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Pre-Pilot and Pilot Studies with Malaysian Nurses on Transnational Nurse Education

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Keywords: Pre-pilot testing, pilot study, Bristol On-line Survey, semi-structured interviews, Malaysian nurses.

Abstract

This paper reports on research undertaken to identify Malaysian nurses' experiences of the part-time Transnational Higher Education post-registration top-up degree programmes delivered by one Australian and two UK universities. An interpretive paradigm and hermeneutic phenomenology and ethnographic principle of cultural interpretation research designs were used. A mixed methods approach was chosen, using both quantitative and qualitative methods. The Bristol Online Survey Questionnaire (BOS) and semi-structured interviews were initially selected to collect data. Pre-pilot testing refined the quantitative and qualitative data collection tools. However, the pilot study for BOS failed to elicit useful responses. This led to only the qualitative methodology being used to elicit participants' views in a culturally sensitive way. The interview guide allowed nurses' views of their experiences in relation to the research question to be obtained. This paper adds to the knowledge and insight on pre-pilot and pilot studies in international multicultural studies in Asia.

Introduction

The internationalisation of higher education has led some university schools of nursing to collaborate with Malaysia to deliver Transnational Higher Education (TNHE) post-registration top-up nursing degree programmes. This research aimed to explore Malaysian nurses' experiences of the part-time TNHE post-registration top-up nursing degree programmes delivered by one Australian and two UK universities (Arunasalam, 2013). These top-up degrees are bridging programmes that allow registered nurses to upgrade their diploma qualifications to a degree. 'Flying faculty' academics 'fly in' from partnership countries for one to two weeks to deliver teaching and 'fly out' to return to their country and academic roles.

It is important to examine the experiences of the nurses that study on these TNHE programmes, as cultural factors strongly influence the society in Asian countries. To undertake international multicultural research, there is a need to identify potential cultural issues that may impact on the research process and the type and level of responses obtained with certain data collection tools.

An interpretive paradigm with hermeneutic phenomenology and an ethnographic principle of cultural interpretation design were used. This allowed interpretation of participants' reflections and meaning of their experiences and provided an emic and etic view for the readers. Initially, a mixed methods approach was chosen – quantitative and qualitative – to provide in-depth insights for the reader.

According to Creswell (2013), a pre-pilot informs the development, refinement, validity and reliability of the data collection instrument and the research process. In contrast, a pilot study is described as a small-scale study (Burns & Grove, 2014). It is conducted in preparation for the main study, to identify the feasibility of the study,

and strengths and limitations of the research methodology (Polit & Beck, 2016). Both pre-pilots and pilot studies are time-consuming, but they reveal unanticipated problems and provide opportunities for the researcher to make improvements to the data collection tool and the research process.

In this article, the pre-pilots and pilot studies conducted are outlined. Relevant factors are identified that must be considered when choosing a data collection instrument and the research process in international multicultural research.

Paradigm

A paradigm is a framework for understanding theories, traditions, approaches, models and methodologies (Babbie, 2011). An interpretive paradigm was chosen as the research aimed to explore Malaysian nurses' experiences of the part-time TNHE post-registration top-up degree programmes. The philosophy of interpretive paradigm focuses on social constructions, such as shared patterns of meaning in creating reality (Denzin & Lincoln, 2011; Myers, 2013).

Research Design

A hermeneutic phenomenological design was utilised to explore the nurses' views of their experiences and identify the researcher's influence in the research process (van Manen, 2014). This design was also informed by the ethnographic principle of cultural interpretation (Geertz, 1973) as the researcher can position themselves as either insider or outsider within their study (Pike, 1967). As an insider, the researcher recognises the cultural beliefs articulated by participants, whilst as an outsider objectively presents the meaning of participants' views for the reader.

Mixed Methods

The two research approaches used in healthcare and nursing research to provide knowledge are quantitative and qualitative methodology. A mixed methods approach allows more comprehensive and complete findings to provide insight into the research problem (Bekhet & Zauszniewski, 2012). Initially, for this study, the mixed approach was preferred to obtain quantitative recurring data on human responses and the qualitative method that supports probing to develop insight into participants' experiences. Burns and Grove (2014) explain the quantitative approach focuses on an objective, systematic process where numerical data is used to obtain information. In contrast, Merriam (2009) stressed qualitative approaches create descriptive findings that will enable meaning to be elicited.

