Methodological Considerations in a Quantitative Study Examining the Relationship between Job attitudes and Citizenship Behaviours

Thanawut Limpanitgul

Cardiff University
X1B Guest Extension Building
Column Drive, Cardiff
United Kingdom

Tel: (+44) 7894347628
E-mail: LimpanitgulT@cardiff.ac.uk

Supervisors: Dr. Julian Gould-Williams
Professor Matthew Robson

18th EDAMBA Summer Academy
Soreze, France
July 2009

ABSTRACT

The current paper aims to discuss methodology and methodological challenges (i.e. the issues of questionnaire translation and common method bias) in developing a social structure explanation of employee citizenship behaviours, emphasising the importance of job satisfaction, and the three components of organisational commitment in an Asia context.

As this research paper adopted the critical realism position in investigating the phenomenon, choices of lower-level methodological considerations are influenced by such philosophical perspective. In short, the cross-section descriptive questionnaire survey was considered as the most appropriate research approach to gather information. Statistical techniques were proposed as the means to analyse the data.

Keywords: Job attitudes, citizenship behaviours, collaborative translation, common method bias, structural equation modelling

1. Introduction and Background of Research

Since the early 1980s, there has been a dramatic increase of interest in the service sector as academicians and practitioners realised the profound structural shift towards services in every advanced economy (Oliver *et al.* 1997) along with an awareness of the economic contribution of the service sector. Academics have shown that the service sector has grown to become one of the largest and most important sectors in many countries within advanced economies. (Korczynski 2002; Lovelock and Wirtz 2007; Sun *et al.* 2007), and continues to perform an increasingly important role within the economies of developing countries (Kosonboon 2006; Bitner and Brown 2008). Thus, the pursuit of service excellence is now considered as an essential strategy (Gould-Williams 1999).

In service organisations, human resources are probably the most important source of the organisation's success (Guest 1997; Lovelock *et al.* 2005; Browning 2006) as they represent the organisations and produce the service (Zeithaml and Bitner 1996), carry the responsibility of projecting their organisation's image and creating a satisfying service experience for the customer (Bowen and Lawler 1992). Nonetheless, many of the variables affecting employee behaviours in service settings remain unknown (Ackfeldt and Wong 2006). An increasing interest in job attitudes of frontline employees has been witnessed, given their prominent role in developing customer relationships (Schneider and Bowen 1993; Heskett *et al.* 1994; Paulin *et al.* 2006). Indeed, recent marketing studies identify relationships between contact employee job attitudes and several customer-related outcomes. For example, many studies reported associations between service employee job satisfaction and customer perceptions of service quality, (e.g. Yee *et al.* 2008), service evaluation (e.g. Crosby and Stephen 1987), customer value perceptions (e.g. Hartline and Ferrell 1993) and customer satisfaction (e.g. Parasuraman 1987; Bitner *et al.* 1990; Yee *et al.* 2008) as well as the association between organisational commitment and service orientation (e.g. Beatson *et al.* 2008). The recognition that job satisfaction and organisational commitment are interdependent (Luthans 2002; Rayton 2006) and both constructs are important in understanding employee behaviour (Tett and Meyer 1993; Harrison *et al.* 2006) establishes the importance of employee job attitudes to service excellence.

