

2014-05-07

# Chinese international students' perspective and strategies in preparing for their future employability

Huang, R

<http://hdl.handle.net/10026.1/4291>

---

10.1080/13636820.2014.894933

Journal of Vocational Education and Training

Informa UK Limited

---

*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.*

## **Chinese international students' perspective and strategies in preparing for their future employability**

**ABSTRACT** Graduate employability and the contribution graduates make to the UK economy has been widely debated by policymakers, however little attention has been paid to the employability of international students. Given the growing significance of international students to the UK economy this is an interesting oversight; this article addresses this issue. Students from the Mainland China currently represent nearly 16% of the international student population; therefore we focused on this group, firstly to examine their perspectives on their future employability, and then to examine how they prepared for their future careers. Given that internationalisation is a priority for many UK universities, the findings of this research will make a significant contribution to these under-researched areas.

Keywords: employability, international students, Chinese students, higher education.

### **Introduction**

According to the Higher Education Statistics Agency (HESA, 2012), in 2011, there were 428,225 non-UK domiciled students studying in British universities; 130,115 were European Union students and 298,110 Non-EU students. Students from the China are the most numerous, with 16% of non-UK domiciled student population coming from China. Taking into consideration the fees and living expenses that international students contribute to Britain, the export value of UK education and training is estimated to be £28bn. In other words, UK education and training is a significant export industry, comparable to the £19bn generated by financial services and £20bn through the automotive industry (BBC, 2007).

Huang (2008a, 2008b) argues that previous research in relation to international students is limited in its scope, concentrating on areas such as the country of origin, or the academic / social experience. As the emphasis is now more on the contribution international students' fees make to the prestige and income of individual universities, Leonard and Morley (2003) are concerned that there is limited research on the progression and achievement of international students following their graduation, and also their subsequent careers and motilities.

The employability of university graduates has dominated much of educational and economic policy (Cranmer, 2006). Yet there has been little empirical work exploring the way in which students understand and manage their employability (Tomlinson, 2007; Tymon, 2011). Much of the extant research tends to be small-scale, concentrating on integrating employability into undergraduate teaching and the success of these initiatives (e.g. Boden & Nevada, 2010; Harvey, 2005). An additional limitation observed by Johnston (2003: 419) is the tendency for researchers to focus on groups with the potential to influence the government, while "the voices of other partners in the graduate recruitment process, the graduates, are deafening in their silence". Furthermore, existing research tends to focus on the employability of home students, with little reference made to the increasingly international dimensions of higher education and the implications this had for graduate employability (Waters, 2009). Huang (2011) argues that without knowledge of the career intentions and attitudes of international students, efforts at improving this aspect of the international student experience may be unnecessarily disjointed and, potentially compromising to the longer-term impact of their time spent in the UK.

A review of relevant literature indicates that teaching-centred universities, with their potentially greater focus on skills, and a remit for vocational education, are more receptive to the idea of incorporating employability skills development in their programmes; whereas research-intensive/traditional universities have been reluctant to deviate from their value system to the development of employability skills (Tariq and Cochrane, 2003; Baker and Henson, 2010; Huang, 2011). Gibbs (2005) notes that until recently most progress in employability training had been made in teaching-centred institutions, with the research-intensive institutions either standing aloof or struggling. There is a large volume of research on international students, but Li (2012) rightly argues that little attention has been devoted to illuminating the link between the individual's experience of HE in another country and the subsequent transitions of these students to the labour market. In particular, very limited consideration has been given to the linkages in relation to the different types of institutions that international students enrol at when studying in the UK.

Against the above background, this paper examines perspectives and strategies on employability that international students from Mainland China hold and develop whilst studying at British universities. Most Mainland Chinese students return home following graduation (Li, 2012) therefore it is imperative that whilst undertaking their studies in the UK they are prepared for seeking employment on their return home. Drawing on data collected from students at all levels of study from twenty-five British universities this paper explores Mainland Chinese students' understandings and approaches to managing their employability in order to ascertain their views on factors influencing their employability. The paper then considers how students perceive the contributions that career preparation activities make to their future employability, and how those career preparation activities may vary across the range of institutions that the respondents were drawn from, i.e. research-intensive or teaching-centred universities.

## **Understandings of employability**

The UK is not alone in using national policy to drive synergies between education and economic prosperity. Cranmer (2006) claims that employability is becoming a core issue in many countries, and indeed Gracia (2009) argues that the global knowledge economy positions employability as a central driver of political and business thinking, underpinning national competitive advantages, catalysing demand for flexible, creative, life-long learners. However, internationally, different definitions and understandings of employability are being used to shape these policies (Little, 2003).

Discussions around employability are not new, with the historical antecedents of the current employability debate dating back at least a century (McQuaid and Lindsay, 2005). Recently, increased attention has been paid to role of HE in developing employability (Gibbs, 2000; Harvey, 2001; McQuaid and Lindsay, 2005). Yet despite this shift, the term 'employability' remains poorly defined and is considered primarily with reference to individual skills development, such that "the rhetoric that shrouds the idea of employability has been subjected to little conceptual examination" (Brown 2003:107). This perhaps reflects the multi-dimensional nature of employability (Lee, 2002), which at an individual level relates to the acquisition of knowledge, skills and abilities that make a graduate more likely to gain employment and be successful in their chosen occupation (Yorke 2004). More broadly employability relates to the capability to move into and within labour markets and to realise a potential by gaining sustainable employment (Allison et al., 2002).

Holmes (2011) examines three competing perspectives on employability, termed here as the 'possessive', 'positioning' and 'processual' approaches, that offer a more coherent explanation of employability that reflects both past actions and future needs in this area. The first approach termed as the possessive approach is based on the assumption that employability is defined as a set of achievements, including skills, understandings and personal attributes (Yorke, 2004). Interestingly this is the most commonly used approach (Pegg et al., 2012), but, as Holmes (2011) argues it is deeply flawed theoretically: such simplistic measures ignore the influence of sociocultural factors such as gender, ethnicity and social class on employability and its development (Morley 2001; Blasko *et al.*, 2002; Garsten and Jacobsson 2003; Smetherham, 2004; Gracia, 2009).