Ethical Considerations

Higginbottom (2004:4) advises to leave "ethical footprints" so that future researchers following the research journey may tread in our footprints, knowing that the research was ethically conducted. Full ethical approval was obtained from the researcher's university ethics committee. Advice about ethics from the British Education Research Association (2011) was followed: participants were informed of the research aims, consented to participate in the study and to the use of a recorder, assured of anonymity and confidentiality, and measures were taken to avoid any risks.

Pre-pilot

The validity of a research study is ascertained by how the intended emotions, associations and meanings of each question is established, the criteria to assess the

relevance and appropriateness of questions and the process of reviewing questions. Caspar, Peytcheva, Yan, Lee, Liu, and Hu (2016) agree with Cresswell (2013) that with pre-pilots, various activities are done to evaluate the capability of the tool to collect data and the suitability of the research process.

To ascertain this, Yan, Kreuter and Tourangeau (2012) state it is vital to first assess the aim of each question and content validity of the tool; secondly, to develop the criteria for evaluating the appropriateness of the questions; thirdly, to use methods to test the questions; and finally, to determine what is included or excluded, and revise the questions. Thabane, Ma, Chu (2010) and Willis (2016) believe it must be in line with the aim of the research, but the clarity of questions, style of language, ascribed meaning and reliability of interpretations is also important. In this research, the pre-pilot was also used in order to inform the question wording and other aspects of the research design for example appropriate target population.

Pilot Study

The National Institute for Health Research Evaluation Trials and Studies Coordinating Centre (NETSCC, 2014) describe a pilot study as a smaller version of a study. A pilot study is key to test research methods (Kim, 2011), determine validity and reliability of tools (Hammond & Wellington, 2013), and resource implications (van Teijingen & Hundley, 2002). This will reveal potential challenges (Arain et al, 2010) and identify the feasibility of the planned study (Willis, 2016).

Burns and Grove (2014) and Polit and Beck (2016) stress that, for every pilot study, the aspect/s that will be tested (for example, the methods and/or results) and the criteria to identify the success should be outlined in the reporting of the research. This will enable readers to understand the potential effectiveness of tools and feasibility of the study. It will also guide them when conducting a study using similar participants, tools and/or processes.

Bristol Online Survey

The Bristol Online Survey (BOS) Questionnaire is a survey that is conducted in small or large scale over the internet. It was chosen as the quantitative data collection tool as it offered ease of access to the sample group (Malaysian nurses) because of their geographic location (UK-Malaysia). In addition, it would incur minimal financial costs as there was no need for printing or postage (Scott et al., 2011). Although it does not restrict the number of respondents, Polit and Beck (2016) argue with surveys there is lack of control over whether participants respond, or the way in which they respond.

A BOS Questionnaire with nine questions was developed in line with the aims of this research. The tenth question focused on feedback on the design and set-up of the tool (Table 1). A purposive sampling method was used for the pre-pilot to recruit two Malaysian academics. This approach focuses on identifying individuals that will enable information-rich data to be obtained (Cresswell & Clark, 2011).

Table 1 BOS pre-pilot test comments

Factors	Comments
Style of questioning	Overall good Demographic profile (numbers 1-4) Good, easy and user friendly

	Open ended questions (numbers 5-10) Will these questions be in Bahasa Malaysia and English? Use Likert/dichotomous scales where they tick/circle Not many respondents will like to write their responses
Words and/or language used	Understandable, good, simple language used
Relevance of the questions	Covers what study aims to investigate, good
Set-up of the survey	Simple, good - pleasing to the eye
Ease of completion	May leave a few blanks, will provide very short responses
Any other comments.	None, excellent work

The feedback received enabled the researcher to amend the structure and type of questions used, for example four closed questions, three questions with responses that could be circled, and two short response questions were developed. The final question remained an open question to collect feedback on the factors outlined in Table 1.

For the pilot study, a convenience sampling approach was used to recruit 22 Malaysian nurses, who had completed the first module of a UK TNHE post-registration top-up degree course. This method of locating readily available participants is known as convenience sampling (Polit & Beck, 2016). Leon, Davis and Kraemer (2011) clarify that the sample size is determined by the need for examining feasibility. 17 nurses completed the BOS with implied consent.

The pilot study BOS questionnaires showed that participants had misunderstood certain questions, did not provide any responses to a variety of close ended, tick box and short response questions, thus data analysis was not undertaken. It also failed to elicit feedback to enhance the design or set-up of the BOS questionnaire. The lack of responses may be attributed to cultural patterns of communication that is not inclined towards written information. The failure of the BOS pilot study to obtain recurring data on nurses' responses led to only the use of a qualitative approach.

