381  REGR factor score 3 Strongly agree for analysis 1  Neutral .16161618 .0709470 .2040407711 .3640035  Disagree00073966 .1502610 1.0004293824 .4279030  Strongly disagree 99 .02993006 .3781161 1.000 -1.0487048 1.1085649  Agree Strongly agree24326024 .0514052 .00038990170966188  Neutral08164406 .0682419 .8392763148 .1130267		99	Strongly agree	.31190687	.3798054 7	.964	7715469	1.3953606
Disagree .35162397 .4049527 .9548035662 1.5068141  Strongly disagree .77244180 .4389582 9 .4924797545 2.0246381  REGR factor score 3 Strongly agree for analysis 1  Neutral .16161618 .0709470 .2040407711 .3640035  Disagree00073966 .1502610 1.0004293824 .4279030  Strongly disagree 9 .02993006 .3781161 1.000 -1.0487048 1.1085649  Agree Strongly agree24326024 .0514052 .00038990170966188  Neutral08164406 .0682419 .8392763148 .1130267			Agree	.38158719		.916	7004390	1.4636134
REGR factor score 3 Strongly agree for analysis 1 Strongly agree			Neutral	.40020735		.902	6908526	1.4912673
REGR factor score   3   Strongly agree   Agree   .24326024   .0514052   .000   .0966188   .3899017     for analysis 1   Neutral   .16161618   .0709470   .204  0407711   .3640035     Disagree  00073966   .1502610   1.000  4293824   .4279030     Strongly disagree   9			Disagree	.35162397	.4049527 2	.954	8035662	1.5068141
REGR factor score 3 Strongly agree Agree .24326024 .0514052 .000 .0966188 .3899017 for analysis 1 Neutral .16161618 .0709470 .2040407711 .3640035 .2 Disagree00073966 .1502610 0 .0004293824 .4279030 .0 Strongly disagree 99 .02993006 .3781161 1.000 -1.0487048 1.1085649 .9 Agree Strongly agree24326024 .0514052 .00038990170966188 .3899017 .0966188 .3899017 .0514052 .0003899017 .0966188 .3899017 .0516189 .3781161 .000 -1.0487048 .1130267				.77244180	9	.492	4797545	2.0246381
Neutral .16161618 .0709470 .2040407711 .3640035  Disagree00073966 .1502610 1.0004293824 .4279030  Strongly disagree 99 .02993006 .3781161 1.000 -1.0487048 1.1085649  Agree Strongly agree24326024 .0514052 .00038990170966188  Neutral08164406 .0682419 .8392763148 .1130267		Strongly agree	Agree	.24326024		.000	.0966188	.3899017
Strongly disagree 99 .02993006 .3781161 1.000 -1.0487048 1.1085649  Agree Strongly agree24326024 .0514052 .00038990170966188  Neutral08164406 .0682419 .8392763148 .1130267			Neutral	.16161618	.0709470 2	.204	0407711	.3640035
Agree Strongly agree24326024 .0514052 .00038990170966188  Neutral08164406 .0682419 .8392763148 .1130267			Disagree	00073966	0	1.000	4293824	.4279030
99 .02993006 .3781161 1.000 -1.0487048 1.1085649  Agree Strongly agree24326024 .0514052 .00038990170966188  Neutral08164406 .0682419 .8392763148 .1130267				.17495535	.2258790 1	.972	4693994	.8193101
Neutral08164406 .0682419 .8392763148 .1130267			-	.02993006		1.000	-1.0487048	1.1085649
		Agree	Strongly agree	24326024*		.000	3899017	
- 1 1			Neutral	08164406		.839	2763148	.1130267

Meutral   Strongly agree   -21333018   3776179   993   -12905438   863885   863885   8776179   993   -12905438   863885   863885   8776179   993   -12905438   863885   8776179   993   -130267   276314   8776179   993   -1310267   276314   8776179   996   -6097120   285000   66097120   285000   66097120   285000   66097120   285000   66097120   285000   66097120   285000   66097120   285000   66097120			Disagree	24399990	.1490028	.574	6690536	.1810538
Neutral   Strongly agree   -16161618   0709470   -204   -3640035   -040777   -204   -3640035   -040777   -204   -3640035   -040777   -204   -3640035   -276314   -27				06830489		1.000	7102777	.5736679
Neutral   Strongly agree   .16161618   .0709470   .204   .3640035   .040777   .276314   .27631			•	21333018	.3776179	.993	-1.2905438	.8638834
Agree		Neutral	Strongly agree	16161618	.0709470	.204	3640035	.0407711
Strongly disagree   99   -1.3168612   3807707   399   -1.2178933   3.95452*			Agree	.08164406		.839	1130267	.2763148
Strongly disagree   -13168612   -3807707   -999   -1.2178933   -954521   -13168612   -13168612   -1300   -1.2178933   -954522   -13168612   -1300   -1.2178933   -954522   -13168612   -1300   -1.2178933   -1.2178933   -954522   -1.2178933   -1.2178933   -954522   -1.2178933   -954522   -1.2178933   -1.2178933   -954522   -1.21789333   -1.21789333			Disagree	16235584		.906	6097120	.2850003
Psi				.01333917	.2302950	1.000	6436129	.6702913
Disagree   Strongly agree   .00073966   .1502610   1.000   .4279030   .429367   .4289670   .4289670   .4289670   .42856			-	13168612	.3807707	.999	-1.2178933	.9545211
Agree		Disagree	Strongly agree	.00073966	.1502610	1.000	4279030	.4293824
Strongly disagree   99			Agree	.24399990		.574	1810538	.6690536
Strongly disagree   99   .03066972   .031516   .000   .1.1193824   1.18072:			Neutral	.16235584		.906	2850003	.6097120
Strongly disagree			0,	.17569501	.2656702	.986	5821704	.9335604
Strongly disagree   Agree   .17495535   .2258790   .972   .8193101   .469398   .468389   .2250440   .000   .5736679   .710277   .71027			•	.03066972	.4031516	1.000	-1.1193824	1.1807219
Agree			Strongly agree	17495535	.2258790	.972	8193101	.4693994
Neutral  01333917   .2302950   1.000  6702913   .643612		uisayiee	Agree	.06830489	.2250440	1.000	5736679	.7102777
Disagree			Neutral	01333917	.2302950	1.000	6702913	.6436129
99 Strongly agree02993006 .3781161 1.000 -1.1085649 1.048704			Disagree	17569501	.2656702	.986	9335604	.5821704
Strongly agree			99	14502529	.4370059	.999	-1.3916521	1.1016016
Agree		99	Strongly agree	02993006	.3781161	1.000	-1.1085649	1.0487048
Neutral   .13168612   .3807707   .999  9545211   1.217893   .3807707   .999  9545211   1.217893   .3807707   .399  9545211   1.217893   .3807707   .399  9545211   1.217893   .3807707   .399   .34807059   .399   -1.1016016   1.391652   .38077059   .3470059   .399   -1.1016016   1.391652   .38077059   .399   -1.1016016   1.391652   .38077059   .399   -1.1016016   1.391652   .3807314   .391652   .39165			Agree	.21333018	.3776179	.993	8638834	1.2905438
Disagree  03066972   .4031516   1.000   -1.1807219   1.119382   1.119382   .14502529   .4370059   .999   -1.1016016   1.391652   .14502529   .4370059   .999   -1.1016016   1.391652   .16947314   .0514225   .013   .0227824   .3161632   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .000   .00045437   .862117   .000   .000   .000   .000   .00045437   .862117   .000   .000   .000   .00045437   .862117   .000   .000   .00045437   .862117   .000   .00045437   .862117   .000   .00045437   .862117   .000   .00045437   .			Neutral	.13168612	.3807707	.999	9545211	1.2178933
Strongly disagree   .14502529   .4370059   .999   -1.1016016   1.391652     REGR factor score 4 for analysis 1   Neutral   .22005964   .0709709   .024   .0176042   .422518     Disagree   .43333062   .1503115   .046   .0045437   .862117   .7     Strongly disagree   .42372561   .3782434   .873   -1.5027235   .655272   .655272   .656   .999   .42372561   .0514225   .013   .3161639   .022782   .655272   .656   .013   .3161639   .022782   .655272   .656   .013   .3161639   .022782   .655272   .656   .013   .3161639   .022782   .655272   .013   .3161639   .022782   .013   .022782   .			Disagree	03066972	.4031516	1.000	-1.1807219	1.1193824
REGR factor score 4 for analysis 1  Neutral  Neu				.14502529	.4370059	.999	-1.1016016	1.3916521
Neutral		Strongly agree		.16947314	.0514225	.013	.0227824	.3161639
Disagree	TOT WHATYOU		Neutral	.22005964	.0709709	.024	.0176042	.4225151
Strongly disagree 9942372561 .3782434 .873 -1.5027235 .655272  Agree Strongly agree16947314 .0514225 .0133161639022782  Neutral .05058650 .0682649 .9771441498 .245322  Disagree .26385748 .1490530 .4851613393 .689054  Strongly disagree .17915503 .2251197 .9684630339 .821343  Disagree .59319876 .3777450 .618 -1.6707749 .484377			Disagree	.43333062	.1503115	.046	.0045437	.8621176
9942372561 .3782434 .873 -1.5027235 .655272  Agree Strongly agree16947314 .0514225 .0133161639022782  Neutral .05058650 .0682649 .9771441498 .245322  Disagree .26385748 .1490530 .4851613393 .689054  Strongly .17915503 .2251197 .9684630339 .821343  disagree .7 9959319876 .3777450 .618 -1.6707749 .484377				.34862817	.2259550	.636	2959435	.9931998
Agree Strongly agree16947314 .0514225 .0133161639022782 .013 .0514225 .013 .013 .3161639022782 .013 .013 .013 .013 .013 .013 .013 .013				42372561	.3782434	.873	-1.5027235	.6552722
Neutral .05058650 .0682649 .9771441498 .245322  Disagree .26385748 .1490530 .4851613393 .689054  Strongly .17915503 .2251197 .9684630339 .821343 disagree 7 9959319876 .3777450 .618 -1.6707749 .484373		Agree	Strongly agree	16947314 <sup>*</sup>	.0514225	.013	3161639	0227824
Disagree .26385748 .1490530 .4851613393 .689054  Strongly .17915503 .2251197 .9684630339 .821343 disagree 7 9959319876 .3777450 .618 -1.6707749 .484377			Neutral	.05058650	.0682649	.977	1441498	.2453228
Strongly disagree 9959319876 .3777450 .618 -1.6707749 .484377  Neutral Strongly agree22005964 .0709709 .0244225151017604			Disagree	.26385748	.1490530	.485	1613393	.6890542
9959319876 .3777450 .618 -1.6707749 .484377 Neutral Strongly agree22005964 .0709709 .0244225151017604				.17915503	.2251197	.968	4630339	.8213439
Neutral Strongly agree22005964 .0709709 .0244225151017604			•	59319876	.3777450	.618	-1.6707749	.4843774
		Neutral	Strongly agree	22005964	.0709709	.024	4225151	0176042
			Agree	05058650	.0682649	.977	2453228	.1441498
			Disagree	.21327098	.1568738	.751	2342358	.6607777

		Strongly disagree	.12856853	.2303725	.994	5286047	.7857417
		99	64378526	.3808988 5	.538	-1.7303580	.4427875
	Disagree	Strongly agree	43333062 <sup>*</sup>	.1503115 7	.046	8621176	0045437
		Agree	26385748	.1490530 2	.485	6890542	.1613393
		Neutral	21327098	.1568738 0	.751	6607777	.2342358
		Strongly disagree	08470245	.2657596 7	1.000	8428229	.6734180
		99	85705624	.4032872 8	.275	-2.0074955	.2933830
	Strongly disagree	Strongly agree	34862817	.2259550 4	.636	9931998	.2959435
	Ü	Agree	17915503	.2251197 7	.968	8213439	.4630339
		Neutral	12856853	.2303725	.994	7857417	.5286047
		Disagree	.08470245	.2657596 7	1.000	6734180	.8428229
		99	77235379	.4371530 0	.488	-2.0194002	.4746926
(	99	Strongly agree	.42372561	.3782434 5	.873	6552722	1.5027235
		Agree	.59319876	.3777450 8	.618	4843774	1.6707749
		Neutral	.64378526	.3808988 5	.538	4427875	1.7303580
		Disagree	.85705624	.4032872	.275	2933830	2.0074955
* The mean difference is		Strongly disagree	.77235379	.4371530 0	.488	4746926	2.0194002

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

REGR factor score 1 for analysis 1

Tukey HSD<sup>a,b</sup>

family important		Subset for alpha = 0.05		
	N	1	2	
Disagree	47	1737098		
Neutral	281	0477520		
Agree	874	0455476		
Strongly agree	656	.0717648		
Strongly disagree	20	.3988993	.3988993	
99	7		.9050800	
Sig.		.278	.419	

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 27.228.
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

#### REGR factor score 2 for analysis 1

Tukey HSD<sup>a,b</sup>

		Subset for alpha = 0.05
family important	N	1
Strongly disagree	20	4103455
Neutral	281	0381110
Agree	874	0194909
Disagree	47	.0104723
Strongly agree	656	.0501894
99	7	.3620963
Sig.		.050

Means for groups in homogeneous subsets are displayed. a. Uses Harmonic Mean Sample Size = 27.228.