The positional approach seems to support that graduate skills relates strongly to issues of social positioning (Holmes, 2011). The graduate recruitment processes and practices could be analysed through positional conflict theory (Brown & Hesketh, 2004). Individuals are indicated to be able to make a difference to their likelihood of gaining desired employment (Brown & Hesketh, 2004). However Holmes (2011) argues that this approach is shown to be more in accord with the evidence of employment outcomes, but tends, arguably, to lead to a 'counsel of despair'.

Lastly, the processual approach uses the concept of graduate identity, thus it develops ways for students to present themselves to potential employers (Holmes, 2011). Holmes (2011) argues that this approach, particularly focusing on the concept of graduate identity, is theoretically robust, supported by empirical evidence, and provides a sound basis for curriculum and other forms of intervention to enhance graduate employability. Account should also be taken of the personal and external barriers (such as labour market, macroeconomic environment) that can influence employability, particularly with respect to the changing supply of graduates and demand from employers (McQuaid and Lindsay, 2005).

Rooney et al., (2006) seek views of employability from Europe, the US and South America, and clearly show that definitions and implications are varied. Such findings have potentially significant implications for international students (Li, 2012). They live and study in a different country to which they might return; therefore as students they arrive with a conception of employability formulated, in the case of Mainland Chinese students, under differing cultural conditions to where they are now studying (De Witt, 2011). A 'new' interpretation of employability, informed by the policy and practices of the host country, is introduced. It is recognised that the students assume their international experience will improve their employability (Dalglish and Chan, 2005). However, it is not known how international students negotiate or manage these differing definitions, therefore there is a risk that they are left in a confused state regarding the management of their future employability.

### **Students' approaches to managing their employability**

Traditionally the planning and management of careers was considered to be the responsibility of the individual (Baruch, 2006). Career management represents the ability to keep pace with the changes that occur in organisations and industry, and to prepare for the future (Clarke, 2008). To manage their career development, individuals start to identify what they want from their career, assessing the strengths and weaknesses of the career goals, and they then decide what steps need to be taken to realize these goals (Orpen, 1994).

If we regard employability as an individual's potential to gain and maintain employment within the current labour market (Hillage & Pollard, 1998; Lee, 2002), it becomes a crucial issue which needs negotiating and working at by the individuals (Clarke, 2008; Li, 2012). It involves not only developing the profiles and credentials of the individual graduates, but also particular attitudes and appropriate labour market management strategies (Tomlinson, 2007; Clarke, 2008). However, there has been little research exploring student understandings and management of their employability (Tomlinson, 2007; Tymon, 2011). As Tomlinson (2007) observes employability and career progression were largely viewed as being a problem for graduates rather than HE providers. The managing of employability and careers was determined by the individual graduates themselves, and their future in the labour market lay mainly in their own hands (Bridgstock, 2009; Li, 2012).

Brown and Hesketh (2004) identify two approaches taken by graduates to manage their employability: graduates who developed a 'player' approach to employability which involves shaping themselves and their credentials around what they thought companies required, while for the purist approach the recruitment process was perceived as a meritocratic process that enables graduates and employers to find the right match in terms of knowledge, skills and self-identity. However, based on a multiple (n = 23), longitudinal case study of the construction of personal employability by Mainland Chinese students at a UK university, Li (2012) reveals that some concepts developed by Brown and Hesketh, such as 'purists' vs. 'players' and 'personal capital' need to be interpreted and contextualised differently when applied in an international context, and by introducing a Chinese concept – 'Suzhi'(素质) outlines how this might be achieved in relation to students from Mainland China. Yan (2003) and Anagnost (2004) point out that 'suzhi' is used to judge the value of a human being according to their knowledge, skills, morality and manners, and can be used in various contexts without being restricted to the individual's transition to the labour market. Li (2012:14) emphasises that "it is the development of one's 'suzhi' that gives one positional advantage in all aspects of social and economic life, and gaining advantage in an increasingly polarised and high-stakes Chinese employment market is just one part of this larger process".

Tomlinson (2007) develops an ideal-type model of student orientations to their future careers and employability; the model involves four types of orientations, including careerist, ritualist, rebel and retreatist. The careerists were active in managing their employability and their approach to career progression is flexible and adaptive (Clarke, 2008). The ritualists were more passive; they tend to scale down their aspirations, paying more attention to achieving financial return for their labour market activities (Tomlinson, 2007). Retreatists abandon labour market goals and became passive in their approaches. Similarly rebels abandon labour market goals but they also are quite active in their approach. Huang (2011) applies Tomlinson's model to a cohort of Mainland Chinese students studying Tourism and Hospitality in one British university. This analysis demonstrates the Mainland Chinese students were more careerists or ritualists, and none of her respondents were labelled as rebels. Huang's (2011) results suggest that the career approaches of Mainland Chinese students are influenced by their culture, their traditional education in China and also living standards of the Chinese. Furthermore as Tomlinson (2007) states, his model is an ideal-type which fails to acknowledge the dynamics of the student's experience (Huang, 2011).

Stevenson and Clegg (2011) highlight the expectation from employers for students to display a combination of personal qualities, understandings, practices and the ability to reflect productively on experience (Yorke & Knight, 2006), in addition to possessing a degree. To develop these qualities and skills they suggest students become involved with extracurricular

activities (e.g. cultural, voluntary and sporting activities), organised within the university through student societies (Dalglish & Chan, 2005; Sleaf & Reed, 2006; Stevenson & Clegg, 2011).

In the Chinese context, it needs to be considered that there exists a different range of attitudes and approaches students take to managing their careers. Zhang et al., (2007) and Huang (2008) claim that in order to manage careers, university students perceived that it is of great significance to have a positive attitude towards study. In addition Mainland Chinese students demonstrate an awareness of needing to adapt their understanding of employability with time (Liu & Wu, 2010). According to Zhang et al., (2007) and Huang (2008), it is in line with the wishes of rational employment characteristics to go for the job with high salary. Some authors (e.g. Chen, 2010; Liu & Wu, 2010) observe that in China university students use the 'Future Employment Goals and Career Planning' scheme to plan their knowledge and skills in order to manage their employability. Many students use holidays to attend vocational and job skills training (Chen, 2010; Liu & Wen, 2012). Moreover, based on the demands from the employers, graduates tend to adjust their own employability structure and develop their employability in a directional way (Liu & Wu, 2010).

