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Abstract

This paper describes the process of the conduct of preliminary tests to determine the construct and content validity of the chosen data collection method for a study into the relationship between Islamic principles and objectives, Islamic financial law and *takaful* (slamic Insurance) operations and practices in Nigeria. Semi-structured interviews were tested on a select group of respondents mirroring the intended subjects in the field. The pilot test showed the construct to be both valid and reliable while giving the opportunity to insert refinements to the research tool.

Keywords

Academic Skills, Qualitative Research, Interview Schedule, Validation, Pilot Test, Constructs Validity, Construct Reliability

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Establishing Construct Validity and Reliability: Pilot Testing of a Qualitative Interview for Research in Takaful (Islamic Insurance)

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This paper describes the process of the conduct of preliminary tests to determine the construct and content validity of the chosen data collection method for a study into the relationship between Islamic principles and objectives, Islamic financial law and takaful (Islamic insurance) operations and practices in Nigeria. Semi-structured interviews were tested on a select group of respondents mirroring the intended subjects in the field. The pilot test showed the construct to be both valid and reliable while giving the opportunity to insert refinements to the research tool. Keywords: Academic Skills, Qualitative Research, Interview Schedule, Validation, Pilot Test, Constructs Validity, Construct Reliability

In the conduct of any study, a good researcher is expected to, at the inception after determining the area of the research, create an outline of the strategy to be followed during the conduct of the research. This strategy also referred to as the research design, will include an outline of the methodology to be followed, the concepts to be measured and the methods chosen by the researcher that will adequately perform the task. In qualitative research, Boeiji (2010) argues that the creation of a design allows for structure within the inherent flexibility of qualitative methods and a good research design should effectively provide the researcher the means of obtaining data that will answer the research questions within the time, budget and skills constraints of the researcher (Ghauri & Gronhaug, 2005).

With every research design, instruments chosen for the collection of data must pass the tests of validity and reliability before they can be considered good measures. The reliability of a measure is achieved when it consistently, and without bias, measure the concepts it is supposed to measure (Sekaran, 2003). Reliability is established either through test-re-test where the same test administered to the same respondents at different times obtains the same results or parallel form reliability when the same test with different wordings or sequence of questions also results in the same data. (Sekaran, 2003)

Validity, on the other hand, is aimed at ensuring that the instrument of measurement has tapped the concept it sets out to measure by including an adequate representation of items that operationalize the concept (content validity), differentiates items on an adequate criterion (criterion-related validity) and ensures that the measure used fits around the theories for which the test is created (Construct validity) (Ghauiri & Gronhaug, 2005; Sekaran, 2003) though Mouton and Marais (1996) argue that validation is not a necessity in qualitative research as concepts already reflect the world of the object of study. One way to ensure that validity is achieved in any research is to conduct a pilot study of research instruments.

A pilot study is defined as a mini version of a research or a trial run conducted in preparation of a full scale study and may be conducted specifically to pre-test a research instrument (Teijlingen & Hundley, 2001) and Tashakkori & Teddlie (2003) have established that pilot studies are useful in both quantitative and qualitative research. Various authors have highlighted the importance of the conduct of a pilot study as fundamental to any research as it serves the function of helping to detect possible flaws in the measurement instrument (Teijlingen & Hundley, 2001) Watson, Atkinson, & Rose, 2007) and whether concepts have been adequately operationalized. This is achieved by pre-testing the instrument on a small number of participants having the same characteristics as those in the main study. Sekaran (2003) also argues that interviewees can bias data collected if they do not understand the questions put to them and according to Calitz (2009) a pilot test of questions helps to identify unclear or ambiguous statements in the research protocol while Van Wijk and Harrison (2013) believe that pilot studies can add value and credibility to the entire research project. In essence, a pilot study helps to ascertain how well a research instrument will work in the actual study by identifying potential problems and areas that may require adjustments. Where an interview is used as the research instrument, a pilot study helps to do the following:

1. Highlight ambiguities and difficult and unnecessary questions and discard or modify same.
2. Record the time taken to complete the interview to determine whether it is reasonable.
3. Determine whether each question elicits an adequate response.
4. Establish whether replies can be properly interpreted in relation to the information required (van Teijlingen & Hundley, 2001)
5. Determine whether the researcher has incorporated all the questions necessary to measure all concepts (Berg, 2001).
6. Allow the researcher to practice and perfect interviewing techniques (Berg, 2001)

The pilot study in this paper was therefore a try-out of the interview protocol developed for a study into Islamic legal requirements for the conduct of the takaful industry in particular to determine whether there were differences between the requirements of the *Shari'ah (*Islamic law), existing regulation and the actual practices of the takaful operators. Specifically, the study aimed to discover whether issues identified in the takaful industry elsewhere are also present in the emerging takaful industry in Nigeria by conducting a study into the operations and practices of the country's takaful providers.

This paper which presents the stages taken and the methods used in the pilot testing of an interview protocol as part of an ongoing study into takaful (Islamic insurance) is divided into five sections. After this introduction, the next section presents the background to the study for which the protocol was developed, the third section discusses different interview techniques and the reasons for the choice of the specific design used in the research, the fourth highlights the methods used for the conduct of the pilot study while the last section presents the findings and conclusions derived from the pilot and at the end of the paper.

Background to the Study

Takaful is a system that provides risk protection based on Islamic principles which distinguishes itself from conventional insurance by the avoidance of forbidden elements of (*riba*), uncertainty (*gharar*) and gambling (*maysir*). However, scholars of Islamic financial law have identified various issues within the provision of takaful ranging from sharia compliance in the use of financing models by the takaful operators, investment methods and underwriting to *shari'ah* supervision among others.

In Nigeria, which is the area covered by this study, the takaful industry emerged in 2005 with the opening of a takaful windows by two conventional insurance companies and currently has three conventional insurers providing takaful via window operations. To ascertain whether the issues identified in the takaful industry elsewhere also exist in the emerging industry in Nigeria, a case study of the three takaful providers was undertaken against the backdrop of identified issues. To achieve the objectives of the study, the interview of stakeholders of takaful operations, particularly management and marketing staff, was chosen as an instrument to measure the concepts identified through literature review (Jacob & Furgerson, 2012).

The Research Instrument: The Qualitative Interview

Though there are different research instruments which could serve as adequate data collection tools, the researcher chose the qualitative interview due to the fact that in case studies, particularly where knowledge and perceptions form parts of the points on interest, the interview which entails the extraction of information using guided conversations with respondents (Yin 2003) plays an important role in data collection.

It is a method of acquiring rich, detailed and in-depth information about participants' experiences and views on a particular matter (Turner, 2010) where the researcher becomes the main data collecting instrument and when used properly, the interview as a data collection method gives better insight into the subject of the study as it allows for a more personal and insightful access to data (Wilkinson & Birmingham, 2003). The different types of interview methods are classified by Yin (2003) as the open-ended questions interview, the focused interview and the structured interview and by Sekaran (2003) as structured and unstructured interviews while Robson (2002) includes a third classification of semi-structured interviews. The open-ended question asks for both facts and opinions from respondents, the focused interview follows already delineated set of questions while the structured interview is usually used to obtain quantitative data (DiCicco-Bloom & Crabtree, 2006; Yin, 2003). On the other hand, the unstructured interview is one in which there is no planned sequence of questions while the structured interview is usually conducted with a view of acquiring information about specific facts which are known to the researcher before the interview begins (Sekaran, 2003).

The semi-structured interview, however adopts a middle ground as the interviewer does have a sequence of questions to be asked during interview but has considerably more freedom to change the sequence, wordings and time allocated to each question based on the needs of each separate interview (Robson, 2002). In fact, the semi-structured interview is usually a combination of both structured and unstructured formats in one interview.