REGR factor score 3 for analysis 1
Tukey HSD<sup>a,b</sup>

		Subset for alpha = 0.05
family important	N	1
Agree	874	1044287
Strongly disagree	20	0361238
Neutral	281	0227846
99	7	.1089015
Strongly agree	656	.1388315
Disagree	47	.1395712
Sig.		.945

Means for groups in homogeneous subsets are displayed.

REGR factor score 4 for analysis 1

Tukey HSD<sup>a,b</sup>

		Subset for alpha = 0.05		
family important	N	1	2	
Disagree	47	3090180		
Strongly disagree	20	2243155		
Neutral	281	0957470	0957470	
Agree	874	0451605	0451605	
Strongly agree	656	.1243126	.1243126	
99	7		.5480382	
Sig.		.595	.161	

Means for groups in homogeneous subsets are displayed.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

a. Uses Harmonic Mean Sample Size = 27.228.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

<sup>a. Uses Harmonic Mean Sample Size = 27.228.
b. The group sizes are unequal. The harmonic mean of the group</sup> sizes is used. Type I error levels are not guaranteed.

# Oneway

[DataSet1] F:\301109.sav

# ANOVA

		Sum of Squares	df	Mean Square
REGR factor score 1 for	Between Groups	15.496	5	3.099
analysis 1	Within Groups	1868.504	1879	.994
	Total	1884.000	1884	
REGR factor score 2 for	Between Groups	14.047	5	2.809
analysis 1	Within Groups	1869.953	1879	.995
	Total	1884.000	1884	
REGR factor score 3 for	Between Groups	21.719	5	4.344
analysis 1	Within Groups	1862.281	1879	.991
	Total	1884.000	1884	
REGR factor score 4 for	Between Groups	16.339	5	3.268
analysis 1	Within Groups	1867.661	1879	.994
	Total	1884.000	1884	

#### **ANOVA**

			F	Sig.
REGR factor score	1 for	Between Groups	3.117	.008
analysis 1		Within Groups		
		Total		
REGR factor score	2 for	Between Groups	2.823	.015
analysis 1		Within Groups		
		Total		
REGR factor score	3 for	Between Groups	4.383	.001
analysis 1		Within Groups		
		Total		
REGR factor score	4 for	Between Groups	3.288	.006
analysis 1		Within Groups		
		Total		

### **Post Hoc Tests**

# **Multiple Comparisons**

Dependent Variable	(I) foodie	(J) foodie	Mean			95% Confide	ence Interval
			Difference			Lower	Upper
			(I-J)	Std. Error	Sig.	Bound	Bound
REGR factor score 1	Strongly agree	Agree	.02280247	.05468486	.998	1331945	.1787995
for analysis 1		Neutral	01773791	.06390980	1.000	2000505	.1645747
		Disagree	.22395681	.09986669	.219	0609283	.5088419
		Strongly	64567496	.23845789	.074	-1.3259129	.0345630
		disagree					
		99	54113122	.40908755	.772	-1.7081166	.6258542
	Agree	Strongly agree	02280247	.05468486	.998	1787995	.1331945
		Neutral	04054037	.06197604	.987	2173366	.1362558
		Disagree	.20115434	.09864037	.320	0802325	.4825412
		Strongly	66847743	.23794691	.056	-1.3472577	.0103029
		disagree					
		99	56393369	.40878991	.739	-1.7300700	.6022026
	Neutral	Strongly agree	.01773791	.06390980	1.000	1645747	.2000505
		Agree	.04054037	.06197604	.987	1362558	.2173366

		=	_				-
		Disagree	.24169471	.10403822	.185	0550904	.5384798
		Strongly disagree	62793705	.24023480	.094	-1.3132439	.0573698
		99	52339332	.41012586	.798	-1.6933406	.6465540
	Disagree	Strongly agree	22395681	.09986669	.219	5088419	.0609283
		Agree	20115434	.09864037	.320	4825412	.0802325
		Neutral	24169471	.10403822	.185	5384798	.0550904
		Strongly	86963177	.25219368	.008	-1.5890532	1502104
		disagree 99	76508803	.41724347	.444	-1.9553394	.4251634
	Strongly	Strongly agree	.64567496	.23845789	.074	0345630	1.3259129
	disagree	Agree	.66847743	.23794691	.056	0103029	1.3472577
		Neutral	.62793705	.24023480	.094	0573698	1.3132439
		Disagree	.86963177	.25219368	.008	.1502104	1.5890532
		99	.10454374	.47008608	1.000	-1.2364494	1.4455368
	99	Strongly agree	.54113122	.40908755	.772	6258542	1.7081166
	33	Agree	.56393369	.40878991	.739	6022026	1.7300700
		Neutral	.52339332	.41012586	.798	6465540	1.6933406
			l .	.41724347			
		Disagree	.76508803	.41724347	.444 1.000	4251634 -1.4455368	1.9553394 1.2364494
		Strongly disagree	10454374				
REGR factor score 2	Strongly agree	Agree	.07218961	.05470606	.774	0838679	.2282471
for analysis 1		Neutral	.22763550*	.06393458	.005	.0452523	.4100188
		Disagree	.15758881	.09990540	.614	1274068	.4425844
		Strongly disagree	.09498842	.23855033	.999	5855132	.7754901
		99	24686398	.40924615	.991	-1.4143018	.9205738
	Agree	Strongly agree	07218961	.05470606	.774	2282471	.0838679
		Neutral	.15544590	.06200006	.122	0214189	.3323107
		Disagree	.08539921	.09867861	.955	1960967	.3668952
		Strongly disagree	.02279881	.23803915	1.000	6562446	.7018422
		99	31905358	.40894839	.971	-1.4856420	.8475348
	Neutral	Strongly agree	22763550 <sup>*</sup>	.06393458	.005	4100188	0452523
		Agree	15544590	.06200006	.122	3323107	.0214189
		Disagree	07004669	.10407855	.985	3669468	.2268534
		Strongly disagree	13264708	.24032794	.994	8182196	.5529255
		99	47449948	.41028486	.857	-1.6449004	.6959014
	Disagree	Strongly agree	15758881	.09990540	.614	4425844	.1274068
		Agree	08539921	.09867861	.955	3668952	.1960967
		Neutral	.07004669	.10407855	.985	2268534	.3669468
		Strongly disagree	06260039	.25229145	1.000	7823007	.6570999
		99	40445279	.41740523	.928	-1.5951656	.7862601
	Strongly	Strongly agree	09498842	.23855033	.999	7754901	.5855132
	disagree	Agree	02279881	.23803915	1.000	7018422	.6562446
		Neutral	.13264708	.24032794	.994	5529255	.8182196
		Disagree	.06260039	.25229145	1.000	6570999	.7823007
	99	99 Strongly agree	34185240 .24686398	.47026832	.979 .991	-1.6833654 9205738	.9996606 1.4143018
	33	Agree	.24686398	.40924615	.991	9205738	1.4143018
		Neutral	.47449948	.41028486	.857	6959014	1.6449004
		Disagree	.40445279	.41740523	.928	7862601	1.5951656
		Strongly	.34185240	.47026832	.979	9996606	1.6833654
REGR factor score 3	Strongly agree	disagree Agree	.17946463	.05459371	.013	.0237276	.3352016
for analysis 1	Judingly agree	Neutral	.22300929	.06380328	.006	.0237276	.4050180
,		Disagree	.35725068*	.09970023	.005	.0728404	.6416610
		Strongly	.21382718	.23806043	.947	4652769	.8929313
		disagree 99	.04895912	.40840569	1.000	-1.1160812	1.2139994
	Agree	Strongly agree	17946463	.05459371	.013	3352016	0237276
	<u> </u>	Neutral	.04354466	.06187274	.982	1329569	.2200462
		Disagree	.17778604	.09847595	.462	1031318	.4587039
		Strongly	.03436255	.23755030	1.000	6432864	.7120115
		disagree 99	13050551	.40810855	1.000	-1.2946982	1.0336871
	Neutral	Strongly agree	22300929	.06380328		4050180	
	. toutiui	_ Judingly agree	000020	.55555520	.500	. 1000 100	.5-, 10000

1		- ^ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	04254400	06407074	000	2222422	1200500
		Agree	04354466 .13424138	.06187274 .10386481	.982 .789	2200462 1620490	.1329569 .4305318
		Disagree Strongly	00918212	.23983438	1.000	1620490	.4305318
		disagree	00810212	.23503436	1.000	0333407	.0749023
		99	17405018	.40944227	.998	-1.3420475	.9939471
	Disagree	Strongly agree	35725068	.09970023	.005	6416610	0728404
	3.0	Agree	17778604	.09847595	.462	4587039	.1031318
		Neutral	13424138	.10386481	.789	4305318	.1620490
		Strongly	14342350	.25177333	.993	8616458	.5747988
		disagree					
		99	30829156	.41654802	.977	-1.4965591	.8799760
	Strongly	Strongly agree	21382718	.23806043	.947	8929313	.4652769
	disagree	Agree	03436255	.23755030	1.000	7120115	.6432864
		Neutral	.00918212	.23983438	1.000	6749825	.6933467
		Disagree	.14342350	.25177333	.993	5747988	.8616458
		99	16486806	.46930255	.999	-1.5036260	1.1738899
	99	Strongly agree	04895912	.40840569	1.000	-1.2139994	1.1160812
		Agree	.13050551	.40810855	1.000	-1.0336871	1.2946982
		Neutral	.17405018	.40944227 .41654802	.998 .977	9939471 8700760	1.3420475
		Disagree Strongly	.30829156 .16486806	.41654802	.977	8799760 -1.1738899	1.4965591 1.5036260
		disagree	.10400000	.40930233	.999	-1.1730099	1.5050200
REGR factor score 4	Strongly agree	Agree	.02945132	.05467252	.995	1265105	.1854131
for analysis 1	3, 3	Neutral	20059964	.06389538	.021	3828711	0183282
		Disagree	.02995330	.09984416	1.000	2548676	.3147742
		Strongly	13171476	.23840410	.994	8117993	.5483697
		disagree	13171470	.23040410	.554	0117993	.5465697
		99	41577644	.40899527	.913	-1.5824986	.7509457
	Agree	Strongly agree	02945132	.05467252	.995	1854131	.1265105
	, .g. 00	Neutral	23005096	.06196206	.003	4068073	0532946
		Disagree	.00050198	.09861811	1.000	2808214	.2818254
		ŭ	16116609				
		Strongly disagree	16116609	.23789323	.984	8397933	.5174611
		99	44522777	.40869770	.886	-1.6111010	.7206455
	Neutral	• -	.20059964	.06389538		.0183282	
	iveutrai	Strongly agree			.021		.3828711
		Agree	.23005096*	.06196206	.003	.0532946	.4068073
		Disagree	.23055294	.10401475	.230	0661652	.5272711
		Strongly	.06888487	.24018061	1.000	6162674	.7540371
		disagree	21517604	44002225	005	1 2040600	0545060
	Diagram	99 Strongly 2 222	21517681	.41003335	.995	-1.3848602	.9545066
	Disagree	Strongly agree	02995330	.09984416	1.000	3147742	.2548676
		Agree	00050198	.09861811	1.000	2818254	.2808214
		Neutral	23055294	.10401475	.230	5272711	.0661652
		Strongly	16166806	.25213679	.988	8809272	.5575911
		disagree	<b>.</b>				
		99	44572974	.41714935	.894	-1.6357127	.7442532
	Strongly	Strongly agree	.13171476	.23840410	.994	5483697	.8117993
	disagree	Agree	.16116609	.23789323	.984	5174611	.8397933
		Neutral	06888487	.24018061	1.000	7540371	.6162674
		Disagree	.16166806	.25213679	.988	5575911	.8809272
		99	28406168	.46998004	.991	-1.6247523	1.0566289
	99	Strongly agree	.41577644	.40899527	.913	7509457	1.5824986
		Agree	.44522777	.40869770	.886	7206455	1.6111010
		Neutral	.21517681	.41003335	.995	9545066	1.3848602
		Disagree	.44572974	.41714935	.894	7442532	1.6357127
		Strongly	.28406168	.46998004	.991	-1.0566289	1.6247523
		disagree	.20400100	.40550004	.991	-1.0500209	1.024/323
*. The mean difference							