## **Methodology**

This research reports the first part of a national research project in Britain. Following a review of relevant literature sources, a four-part questionnaire was designed. This paper reports the outcomes of this questionnaire in relation to Mainland Chinese students' perspectives and initiatives in employability whilst studying in the UK. The first section captured demographic information. The second section explored students' understanding and approaches to employability. Different understandings and approaches to employability were explained to ensure participants could respond appropriately. Holmes' (2011) definitions of employability were used as they encompass the different views of employability in the literature and reflect practices in universities (Pegg et al., 2012). Although Tomlinson's (2007) four approaches to managing a future career are ideal-type, they provided a good framework for the Mainland Chinese students to categorise their behaviour (Huang, 2011). Consequently, the authors felt that the continued use of similar questions for this research would allow comparisons to be made across other studies. The third section discussed influential factors in employability (Morley 2001; Blasko *et al.*, 2002; Garsten and Jacobsson 2003). The fourth section was concerned with the students' likelihood to participate in different activities to develop their employability (Clarke, 2008; Luo, 2010; Pegg et al., 2012)

Single choice questions were used to identify students' understanding and their approaches to employability. The possibility of using different activities to improve their employability and also their potential agreement with different influential factors were measured using a seven-point Likert scale (1 means completely wrong and 7 means completely correct). With respect to this, the comments of Cooper and Schindler (2008: 309) are pertinent: "the advantages of the 7 and 9 point Likert scale are better approximation of a normal response curve and extraction of more variability among respondents".

Although designed initially in English, as Mainland Chinese students were the target population, the questionnaire was then translated to simplified Chinese. A back translation method (Sperber, 2004) was used in order to avoid misunderstandings. The questionnaire was then piloted with 30 students, following the recommendations of Hair et al., (2007), and minor modifications made. The questionnaire was administered online using the Qualtrics

software and was delivered through the Chinese Student and Scholar Association (CSSA) network in the UK. The CSSA is the official organisation for Chinese students and scholars registered in the UK (CSSA UK, 2013), thus the online questionnaire was open to Mainland Chinese students studying in the UK at the time of data collection. The online questionnaire was administered between 1<sup>st</sup> October and 30<sup>th</sup> November 2012; 196 online responses were collected, of which 141 were usable. Face-to-face questionnaires were administered by a member of the research team at five British universities leading to 308 usable responses. In total, 449 useable responses were obtained from the online and face-to-face administration of the questionnaire. Although this sampling methodology ensured data were obtained from a number of universities, we did observe some limitations. With respect to the overall number of Mainland Chinese studying in the UK this study obtained a relatively low response rate, reflecting the difficulties of accessing this sample population within a limited timeframe. Additionally respondents were drawn primarily from business-related disciplines; therefore the generalizability of these data to other subject disciplines should be made with caution.

Data were analysed using SPSS Version 20.0. Descriptive statistics were first computed, then a principal component factor analysis completed, using varimax rotation, to determine whether distinct dimensions of different initiatives were adopted by respondents when developing their employability. Bryman and Bell (2011) argue that factor analysis is a data reduction technique that groups variables into factors or dimensions that have common characteristics, and its use is important when there is a need to reduce large amounts of data. Giudici (2003) argues that principal component factor analysis is the easiest way to carry out data reduction as it is based on linear transformations. Varimax rotation was used because it “redistributes the variance among factors more evenly and produces less complex factors” (Kass & Tinsley, 1979, 134). The Kaiser-Meyer-Olkin statistic and Cronbach’s alpha values were referenced to confirm the results of the factor analysis. Chi-square tests and One-Way ANOVA were employed to explore relationships between different variables.

## Results

### Profile of the respondents

Table 1 shows the profile of respondents; 52.1% are female, and the majority (65.9%) are between 22 to 30 years old. 41.6% of respondents are undertaking a masters degree, while 37.2% are in the final year of their first degree. 39.9% of the respondents are undertaking Business Management and Studies and 26.3% of the respondents are undertaking Accounting and Finance. Students from Mainland China represent the largest number of international students in the UK from outside the EU (HESA, 2013). The majority of international students are undertaking their first degree (UKCISA, 2013), whereas, the majority of respondents were engaged in postgraduate study. Therefore the age profile and perspectives our respondents hold regarding their employability may contrast the international study body as a whole. With regards gender, the respondents profile (more females than males) mirrors the gender profile in UK HE (with respect to both home and international student) whereby there are more female students (HESA, 2013). In 2011-12 most international students were recorded as undertaking their studies in business and administration (UKCOSA, 2013), therefore the high proportion of respondents drawn from these disciplines is not unanticipated.

Respondents were asked to indicate at which university they are currently studying. Data were collected from 25 universities. Some British universities have formed groups through which they share ideas and resources regarding issues and procedures in the HE

sector. For instance both 1994 Group and Russell Group represent research-intensive universities in the UK (1994 Group, 2012; Russell Group, 2012). Subsequently, the universities of the respondents were re-coded as either research-intensive universities, or as teaching-centred universities. Based on such categorisation, 233 respondents are from research-intensive and 216 respondents are from teaching-centred universities.

[Table 1 near here]

### Understandings of employability

Using Holmes' (2011) understandings of employability the majority of respondents (n=271, 60.4%) follow the 'skill' approach in that employability means the possession of the skills, knowledge, attitudes and commercial understandings. Chi-square test results ( $p=.290$ ) indicates no difference between the understandings possessed by undergraduate and postgraduate students. This reflects the influence of the skills agenda emphasised in British universities (Harvey, 2001; Yorke & Knight, 2006; Fallows & Steven, 2000) and also what the Mainland Chinese students gained from their education in China (Liu & Wu, 2010; Shi & Wen, 2012). However, it is worthwhile to note that within HE, the skills agenda has been criticised as reflecting a narrow view of educational aims and a threat to academic freedom (Morley, 2001), and related definitions and identification of employability skills has been problematised (Holmes, 2001).