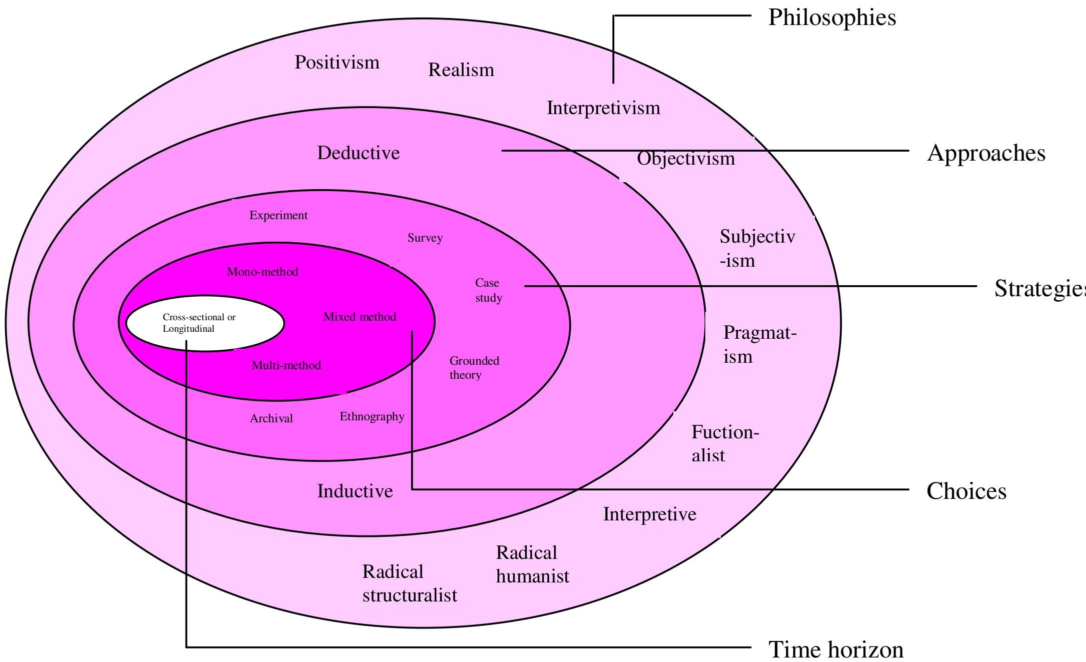
2. Research Design

Methodology is a body of knowledge that enables researchers to explain and analyse methods – indicating their limitations and resources, identifying their presuppositions and consequences, and relating their potentialities to research advances (Miller 1983). Moreover, it underpins the types of questions that can be addressed and the nature of the evidence that is generated (Clark *et al.* 1984). Therefore, the issue of research methodology is important to any study. Appropriation between research paradigm, type of data, and collection methods has significant implications upon the research findings. The objective to examine the relationship between job attitudes and service employee performance serves as a guideline in developing the discussion of research design in this paper.

Research design provides an overall guidance for the collection and analysis of data of a study (Churchill 1979). Importance of research design stems from its role as a critical link between the theory and argument that informed the research and the empirical data collected (Nachmias and Nachmias 2008). A choice of research design 'reflects decisions about the priority being given to a range of dimensions of the research process (Bryman and Bell 2007, p. 40), and this of course will have considerably influence on lower-level methodological procedures such as sampling and statistical packages. It is therefore a blueprint that enables researchers to find answers to the questions being studied for any research project. Along with clear research plan it provides, constraints and ethical issues that a study will inevitably encounter must also be taken into account (Saunders *et al.* 2007).

Figure 1 illustrates different layers and approaches that are available and must be consistently employed when conducting a research. In accordance with the research onion, prior data collection and analysis techniques can be determined, considerations on several issues must be completed. The following subsections explain philosophical positions, research approaches, strategies, and time horizon of the present study.

Figure 1: The research onion



Source: Saunders *et al.* (2007, p.132)

2.1 Research Philosophy

A research philosophy is a belief about the way data about a phenomenon should be collected and analysed (Levin 1988). Different philosophical perspectives used to interpret an event appear to be problematic for natural scientists as elsewhere (May 1997). To interpret and understand the world we are living, we certainly need ‘ways of viewing’ and ‘ways of interpreting’ to grasp the surrounding facts, ideas, and events. The social world, therefore, can be interpreted and understood via many schools of thoughts.

In whatever manifestation, for a theoretical model to explain anything there must be an appropriate relationship between the statements made, the methods used to make such statements, and the philosophical perspective deployed to inform the methods (Abbott 1998). In each of these respects, there are issues pertaining to ontology, epistemology, and methodology. Ontology is concerned with the nature of reality. Its central question is whether social entities can, or should, be considered social constructions built-up from the perception and action of social actors. Epistemology, on the other hand, concerns what constitute acceptable knowledge in an area of study. The key epistemological question is "can the approach to the study of the social world, […], be the same as the approach to studying the natural sciences?" (Saunders *et al*. 2007, p. 108). Epistemology provides the philosophical underpinning – the credibility – which legitimises knowledge and the framework for a process that will produce through a rigorous methodology. In summary, ontology is 'being', epistemology is 'knowing', and methodology is 'studying'.

In behavioural sciences, the positivist posits that human behaviours can be explained and predicted in terms of cause and effect (May 1997). Positivists believe that the collection of data has to be performed in the social environment and involved reactions of people to it (May 1997). Principal positivist methods consist of observations, experiments and survey techniques, and often involve complicated statistical analysis in order to generate the findings and to test hypotheses empirically (Schiffman and Kanuk 1997). The main aim of the positivistic researcher is to generalising the results to the larger population, 'the deductive approach'. To put it more simply, the positivistic, deductive approach implies that the theory must be first generated and then tested by empirical observations. If the theory is falsified, it has to be rejected, and a new one formulated to replace it.

Another research paradigm is critical realism which views the world in terms of three components: the reality, the actual, and the empirical. According to Sayer (2000), the reality concerns that which exist regardless of whether we understand it or whether we have experience of it. It is realm of objects, their structure and power and can exist even we have no experience of the results or lack of empirical evidence. The actual refers to the outcome when the structure and powers of the real are activated. And, the empirical refers to the domain of experience. The difference between this paradigm and positivism is that critical realists distinguish between the actual and the real. In exact word, the actual is not a complete representation of the real. With research questions and objectives in mind, it is clear to certain degree that this research is positioned on a continuum towards the positivistic perspective rather than on the interpretive perspective.

To summarise, the ontological position of this study is that reality exists outside a researcher's mind. This research is based on the belief that there exists a real physical world beyond our knowledge and comprehension. Moreover, there also exists a social world that is being constructed, shaped and influenced by our life experiences, knowledge, and desire. Thus, this study positions itself on 'critical realism' perspective, hence taking the position that one can only understand reality to a limited extent; no one can obtain the entire picture of a studied phenomenon. Therefore, reality can be studied to a certain extent and generalisations can be made with a degree of probability.