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

REGR factor score 1 for analysis 1

Tukey HSD<sup>a,b</sup>

foodie		Subset for alpha = 0.05		
	N	1	2	
Disagree	119	2127406		
Agree	724	0115863	0115863	
Strongly agree	615	.0112162	.0112162	
Neutral	403	.0289541	.0289541	
99	6	.5523474	.5523474	
Strongly disagree	18		.6568912	
Sig.		.069	.160	

Means for groups in homogeneous subsets are displayed. a. Uses Harmonic Mean Sample Size = 25.411.

- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

REGR factor score 2 for analysis 1

\_Tukey HSD<sup>a,b</sup>

		Subset for alpha = 0.05
foodie	N	1
Neutral	403	1411718
Disagree	119	0711251
Strongly disagree	18	0085247
Agree	724	.0142741
Strongly agree	615	.0864637
99	6	.3333277
Sig.		.535

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 25.411.
  b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

REGR factor score 3 for analysis 1
Tukey HSD<sup>a,b</sup>

		Subset for alpha = 0.05
foodie	N	1
Disagree	119	2158923
Neutral	403	0816509
Strongly disagree	18	0724688
Agree	724	0381062
99	6	.0923993
Strongly agree	615	.1413584
Sig.		.797

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 25.411.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

# REGR factor score 4 for analysis 1

Tukey HSD<sup>a,b</sup>

Takey FIED		
		Subset for alpha = 0.05
foodie	N	1
Disagree	119	0622185
Agree	724	0617166
Strongly agree	615	0322652
Strongly disagree	18	.0994495
Neutral	403	.1683344
99	6	.3835112
Sig.		.603

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 25.411.
  b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

ONEWAY FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 BY trust /MISSING ANALYSIS /POSTHOC=TUKEY ALPHA(0.05).

# Oneway

[DataSet1] F:\301109.sav

#### **ANOVA**

			Sum of Squares	df	Mean Square
REGR factor score	1 for	Between Groups	24.345	5	4.869
analysis 1		Within Groups	1859.655	1879	.990
		Total	1884.000	1884	
REGR factor score 2	2 for	Between Groups	8.534	5	1.707
analysis 1		Within Groups	1875.466	1879	.998
		Total	1884.000	1884	
REGR factor score 3	3 for	Between Groups	14.481	5	2.896
analysis 1		Within Groups	1869.519	1879	.995
		Total	1884.000	1884	
REGR factor score 4	4 for	Between Groups	53.437	5	10.687
analysis 1		Within Groups	1830.563	1879	.974
		Total	1884.000	1884	

# ANOVA

			F	Sig.
REGR factor score	1 for	Between Groups	4.920	.000
analysis 1		Within Groups		
		Total		
REGR factor score	2 for	Between Groups	1.710	.129
analysis 1		Within Groups		
		Total		
REGR factor score	3 for	Between Groups	2.911	.013
analysis 1		Within Groups		
		Total		
REGR factor score	4 for	Between Groups	10.970	.000
analysis 1		Within Groups		
		Total		

#### **Post Hoc Tests**

# **Multiple Comparisons**

Dependent Variable	(I) trusting	(J) trusting	Mean			95% Confide	ence Interval
			Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
REGR factor score 1	Strongly agree	Agree	.20615672	.0557440	.003	.0471382	.3651753
for analysis 1		Neutral	.22968899 <sup>*</sup>	.0680722 0	.010	.0355025	.4238755
		Disagree	.25657143	.0983690	.096	0240416	.5371844
		Strongly disagree	33917677	.2385959	.714	-1.0198084	.3414549
		99	28808113	.3031790 9	.933	-1.1529463	.5767840
	Agree	Strongly agree	20615672	.0557440 6	.003	3651753	0471382
		Neutral	.02353228	.0620677	.999	1535256	.2005901
		Disagree	.05041471	.0943136	.995	2186294	.3194589
		Strongly disagree	54533349	.2369527 0	.194	-1.2212777	.1306107
		99	49423785	.3018876 3	.574	-1.3554189	.3669432
	Neutral	Strongly agree	22968899 <sup>*</sup>	.0680722 0	.010	4238755	0355025
		Agree	02353228	.0620677	.999	2005901	.1535256
		Disagree	.02688243	.1020856	1.000	2643327	.3180975
		Strongly disagree	56886577	.2401520 5	.168	-1.2539366	.1162050
		99	51777012	.3044052 7	.531	-1.3861331	.3505929
	Disagree	Strongly agree	25657143	.0983690	.096	5371844	.0240416
		Agree	05041471	.0943136	.995	3194589	.2186294
		Neutral	02688243	.1020856 6	1.000	3180975	.2643327
		Strongly disagree	59574820	.2504309 5	.164	-1.3101411	.1186447
		99	54465256	.3125783 4	.504	-1.4363305	.3470254
	Strongly disagree	Strongly agree	.33917677	.2385959	.714	3414549	1.0198084
	albagree	Agree	.54533349	.2369527	.194	1306107	1.2212777
		Neutral	.56886577	.2401520	.168	1162050	1.2539366
		Disagree	.59574820	.2504309	.164	1186447	1.3101411
		99	.05109564	.3807318	1.000	-1.0350008	1.1371920
	99	Strongly agree	.28808113	.3031790	.933	5767840	1.1529463
		Agree	.49423785	.3018876	.574	3669432	1.3554189
		Neutral	.51777012	.3044052	.531	3505929	1.3861331
		Disagree	.54465256	.3125783	.504	3470254	1.4363305
		Strongly disagree	05109564	.3807318	1.000	-1.1371920	1.0350008

REGR factor score 2	Strongly agree	Agree	.13378528	.0559805	.160	0259078	.2934784
for analysis 1	Strongly agree	Neutral	.05950136	.0683609	.954	1355089	
				7			.2545116
		Disagree	01746778	.0987863 8	1.000	2992712	.2643356
		Strongly disagree	.13211833	.2396080 5	.994	5514006	.8156373
		99	29782181	.3044652 1	.925	-1.1663558	.5707122
	Agree	Strongly agree	13378528	.0559805 3	.160	2934784	.0259078
		Neutral	07428391	.0623310 4	.841	2520928	.1035250
		Disagree	15125306	.0947137 0	.601	4214385	.1189324
		Strongly disagree	00166695	.2379578	1.000	6804785	.6771446
		99	43160709	.3031682	.713	-1.2964414	.4332272
	Neutral	Strongly agree	05950136	.0683609	.954	2545116	.1355089
		Agree	.07428391	.0623310	.841	1035250	.2520928
		Disagree	07696914	.1025187	.975	3694196	.2154813
		Strongly	.07261697	.2411708	1.000	6153600	.7605939
		disagree 99	35732317	.3056965 9	.852	-1.2293699	.5147235
	Disagree	Strongly agree	.01746778	.0987863	1.000	2643356	.2992712
		Agree	.15125306	.0947137	.601	1189324	.4214385
		Neutral	.07696914	.1025187	.975	2154813	.3694196
		Strongly	.14958611	.2514933	.991	5678374	.8670096
		disagree 99	28035403	.3139043	.948	-1.1758146	.6151065
	Strongly	Strongly agree	13211833	.2396080	.994	8156373	.5514006
	disagree	Agree	.00166695	.2379578	1.000	6771446	.6804785
		Neutral	07261697	.2411708	1.000	7605939	.6153600
		Disagree	14958611	.2514933	.991	8670096	.5678374
		99	42994014	.3823469 6	.871	-1.5206439	.6607636
	99	Strongly agree	.29782181	.3044652	.925	5707122	1.1663558
		Agree	.43160709	.3031682	.713	4332272	1.2964414
		Neutral	.35732317	.3056965	.852	5147235	1.2293699
		Disagree	.28035403	.3139043	.948	6151065	1.1758146
		Strongly disagree	.42994014	.3823469 6	.871	6607636	1.5206439
REGR factor score 3	Strongly agree	Agree	.17728139	.0558917	.019	.0178417	.3367211
for analysis 1		Neutral	.21658696	.0682524	.019	.0218862	.4112877
		Disagree	.08117846	.0986296	.963	2001778	.3625347
		Strongly	09586889	.2392278	.999	7783032	.5865654
		disagree 99	.10693049	.3039820	.999	7602252	.9740862
	Agree	Strongly agree	17728139 <sup>*</sup>	.0558917	.019	3367211	0178417
		Neutral	.03930558	.0622321	.989	1382212	.2168323
		_		3			