For the purposes of this research, the focused, semi structured interview was employed using broad open ended questions (Boyce & Neale, 2006; Jacob & Ferguson, 2012; Wilkinson & Birmingham, 2003) because the researcher already has some knowledge in the area of the subject matter of the interviews and the semi-structured interview allows for flexibility within each interview so that optimal information is obtained from participants (Wallace, 1998). It is also the optimal method where the researcher wishes to discover what is known about the concepts in question from the interviewee's perspective (Chenail, 2011). Furthermore, the open-ended question also allows for follow up questions and prompts based on the answers given by the participant.

An interview protocol, which is a set of rules and guidelines to be used for the conduct of the interviews was developed. The protocol consists of pre and post interview guidelines and also the set of questions which will be asked during the interview (see Addendum A). Due to the fact that open-ended questions were uses, following the suggestions of Boyce and Neale (2006) the number of questions were limited to 15 though probes which would aid in eliciting more information from participants, were attached to questions. However, this guide was considered flexible to be adjusted during interviews to accommodate the interview situation (Robson, 2002; Yin, 2003).

The Pilot Test

In the conduct of the pilot testing, efforts were made by the researcher to ensure the setting, choice of participants and interview methods were as close as those intended in the main study as possible.

Selection of Interview Participants for the Pilot Test

The researcher used the same criteria for the selection of participants as would be used in the main study. The target participants in this study are persons involved in management, product development, marketing and *shari'ah* supervision of takaful providers. For this reason participants involved in the pilot testing included a licensed takaful agent, a member of a *shari'ah* supervisory board of a takaful operator and, in the absence of management staff, a lecture and researcher in takaful was included in the pilot study.

Interview Setting

When using an interview as a research tool, particularly face-to-face interviews, Jacob and Furgerson (2012) suggest using a setting that provides the most comfort to the participant. However, the setting must also be without too much background noise to that distractions are removed and recording of data is made easier. They also suggest setting aside uninterrupted time that is estimated to be adequate for the conduct of the interview. For this reason, participants were allowed to choose the settings for the interviews they were most comfortable with so long as they would also provide a quiet environment.

The Interview

Before beginning the interview, a good rapport was first established with the participants in order to facilitate better responses (Berg, 2001; Jacob & Furgerson, 2012) This is determined by both overt and active factors and while the former include mode of dressing, appearance and demeanor, the latter implies the use of proper introduction, explaining the nature and reasons for the research and making conversation that will put the participant at ease before the commencement of the substantive interview (Berg, 2001, 2004). To this end, the researcher actively chose clothing that would reflect well on the subject matter of the research (Islamic finance) and full explanation into the nature of the research, without disclosing the actual research questions, was made to the participants. Pre-interview conversation was also geared towards establishing empathic ties (the takaful connection) with the participants and participants were put at ease by assuring them of the confidentiality their identity and that any information obtained from them would only be used for the purpose of the research.

Upon the commencement of the actual interview, the questions in the protocol were followed sequentially. This is because questions had already been arranged based on the logical connections between them. However, certain questions, which were considered irrelevant due to the peculiar characteristics of each participant, were skipped. For example, questions about facts specific to management decisions were omitted from the interview with the takaful agent and also with the member of the *shari'ah* supervisory board. Questions were not phrased exactly as they appear in the guide though the general topics and concepts delineated in each question in the interview guide were adhered to. Within each interview, the prompts attached to each question were used to elicit more information where the interviewee did not extend answers towards that direction.

Findings from the Interviews

The first interview provided the opportunity to refine, rephrase and clarify some questions in the guide. For example, question 1 of the interview protocol which was aimed towards determining the extent of the knowledge of respondents in Islamic finance was amended as it was noticed that the original question, as it was framed, tended to elicit information about what they knew about Islamic finance generally. The probe was also excluded as it was established that the relevant information would have already been gotten from answers to the first question.

1. Can you tell me about yourself and how you came to be in this position?
   i. What are your educational qualifications?
   ii. Tell me what you know about Islamic finance? (probe to find out if experience is as practitioner or customer)
1. Can you tell me about yourself and how you came to be in this position?
   i. What are your educational qualifications?
   ii. Tell me about your knowledge, experience and the nature of exposure you have had to Islamic finance?
   iii. Do all members of management also have this experience?