Focus Groups/Interviews

In selecting the use of only a qualitative approach, it was important to identify whether focus groups and/or interviews would be appropriate to collect context sensitive data for this research. Focus groups are focused on an issue; thus, shared or disputed opinions, thoughts of individual group members can coalesce into a shared reflection of the social realities of a cultural group (Patton, 2002, Krueger & Casey, 2015). In contrast, Reason (1988:79) believes interviews would enable 'the liveliness, involvement and even the passion' of nurses' experiences to be obtained.

In an attempt to gain, develop, validate and ascertain in-depth understanding of participants' experiences, interviews were chosen as the data collection method. This is because the culture in Malaysia promotes agreement rather than critique (Abdullah & Koh, 2009). Thus, due to pertinence of saving face, of self and authority, the nurses may not feel comfortable to speak in English, voice their opinion or express their views openly in a group situation, or in front of other senior nurses and myself, irrespective of whether their perspectives were shared or not. It may have led to participants feigning agreement or expressing thoughts and opinions that they think are expected of them, or which limit disclosure (Abdullah, 1992). Also, participants may have feared negative consequences, such as being perceived with a bad image amongst others in the group, or subject to reprisals or repercussions due to socially unacceptable

responses. They would be more confident to express personal views on a one-to-one basis. However, there is a tendency that the intrusive and time-intensive nature of interviews may prevent the nurses from voicing their opinions.

Interviews may be conducted as structured, semi-structured or unstructured (Denzin & Lincoln, 2011). Semi-structured interviews in line with the study's purpose assist researchers to develop understanding of interviewees' realities. In comparison, structured interviews follow a set order of questioning, whilst unstructured interviews lack the same context questions and produce voluminous amounts of data.

An eight-question interview guide was developed to conduct semi-structured interviews. Polit and Beck's (2016) principles related to developing interview questions were utilised. The British English words, phrases and language were translated to align with the Malaysian English language and culture to ensure it was easily understood and did not cause offence. This was to demonstrate sensitivity and to encourage participant responses (Caspar, Peytcheva, Yan, Lee, Liu, and Hu (2016).

In the pre-pilot stage, the interview guide was given to five Malaysian educationalists randomly selected at an International Conference on University Learning and Teaching hosted by a UK university in partnership with a Malaysian university. Their collective view was that using interviews compared to focus groups was a more suitable data collection tool. They all agreed that the interviews should be conducted in both Bahasa Malaysia and English. Some advice was also given on the questioning style to encourage confidential and in-depth responses.

The pilot study interviews were undertaken in Malaysia. The aim was to determine the clarity of questions and whether the semi-structured interview guide would elicit useful responses in line with the research aims of the main study. A convenience sample of four Malaysian nurses studying the final module of a UK TNHE post-registration top-up nursing degree programme were approached. There were no refusals.

It became obvious when conducting the interviews that, despite reassuring the nurses that they were reading the information sheet and signing the consent forms only as part of the pilot study, the nurses displayed the classic Malaysian 'smile and silence' attitude of withholding information. Initially it appeared that they were disguising their responses behind a façade of 'saving face'. When their responses remained the same after the purpose of the pilot study and assurance of confidentiality and anonymity was reiterated a few times, certain key factors became evident.

First, the researchers' perceived status as a Malaysian now based in the UK was affecting them. Secondly, despite stating that they could speak in Bahasa Malaysia, they had chosen to speak in English and then became self-conscious. Thirdly, they may have feared the potential of facing negative consequences as they had not yet completed their programme of study. Gagliardi (2007) supports that participants may refrain from truth or comment on issues that might result in negative repercussions.

As a Malaysian with insights based on shared lived experiences, it led the researcher to revert to the use of a gentle approach, local slang and humour to encourage interviewees to narrate their experiences. The recordings were transcribed and scrutinised but not analysed as the aim was to identify challenges and develop relevant

strategies. It highlighted that some participants had difficulty understanding certain English words used, for example, the use of ‘patient hospitalised’ instead of ‘patient warded’. Further, to enable a conversational mode, the researcher needed to memorise the interview questions and slow their pace and style of questioning.

Conclusion

This paper adds to the pre-pilot and pilot studies literature in international cross-cultural research in Asia. It identifies the importance of pre-pilot and pilot studies and their reporting in the research. This is because other researchers will be aware of the culturally sensitive issues that will impact on the research process and the type and level of responses obtained with certain data collection tools. Some relevant strategies that may assist novice researchers and reviewers of scientific articles have been outlined.

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