I		Disagree	09610293	.0945634	.913	3658596	.1736538
		Strongly	27315028	.2375802	.860	9508847	.4045841
		disagree 99	07035090	.3026871	1.000	9338128	.7931110
	Neutral	Strongly agree	21658696	.0682524	.019	4112877	0218862
		Agree	03930558	.0622321	.989	2168323	.1382212
		Disagree	13540850	.1023560	.772	4273949	.1565779
		Strongly disagree	31245585	3 .2407880 9	.786	9993410	.3744293
		99	10965647	.3052114	.999	9803193	.7610064
	Disagree	Strongly agree	08117846	.0986296	.963	3625347	.2001778
		Agree	.09610293	.0945634	.913	1736538	.3658596
		Neutral	.13540850	.1023560	.772	1565779	.4273949
		Strongly disagree	17704735	.2510942	.981	8933323	.5392376
		99	.02575203	.3134062	1.000	8682875	.9197916
	Strongly disagree	Strongly agree	.09586889	.2392278	.999	5865654	.7783032
	uisagiee	Agree	.27315028	.2375802	.860	4045841	.9508847
		Neutral	.31245585	.2407880	.786	3744293	.9993410
		Disagree	.17704735	.2510942	.981	5392376	.8933323
		99	.20279938	.3817402	.995	8861735	1.2917723
	99	Strongly agree	10693049	.3039820	.999	9740862	.7602252
		Agree	.07035090	.3026871	1.000	7931110	.9338128
		Neutral	.10965647	.3052114	.999	7610064	.9803193
		Disagree	02575203	.3134062	1.000	9197916	.8682875
		Strongly disagree	20279938	.3817402	.995	-1.2917723	.8861735
REGR factor score 4 for analysis 1	Strongly agree	Agree	.22286023	.0553063	.001	.0650904	.3806300
To analysis :		Neutral	.35544364	.0675376	.000	.1627821	.5481052
		Disagree	.61657560 <sup>*</sup>	.0975966	.000	.3381662	.8949850
		Strongly disagree	.19660484	.2367222	.962	4786820	.8718916
		99	20722984	.3007983	.983	-1.0653034	.6508437
	Agree	Strongly agree	22286023 <sup>*</sup>	.0553063	.001	3806300	0650904
		Neutral	.13258341	.0615803	.261	0430840	.3082508
		Disagree	.39371538	.0935729	.000	.1267840	.6606468
		Strongly	02625539	.2350919	1.000	6968915	.6443807
		disagree 99	43009007	.2995169	.705	-1.2845085	.4243284
	Neutral	Strongly agree	35544364	.0675376	.000	5481052	1627821
		Agree	13258341	.0615803	.261	3082508	.0430840
		Disagree	.26113196	.1012840	.103	0277963	.5500602
		_		1			l

		Strongly disagree	15883880	.2382662 0	.986	8385299	.5208523
		99	56267348	.3020148 5	.425	-1.4242175	.2988705
	Disagree	Strongly agree	61657560 <sup>*</sup>	.0975966 2	.000	8949850	3381662
		Agree	39371538	.0935729 9	.000	6606468	1267840
		Neutral	26113196	.1012840 1	.103	5500602	.0277963
		Strongly disagree	41997076	.2484643 8	.538	-1.1287538	.2888122
		99	82380544	.3101237 4	.085	-1.7084813	.0608704
-	Strongly disagree	Strongly agree	19660484	.2367222 6	.962	8718916	.4786820
		Agree	.02625539	.2350919 7	1.000	6443807	.6968915
		Neutral	.15883880	.2382662 0	.986	5208523	.8385299
		Disagree	.41997076	.2484643 8	.538	2888122	1.1287538
		99	40383468	.3777420 6	.894	-1.4814022	.6737329
	99	Strongly agree	.20722984	.3007983 0	.983	6508437	1.0653034
		Agree	.43009007	.2995169 8	.705	4243284	1.2845085
		Neutral	.56267348	.3020148 5	.425	2988705	1.4242175
		Disagree	.82380544	.3101237 4	.085	0608704	1.7084813
* The second I''	- in it is a state of the	Strongly disagree	.40383468	.3777420 6	.894	6737329	1.4814022

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

Tukcy HOD		
trusting		Subset for alpha
		= 0.05
	N	1
Disagree	128	1061566
Neutral	368	0792741
Agree	851	0557419
Strongly agree	509	.1504148
99	11	.4384960
Strongly disagree	18	.4895916
Sig.		.100

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 37.469.
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

#### REGR factor score 2 for analysis 1

Tukey HSD<sup>a,b</sup>

		Subset for alpha = 0.05
trusting	N	1
Agree	851	0634330
Strongly disagree	18	0617661
Neutral	368	.0108509
Strongly agree	509	.0703522
Disagree	128	.0878200
99	11	.3681741
Sig.		.421

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 37.469. b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

REGR factor score 3 for analysis 1
Tukey HSD<sup>a,b</sup>

rakey rieb		
		Subset for alpha = 0.05
trusting	N	1
Neutral	368	0890475
Agree	851	0497419
99	11	.0206090
Disagree	128	.0463610
Strongly agree	509	.1275395
Strongly disagree	18	.2234084
Sig.		.753

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 37.469.

- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

REGR factor score 4 for analysis 1

Tukey HSD<sup>a,b</sup>

		Subset for alpha = 0.05		
trusting	N	1	2	
Disagree	128	4040354		
Neutral	368	1429034	1429034	
Agree	851	0103200	0103200	
Strongly disagree	18	.0159354	.0159354	
Strongly agree	509	.2125402	.2125402	
99	11		.4197701	
Sig.		.075	.134	

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 37.469.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

# Oneway

[DataSet1] F:\301109.sav

# ANOVA

		Sum of Squares	df	Mean Square
REGR factor score 1 for	Between Groups	9.793	5	1.959
analysis 1	Within Groups	1874.207	1879	.997
	Total	1884.000	1884	
REGR factor score 2 for	Between Groups	21.106	5	4.221
analysis 1	Within Groups	1862.894	1879	.991
	Total	1884.000	1884	
REGR factor score 3 for	Between Groups	46.132	5	9.226
analysis 1	Within Groups	1837.868	1879	.978
	Total	1884.000	1884	
REGR factor score 4 for	Between Groups	7.917	5	1.583
analysis 1	Within Groups	1876.083	1879	.998
	Total	1884.000	1884	

#### **ANOVA**

			F	Sig.
REGR factor score	1 for	Between Groups	1.964	.081
analysis 1		Within Groups		
		Total		
REGR factor score	2 for	Between Groups	4.258	.001
analysis 1		Within Groups	ļ	
		Total		
REGR factor score	3 for	Between Groups	9.433	.000
analysis 1		Within Groups		
		Total		
REGR factor score	4 for	Between Groups	1.586	.161
analysis 1		Within Groups		
		Total		

### **Post Hoc Tests**

# **Multiple Comparisons**

Dependent Variable	(I) food	(J) food	Mean			95% Confide	ence Interval
	interests	interests	Difference			Lower	Upper
			(I-J)	Std. Error	Sig.	Bound	Bound
REGR factor score 1 for analysis 1	Strongly agree	Agree	00177874	.0499166 5	1.000	1441737	.1406162
		Neutral	08012745	.0880448 2	.944	3312889	.1710340
		Disagree	.15237322	.1849725 1	.963	3752894	.6800359
		Strongly disagree	32764778	.2442130 3	.762	-1.0243032	.3690076
		99	-1.14284172	.4477235 4	.110	-2.4200422	.1343588
	Agree	Strongly agree	.00177874	.0499166 5	1.000	1406162	.1441737
		Neutral	07834871	.0911620 6	.956	3384026	.1817051

disagree 0 0 99 -1.14106298 .4483469 .112 -2	-1.0257795	.3740414
99 -1.14106298 .4483469 .112 -2		
	-2.4200419	.1379159
	1710340	.3312889
	1817051	.3384026
	3382703	.8032717
Strongly24752033 .2558492 .928 disagree 8	9773699	.4823292
	-2.3583195	.2328909
Disagree Strongly agree15237322 .1849725 .963	6800359	.3752894
	6861048	.3778008
Neutral23250067 .2000841 .855	8032717	.3382703
	-1.3449061	.3848641
	-2.6714194	.0809895
Strongly Strongly agree .32764778 .2442130 .762 disagree 3	3690076	1.0243032
	3740414	1.0257795
	4823292	.9773699
	3848641	1.3449061
	-2.2646212	.6342334
	1343588	2.4200422
	1379159	2.4200419
	2328909	2.3583195
Disagree 1.29521494 .4824294 .079	0809895	2.6714194
Strongly .81519393 .5080977 .596 disagree 6	6342334	2.2646212
REGR factor score 2 Strongly agree Agree .16851562 .0497657 .009 for analysis 1	.0265511	.3104802
Neutral .25676430 .0877786 .041	.0063621	.5071665
	0913317	.9608036
	5718924	.8172068
	-1.6484463	.8982335
	3104802	0265511
	1710191	.3475164
	2641246	.7965652
	7436532	.6519364
y I	-1.8187349	.7314909
	5071665	0063621
	3475164	.1710191

		Disagree	.17797162	.1994793	.948	3910741	.7470173
		Strongly	13410709	.2550759	.995	8617505	.5935363
		disagree 99	63187069	.4528024	.730	-1.9235596	.6598182
				6			
	Disagree	Strongly agree	43473592	.1844133 8	.172	9608036	.0913317
		Agree	26622030	.1859127 6	.707	7965652	.2641246
		Neutral	17797162	.1994793 7	.948	7470173	.3910741
		Strongly disagree	31207871	.3022696 2	.907	-1.1743495	.5501920
		99	80984231	.4809711 7	.543	-2.1818868	.5622022
	Strongly disagree	Strongly agree	12265721	.2434748	.996	8172068	.5718924
	alougico	Agree	.04585841	.2446124	1.000	6519364	.7436532
		Neutral	.13410709	.2550759	.995	5935363	.8617505
		Disagree	.31207871	.3022696	.907	5501920	1.1743495
		99	49776360	.5065619	.924	-1.9428097	.9472824
	99	Strongly agree	.37510640	.4463701	.960	8982335	1.6484463
		Agree	.54362201	.4469917	.829	7314909	1.8187349
		Neutral	.63187069	.4528024	.730	6598182	1.9235596
		Disagree	.80984231	.4809711 7	.543	5622022	2.1818868
		Strongly disagree	.49776360	.5065619	.924	9472824	1.9428097
REGR factor score 3	Strongly agree	Agree	.27503580*	.0494303	.000	.1340281	.4160435
for analysis 1		Neutral	.40101236	6 .0871870 8	.000	.1522978	.6497270
		Disagree	.41604798	.1831704 9	.206	1064741	.9385701
		Strongly disagree	17528935	.2418338	.979	8651579	.5145792
		99	.27832143	.4433617	.989	9864365	1.5430794
	Agree	Strongly agree	27503580	.0494303	.000	4160435	1340281
		Neutral	.12597656	.0902739	.730	1315438	.3834969
		Disagree	.14101218	.1846597	.973	3857583	.6677827
		Strongly	45032515	.2429638	.432	-1.1434170	.2427667
		disagree 99	.00328563	5 .4439791 3	1.000	-1.2632334	1.2698047
	Neutral	Strongly agree	40101236	.0871870	.000	6497270	1522978
		Agree	12597656	.0902739	.730	3834969	.1315438
		Disagree	.01503562	.1981349	1.000	5501749	.5802461
		Strongly	57630171	.2533567	.205	-1.2990410	.1464376
		disagree 99	12269093	.4497507	1.000	-1.4056742	1.1602924
	Disagree	Strongly agree	41604798	.1831704	.206	9385701	.1064741
		Agree	14101218	.1846597	.973	6677827	.3857583
		Neutral	01503562	.1981349	1.000	5802461	.5501749
		Strongly	59133733	.3002324	.360	-1.4477966	.2651220
		disagree		1			