Of the respondents, 32.7% agreed that employability is conceptualised as a form of identity. Their understanding is aligned with the processual approach of employability (Tomlinson, 2008; Holmes, 2011). This could suggest that these students are more concerned with their individual experiences of work as these experiences are likely to influence their labour market outcomes and shape their propensity for employment. Only 6.9% agreed with the positional approach of employability, which is unusual given that in China there is a very traditional view that education is a way for individual's to change their position in society (Lee, 2000). Such low acceptance might be due to two reasons: (1) there has been a rapid increase in the number of Chinese students studying overseas, which together with changes in the global and Chinese economies and employment situations, have meant that the labour market value of an overseas degree cannot be taken for granted (Li, 2012); (2) the massive expansion of HE in China in recent years (UNESCO Institute for Statistics 2012) has contributed to fiercer labour market competition and graduate unemployment in China (Li, Morgan, and Ding 2008).

Using Tomlinson's (2007) typology to give an indication of their approach to their future careers, work and employability, Table 2 shows that careerist and ritualist behaviours resonated with the actions they were taking. 56.6% of respondents categorised themselves as a careerist, who develop strong identities around their future work and careers, and that future work and careers are viewed as providing a vehicle for self-development and personal fulfilment. Their future work and careers could be viewed as what Giddens (1991) refers to as a 'life project'. Nearly 35% of the respondents categorised their approaches as a ritualist, who plan their career to gain sufficient financial rewards to enjoy a middle-class lifestyle. A very small group of the respondents report themselves as a retreatist and a rebel.

[Table 2 near here]



A series of Chi-square tests examined the relationships between the profile of the respondents, their understandings of employability and also their approach to future careers. Only gender was identified as a significant difference ( $\chi^2(3, N = 449) = 12.85, p = .005$ ) with respect to approaches to managing their future. Our analysis indicates that slightly more male than female students categorised their approaches to careerists (Table 3), while more female students perceived themselves as ritualists. This finding supports Davey and Lalande (2004) that even though there are minimal differences in work values between genders participating within a particular occupation, there are still gender difference in work value and occupational choices. It is also consistent with Peng et al., (2009) argument that there is a gender difference in the work commitment of Chinese workers.

[Table 3 near here]

### Influential factors

The Mainland Chinese students identified individual skills and attitudes as the most important factor influencing their employability (Table 4) followed by 'labour market' and 'work culture'. The highest agreement in 'individual skills and attitudes' seem to be consistent with Tomlinson's (2007) observation of British students who perceive themselves as active agents, and looked at factors relating to personal disposition, attitudes and individual characteristics as determining their labour market trajectories. This also confirms Huang's (2011) qualitative research of Chinese international students' views of their active individual role in employability building. It could also be argued that regardless of potential employees' cultural background, an individual's skills and attitudes have a strong influence in the development of employability,

[Table 4 near here]

The least influential factors to their employability for Mainland Chinese students are 'Gender', 'Age', and 'family background (Table 4). The lowest score on 'Gender' appears to be consistent with Tomlinson's (2007) argument that the students overlook structural factors which might influence employment, in particular, gender. However, this is contradicted by Huang (2011) who observes that female Mainland Chinese students in the UK seem aware of the negative influences of gender on their career progress. A Chi-square test examined whether there is a gender difference on the view of influence of gender in employability. As  $X^2(6, N = 449) = 7.88, p = .247$ , this means  $p > 0.05$ , hence, there is no difference among the genders on the view of the importance of this influential factor. Such finding supports what Rowe and Snizek (1995: 22) state that "alleged gender differences are minimal, and continued emphasis on differences merely serves to reinforce traditional gender-role stereotypes and to perpetuate gender inequality in the workplace".

### Their likelihood to adopt different activities

The major component of the questionnaire addressed the likelihood that different activities in the UK would be engaged with by Mainland Chinese students to develop their employability. A 7-point scale, with 1 = *most unlikely* and 7 = *most likely*, was used to assess the respondents' feelings about the activity items (see Table 5).

[Table 5 near here]

The respondents were most likely to participate in the following activities to develop their employability: 'Undertaking internship', 'Paying attention to the labour market in China', and 'Undertaking paid part-time work' (Table 5). This highest likelihood for internship indicates that Mainland Chinese students recognise the significance of internship to their development (Liu & Wu, 2010; Walo, 2001). Awareness of the labour market in China implies that majority of students do not see overseas study as a means of entering the international labour market and most wish to return to work in China (Li, 2012).

The items with which they were least likely to engage with included 'Attending different competitions', 'Acting as a course representative', and 'Acting as a peer mentor' (Table 5). The low interest in competitions might relate to their relatively recent introduction and a limited awareness of them amongst respondents. The low likelihood to being a course representative reflects the dominance of home students in undertaking this role (Carey, 2012).

To discover the underlying dimensions of the 20 different activities that the students might undertake to develop their employability, a factor analysis of those activities was conducted. The principal component factoring method with a varimax rotation was used to uncover activity dimensions. Furthermore, to determine whether the factoring procedure was appropriate, the Kaiser-Myer-Olkin (KMO) statistic was referenced. The rule of KMO scale according to Kaiser (1974) is above 0.90 (very good), 0.80 (good), 0.70 (medium) and less than 0.60 (poor), but usually under 0.60 is still allowed as not less than 0.50. Hence based on the above rule, the measure (.850) was 'good', indicating that it was safe to proceed with the factor analysis. Based on Child's (1970) recommendation, only those factors with eigenvalues equal to or greater than 1.0 were extracted. The initial analysis results indicated that four factors with eigenvalues exceeding 1.0 existed. Factors having eigenvalues of less than 1.0 were not further processed, because these factors were considered no better than a single variable (Tucker et al., 1969).

Another two criteria were used to determine the viability of each dimension. First, only items with factor loadings of at least .40 were retained (Tabachnick & Fidell 2001; Chen and Kerstetter, 1999). Each dimension was subjected to reliability testing. Items that reduced the reliability of a dimension were eliminated from further analysis, and only factor dimensions with Cronbach's alpha values greater than .60 were deemed acceptable. Activity items eliminated as a result of this overall cleansing procedure were 'Being friends with other international students' and 'Participating in fieldwork'. The final number of the items was reduced to 18.