2.2 Research Approach, Strategy, and Time Horizon

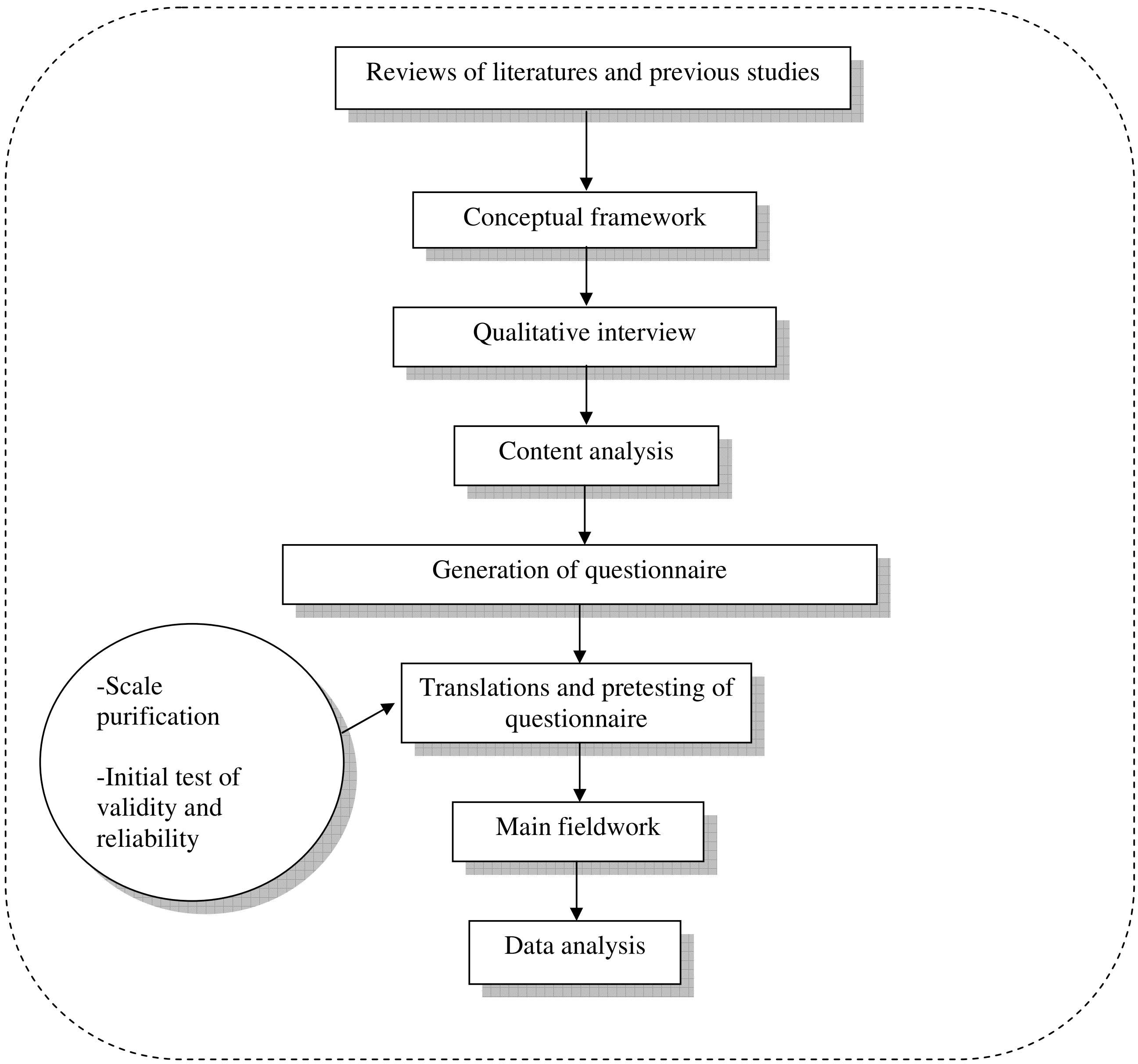
Deriving from the research philosophy is the determination of research approach, strategy, and time horizon. It is normally argued that research approaches are attached to different research philosophies (Saunders *et al.* 2007). By adopting a positivistic view, the present study showed a focus on theory testing wherein theory was first adopted as the framework for developing and testing hypotheses in a specific research context. This emphasises deductive orientation of the present study.

After determination on research approach, the researcher proceed to consider whether the present study should be exploratory, causal, or descriptive. Given the nature of the research objectives (i.e. to investigate the effects of the independent variables on service employee behavioural outcomes) and the adequate availability of prior evidence to formulate hypothesised relationships for examination, it was deemed that cross-section descriptive survey was the most appropriate option for this study.

3. Data Collection Methods

The present study employed multi-methods, using both quantitative and qualitative techniques, in data collection with more emphasis on quantitative methods. It must be noted that the questionnaire survey was used as main data collection instrument of this study because the questionnaire survey enables researchers to examine and explain relationships between constructs, in particular cause-and-effect relationships (Saunders *et al.* 2007). The following diagram represents the whole process of data generation in the present study. It can be divided into two major stages: 1) generation of questionnaire; and 2) translation and pretesting of questionnaire.