Agree	651579 434170 990410 477966 8889176 864365 632334 9056742 6005239 8816961 3391868 772296
Agree	2990410 4477966 8889176 864365 6632334 6056742 6005239 8816961 391868
Neutral   .57630171   .2533567   .205  1464376   1.2	1477966 1889176 1864365 1632334 1056742 1005239 1816961
Disagree   .59133733   .3002324   .360  2651220   1.4     99	8889176 864365 8632334 8056742 8005239 8816961
99 Strongly agree27832143 .4433617 .989 -1.5430794 .58  Agree00328563 .4439791 1.000 -1.2698047 1.2  Neutral .12269093 .4497507 1.000 -1.1602924 1.4  Disagree .13772655 .4777295 1.000 -1.2250708 1.5  Strongly disagree .7  Strongly disagree .09672058 .0499416 .3800457456 .2  Neutral07405751 .0880888 .9603253446 .1  Agree Strongly agree .09672058 .0499416 .996 .5760770 .8  Strongly disagree .099 .60169030 .4479475 .761 -1.8795297 .6  Neutral17077809 .0912076 .4204309620 .0  Neutral17077809 .0912076 .4204309620 .0  Strongly disagree .04132328 .1865697 1.0004908956 .5  Strongly disagree .04132328 .1865697 1.0004908956 .5  Neutral Strongly agree .69841088 .4485712 .627 -1.9780296 .5  Neutral Strongly agree .07405751 .0880888 .9601772296 .5	1864365 1632334 1056742 1005239 1816961 1391868
99 Strongly agree27832143 .4433617 8 Agree00328563 .4439791 1.000 -1.2698047 1.2  Neutral .12269093 .4497507 1.000 -1.1602924 1.4 Disagree .13772655 .4777295 1.000 -1.2250708 1.5 Strongly disagree09672058 .0499416 .3800457456 .2 Neutral07405751 .0880888 .9603253446 .1 Strongly disagree .13804386 .1850650 .9763898827 .6 Strongly disagree .9960169030 .4479475 .761 -1.8795297 .6  Neutral17077809 .0912076 .4204309620 .0 Disagree .04132328 .1865697 1.0004908956 .5 Strongly disagree .9969841088 .4485712 .627 -1.9780296 .5 Neutral Strongly agree .07405751 .0880888 .9601772296 .5  Neutral Strongly agree .07405751 .0880888 .960 .1772296 .5	2632334 2056742 3005239 2816961 2391868
Agree00328563	056742 6005239 0816961 2391868
Neutral   .12269093   .4497507   1.000   -1.1602924   1.4     Disagree   .13772655   .4777295   1.000   -1.2250708   1.5     Strongly disagree   .45361078   .5031478   .946   -1.8889176   .5     REGR factor score   4 for analysis 1   Neutral  07405751   .0880888   .960  3253446   .1     Disagree   .13804386   .1850650   .976  3898827   .6     Disagree   .12092684   .2443352   .996  5760770   .8     Strongly disagree   .999  60169030   .4479475   .761   -1.8795297   .6     Agree   Strongly agree  09672058   .0499416   .380  2391868   .0     Neutral  17077809   .0912076   .420  4309620   .0     Disagree   .04132328   .1865697   1.000  4908956   .5     Strongly disagree   .99  69841088   .4485712   .627   -1.9780296   .5     Neutral   Strongly agree   .07405751   .0880888   .960  1772296   .5     Neutral   Strongly agree   .07405751   .0880888   .960  1772296   .5	6005239 9816961 2391868
Strongly disagree   Composition   Composit	816961
Strongly disagree  45361078   .5031478   .946   -1.8889176   .538888   .946   -1.8889176   .5388888   .946   -1.8889176   .5388888   .946   -1.8889176   .24889176   .24889176   .248891876   .24889188   .946   -1.8889176   .24889188   .946   -1.8889176   .24889188   .946   -1.8889176   .24889188   .946   -1.8889176   .24889188   .946   -1.8889176   .24889188   .946   -1.874946   .2489918   .946   -1.874946   .2489918   .946   -1.874946   .2489918   .946   -1.874946   .2489918   .946   -1.874946   .2489918   .946   -1.874946   .2489918   .946   -1.874946   .2489918   .946   -1.8889176   .2489918   .946   -1.8889176   .2489918   .946   -1.8889176   .2489918   .946   -1.8889176   .2489918   .9489918   .946   -1.8889176   .2489918   .946   -1.8889176   .2489918   .946   -1.8889176   .2489918   .946   -1.8889176   .2489988   .946   -1.8889176   .2489988   .946   -1.8889176   .2489918   .946   -1.8889176   .2489918   .946   -1.8889176   .2489918   .946   -1.8889176   .2489918   .946   -1.8889176   .2489988   .946   -1.8889176   .2489988   .946   -1.8889176   .2489918   .9489	391868
REGR factor score 4 for analysis 1  Neutral  Neu	
Neutral07405751	772296
Disagree .13804386 .1850650 .9763898827 .68  Strongly	
disagree 9960169030 .4479475 .761 -1.8795297 .60  Agree Strongly agree09672058 .0499416 .3802391868 .00  Neutral17077809 .0912076 .4204309620 .00  Disagree .04132328 .1865697 1.0004908956 .50  Strongly .02420626 .2454768 1.0006760543 .70  disagree 9969841088 .4485712 .627 -1.9780296 .50  Neutral Strongly agree .07405751 .0880888 .9601772296 .30	659705
9960169030	179307
Agree Strongly agree09672058 .0499416 .3802391868 .00  Neutral17077809 .0912076  .4204309620 .00  Disagree .04132328 .1865697  1.0004908956 .5  Strongly .02420626 .2454768  1.0006760543 .7  disagree	761491
Neutral      17077809       .0912076       .420      4309620       .00         Disagree       .04132328       .1865697       1.000      4908956       .5         Strongly disagree       .02420626       .2454768       1.000      6760543       .7         4      69841088       .4485712       .627       -1.9780296       .5         Neutral       Strongly agree       .07405751       .0880888       .960      1772296       .3	457456
Disagree .04132328 .1865697 1.0004908956 .5  Strongly .02420626 .2454768 1.0006760543 .7 disagree 9969841088 .4485712 .627 -1.9780296 .5  Neutral Strongly agree .07405751 .0880888 .9601772296 .3	894058
Strongly disagree     .02420626     .2454768 4     1.000    6760543     .7       99    69841088     .4485712 5     .627     -1.9780296     .5       Neutral     Strongly agree     .07405751     .0880888     .960    1772296     .3	735422
9969841088 .4485712 .627 -1.9780296 .5 Neutral Strongly agree .07405751 .0880888 .9601772296 .3	244668
Neutral Strongly agree .07405751 .0880888 .9601772296 .3	812078
	253446
	309620
· · · · · · · · · · · · · · · · · · ·	831579
	251990
disagree 7 9952763280 .4544025 .855 -1.8238861 .7	686205
	898827
· · · · · · · · · · · · · · · · · · ·	908956
Neutral21210136 .2001842 .8977831579 .3	589552
	482007
	371587
	760770
· · · · · · · · · · · · · · · · · · ·	
Neutral19498435 .2559772 .9749251990 .5	760543
Disagree .01711702 .3033377 1.0008482007 .8	760543 352303

	99	72261715	.5083519 3	.714	-2.1727695	.7275352
99	Strongly agree	.60169030	.4479475 1	.761	6761491	1.8795297
	Agree	.69841088	.4485712 5	.627	5812078	1.9780296
	Neutral	.52763280	.4544025 2	.855	7686205	1.8238861
	Disagree	.73973416	.4826707 6	.643	6371587	2.1166270
	Strongly disagree	.72261715	.5083519 3	.714	7275352	2.1727695

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

REGR factor score 1 for analysis 1

Tukey HSD<sup>a,b</sup>

food interests		Subset for alpha = 0.05			
	N	1	2		
Disagree	30	1628003			
Strongly agree	1032	0104271			
Agree	654	0086483			
Neutral	147	.0697004			
Strongly disagree	17	.3172207	.3172207		
99	5		1.1324146		
Sig.		.654	.104		

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 19.903.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

REGR factor score 2 for analysis 1

Tukey HSD<sup>a,t</sup>

		Subset for alpha = 0.05
food interests	N	1
Disagree	30	3492159
Neutral	147	1712443
Agree	654	0829956
Strongly disagree	17	0371372
Strongly agree	1032	.0855200
99	5	.4606264
Sig.		.106

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 19.903.b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

REGR factor score 3 for analysis 1

Tukey HSD<sup>a,b</sup>

Tulkey Flob		
		Subset for alpha = 0.05
food interests	N	1
Disagree	30	2835730
Neutral	147	2685374
99	5	1458464
Agree	654	1425608
Strongly agree	1032	.1324750
Strongly disagree	17	.3077643
Sig.		.411

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 19.903.

# REGR factor score 3 for analysis 1

Tukey HSD<sup>a,b</sup>

		Subset for alpha = 0.05
food interests	N	1
Disagree	30	2835730
Neutral	147	2685374
99	5	1458464
Agree	654	1425608
Strongly agree	1032	.1324750
Strongly disagree	17	.3077643
Sig.		.411

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 19.903.
  b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

REGR factor score 4 for analysis 1

ı	ukey	H2D.

		Subset for alpha = 0.05
food interests	N	1
Disagree	30	1085704
Strongly disagree	17	0914534
Agree	654	0672471
Strongly agree	1032	.0294734
Neutral	147	.1035309
99	5	.6311637
Sig.		.180

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 19.903.

- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

ONEWAY FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 BY foodeve /MISSING ANALYSIS /POSTHOC=TUKEY ALPHA(0.05).

#### Oneway

[DataSet1] F:\301109.sav

#### ANOVA

ANOVA							
		Sum of Squares	df	Mean Square			
REGR factor score 1 for	Between Groups	5.271	5	1.054			
analysis 1	Within Groups	1878.729	1879	1.000			
	Total	1884.000	1884				
REGR factor score 2 for	Between Groups	10.362	5	2.072			
analysis 1	Within Groups	1873.638	1879	.997			
	Total	1884.000	1884				
REGR factor score 3 for	Between Groups	35.458	5	7.092			
analysis 1	Within Groups	1848.542	1879	.984			
	Total	1884.000	1884				
REGR factor score 4 for	Between Groups	9.309	5	1.862			
analysis 1	Within Groups	1874.691	1879	.998			
	Total	1884.000	1884				

# ANOVA

			F	Sig.
REGR factor score	1 for	Between Groups	1.054	.384
analysis 1		Within Groups		
		Total		
REGR factor score	2 for	Between Groups	2.078	.065
analysis 1		Within Groups		
		Total		
REGR factor score	3 for	Between Groups	7.208	.000
analysis 1		Within Groups		
		Total		
REGR factor score	4 for	Between Groups	1.866	.097
analysis 1		Within Groups		
		Total		

# **Post Hoc Tests**

Tukey HSD		Multiple Co	mparisons				
Dependent Variable	(I) visit food	(J) visit food	Mean			95% Confide	ence Interval
·	events	events	Difference			Lower	Upper
			(I-J)	Std. Error	Sig.	Bound	Bound
REGR factor score 1 for analysis 1	Strongly agree	Agree	02167533	.0580217 1	.999	1871912	.1438405
		Neutral	.00837440	.0654547 5	1.000	1783454	.1950942
		Disagree	.04520509	.0811802 9	.994	1863742	.2767844
		Strongly disagree	.01524545	.1478130 7	1.000	4064142	.4369050
		99	58997626	.2806485 0	.286	-1.3905694	.2106169
	Agree	Strongly agree	.02167533	.0580217 1	.999	1438405	.1871912
		Neutral	.03004972	.0628305 1	.997	1491840	.2092834
		Disagree	.06688042	.0790796 2	.959	1587064	.2924673
		Strongly disagree	.03692077	.1466698 7	1.000	3814777	.4553192
		99	56830094	.2800480 8	.326	-1.3671813	.2305795
	Neutral	Strongly agree	00837440	.0654547 5	1.000	1950942	.1783454
		Agree	03004972	.0628305 1	.997	2092834	.1491840
		Disagree	.03683069	.0846840 8	.998	2047437	.2784051
		Strongly disagree	.00687105	.1497660 1	1.000	4203596	.4341017
		99	59835066	.2816819 8	.275	-1.4018920	.2051907
	Disagree	Strongly agree	04520509	.0811802 9	.994	2767844	.1863742
		Agree	06688042	.0790796 2	.959	2924673	.1587064
		Neutral	03683069	.0846840 8	.998	2784051	.2047437
		Strongly disagree	02995964	.1572761 0	1.000	4786140	.4186947
		99	63518136	.2857457 8	.228	-1.4503153	.1799526
	Strongly disagree	Strongly agree	01524545	.1478130 7	1.000	4369050	.4064142
		Agree	03692077	.1466698 7	1.000	4553192	.3814777