After these criteria were applied, the optimal number of factor dimensions was found to be four. The final four activity dimensions/factors were named as 'Coursework and Exam' (F1), 'Work Experience and Relevant Workshops' (F2), 'Social Activities' (F3), and 'University Responsibilities' (F4). Items related to coursework and exam such as undertaking presentations, essay or report writing, exam preparation, and preparing group work contributed heavily to the first factor. This factor consisted of four items. The Cronbach's alpha for the factor was .888. This factor had an eigenvalue of 6.609 and accounted for 36.719% of the variance explained. Items related to work experience and related workshops such as paying close attention to employability related course content, undertaking internships and undertaking paid part-time job. This factor consisted of five items. The Cronbach's alpha for the factor was .834. This factor had an eigenvalue of 1.917 and accounted for 10.65% of the variance explained. Items related to social activities such as participating in student union societies and clubs, participating in voluntary work, and

travelling. This factor consisted of five items. The Cronbach's alpha for the factor was .778. This factor had an eigenvalue of 1.524 and accounted for 8.467% of the variance explained. Items related to university responsibilities such as acting as a mentor, a course representative and attending different competitions. This factor consisted of four items. The Cronbach's alpha for the factor was .707. This factor had an eigenvalue of 1.226 and accounted for 6.813% of the variance explained. The underlying dimensions of different activities are presented in Table 6:

[Table 6 near here]

One-way ANOVA procedure was employed to determine whether the students' responses to the general activity dimensions differed depending on their understanding of employability. Significant differences were found with two of the four activity dimensions, Coursework and Exam, and University Responsibilities (Table 7).

[Table 7 near here]

The post hoc testing methods (LSD and Scheffe) were used to determine exactly which groups differ from which others in terms of mean differences. The results indicated that respondents whose understanding of employability follows the 'skill approach' were more likely than the respondents whose understanding follows 'positional approach', to use 'Coursework and Exam' and 'University Responsibilities' to develop their employability. These findings reflect essential differences between the two approaches: the former one emphasises a set of skills gained from different activities while the latter one is more related to the outcome (Holmes, 2011).

#### Differences between Research-intensive universities and Teaching-centred universities

Different tests were employed to determine whether responses to different variables differed depending on the types of universities they are studying at. Firstly, Chi-square tests were adopted to determine whether there is significant difference among their understanding of employability, and their approaches to their future career. Significant differences were found in both variables (Table 8):

[Table 8 near here]

This indicated that respondents in research-intensive universities were more likely than those in teaching-centred universities to follow the skill approach. Those in teaching-centred universities were more likely pursue positional and processual approaches. Furthermore, respondents in research-intensive universities were more likely to take a careerist approach and those in teaching-centred universities were more likely to pursue Ritualist, Retreatist and Rebel approaches to their future career. It is clear, therefore, that (1) Mainland Chinese students at different types of universities are students with different career aspirations (Huang, 2008); (2) the research-intensive universities demonstrate more interest in employability training than other researchers claim, and their training is in line with the skills agenda of employability (Pegg, et al., 2012).

A one-Way ANOVA was used to determine whether or not there are significant differences among different influential factors and also general activity dimensions

depending on the universities type. Responses to two influential factors and also all four activity dimensions were found to differ significantly (see Table 9).

[Table 9 near here]

*Influential factors.* The above results indicated respondents in teaching-centred universities are more likely to think their employability is influenced by their age (4.34 vs. 3.91) and gender (3.367 vs. 3.31).

*Activity dimensions.* Table 9 indicates that students at the research-intensive universities rate every activity dimension higher than their compatriots at the teaching-centred universities. This means that respondents who belong to research-intensive universities were significantly more likely than those in teaching-centred universities to use 'Coursework and Exams', 'Work Experience and Relevant Workshops', 'Social Activities', and 'University Responsibilities' to develop their employability. Such results might be due to unmeasured differences between the two populations when they decided to study abroad and subsequently choose different type of universities.

## **Conclusions**

This research gathered data from 449 Mainland Chinese students currently studying in the UK. An understanding of employability predominately relates to the skills approach to manage employability, this is consistent with the skills agenda being promoted by many universities. In terms of managing their future careers, work and employability, the results indicated that Chinese students are careerists or ritualists. Personal skills and attitudes are perceived as the most important factor influencing the development of their employability, with gender and age been the least influential.

The major component of the questionnaire addressed the likelihood of different activities being used to develop students' employability. 'Undertaking internship', 'Paying attention to the labour market in China', and 'Undertaking paid part-time work' were most likely to be engaged with, however respondents are not keen on 'Attending different competitions', 'Acting as a course representative', and 'Acting as a peer mentor'. A factor analysis was conducted on the 20 different activities the students might participate in. This research identified four underlying dimensions of their likelihood to engage with different activities to develop their employability as 'Coursework and Exam', 'Work Experience and Relevant Workshops', 'Social Activities', and 'University Responsibility'. Finally it is apparent there are significant differences in understanding of employability, and also initiatives to develop their employability, among the respondents who are studying at research-intensive universities to those in teaching-centred universities. Possible reasons for these differences are different career aspirations of Mainland Chinese students at different types of universities, and also the emphasis placed on graduate employability by research-intensive universities.

This research offers a much-needed international dimension to the on-going debate regarding students' employability which is primarily centred on the UK and the USA. We offer following recommendations to universities: (1) before universities emphasise the importance of employability to Mainland Chinese students, they should understand what their students' views are. A 'skills approach' is popular among the students; but given its major flaws, institutions should explain and encourage Chinese students to have a better

understanding of employability; (2) the research shows that Chinese students tend to use careerists or ritualists approach to manage their future careers. Therefore by emphasising value of their courses to future careers, the universities which are keen to attract Mainland Chinese students should consider such preferences when they promoting their courses abroad; (3) In order to help Chinese students to develop their employability, universities should only consider using different assessments to examine knowledge and abilities of the students. Additionally, it should also emphasise the importance of the whole experience of being an international student in the UK; (4) Based on apparent differences in understandings and initiatives to develop their employability among Mainland Chinese students at different type of universities, the individual institutions should reconsider their strategies in teaching and learning in relation to employability of Mainland Chinese students.