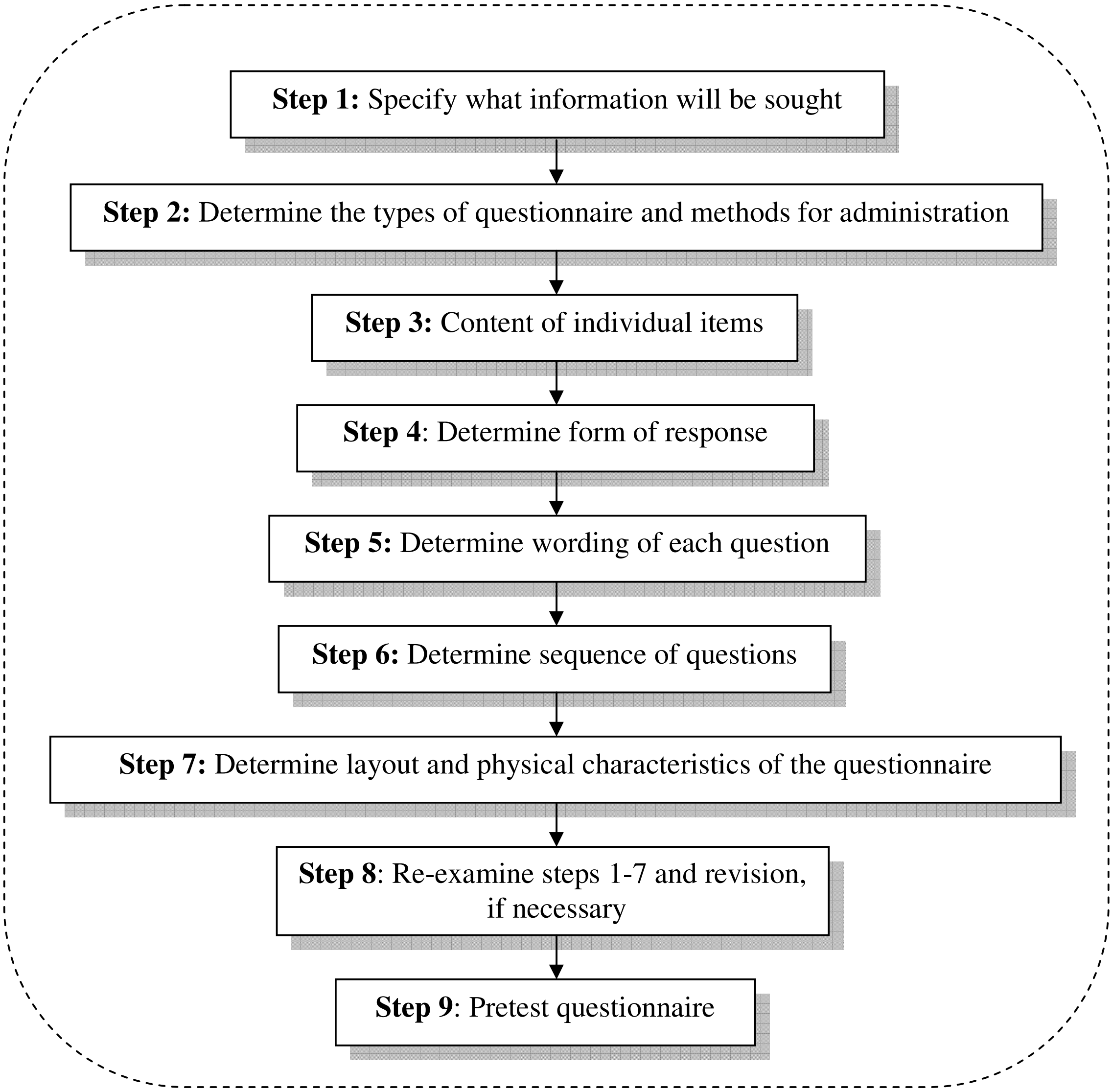
Figure 2: The procedural step of the present study



3.1 Questionnaire Development Process

The process of questionnaire development is based on the approach recommended by Churchill and Iacobucci (2002) which composes of nine steps. The following figure illustrates a step-by-step procedure which was used as a guideline for generating the questionnaire employed in this study.

Figure 3: Questionnaire development process



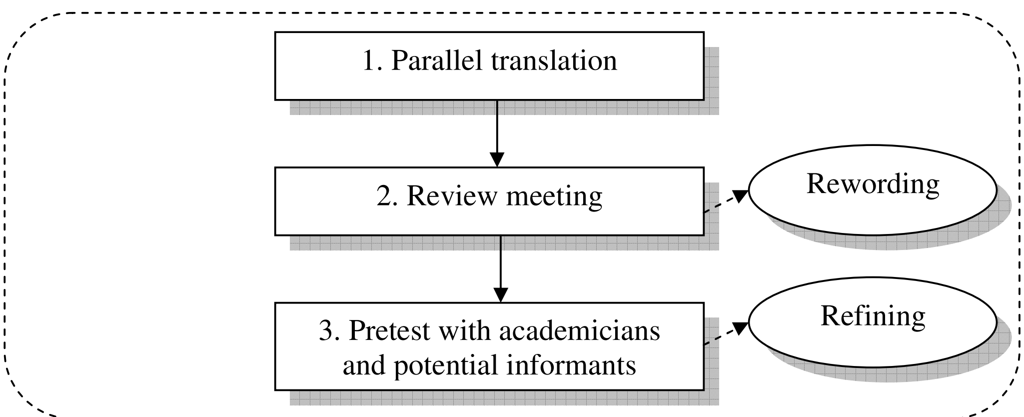
Source: Based on Churchill and Iacobucci (2002, p. 315)