Disagree		_	- Neutral	00687105	.1497660	1.000	4341017	.4203596
99				11	1			
99 Strongly agree   .58937626   .286485   .286   .2106169   1.3905694   Agree   .56830094   .2800480   .326   .2206795   1.3671813   Neutral   .59835066   .2816819   .275   .2051907   1.4019820   B			Disagree	.02995964	0	1.000	4186947	.4786140
Agree   .56830094   .2900480   .326   .2305795   1.3671813   Neutral   .59835066   .2818819   .275   .2261907   1.4019320   Disagree   .63518136   .2857457   .311326   .228   .1799526   1.4503153   Strongly disagree   .60522171   .311326   .375   .228161   1.4323153   REGR factor score 2 for analysis 1   .12264501   .0679430   .279   .0426465   .2879365   .2879			99	60522171		.375	-1.4932595	.2828161
Agree		99	Strongly agree	.58997626		.286	2106169	1.3905694
Neutral			Agree	.56830094	.2800480	.326	2305795	1.3671813
Disagree   .63518136   .285745   .228   .1799626   1.4503153     Strongly disagree   .60522171   .3113022   .375   .2828161   1.4932595     REGR factor score 2 for analysis 1   .627636   .659620			Neutral	.59835066	.2816819	.275	2051907	1.4018920
Strongly disagree   .60522171   .3113022   .375   .2828161   1.4932595			Disagree	.63518136	.2857457	.228	1799526	1.4503153
REGR factor score 2 for analysis 1    Neutral   1.5213618   0.653660   1.83   -0.343304   .3386028   .3386028   .3476125   .3444023   .1476125   .944   -2.866477   .5555281   .3444023   .1476125   .944   .2866477   .5555281   .3444023   .1476125   .944   .2866477   .5555281   .3444023   .1476125   .944   .2866477   .5555281   .3444023   .1476125   .944   .2866477   .5555281   .3444023   .1476125   .944   .2866477   .5555281   .3426465   .34644023   .3476125   .944   .2866477   .5555281   .3426465   .34644023   .3476125   .944   .2866477   .5555281   .3426465   .34644023   .3464418   .34644023   .3464418   .34644023   .3464418   .34644023   .3464418   .34644023   .3464418   .34644023   .3464418   .3464403   .3464418   .3464403   .3464418   .3464403   .3464418   .3464403   .3464418   .3464403   .3464418   .3464403   .3464418   .3464403   .3464418   .3464403   .3464418   .3464403   .3464418   .3464403   .3464418   .3464403   .3464418   .3464403   .3464418   .3464403   .3464418   .3464403   .3464418   .3464603   .3464418   .3464603   .3464418   .3464603   .3464418   .3464603   .3464418   .3464603   .3464418   .3464603   .3464418   .3464603   .3464418   .3464603   .3464418   .3464603   .3464418   .3464603   .3464418   .3464603   .3464418   .3464603   .3464418   .3464603   .3464418   .3464603   .3464418   .3464603   .3464604   .3464604   .3464604   .3464604   .3464604   .3464604   .3464604   .3464604   .3464603   .3464604   .3464604   .3464603   .3464604   .3464603   .3466603			Strongly disagree	.60522171	.3113022	.375	2828161	1.4932595
Neutral 1.5213618		Strongly agree	Agree	.12264501	.0579430	.279	0426465	.2879365
Strongly disagree	2 for analysis f		Neutral	.15213618	l l	.183	0343304	.3386028
99			Disagree	.18842251	.0810702	.185	0428428	.4196878
Page			Strongly disagree	.13444023		.944	2866477	.5555281
Neutral			99	27202917	.2802680	.927	-1.0715369	.5274785
Disagree		Agree	Strongly agree	12264501	.0579430	.279	2879365	.0426465
Strongly disagree 99939467418 .2796683 .720 -1.1924714 .4031231 .39467418 .2796683 .720 -1.1924714 .4031231 .39467418 .0653660 .183 .3386028 .0343304 .4gree02949118 .0627453 .997 .2084819 .1494995 .20 .3628632 .0845692 .998 .2049606 .2775332 .66 .2813000 .4443474 .4089555 .4495629 .999 .42416536 .2813000 .659 -1.2266172 .3782865 .70 .70 .789724 .961 .2910585 .1595035 .1996 .72775332 .2049606 .5810919 .494968 .2853583 .590 .2775332 .2049606 .5810919 .494968 .2853583 .590 .1.2744805 .3535771 .5810919 .494928 .2853583 .590 .1.2744805 .3535771 .5999 .40646940 .10600 .4089555 .4443474 .4060360 .4999 .40646940 .3108802 .781 .12930332 .4803644 .999 .510019 .3999 .520284 .394638 .5020284 .999 .40646940 .3108802 .781 .12930332 .4803644 .999 .40646940 .3108802 .781 .12930332 .4803644 .999 .510019 .39467418 .279688 .927 .55274785 1.0715369 .999 .40646940 .3108802 .720 .4031231 1.1924714			Neutral	.02949118	.0627453	.997	1494995	.2084819
Neutral   Strongly agree  15213618   .2796633   .720   -1.1924714   .4031231			Disagree	.06577750	.0789724	.961	1595035	.2910585
Neutral   Strongly agree  15213618   .0653660   .183  3386028   .0343304     Agree  02949118   .0627453   .997  2084819   .1494995     Disagree   .03628632   .0845692   .998  2049606   .2775332     Strongly disagree  01769595   .1495629   1.000  4443474   .4089555     Garage  22416536   .2813000   .659   -1.2266172   .3782865     Disagree   Strongly agree  18842251   .0810702   .185  4196878   .0428428     Agree  06577750   .0789724   .961  2910585   .1595035     Neutral  03628632   .0845692   .998  2775332   .2049606     Strongly disagree  05398228   .1570628   .999  5020284   .3940638     99  46045168   .2853583   .590   -1.2744805   .3535771     Strongly disagree   Strongly agree  13444023   .1476126   .944  5555281   .2866477     Agree  01179522   .1464710   1.000  4296264   .4060360     Neutral   .01769595   .1495629   1.000  4089555   .4443474     Disagree   .05398228   .1570628   .999  3940638   .5020284     99   Strongly agree   .27202917   .2802880   .927  5274785   1.0715369     Agree   .39467418   .2796683   .720  4031231   1.1924714			Strongly disagree	.01179522		1.000	4060360	.4296264
Neutral			99	39467418	.2796683	.720	-1.1924714	.4031231
Agree02949118		Neutral	Strongly agree	15213618	.0653660	.183	3386028	.0343304
Disagree   .03628632   .0845692   .998  2049606   .2775332     Strongly disagree  01769595   .1495629   1.000  4443474   .4089555     99			Agree	02949118	.0627453	.997	2084819	.1494995
Strongly disagree 9901769595			Disagree	.03628632	.0845692	.998	2049606	.2775332
P9			Strongly disagree	01769595	.1495629	1.000	4443474	.4089555
Agree06577750			99	42416536	_	.659	-1.2266172	.3782865
Agree06577750		Disagree	Strongly agree	18842251		.185	4196878	.0428428
Strongly disagree			Agree	06577750		.961	2910585	.1595035
Strongly disagree			Neutral	03628632	_	.998	2775332	.2049606
Strongly disagree Strongly agree13444023 .1476126 .9445555281 .2866477  Agree01179522 .1464710 1.0004296264 .4060360  Neutral .01769595 .1495629 1.0004089555 .4443474  Disagree .05398228 .1570628 .9993940638 .5020284  9940646940 .3108802 .781 -1.2933032 .4803644  99 Strongly agree .27202917 .2802680 .9275274785 1.0715369  Agree .39467418 .2796683 .7204031231 1.1924714			Strongly disagree	05398228	t e	.999	5020284	.3940638
Strongly disagree         Strongly agree        13444023         .1476126         .944        5555281         .2866477           Agree        01179522         .1464710         1.000        4296264         .4060360           Neutral         .01769595         .1495629         1.000        4089555         .4443474           Disagree         .05398228         .1570628         .999        3940638         .5020284           99        40646940         .3108802         .781         -1.2933032         .4803644           99         Strongly agree         .27202917         .2802680         .927        5274785         1.0715369           Agree         .39467418         .2796683         .720        4031231         1.1924714			99	46045168		.590	-1.2744805	.3535771
Neutral .01769595 .1495629 1.0004089555 .4443474  Disagree .05398228 .1570628 .9993940638 .5020284  9940646940 .3108802 .781 -1.2933032 .4803644  99 Strongly agree .27202917 .2802680 .9275274785 1.0715369  Agree .39467418 .2796683 .7204031231 1.1924714		Strongly disagree	Strongly agree	13444023		.944	5555281	.2866477
Neutral .01769595 .1495629 1.0004089555 .4443474  Disagree .05398228 .1570628 .9993940638 .5020284  9940646940 .3108802 .781 -1.2933032 .4803644  99 Strongly agree .27202917 .2802680 .9275274785 1.0715369  Agree .39467418 .2796683 .7204031231 1.1924714			Agree	01179522		1.000	4296264	.4060360
9940646940 .3108802 .781 -1.2933032 .4803644  99 Strongly agree .27202917 .2802680 .9275274785 1.0715369  Agree .39467418 .2796683 .7204031231 1.1924714			Neutral	.01769595		1.000	4089555	.4443474
99 Strongly agree .27202917 .2802680 .9275274785 1.0715369  Agree .39467418 .2796683 .7204031231 1.1924714			Disagree	.05398228	.1570628	.999	3940638	.5020284
99 Strongly agree .27202917 .2802680 .9275274785 1.0715369  Agree .39467418 .2796683 .7204031231 1.1924714			99	40646940		.781	-1.2933032	.4803644
Agree .39467418 .2796683 .7204031231 1.1924714		99	Strongly agree	.27202917	.2802680	.927	5274785	1.0715369
Neutral .42416536 .2813000 .6593782865 1.2266172			Agree	.39467418		.720	4031231	1.1924714
			Neutral	.42416536	9 .2813000 7	.659	3782865	1.2266172

		Disagree	.46045168	.2853583	.590	3535771	1.2744805
		Strongly disagree	.40646940	.3108802	.781	4803644	1.2933032
REGR factor score	Strongly agree	Agree	.27919358	.0575536	.000	.1150128	.4433743
3 for analysis 1		Neutral	.28324065 <sup>*</sup>	.0649267	.000	.0980270	.4684543
		Disagree	.37218355 <sup>*</sup>	.0805254	.000	.1424723	.6018948
		Strongly disagree	.33067296	.1466207	.213	0875853	.7489312
		99	.23085627	.2783846 5	.962	5632789	1.0249915
	Agree	Strongly agree	-	.0575536	.000	4433743	1150128
		Neutral	.27919358* .00404707	.0623236	1.000	1737409	.1818350
		Disagree	.09298997	.0784417	.844	1307772	.3167571
		Strongly disagree	.05147938	.1454867 6	.999	3635441	.4665028
		99	04833731	.2777890 8	1.000	8407735	.7440989
	Neutral	Strongly agree	-	.0649267	.000	4684543	0980270
		Agree	.28324065 <sup>*</sup> 00404707	6 .0623236 9	1.000	1818350	.1737409
		Disagree	.08894290	.0840009	.898	1506829	.3285687
		Strongly disagree	.04743231	.1485579	1.000	3763521	.4712167
		99	05238438	.2794097 9	1.000	8494439	.7446752
	Disagree	Strongly agree	-	.0805254	.000	6018948	1424723
		Agree	.37218355 09298997	.0784417	.844	3167571	.1307772
		Neutral	08894290	.0840009 8	.898	3285687	.1506829
		Strongly disagree	04151059	.1560074	1.000	4865459	.4035247
		99	14132728	.2834408	.996	9498859	.6672314
	Strongly disagree	Strongly agree	33067296	.1466207	.213	7489312	.0875853
		Agree	05147938	.1454867	.999	4665028	.3635441
		Neutral	04743231	.1485579	1.000	4712167	.3763521
		Disagree	.04151059	.1560074	1.000	4035247	.4865459
		99	09981669	.3087911 7	1.000	9806912	.7810578
	99	Strongly agree	23085627	.2783846	.962	-1.0249915	.5632789
		Agree	.04833731	.2777890	1.000	7440989	.8407735
		Neutral	.05238438	.2794097	1.000	7446752	.8494439
		Disagree	.14132728	.2834408	.996	6672314	.9498859
		Strongly disagree	.09981669	.3087911	1.000	7810578	.9806912
REGR factor score 4 for analysis 1	Strongly agree	Agree	.11344668	.0579593	.368	0518912	.2787846
. Tot allalyold 1		Neutral	04932929	.0653843	.975	2358483	.1371897
		Disagree	03640538	.0810929	.998	2677357	.1949249
		Strongly disagree	.05109224	.1476541	.999	3701139	.4722984
		99	20839480	.2803467	.976	-1.0081271	.5913375
	_	132		1			