Future research could replicate this study on a larger scale, and also in different countries, to judge whether the findings are consistent with Chinese students studying in other cultures and systems. Comparative studies of Mainland Chinese students with other international students, and also comparison study of the Mainland Chinese students abroad and British students abroad, will enhance our understanding of the impacts of international experience to students in the development of their employability. It would be interesting to examine whether the pattern in relation to research / teaching centred universities is replicated elsewhere, and with other international student groups, as this could have implications for how employability is promoted across the HE sector.

There were limitations on this study. The data needs to be considered as indicative, as we cannot claim this sample as representative of all Chinese international students who are studying in the UK. Time and cost meant that the samples were restricted to five universities in South East and South West England. Finally, self-reported data are always reliant on the participants' memories. Despite these limitations, we consider that this research has added to the knowledge of employability, and provided fruitful leads for researchers interested in the international student phenomenon. As mentioned earlier, this research reports a part of a wider research project. The next stage will involve in a series of in-depth interviews with volunteers from the questionnaire, and then focus group discussions with Mainland Chinese students at different universities; these activities will help to verify the findings and also identify new themes for future research.

### **Acknowledgement**

This research was supported by the Pedagogical Research Institute & Observatory (PedRIO), Plymouth University (UK).

### **References**

- Allison, J., Harvey, C. & Nixon, I., 2002, *Enhancing Employability: A long term strategic challenge*. University of Newcastle. Available at [http://www.ltsn.ac.uk/application.asp?app=resources.asp&process=full\\_record&section=generic&id=164](http://www.ltsn.ac.uk/application.asp?app=resources.asp&process=full_record&section=generic&id=164) [Accessed 13 July 2012].
- Baruch, Y. (2006). Career development in organizations and beyond: Balancing traditional and contemporary viewpoints. *Human Resource Management Review*. 16.pp.125-138.
- BBC (2007) 'UK learning exports "worth £28bn"', available at <http://news.bbc.co.uk/1/hi/education/6999661.stm>, accessed on 16/12/2012
- Blasko, Z., J. Brennan, B. Little, and T. Shah. 2002. *Access to what? Analysis of factors determining graduate employability*.

- Bridgstock, R. (2009): The graduate attributes we've overlooked: enhancing graduate employability through career management skills, *Higher Education Research & Development*, 28:1, 31-44.
- Brown, P. (2003). The opportunity trap: education and employment in a global economy, *European Educational Research Journal*, 2(1), 141–179
- Brown, P. and Hesketh, A. (2004). *The mismanagement of talent: Employability and jobs in the knowledge economy* (Oxford, Oxford University Press)
- Bryman, A. and Bell, E (2011) *Business Research methods*, 3<sup>rd</sup> ed. (Oxford, Oxford University Press)
- Carey, P (2012), student engagement: stakeholder perspectives on course representation in university governance, *Studies in Higher Education*, available on <http://www.tandfonline.com/doi/pdf/10.1080/03075079.2011.621022>, accessed on 06/02/2013
- Chen, H. J. (2010). Discussion on improving the employability of University Students. *Reform & Development*. 9
- Chen, P., & Kerstetter, D. L. (1999). International students' image of rural Pennsylvania as a travel destination. *Journal of Travel Research*, 37, 256–266
- Child, D. (1970). *The Essentials of Factor Analysis*. Holt: New York
- Clarke, M. (2008), "Understanding and managing employability in changing career contexts", *Journal of European Industrial Training*. 32 (4). pp. 258 – 284.
- Cooper, D. R., & Schindler, P. S. (2008). *Business Research Methods*. 10<sup>th</sup> edition. McGraw-Hill/Irwin: New York
- Cranmer, S. 2006. Enhancing graduate employability: best intentions and mixed outcomes, *Studies in Higher Education* 31, no. 2: 169-184
- Dalglish, C. L. and Chan, A. O. (2005). Expectations And Reality – International Student Reflections On Studying In Australia. *Australian International Education Conference*. Gold Coast, Australia.
- Davey, H., and Lalande, V., (2004) Gender differences, values, occupational choices, available on [http://www.natcon.org/archive/natcon/papers/natcon\\_papers\\_2004\\_Davey\\_Lalande.pdf](http://www.natcon.org/archive/natcon/papers/natcon_papers_2004_Davey_Lalande.pdf), access on 10/01/2013
- De Wit, H (2011). *Trends, Issues and Challenges in Internationalisation of Higher Education*. Amsterdam. Centre for Applied Research on Economics and Management, Hogeschool van Amsterdam.
- The Mainland Chinese students and Scholars Association UK (2013) 'The Mainland Chinese students and Scholars Association UK: about us', available on <http://cssauk.org.uk/about-us/%e5%85%a8%e8%8b%b1%e5%ad%a6%e8%81%94%e7%ae%80%e4%bb%8b/>, access on 10/06.2013
- Fallows, S. and Steven, C (2000). 'Building employability skills into the higher education curriculum: a university-wide initiative', *Education + Training*, 42(2), 75-83
- Garsten, C., and K. Jacobsson, eds. (2003). Learning to be employable: An introduction. In *Learning to be employable: New agendas on work, responsibility and learning in a globalizing world*, 2–14. London: Palgrave Macmillan.
- Gibbs P. T. (2000) Isn't higher education employability? *Journal of Vocational Education & Training*, 52 (4), 559-571
- Giudici, P. (2003). *Applied Data Mining: Statistical Methods for Business and Industry*. Wiley, London.