3.2 Translation and Pretesting

Once the questionnaire was finalised, it is subject to translation and pretesting. In international research, translation is extremely important, especially if the questions are to have the identical meaning to all participants (Saunder *et al.* 2007). Back translation is the most commonly used method in multi-country research (Brislin 1970), it however assumes an etic approach to linguistic translation which means that this approach lacks considerations of meaning asymmetry of the same words or constructs exist in different languages. Moreover, there are some limitations associated with employing back translation approach in international research. First, there may be different use of language between bi- and monolingual speakers (Brislin 1970). As bilinguals (i.e. translator) are fluent in both languages, they may not use a language in the same way as monolinguals. They can also more easily understand a poorly written target translation. Furthermore, back translation only provides a literal translation from one language to another; it may not capture the intended sense of statement (Douglas and Craig 2007). This approach is, therefore, discarded.

Parallel translation has been advocated as a preferred method of achieving equivalence in meaning (Hambleton 1993). The translation process of the present study considered parallel translation method together with suggestions made by Douglas and Craig (2006; 2007) in conducting international research. Therefore, an extended parallel translation procedure called “collaborative translation” of the questionnaire was employed in translating the questionnaire for this study. This approach can bring together disciplinary expertise and cultural knowledge to translate the questionnaire (Douglas and Craig 2007). Figure 4 outlines the translation steps adopted in this research.

Figure 4: Translation procedure



3.2.1 Parallel Translation

The questionnaire was separately translated from English to Thai by two independent translators who hold a PhD in the field of English linguistics and are familiar with technical terms in business areas. This resulted in two Thai versions of the questionnaire which were used in the review meeting.

The translators were then invited to a meeting hold with the aim of adjusting and finalising the Thai-version questionnaire. Also, an independent academic researcher in the field of human resource management was invited to the meeting. Each participant was given both Thai versions of the questionnaire along with the original English-version questionnaire before the meeting. Differences of wordings between the two versions were discussed. Amendments were made accordingly until both translators and the independent academic researcher were satisfied. The refined version of the questionnaire was then sent to an academic officer who is a specialist in Thai linguistic to check for wording ambiguities and appropriate use of the language. Few minor amendments were made with accordance to his suggestions, provided the amendments did not affect the conceptual equivalence.

3.2.2 Pretesting

With Academicians

When the English-version questionnaire was conceptually developed, it was reviewed by two British researchers; one holds a PhD in the area of marketing and the other in human resource management. The purpose is to ensure that the questionnaire possessed face validity. Additionally, the pretest aimed to reduce wording ambiguity and potential confusion of each question.

Because pretesting of research instruments in each cultural context is critical (Douglas and Craig 2006), the Thai-version questionnaire was pretested with two groups of people: Thai academics and potential informants. Two Thai researchers who hold a doctorate in the area of marketing and management acted as judges of the Thai-version questionnaire. This aims to ensure the conceptual equivalence of English- and Thai-versions questionnaires.

With Potential Informants

It is noted that languages used by people from different background (i.e. the academicians and potential informants) may be different. Once the target questionnaire was refined, it was due to pretesting with potential informants. Also, it aimed to establish an initial reliability assessment. This stage of pretesting was divided into two rounds with different set of objectives for each round.

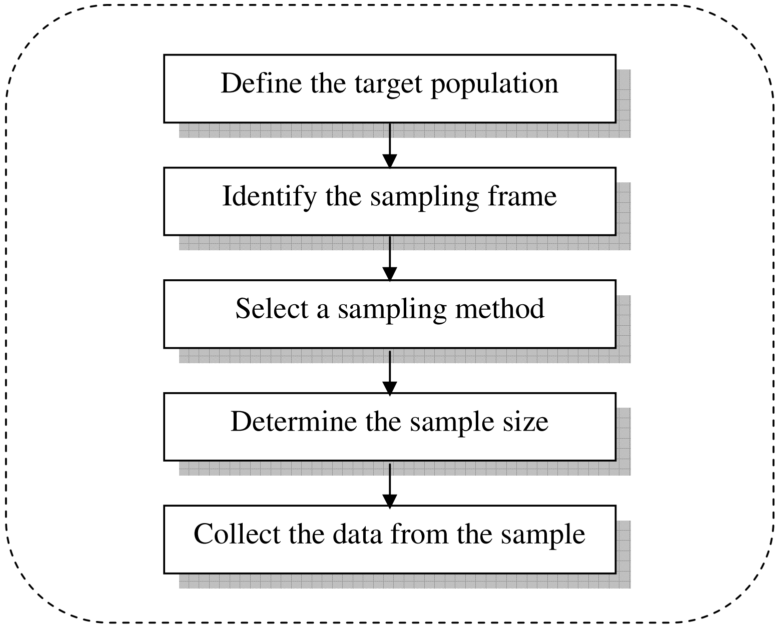
The first round of questionnaire pretest aimed to capture potential wording ambiguities, timing, and other difficulties encountered by the respondents in completing the questionnaire. This round involves interviewing a Thai manager and ten Thai flight attendants from various airlines. Amendments were made accordingly, mainly in Section Six: General background information.