Agree Strongly agree11344668 .0579593 .36	2787846	.0518912
Neutral16277597 .0627629 .099	3418170	.0162650
Disagree14985206 .0789945 .40	3751963	.0754922
Strongly disagree06235444 .1465121 .996	4803030	.3555941
9932184148 .2797469 4	-1.1198628	.4761799
Neutral Strongly agree .04932929 .0653843 .975	1371897	.2358483
Agree .16277597 .0627629 .099	0162650	.3418170
Disagree .01292391 .0845930 1.000	2283907	.2542386
Strongly disagree .10042154 .1496049 .98	3263497	.5271928
9915906551 .2813790 .993 8	9617428	.6436117
Disagree Strongly agree .03640538 .0810929 .996	1949249	.2677357
Agree .14985206 .0789945 .404	0754922	.3751963
Neutral01292391 .0845930 1.000	2542386	.2283907
Strongly disagree .08749762 .1571069 .994	3606743	.5356695
9917198942 .2854385 .99	9862468	.6422680
Strongly disagree Strongly agree05109224 .1476541 .999	4722984	.3701139
Agree .06235444 .1465121 .996	3555941	.4803030
Neutral10042154 .1496049 .988	5271928	.3263497
Disagree08749762 .1571069 .99	5356695	.3606743
9925948704 .3109675 4	-1.1465699	.6275959
99 Strongly agree .20839480 .2803467 .970	5913375	1.0081271
Agree .32184148 .2797469 .866	4761799	1.1198628
Neutral .15906551 .2813790 .998	6436117	.9617428
Disagree .17198942 .2854385 .99	6422680	.9862468
Strongly disagree .25948704 .3109675 .96	6275959	1.1465699

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

_ Tukey HSD					
visit food events		Subset for alpha = 0.05			
	N	1	2		
Disagree	211	0495727			
Strongly disagree	50	0196131			
Neutral	411	0127420			
Strongly agree	540	0043676			
Agree	660	.0173077			
99	13		.5856086		
Sig.		.999	1.000		

Means for groups in homogeneous subsets are displayed. a. Uses Harmonic Mean Sample Size = 55.833.

#### REGR factor score 1 for analysis 1

Tukey HSD<sup>a,b</sup>

visit food events		Subset for alpha = 0.05		
	N	1	2	
Disagree	211	0495727		
Strongly disagree	50	0196131		
Neutral	411	0127420		
Strongly agree	540	0043676		
Agree	660	.0173077		
99	13		.5856086	
Sig.		.999	1.000	

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 55.833.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

#### REGR factor score 2 for analysis 1

Tukey HSD<sup>a,b</sup>

		Subset for alpha = 0.05
visit food events	N	1
Disagree	211	0895278
Neutral	411	0532415
Strongly disagree	50	0355456
Agree	660	0237503
Strongly agree	540	.0988947
99	13	.3709238
Sig.		.144

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 55.833.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

#### REGR factor score 3 for analysis 1

Tukey HSD<sup>a,b</sup>

		Subset for alpha = 0.05
visit food events	N	1
Disagree	211	1606476
Strongly disagree	50	1191371
Neutral	411	0717047
Agree	660	0676577
99	13	0193204
Strongly agree	540	.2115359
Sig.		.353

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 55.833.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

#### REGR factor score 4 for analysis 1

Tukey HSD<sup>a,b</sup>

Tukey HSD		
		Subset for alpha = 0.05
visit food events	N	1
Agree	660	0886380
Strongly disagree	50	0262835
Strongly agree	540	.0248087
Disagree	211	.0612141
Neutral	411	.0741380
99	13	.2332035
Sig.		.530

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 55.833.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

ONEWAY FAC1\_1 FAC2\_1 FAC3\_1 FAC4\_1 BY artexp /MISSING ANALYSIS /POSTHOC=TUKEY ALPHA(0.05).

Oneway

[DataSet1] F:\301109.sav

# **ANOVA**

		Sum of Squares	df	Mean Square
REGR factor score 1 for	Between Groups	8.968	5	1.794
analysis 1	Within Groups	1875.032	1879	.998
	Total	1884.000	1884	
REGR factor score 2 for	Between Groups	25.080	5	5.016
analysis 1	Within Groups	1858.920	1879	.989
	Total	1884.000	1884	
REGR factor score 3 for	Between Groups	21.978	5	4.396
analysis 1	Within Groups	1862.022	1879	.991
	Total	1884.000	1884	
REGR factor score 4 for	Between Groups	18.703	5	3.741
analysis 1	Within Groups	1865.297	1879	.993
	Total	1884.000	1884	

#### **ANOVA**

		F	Sig.
REGR factor score 1 fo	r Between Groups	1.797	.110
analysis 1	Within Groups		
	Total		
REGR factor score 2 fo	r Between Groups	5.070	.000
analysis 1	Within Groups		
	Total		
REGR factor score 3 fo	r Between Groups	4.436	.001
analysis 1	Within Groups		
	Total		
REGR factor score 4 fo	r Between Groups	3.768	.002
analysis 1	Within Groups		
	Total		

# **Post Hoc Tests**

# **Multiple Comparisons**

Dependent Variable	(I) artistic	(J) artistic	Mean			95% Confide	ence Interval
	experiences	experiences	Difference			Lower	Upper
			(I-J)	Std. Error	Sig.	Bound	Bound
REGR factor score 1 for analysis 1	Strongly agree	Agree	.04371882	.0587119 6	.976	1237661	.2112037
		Neutral	03896741	.0650150 7	.991	2244329	.1464981
		Disagree	.09519234	.1086182 6	.952	2146580	.4050427
		Strongly disagree	19570313	.2282482 6	.956	8468165	.4554103
		99	62495784	.2810044 4	.227	-1.4265664	.1766507
	Agree	Strongly agree	04371882	.0587119 6	.976	2112037	.1237661
		Neutral	08268623	.0571696 1	.699	2457714	.0803989
		Disagree	.05147352	.1041121 1	.996	2455223	.3484694
		Strongly disagree	23942195	.2261386 2	.898	8845173	.4056734
		99	66867666	.2792935 8	.159	-1.4654047	.1280514
	Neutral	Strongly agree	.03896741	.0650150 7	.991	1464981	.2244329
		Agree	.08268623	.0571696 1	.699	0803989	.2457714

	_		_				
		Disagree	.13415974	.1077923 7	.815	1733346	.4416541
		Strongly disagree	15673573	.2278564 0	.983	8067313	.4932598
	_	99	58599043	.2806862 4	.294	-1.3866913	.2147104
	Disagree	Strongly agree	09519234	.1086182 6	.952	4050427	.2146580
		Agree	05147352	.1041121	.996	3484694	.2455223
		Neutral	13415974	.1077923 7	.815	4416541	.1733346
		Strongly disagree	29089547	.2439047 0	.841	9866713	.4048804
		99	72015017	.2938634	.140	-1.5584411	.1181407
	Strongly disagree	Strongly agree	.19570313	.2282482	.956	4554103	.8468165
		Agree	.23942195	.2261386	.898	4056734	.8845173
		Neutral	.15673573	.2278564	.983	4932598	.8067313
		Disagree	.29089547	.2439047 0	.841	4048804	.9866713
		99	42925471	.3558863	.834	-1.4444754	.5859660
	99	Strongly agree	.62495784	.2810044 4	.227	1766507	1.4265664
		Agree	.66867666	.2792935 8	.159	1280514	1.4654047
		Neutral	.58599043	.2806862	.294	2147104	1.3866913
		Disagree	.72015017	.2938634	.140	1181407	1.5584411
		Strongly disagree	.42925471	.3558863	.834	5859660	1.4444754
REGR factor score 2 for analysis 1	Strongly agree	Agree	.06322545	.0584591	.889	1035383	.2299892
2 IOI allalysis I		Neutral	.21057952 <sup>*</sup>	.0647351	.015	.0259126	.3952465
		Disagree	.29083496	.1081505 8	.078	0176813	.5993512
		Strongly disagree	.78863921 <sup>*</sup>	.2272654 9	.007	.1403293	1.4369491
		99	03471377	.2797945 2	1.000	8328708	.7634433
	Agree	Strongly agree	06322545	.0584591 6	.889	2299892	.1035383
		Neutral	.14735408	.0569234	.100	0150289	.3097370
		Disagree	.22760951	.1036638	.240	0681076	.5233266
		Strongly disagree	.72541377 <sup>*</sup>	.2251649	.016	.0830961	1.3677315
		99	09793922	.2780910 2	.999	8912368	.6953583
	Neutral	Strongly agree	- .21057952 <sup>*</sup>	.0647351	.015	3952465	0259126
		Agree	14735408	.0569234	.100	3097370	.0150289
		Disagree	.08025544	.1073282 5	.976	2259150	.3864258
		Strongly disagree	.57805969	.2268753	.111	0691372	1.2252565
		99	24529330	.2794776 9	.952	-1.0425465	.5519599
	Disagree	Strongly agree	29083496	.1081505	.078	5993512	.0176813
		Agree	22760951	.1036638	.240	5233266	.0681076
		Neutral	08025544	.1073282 5	.976	3864258	.2259150