- Gracia, L. (2009). Employability and higher education: contextualizing female students' workplace experiences to enhance understanding of employability development. *Journal of Education and Work*, 22(4), 301-318
- Harvey, L. (2001). Defining and measuring employability. *Quality in Higher Education*, 7(2), 97-109
- HESA (2013). Student introduction 2011/12. <http://www.hesa.ac.uk/content/view/2705/278/#age> accessed 19th January 2014.
- Hillage, J. and Pollard, E. (1998). Employability: developing a framework for policy analysis (DfEE research briefing no. 85) (London, DfEE)
- Hinchliffe, G. & Jolly, A. (2011): Graduate identity and employability, *British Educational Research Journal*, 37(4), 563-584.
- Holmes, L. (2011). Competing perspectives on graduate employability: possession, position or process?, *Studies in Higher Education*, iFirst article, 1-17
- Huang, J.B. (2008). Improving employability: the key to solve the problem for university students. *Employability Research*.
- Huang, R. (2008a). Are Chinese international students tourists in the UK, in Cochrane, J (ed.) *Asian Tourism: Growth and Change*, Elsevier (Advances in Tourism Research Series), pp135-144
- Huang, R. (2008b). Mapping Educational Tourists' Experience in the UK, *Third World Quarterly*, 29(5), pp1003-1020
- Huang, R (2011) 'International experience and graduate employability: perceptions of Chinese international students in the UK', paper presented in Association for Tourism in Higher Education (ATHE) annual conference, Oxford, 8-9, December 2011
- Johnston, B. 2003. The shape of research in the field of higher education and graduate employment: Some issues. *Studies in Higher Education* 28(4), pp 413-26
- Kaiser, H. F. (1974). An Index of Factorial Simplicity. *Psychometrika*, 39, 31-36.
- Kass, R., & Tinsley, H. (1979). Factor Analysis. *Journal of Leisure Research*, 11 (2), 120-38
- Lee, D. (2002). Graduate Employability. University of Exeter.
- Lee, T. H. C (2000) Education in China: from beginnings to ca 1900, Brill
- Leonard, D and Morley, L, 'Preface', *The experiences of international students in UK higher education: a review of unpublished research*, 2003, available at [http://www.ukcosa.org.uk/about/pubs\\_research.php](http://www.ukcosa.org.uk/about/pubs_research.php), accessed on 17/12/07
- Li, F., W.J. Morgan, and X. Ding. 2008. The expansion of higher education, employment and over-education in China. *International Journal of Educational Development*, 28, 687-97.
- Li, Z. (2012). A critical account of employability construction through the eyes of Chinese postgraduate students in the UK. *Journal of Education and Work*.
- Little, B. (2003) *International perspectives on employability*. Briefing Paper. York, The Higher Education Academy. Available online at: <http://www.heacademy.ac.uk/> (accessed 21 March 2005).
- Liu, L. L. & Wu, J. (2010). Research on Employability of University Graduates ——Based on Survey of Graduates Majored in Management and Economics. *Educational Research*. 3.
- Luo, R. F. (2010). Thinking about the Concept of Employability and Employability of University Graduates. *Work & Study Abroad*. 04
- McQuaid, R. W and Lindsay, C. (2005). The concept of employability, *Urban Studies*, 42(2), 197-219
- Morley, L. (2001). "Producing New Workers: Quality, equality and employability in higher education." *Quality in Higher Education*, 7(2), pp131-138.

- Orpen, C. (1994). The Effects of Organizational and Individual Career Management on Career Success. *International Journal of Manpower*. 15 (1), pp. 27-37.
- Pegg, A. Waldock, J. Hendy-Isaac, S. & Lawton, R. (2012). Pedagogy for employability, *The Higher Education Academy*.
- Peng, K. Z., Ngo, H.-Y; Shi, J. Q. and Wong, C. S. (2009). 'Gender differences in the work commitment of Chinese workers: An investigation of two alternative explanations.' *Journal of World Business* 44(3), 323-335.
- Pett, M.A., Lackey, N.R., Sullivan, J.J., 2003. Making Sense of Factor Analysis for Instrument in Health Care Research. SAGE Publication, Inc, Thousand Oak, CA.
- Rooney, P., Kneale, P., Gambini, B., Keiffer, A., Vandrasek, B., Gedye, S (2006). "Variations in International Understandings of Employability for Geography." *Journal of Geography in Higher Education*, 30(1), pp133-145.
- Rowe, R., and Snizek, W. E. (1995) "Gender Differences in Work Values: Perpetuating the Myth." *Work & Occupations*, 22, p 215.
- Shi, Q.H. & Wen, J. (2012). The Employability of Chinese University Students. *Peking University Education Review*. 10(1).
- Sleap, M. and Reed, H. 2006. Views of sport science graduates regarding work skills developed at university. *Teaching in Higher Education* 11, no. 1: 47-61.
- Sperber, A. D. (2004) Translation and validation of study instruments for cross-cultural research. *Gastroenterology*, 126, S124-128
- Stevenson, J. and Clegg, S. (2011). Possible selves: students orientating themselves towards the future through extracurricular activity, *British Educational Research Journal*, 37:2, 231-246
- The Higher Education Statistics Agency (HESA) (2012) 'International Students in UK Higher Education (HE) in 2011', available at [http://www.ukcisa.org.uk/about/statistics\\_he.php](http://www.ukcisa.org.uk/about/statistics_he.php) accessed on 11/01/2013
- Tomlinson, M. 2007. Graduate employability and student attitudes and orientations to the labour market. *Journal of Education and Work* 20, no.4: 285-304
- Tucker, L. D., Koopman, R. F. and Linn, R. L. (1969). Evaluation of factor analytic research procedures by mean of simulated correlation matrices. *Psychometrika*, 34(4), 421-459.
- Tymon, A. 2011. The student perspective on employability, *Studies in Higher Education*, iFirst Article, 1-16
- UKCISA (2013) International student statistics: UK HE. [http://www.ukcisa.org.uk/Info-for-universities-colleges--schools/Policy-research--statistics/Research--statistics/International-students-in-UK-HE/#International-\(non-UK\)-students-in-UK-HE-in-2011-12](http://www.ukcisa.org.uk/Info-for-universities-colleges--schools/Policy-research--statistics/Research--statistics/International-students-in-UK-HE/#International-(non-UK)-students-in-UK-HE-in-2011-12) accessed 19th January 2014.
- UNESCO Institute for Statistics. 2012b. Education statistical tables, table 3b: Enrolment by ISCED level. <http://stats.uis.unesco.org/unesco/TableViewer/tableView.aspx?ReportId=175> accessed 11/01/2012
- Wan, H. J. & Jian, C.R. (2011). Exploration of inherent employability and employability. *Employability Guide*. 5.
- Waters, J. 2009, In pursuit of scarcity: transnational students, 'employability', and the MBA. *Environment and Planning* 41: 1865 – 1883
- Yorke, M. 2004. Employability in higher education: what it is – what it is not, *Learning and Employability Guides* (York, LTSN-ESECT)
- Zhang et al., (2007). "The research on improving the employability of university students". *Journal of Social Science of Hunan Medical University*. 9(2).