The second round of questionnaire pretest aimed to assure that there are neither ambiguous nor confusing questions and to obtain some the questions' initial validity and the likely reliability of the data that will be collected. The questionnaires were carried by the researcher to distribute on a flight from Bangkok to Singapore. The initial descriptive analysis was run using statistical techniques (i.e. means, standard deviation, and initial reliabilities). The results were satisfactory.

4. Research Sampling

Sampling is "the selection of a fraction of the total number of unites of interest to decision makers for the ultimate purpose of being able to draw general conclusions about the entire body of units (Parasuraman *et al.* 2004, p. 356). A conclusion can be made from the sample about the population to achieve the research objective" (Saunders *et al.* 2007). It is, therefore, uncommon for a research to survey the entire population due to time and financial constraints, especially, when the population is very large. The present project follows five-step procedure for drawing a sample based on Churchill and Iacobucci's (2002) and Wilson's (2006) suggestions. The following diagram illustratively presents the procedure adopted in this thesis.

Figure 5: Five-step procedure for drawing a sample



Source: Based on Churchill and Iacobucci (2002) and Wilson (2006)

5. Common Method Bias

It has become widely accepted that correlations between variables measured with the same methods are inflated due to the action of common method bias, also referred to as common method variance (Bogazzi *et al.* 1991; Podsakoff *et al.* 2003; Spector 2006). Although a number of sources suggested that this problem is overstated (Spector 2006), statements suggesting that common method bias (hereafter CMB) is a serious problem persist. CMB is a concern because it is one of the main sources of measurement error (Podsakoff *et al*. 2003), which may in turn undermines the validity of the conclusions about relationships between measures (Nunally 1978). Spector (2006) noted that the concern for CMB is mostly raised when cross-sectional, self-reported surveys are employed as a main research instrument.

Recognising the issue of CMB and its serious consequences on final findings, the present study followed Podsakoff *et al.*'s (2003) recommended remedies to minimise and control for CMB potential sources, provided that remedy techniques are applicable in this research context. In general, there are two techniques to control CMB: (1) Procedural remedies; and (2) statistical remedies (See Podsakoff *et al.* 2003 for more details on techniques of each remedy). It is obvious that the ‘easy win’ solution would be the use of different raters and procedural remedies related to questionnaire design. Using different rating sources, however, was not applicable in the airline context for two main reasons. First, cabin crew work is on shift basis and therefore no formal supervisor exists. Their flights are randomly assigned as too are the persons in charge of the flights. Secondly, it is argued that many of the OCBs investigated would not readily be evident to an alternative rating source (Organ and Konovsky 1989; Allen *et al.* 2000). Because of the nature of these service behaviours, Bettencourt *et al.* (2005) stated that superiors may not always be knowledgeable of the extent to which an employee engaged in such behaviours.

Because it was not possible to obtain ratings from other sources, several procedural remedies related to questionnaire design were considered in the present study. First, careful construction and clarity of the scale items was achieved using a systematic questionnaire and measure development process. Second, psychological separation of questions was used in the questionnaire. According to Podsakoff *et al.* (2003, p. 887), psychological separation is an attempt to “make it appear that the measurement of the predictor variable is not connected with or related to the measurement of the criterion variable”, and is recommended when it is not possible to gather data from difference sources. By this, questions were grouped together and put under different general topic sections to make it appear unrelated to respondents. Each section has a brief instruction indicating what is being asked. It used the words ‘behaviour’ instead of ‘performance’ and ‘your organisation & your job’ in stead of ‘job attitude’. This aimed to avoid the problem that respondents may try to establish a relationship between sections. Moreover, the questionnaire begins with asking dependent variables (i.e. performance) and then independent variables (i.e. job satisfaction and organisational commitment). The researcher believes that people are less likely to alter their answers once they have already moved onto the further part of the questionnaire. Finally, the anonymity and confidentiality of participants were guaranteed. The sentence ‘there is no right or wrong answer’ was placed in the questionnaire cover to urge the participants to answer questions as honestly as possible.

Additionally, two statistical techniques were employed to assess and reduce the problem of CMB. One of these is Harman's single factor test which it is evident to be is one of the most widely used techniques (Podsakoff *et al.* 2003). However, it is noted that this method does nothing to statistically control for the method effects (Podsakoff *et al.* 2003). Therefore, another statistical method 'controlling for the effects of a single latent method factor' was also employed. As theory and research on the topic of OCB has presumed a social desirability element to the behaviours (Niehoff 2001). Therefore, social desirability was identified as a main source of CMB in the present study. This construct was explicitly measured using Reynolds's (1982) short form of social desirability measure which comprises a number of reflective questions. Short version of social desirability was used for several reasons: First, the huge numbers of full forms are time consuming which may consequently dissuade participants to complete the questionnaire; and secondly, a study conducted by Loo and Loewen (2004) showed that short versions of the scale are a significant improvement in fit over full scales.