		Strongly disagree	.49780425	.2428545	.315	1949758	1.1905843
		99	32554873	.2925981	.876	-1.1602302	.5091327
	Strongly disagree	Strongly agree	- - -	.2272654	.007	-1.4369491	1403293
		Agree	.78863921	.2251649	.016	-1.3677315	0830961
		Neutral	.72541377* 57805969	.2268753	.111	-1.2252565	.0691372
		Disagree	49780425	.2428545	.315	-1.1905843	.1949758
		99	82335299	.3543539	.185	-1.8342024	.1874964
	99	Strongly agree	.03471377	.2797945	1.000	7634433	.8328708
		Agree	.09793922	.2780910	.999	6953583	.8912368
		Neutral	.24529330	.2794776	.952	5519599	1.0425465
		Disagree	.32554873	.2925981	.876	5091327	1.1602302
		Strongly disagree	.82335299	.3543539	.185	1874964	1.8342024
REGR factor score 3 for analysis 1	Strongly agree	Agree	.17301142	.0585079	.037	.0061086	.3399143
o for analysis f		Neutral	.26103046*	.0647891	.001	.0762095	.4458514
		Disagree	.35800418 <sup>*</sup>	.1082407	.012	.0492307	.6667777
		Strongly disagree	.23321213	.2274550	.910	4156384	.8820627
		99	.45447722	.2800278	.583	3443454	1.2532999
	Agree	Strongly agree	47004440*	.0585079	.037	3399143	0061086
		Neutral	.17301142 .08801904	.0569709	.635	0744993	.2505374
		Disagree	.18499276	.1037502	.477	1109709	.4809565
		Strongly disagree	.06020071	.2253527	1.000	5826527	.7030541
		99	.28146580	.2783229 3	.914	5124933	1.0754249
	Neutral	Strongly agree	-	.0647891	.001	4458514	0762095
		Agree	.2610304608801904	.0569709	.635	2505374	.0744993
		Disagree	.09697372	.1074177	.946	2094520	.4033994
		Strongly disagree	02781833	.2270645	1.000	6755549	.6199182
		99	.19344675	.2797107 5	.983	6044713	.9913649
	Disagree	Strongly agree	25000440*	.1082407	.012	6667777	0492307
		Agree	.35800418 <sup>*</sup> 18499276	.1037502	.477	4809565	.1109709
		Neutral	09697372	.1074177	.946	4033994	.2094520
		Strongly disagree	12479205	.2430570	.996	8181498	.5685657
		99	.09647304	.2928421	.999	7389045	.9318505
	Strongly disagree	Strongly agree	23321213	.2274550	.910	8820627	.4156384
		Agree	06020071	.2253527	1.000	7030541	.5826527
		Neutral	.02781833	.2270645	1.000	6199182	.6755549
		Disagree	.12479205	.2430570	.996	5685657	.8181498
		99	.22126509	.3546494	.989	7904273	1.2329575
<u> </u>				9			

Agree28146560		99	Strongly agree	45447722	.2800278	.583	-1.2532999	.3443454
Neutral   -19344675   2797107   983   -9913649   .6044713   .604			Agree	28146580	_	.914	-1.0754249	.5124933
Disagree				19344675	.2797107	.983	9913649	.6044713
Strongly disagree   -2.2126509   .364647   .989   .1.2329575   .7904273   .			Disagree	09647304	.2928421			.7389045
Strongly agree   Agr			-		7			
Neutral   1.3630247   0.646460   2.87   -0.466800   .3212859	REGR factor score	Strongly agree	Agree	.20826511*		.005	.0412155	.3753147
Disagree	4 for analysis 1		Neutral	.13630247		.287	0486809	.3212859
Strongly disagree   .33162497   .2276549   .692   .3177959   .9810458   .991					6			
Agree Strongly agree			J		1			
Agree Strongly agree					4			
Neutral			99	44706909		.602	-1.2465939	.3524557
Disagree		Agree	Strongly agree	.20826511*		.005	3753147	0412155
Strongly disagree   .12335986   .2255507   .994   .5200586   .7667783   .7667783   .774   .1.4499912   .1393228   .7756775   .774   .7.4499912   .1393228   .77567783   .774   .7.4499912   .1393228   .7.5200586   .7667783   .7.5200586   .7667783   .7.5200586   .7667783   .7.5200586   .7667783   .7.5200586   .7667783   .7.5200586			Neutral	07196264	_	.806	2346238	.0906986
Neutral   Strongly agree   .13630247   .0648460   .287   .3212859   .0486809   .07196264   .0570210   .806   .0906986   .2346238   .09553526   .1075121   .949   .2111598   .4022303   .2272640   .956   .4529834   .8436284   .999   .58337156   .2799566   .296   .1.3819910   .2152479   .2152479   .000   .3197965   .2726512   .095694   .296   .296   .296   .296   .2726512   .095694   .296   .296   .296   .2726512   .095694   .296   .296   .296   .296   .2726512   .095694   .296   .296   .296   .2726512   .0978724   .2432706   .999   .5941799   .7937544   .2930995   .2862739   .296   .29659328   .296			Disagree	.02357262	.1038414	1.000	2726512	.3197965
Page			Strongly disagree	.12335986		.994	5200586	.7667783
Neutral			99	65533419	.2785675	.174	-1.4499912	.1393228
Agree		Neutral	Strongly agree	13630247	.0648460	.287	3212859	.0486809
Disagree   .09553526   .1075121   .949  2111598   .4022303   Strongly disagree   .19532250   .2272640   .956  4529834   .8436284   .99   .58337156   .2799566   .296   -1.3819910   .2152479   .1083359   .267   .5408826   .0772072   .1083359   .267   .5408826   .0772072   .1083359   .267   .5408826   .0772072   .1083359   .267   .5408826   .0772072   .1083359   .267   .5408826   .2726512   .2726512   .2726512   .2726512   .2726512   .2726512   .2726512   .2726512   .2726512   .2726512   .2726512   .2726512   .2726512   .2726512   .2726512   .2726512   .2726512   .2726549			Agree	.07196264	.0570210	.806	0906986	.2346238
9958337156 .2799566			Disagree	.09553526	_	.949	2111598	.4022303
Disagree Strongly agree23183772			Strongly disagree	.19532250		.956	4529834	.8436284
Agree02357262			99	58337156	_	.296	-1.3819910	.2152479
Neutral09553526 .1075121 .9494022303 .2111598 Strongly disagree 9967890681 .2930995 .188 -1.5150186 .1572050 Strongly disagree Strongly agree33162497 .2276549 .6929810458 .3177959 Agree12335986 .2255507 .9947667783 .5200586 Neutral19532250 .2272640 .9568436284 .4529834 Disagree09978724 .2432706 .9997937544 .5941799 9977869405 .3549612 .241 -1.7912757 .2338876 99 Strongly agree .44706909 .2802739 .6023524557 1.2465939 Agree .65533419 .2785675 .1741393228 1.4499912 Neutral .58337156 .2799566 .2962152479 1.3819910 Disagree .67890681 .2930995 .1881572050 1.5150186		Disagree	Strongly agree	23183772	.1083359	.267	5408826	.0772072
Strongly disagree   .09978724   .2432706   .999  5941799   .7937544   .999  67890681   .2930995   .188   -1.5150186   .1572050   .1872050   .188   -1.5150186   .1572050   .188   .15150186   .1572050   .188   .15150186   .1572050   .188   .15150186   .1572050   .188   .15150186   .1572050   .188   .15150186   .1572050   .188   .15150186   .1572050   .188   .15150186   .1572050   .188   .15150186   .1572050   .188   .15150186   .1572050   .188   .15150186   .1572050   .188   .15150186   .1572050   .15150186   .15			Agree	02357262	.1038414	1.000	3197965	.2726512
Strongly disagree   Strongly agree  33162497   .2276549   .692  9810458   .3177959			Neutral	09553526	.1075121	.949	4022303	.2111598
99			Strongly disagree	.09978724		.999	5941799	.7937544
Strongly disagree         Strongly agree        33162497         .2276549         .692        9810458         .3177959           Agree        12335986         .2255507         .994        7667783         .5200586           Neutral        19532250         .2272640         .956        8436284         .4529834           Disagree        09978724         .2432706         .999        7937544         .5941799           99        77869405         .3549612         .241         -1.7912757         .2338876           99         Strongly agree         .44706909         .2802739         .602        3524557         1.2465939           Agree         .65533419         .2785675         .174        1393228         1.4499912           Neutral         .58337156         .2799566         .296        2152479         1.3819910           Disagree         .67890681         .2930995         .188        1572050         1.5150186			99	67890681	.2930995	.188	-1.5150186	.1572050
Agree12335986 .2255507 8 .9947667783 .5200586  Neutral19532250 .2272640 9 .9568436284 .4529834  Disagree09978724 .2432706 8 .9997937544 .5941799  9977869405 .3549612 .241 -1.7912757 .2338876  99 Strongly agree .44706909 .2802739 8 .6023524557 1.2465939  Agree .65533419 .2785675 6 .1741393228 1.4499912  Neutral .58337156 .2799566 1 .2962152479 1.3819910  Disagree .67890681 .2930995 7 .1881572050 1.5150186		Strongly disagree	Strongly agree	33162497	.2276549	.692	9810458	.3177959
Neutral19532250 .2272640 9 .9568436284 .4529834  Disagree09978724 .2432706 8 .9997937544 .5941799  9977869405 .3549612 .241 -1.7912757 .2338876  99 Strongly agree .44706909 .2802739 8 .6023524557 1.2465939  Agree .65533419 .2785675 .1741393228 1.4499912  Neutral .58337156 .2799566 .2962152479 1.3819910  Disagree .67890681 .2930995 7 .1881572050 1.5150186			Agree	12335986	.2255507	.994	7667783	.5200586
Disagree09978724 .2432706 8 .9997937544 .5941799 9977869405 .3549612 .241 -1.7912757 .2338876  99 Strongly agree .44706909 .2802739 8 .6023524557 1.2465939  Agree .65533419 .2785675 .1741393228 1.4499912  Neutral .58337156 .2799566 .2962152479 1.3819910  Disagree .67890681 .2930995 7 .1881572050 1.5150186			Neutral	19532250	.2272640	.956	8436284	.4529834
99			Disagree	09978724	.2432706	.999	7937544	.5941799
99 Strongly agree .44706909 .2802739 8 .6023524557 1.2465939  Agree .65533419 .2785675 .1741393228 1.4499912  Neutral .58337156 .2799566 .2962152479 1.3819910  Disagree .67890681 .2930995 7 .1881572050 1.5150186			99	77869405	.3549612	.241	-1.7912757	.2338876
Agree .65533419 .2785675 .1741393228 1.4499912  Neutral .58337156 .2799566 .2962152479 1.3819910  Disagree .67890681 .2930995 .1881572050 1.5150186		99	Strongly agree	.44706909	.2802739	.602	3524557	1.2465939
Neutral .58337156 .2799566 .2962152479 1.3819910  Disagree .67890681 .2930995 .1881572050 1.5150186			Agree	.65533419	.2785675	.174	1393228	1.4499912
Disagree .67890681 .2930995 .1881572050 1.5150186			Neutral	.58337156	.2799566	.296	2152479	1.3819910
			Disagree	.67890681	.2930995	.188	1572050	1.5150186
			Strongly disagree	.77869405		.241	2338876	1.7912757

 $<sup>^{\</sup>ast}.$  The mean difference is significant at the 0.05 level.

#### REGR factor score 1 for analysis 1

Tukey HSD<sup>a,b</sup>

Tukcy HOD				
artistic experiences		Subset for alpha = 0.05		
	N	1	2	
Disagree	104	0879175		
Agree	802	0364440		
Strongly agree	453	.0072748		
Neutral	493	.0462422	.0462422	
Strongly disagree	20	.2029780	.2029780	
99	13		.6322327	
Sig.		.764	.076	

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 42.247.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

REGR factor score 2 for analysis 1

Tukey HSD<sup>a,b</sup>

		Subset for alpha = 0.05	
artistic experiences	N	1	2
Strongly disagree	20	6824902	
Disagree	104	1846860	1846860
Neutral	493	1044305	1044305
Agree	802		.0429235
Strongly agree	453		.1061490
99	13		.1408628
Sig.		.082	.662

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 42.247.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

REGR factor score 3 for analysis 1

Tukey HSD<sup>a,b</sup>

_ Tukey 113D						
		Subset for alpha = 0.05				
artistic experiences	N	1				
99	13	2872369				
Disagree	104	1907638				
Neutral	493	0937901				
Strongly disagree	20	0659718				
Agree	802	0057711				
Strongly agree	453	.1672403				
Sig.		.289				

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 42.247.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

# REGR factor score 4 for analysis 1

Tukey HSD<sup>a,b</sup>

autiatia aumanianaaa	Cubest for alpha 0.05				
artistic experiences		Subset for alpha = 0.05			
	N	1	2		
Strongly disagree	20	1941409			
Disagree	104	0943537			
Agree	802	0707810			
Neutral	493	.0011816	.0011816		
Strongly agree	453	.1374841	.1374841		
99	13		.5845531		
Sig.		.645	.077		

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 42.247.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.