Table 1: Profile of the respondents

Questions	Categories	Number	%
Gender:	Male	215	47.9
	Female	234	52.1
Age Group:	18-21	150	33.4
	22-30	296	65.9
	31 and above	3	.6
Current year:	Year 1	37	8.2
	Year 2	46	10.2
	Year 3/Final year	167	37.2
	Master	187	41.6
	Others	12	2.7
Subject area:	Business management and studies	178	39.6
	Accounting and Finance	118	26.3
	Tourism, transport and travel	85	18.9
	Science subjects	55	12.2
	Others	13	2.9
Types of universities	Research-intensive universities	233	51.9
	Teaching-centred universities	216	48.1

Table 2: The Mainland Chinese students' approach to future career

	Frequency	Percent
Careerists	254	56.6
Ritualist	156	34.7
Retreatist	22	4.9
Rebel	17	3.8

Table 3: The Mainland Chinese students' approach to future career by gender

			Approach to manage future career				Total
			careerists	Ritualist	Retreatist	Rebel	
Gender	male	Count	139	57	11	8	215
		% within gender	64.7%	26.5%	5.1%	3.7%	100.0%
	female	Count	115	99	11	9	234
		% within gender	49.1%	42.3%	4.7%	3.8%	100.0%
Total		Count	254	156	22	17	449
		% within gender	56.6%	34.7%	4.9%	3.8%	100.0%

Table 4: Influential factors

Influential factors	Mean	Std. dev
Individual skills and attitudes	6.15	1.155
Labour market	5.39	1.275
Work culture	5.29	1.196
Your health and well-being	5.09	1.330
Family and caring responsibilities	4.41	1.438
Family background	4.17	1.621
Age	4.12	1.593
Gender	3.48	1.704

**Note:** 1 means strongly disagree and 7 means strongly agree

Table 5: Mean scores and standard deviation of the 20 activity items

Activity items	Mean	Std. Deviation
Undertaking internship	5.02	1.236
Paying attention to the labour market in China	4.88	1.326
Undertaking paid part-time work	4.86	1.257
Doing presentations for coursework	4.81	1.184
Participating fieldwork	4.70	1.145
Essay or report writing	4.62	1.257
Being friends with other international students	4.59	1.304
Exam preparation	4.56	1.343
Preparing academic group work	4.56	1.175
Paying close attention to employability related course content	4.55	1.315
Participating in voluntary work	4.50	1.192
Paying attention to the labour market in the UK	4.45	1.312
Being friends with local students	4.44	1.295
Attending employability related workshop	4.43	1.321
Participating in Student Union societies and clubs	4.35	1.262
Participating in local events	4.33	1.237
Travelling	4.27	1.343
Acting as a peer mentor	4.21	1.343
Acting as a course representative	4.12	1.327
Attending different competitions (e.g. FLUX)	3.99	1.315

Note: 1 = most unlikely and 7 = most likely

Table 6: the underlying dimensions of different initiatives

	Coursework and exam	Work experience and relevant workshops	Social activities	University responsibilities
Essay or report writing	.858			
Doing presentations for coursework	.856			
Exam preparation	.821			
Preparing academic group work	.733			
Paying close attention to employability related course content		.815		
Undertaking internship		.771		
Attending employability related workshop		.750		
Undertaking paid part-time work		.700		
Paying attention to the labour market in China		.480		
Participating in Student Union societies and clubs			.862	
Participating in voluntary work			.804	
Being friends with local students			.513	
travelling			.486	
Participating in local events			.486	
Acting as a peer mentor				.771
Acting as a course representatives				.756
Attending different competitions (e.g. FLUX)				.699
Paying attention to the labour market in the UK				.496
Eigenvalue	6.609	1.917	1.524	1.226
Variance explained (percentage)	36.719	10.650	8.467	6.813
Cumulative variance explained (percentage)	36.719	47.369	55.836	62.649
Cronbach's alpha	.888	.834	.778	.707
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization.				
a. Rotation converged in 5 iterations.				

Table 7 Overall scores on activity dimension by Understanding of employability (Means and standard deviations)

Understanding of employability	Coursework and Exam	Work Experience and Relevant Workshops	Social Activities	University Responsibilities
Skill approach	4.76 (1.085)	4.85 (1.063)	4.44 (.950)	4.28 (.957)*
Positional approach	4.19(1.006)	4.57 (.779)	4.19 (.825)	3.75 (.885)*
Processual approach	4.52 (1.036)	4.60 (.903)	4.31 (.884)	4.13 (.974)
F	5.379**	3.402	1.726	4.738**

Note: Standard deviations are in parentheses. Dimension scores were coded on a 7-point Likert scale ranging from 1 = most unlikely to 7 = most likely)

\*\*Significant at .01level

Table 8 Significant differences between types of universities

Variables	Research – intensive universities	Teaching – centred universities	Asymp. Sig. (2-sided)
Understanding of employability			
Skill approach	56.8%	43.2%	
Positional approach	35.5%	64.5%	
Processual approach	46.3%	53.7%	.020*
Approach to future career			
Careerists	57.5%	42.5%	
Ritualists	48.7%	51.3%	
Retreatists	40.9%	59.1%	
Rebel	11.8%	88.2%	.001**

Note: \* Significant at .05 level; \*\* Significant at .01 level

Table 9: Differences on different influential factors and activity dimensions (Means and standard deviations)

Variables	Research – intensive universities	Teaching – centred universities	Sig. (2-tailed)
Influential factors(1)			
Age	3.91(1.632)	4.34 (1.523)	.004**
Gender	3.31 (1.710)	3.367 (1.682)	.028*
Activity dimensions(2)			
Coursework and Exam	4.88 (1.07)	4.38 (1.02)	.000***
Work Experience and Relevant Workshops	5.03 (.976)	4.45 (.940)	.000***
Social Activities	4.56 (.924)	4.19 (.882)	.000***
University Responsibilities	4.47 (.96)	3.89 (.88)	.000***

Note: Standard deviations are in parentheses.

(1) Dimension scores were coded on a 7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree)

(2)Dimension scores were coded on a 7-point Likert scale ranging from 1 = most unlikely to 7 = most likely)

\*Significant at .05 level; \*\*Significant at .01 level; \*\*\*Significant at .001level