6. Data Analysis Methods

It is noted that statistical techniques are a major tool for data analysis in the social science research (Nachmias and Nachmias 2008). However, most of multiavarite techniques share a common limitation: Each technique can only investigate one relationship at one time (Hair *et al.* 2006). Recognising the objectives of the present study – to examine the pattern and interrelationships of multiple independent and dependent variables relating to service employee behaviours, structural equation modelling (SEM) is regarded as the most effective analytical instrument (Byrne 2001; Hair *et al.* 1998; Hair *et al.* 2006).

Bibliography

Abbott, K. 1998. Critical realism in industrial relations theory. Current Research in Industrial Relations. *Proceeding of the 10th AIRAANZ Conference*, Waikato Univeristy, NZ. pp. 14-23.

Ackfeldt, A-L. and Wong, W. 2006. The antecedents of prosocial service behaviours: An empirical investigation. *Service Industries Journal* 26, pp. 727-745.

Allen, T. D., Barnard, S., Rush, M. C. and Russell, J. E. A. 2000. Ratings of organisational citizenship behavior: Does the source make a difference? *Human Resource Management Review* 10, pp. 97-114.

Bagozzi, R. P., Yi, Y. and Phillips, L. W. 1991. Assessing construct validity in organisational research. *Administrative Science Quarterly* 36, pp. 421-458.

Beatson, A., Lings, I. and Gudergan, S. P. 2008. Service staff attitudes, organisational practices and performance drivers. *Journal of Management and Organisation* 14, pp. 168-179.

Bettencourt, L. A., Brown, S. W. and MacKenzie, S. B. 2005. Customer-oriented boundary-spanning behaviours: Test of a social exchange model of antecedents. *Journal of Retailing* 81, pp. 141-157.

Bitner, M. J. and Brown, S. W. 2008. The service imperative. *Business Horizons* 51, pp. 71-84.

Bitner, M. J., Booms, B. H. and Tetreault, M. S. 1990. The service encounter: Diagnosing favourable and unfavourable incidents. *Journal of Marketing* 54, pp. 71-84.

Bowen, D. E. and Lawler, E. E. 1992. The empowerment of service workers: What, why, how, and when. *Sloan Management Review* 33, pp. 31-39.

Brislin, R. W. 1970. Back translation for cross-cultural research. *Journal of Cross-Cultural Psychology* 1, pp. 185-216.

Browning, V. 2006. The relationship between HRM practices and service behaviour in South African service organisations. *International Journal of Human Resource Management* 17, pp. 1321-1338.

Bryman, A. and Bell, E. 2007. *Business research methods*. 2nd ed. Oxford: Oxford University Press.

Byrne, B. M. 2001. *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. New Jersey: Lawrence Erlbaum.

Churchill, G. A. 1979. A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research* 16, pp. 64-73.

Churchill, G. A. 1992. *Basic marketing research.* Chicago: Dyan Press.

Churchill, G. A. and Iacobucci, D. 2002. *Marketing research: Methodological foundations.* 8th ed. Orlando: Harcourt College Publishers.

Clark, D., Lotto, L. and Astuto, T. 1984. Effective schooling and school improvement: A comparative analysis of two lines to inquiry. *Educational Administration Quarterly* 20, pp. 41-68.

Crosby, L. A. and Stephen, N. 1987. Effects of relationship marketing on satisfaction, retention, and prices in the life insurance industry. *Journal of Marketing Research* 24, pp. 404-411.

Douglas, S. P. and Craig, C. S. 2006. On improving the conceptual foundations of international marketing research. *Journal of International Marketing* 14, pp. 1-22.

Douglas, S. P. and Craig, C. S. 2007. Collaborative and iterative translation: An alternative approach to back translation. *Journal of International Marketing* 15, pp. 30-43.

Hair, J. F. Jr., Anderson, R. E., Tatham, R. L. and Black W. C. 1998. *Multivariate data analysis.* 5th ed. New Jersey: Prentice Hall.

Hair, J. F. Jr. Black, W. C., Babin, B. J. Anderson, R. E. and Tatham, R. L. 2006. *Multivariate data analysis*. 6th ed. New Jersey: Prentice Hall.

Hambleton, R. K. 1993. Translating achievement tests for use in cross-national studies. *European Journal of Psychological Assessment* 9, pp. 57-65.

Hartline, M. D. and Forrel, O. C. 1996. The management of customer-contact service employees: An empirical investigation. *Journal of Marketing* 60, pp. 52-70.

Heskett, J. L., Jones, T. O., Loveman, G. W., Sasser, W. E. and Schlesinger, L. A. 1994. Putting the service-profit chain to work. *Harvard Business Review* 72(March/April), pp. 164-174.