While in some questions, prompts were added in order to acquire better answers. For instance in question 2 of the protocol whose object was to ascertain if the company takes a share of underwriting surplus as part of its profits, it was noticed that the initial question tended to steer respondents talk about investment strategies only thus a probe was added to remind the researcher of the objective of the question.

2. What takaful models do you use?
   i. What is the definition of profits under the company policy
2. What takaful models do you use?
   i. What is the definition of profits under the company policy? (probe to find out if the company takes a share of surplus).

The pilot test also helped to draw the attention of the researcher to questions which ought to have been included in the guide. An example is the addition made to question 4 of the guide aimed at eliciting information about how the company satisfies recognized *shari'ah* issues concerning compliance in investments

4. Can you tell me about your general practices relating to takaful?
   i. How you go about investment practices? (probe to discover if there are any investments in government bonds)
   ii. What surplus sharing method do you employ? (Probe to discover how persons who have left the fund are taken care of. Also probe to discover if consent of participants is sought before sharing is done)
4. Can you tell me about the general practices relating to takaful?
   i. Can you tell me how you go about investing the takaful fund? (probe to discover if there are any investments in government bonds)
   ii. Do you have a screening system to establish *shari'ah* compliance of companies you invest in?

iii. What surplus sharing method do you employ? (Probe to discover how persons who have left the fund are taken care of. Also probe to discover if consent of participants is sought before sharing is done

Subsequent interviews validated the changes made to guide as evidenced by the nature of answers and information gotten from the interviewees. Attention was also paid to the period taken to conduct each interview. Jacob and Furgerson (2012) opine that an interview should not exceed one and a half hours so that due consideration is given to the other commitments of the interviewee who may have to free up time to participate in the interview. It was noticed that each session averaged about an hour from start to finish thus establishing that the instrument satisfies the recommended time frame for an interview.

Results

Though highlighting the method of a pilot test in qualitative research is useful and can be generalized and used by researchers in any field which for which qualitative research methods may be utilized, a review of the events in the conduct of this pilot test underlined some interesting points.

First, questions used to elicit information for research in Islamic finance have to be explicit and clear. This is because it was established that persons tend to have different conceptions about general matters in Islamic finance. For example the original question about exposure to Islamic finance elicited different answers from different perspectives for all participants to the pilot thus necessitating an amendment to specifically ask about the nature of educational training (if obtained) the respondents have in the matter in question.

In addition, in the conduct of research into Islamic finance and more importantly than in cases of research into conventional (non-religious) matters, the outward appearance of the researcher is just as important as the questions themselves. This is because it was observed that respondents tended to be more receptive to being a part of the study when the researcher reflected the perception of what an ideal Muslim should look like both in dressing and composure.

Conclusion

This pilot study was undertaken to streamline and validate semi structured one-on-one interviews that were to be used to conduct research into the takaful industry in Nigeria and presented in this paper with the hope that it may provide some guidance for others who may also undertake qualitative studies in Islamic finance in general or takaful in particular.

In the conduct of any research not only is the choice of an appropriate data collection instrument very important but more important is to ensure that the chosen instrument performs the desired job properly (i.e., collects the right data). This is even more paramount in qualitative research where, unlike with quantitative, data is neither exact nor statistical in nature and therefore requires ensuring that instruments capture required concepts. Besides, a review of numerous researches conducted into various aspects Islamic finance shows the predilection to use quantitative methods thus creating the need to present an avenue that features how qualitative research can be (and was) used.

Nevertheless, the pilot study had its limitations in that it was not implemented in the original area of the study but in a location which was estimated to substantially similar to the area of the main study. In the same vein, participants, though reflective of the target respondents in the main study, were chosen based on the convenience of access and willingness to participate in the pilot.

However, despite changes made and limitations highlighted, the overall result of the pilot test was the determination that the interview protocol, as a research construct, does satisfy the requirements for validity and reliability within the less rigid parameters of qualitative research as it could adequately be used to obtain data on the concepts that the researcher hoped to measure.

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