Gould-Williams, J. 1999. The impact of employee performance cues on guest loyalty, perceived value and service quality. *The Service Industry Journal* 19, pp. 97-118.

Guest, D. E. 1997. Human resource management and performance: A review and research agenda. *International Journal of Human Resource Management* 8, pp. 263-276.

Harrison, D. A. Newman, D. A. and Roth, P. L. 2006. How important are job attitudes? Meta-analytic comparisons of integratie behavioural outcome and time sequences. *Academy of Management Journal* 49, pp. 305-325.

Korczynski, M. 2002. *Human resource management in service work*. Hampshire: Palgrave.

Kosonboon, S. 2006. *People management in successful service SMEs: A comparative study between service software companies and small hotels in Thailand*. PhD Thesis. Cardiff University.

Levin, D. M. 1988. *The opening of vision: Nihilism and the postmodern situation*. London: Routledge.

Loo, R. and Loewe, P. 2004. Confirmatory factor analysis of scores from full and short versions of the Marlowe-Crowne social desirability scale. *Journal of Applied Social Psychology* 34, pp. 2343-2352.

Lovelock, C. and Wirtz, J. 2007. *Service marketing: People, technology, strategy*. 6th ed. New Jersey: Pearson.

Lovelock, C., Wirtz, J., Keh, H. T. and Lu, X. 2005. *Service marketing in Asia: People, technology, and strategy.* 2nd ed. Singapore: Prentice Hall.

Luthans, F. 2002. *Organisational behaviour*. 9th ed. New York: McGraw Hill.

May, T. 1997. Social research: issues, methods and process. 2nd ed. Trowbridge: Redwood Books.

Miller, D. 1983. *Handbook of research design and social measurement*. 4th ed. London: Longman.

Nachmias, C. F. and Nachmias, D. 2008. *Research methods in the social sciences*. 7th ed. New York: Worth.

Niehoff, B. P. 2001. *A motive-based view of organisational citizenship behaviours: Applying and old lens to a new class of organisational behaviours.* Paper presented at the 28th Annual National Agricultural Education Research Conference. Retrieved July 25, 2008 from [www.sba.muochio.edu/management/mwAcademy/2000/3.pdf]

Nunnally, J. 1978. *Psychometric theory*. New York: McGraw-Hill.

Oliver, R. L., Rust, R. T. and Varki, S. 1997. Customer delight: Foundations, findings, and managerial insight. *Journal of Retailing* 73, pp. 311-336.

Organ, D. W. and Konovsky, M. 1989. Cognitive versus affective determinants of organisational citizenship behaviour. *Journal of Applied Psycholgy* 74, pp. 157-164.

Parasuraman, A. 1987. Customer-oriented cooperate cultures are crucial to services marketing success. *Journal of Services Marketing* 1, pp. 39-46.

Parasuraman, A., Grewal, D. and Krishnan, R. 2004. *Marketing research*. Boston: Houghton Mifflin.

Paulin, M., Ferguson, R. J. and Bergeron, J. 2006. Service climate and organisational commitment: The importance of customer linkages. *Journal of Business Research* 59, pp. 906-915.

Podsakoff, P. M. MacKenzie, S. B., Lee, J. Y. and Podsakoff, N. P. 2003. Common method biases in behavioural research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology* 88, pp. 879-903.

Rayton, B. A. 2006. Examining the interconnection of job satisfaction and organizationl commitment: An application of the bivariate probit model. *International Journal of Human Resource Management* 17, pp. 139-154.

Reynolds, W. M. 1982. Development of reliable and valid short forms of the Marlowe-Crowne social desirability scale. *Journal of Clinical Psychology* 38, pp. 119-125.

Saunders, M., Lewis, P. and Thornhill, A. 2007. *Research methods for business students.* 4th ed. London: Prentice Hall.

Sayer, A. 2000. *Realism and social science.* London: Sage.

Schiffman, L. G. and Kanuk, L. L. 1997. *Consumer Behaviour*. London: Prentice Hall.

Schneider, B. and Bowen, D. E. 1993. The service organisation: Human resource management is crucial. *Organisational Dynamics* 21, pp. 39-52.

Spector, P. E. 2006. Method variance in organisational research: Truth or urban legend. *Organisational Research Methods* 9, pp. 221-231.

Sun, L-Y., Aryee, S. and Law, K. S. 2007. High-performance human resources practices, citizenship behaviour, and organisational performance: A relational perspective. *Academy of Management Journal* 50, pp. 558-577.

Tett, R. P. and Meyer, J. P. 1993. Job satisfaction, organizational commitment, turnover intention, and turnover. *Personnel Psychology* 46, pp. 259-293.

Wilson, A. 2006. *Marketing research: An integrated approach.* 2nd ed. Gosport: Prentice Hall.

Yee, R. W. Y., Yeung, A. C. L. and Cheng, T. C. E. 2008. The impact of employee satisfaction on quality and profitability in high-contact service industries. *Journal of Operations Management* 26, pp. 651-668.

Zeithaml, V. A. and Bitner, M. J. 1996. *Services marketing.* New York: McGraw Hill.