

Development and refinement of the interview protocol: interview questions for international school teacher retention

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ABSTRACT

For novice researchers, creating a list of interview questions as part of the interview procedure to collect data for addressing the research questions is always a challenge. Despite several studies have provided vital suggestions for novice researchers in developing and refining interview questions, few studies offer a clear path for designing and improving interview questions. The suggested guidelines from past research lack empirical evidence, particularly in the field of education. This study aimed to present the process of developing and refining an interview protocol used in an international school teacher retention study. This study suggested and tested five phases in the development and refinement of a qualitative interview protocol: i) establishing preliminary questions based on a literature review; ii) ensuring alignment of interview questions with research questions; iii) constructing an inquiry-based conversation; iv) receiving feedback on interview protocols; and v) piloting the interview protocols. It provides comprehensive and user-friendly guidance for novice researchers in developing qualitative instruments. Using this roadmap can help novice researchers to prepare for the interview process, remain open to new findings and enhance the effectiveness of qualitative interview tools.

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1. INTRODUCTION

Interviews provide a valuable avenue for participants to express their feelings and experiences related to a research topic. It offers an easy and direct means of collecting qualitative data. An interview protocol is developed as an instrument to ask questions and obtain specific information related to the aims of a study [1]. Additionally, it serves as a tool for guiding conversations on a particular topic during the interview process [2]. This protocol allows researchers to gather rich and detailed data, enhancing their understanding of participants' insight and identifying elements that are crucial for answering the research questions. The dependability of the interview protocol is vital for obtaining quality information and maintaining consistency in the data collection process. A detailed and systematic process for developing and refining the interview protocol enables researchers to improve the dependability of their study. However, for novice researchers, creating a list of interview questions in the interview protocol to collect data for answering research questions poses a significant challenge.

Doody and Doody [3] encourage novice researchers to establish an interview protocol before starting their research. They define the interview protocol as a set of questions and a procedural guide that directs novice researchers from the beginning to the end of the interview process. The interview protocol serves as an instrument for posing questions to attain specific information related to the aims of a study [1]. It

also serves as a tool for guiding conversations on a particular topic during the interview process [2]. This protocol enables researchers to collect rich and detailed data, enhancing their understanding of participants' insight and identifying elements that are crucial for answering the research questions.

Although several studies have offered important guidelines for novice researchers in constructing and improving interview questions [2], [4], only a limited number of studies provide a clear roadmap for developing and refining interview questions. Furthermore, the suggested guidelines from previous studies lack empirical evidence, particularly in the field of education. This study aimed to address this empirical gap by presenting a process of developing and refining an interview protocol for an international school teacher retention study.

2. LITERATURE REVIEW

2.1. Interview protocol development and refinement

In social science, qualitative interviews are commonly used to collect participants' insight on the research topic. However, for novice researchers, conducting qualitative interviews can be a significant challenge without proper preparation, experience and oversight, risking findings based on personal bias and prejudice [5]. To address these challenges, most previous studies suggest that researchers carefully plan the interview by formulating questions that focus on and align with the research questions.

While previous research [6]–[8] generally recommended generating preliminary questions based on prior information, a literature review and a conceptual framework, this step is notably absent in the interview protocol refinement (IPR) Framework developed by Castillo-Montoya [2]. The IPR framework offers the advantage of ensuring that all interview questions align with and fall within the scope of the most significant research questions for the study. Castillo-Montoya [2] recommended creating inquiry-based discussion interview questions and then sending them to a colleague, research team member or research assistant for a review of the protocol for an organization, length, writing style and clarity. Obtaining feedback on the interview procedure is significant since it shows how effectively the questions will function [9].

After preparing preliminary questions, researchers conduct pilot testing with a few participants, which is a practice that is commonly employed to ensure validity in research [10]. Although many researchers typically conclude the instrument refinement process after the pilot study [2], [8], Yeong *et al.* [11] advocated for an extended refinement process by reflecting on the preliminary data collection, revisiting the literature, analyzing preliminary data and revising the initial interview guide to identify areas and strategies for further probing. This iterative procedure assists researchers in improving both their interview questions and interviewing skills. According to the literature [2], [6]–[8], the preparation of an interview protocol involves two main processes: i) development that required the formulation of basic questions; and ii) refinement that involved feedback from relevant parties and pilot testing the instrument.

2.2. Background of interview protocol

Yeong *et al.* [11] reported an international teacher retention rate in Asia of only 41.3%, which was the lowest among Asian countries and globally. Notably, teachers, including those from the British International School of Kuala Lumpur, Malaysia, expressed relocating or returning to the UK, resulting in inadequate recognition of the skills acquired in an international context [12]. Literature [13], [14] indicated that teachers leaving schools could affect students' academic performance, leading to the loss of trained teachers and potential knowledge gaps during the semester. The continuity of the students' learning process may be disrupted due to teacher replacement. Additionally, literature [15] emphasizes the time required to build teacher-student relationships and trust. If a teacher leaves, this connection may be severed, potentially affecting student adjustment to the school [16], particularly when it involves experienced and effective teachers. Thus, retaining experienced and qualified teachers is crucial.

Teacher retention in international schools is highly complex due to the diverse origins of teachers, including both international and local hires [17]. Foreign teachers bring different cultures, values and beliefs. Concurrently, the Malaysian government promotes the recruitment of Malaysians as teachers in international schools, especially those catering to the middle-income market [18]. Schools that blend international and private academic curricula may employ more Malaysians to teach both international and Malaysian syllabuses. Consequently, teacher retention practices that are applicable to international teachers may differ from those in the Malaysian contexts. Research indicates that international teachers prefer schools that offer appropriate venues to demonstrate their skills, while Malaysian teachers value environments that can provide comfort to individuals within and outside the organizations [19]. This discrepancy demonstrates that perceptions of teacher retention strategies may influence local teachers differently than their international counterparts.

Retaining long-term teachers poses a common challenge for international school administrators. Many organizations struggle to keep their employees due to the ineffectiveness of a management team in

identifying retention factors and practices [20]. Literature [21], [22] has highlighted the significant role of school leaders in teacher retention, particularly from the perspectives of teachers and principals. However, to date, little is known about the views of other school management members such as heads of departments, human resource (HR) managers and vice principals towards this issue. Therefore, this qualitative study aimed to explore human resource management (HRM) strategies that can improve teacher retention and challenges that school administrators face during the teacher retention process. Two research questions guided the interview protocol as: i) what human resource management strategies affect teacher retention at international schools in Malaysia? ii) what challenges do administrators face in retaining teachers at international schools in Malaysia?

3. METHOD

3.1. Data

This study involved three experts in educational leadership who reviewed and provided input on the protocol. Table 1 shows the profiles of three experts, all of whom are familiar with qualitative research and school leadership issues. Serving as external reviewers, they contribute to maintain the reliability and validity of the interview questions.

Table 1. Expert's profile

Expert	Current position	Research area
A	Director of teacher training college	Leadership, teachers' training and development
B	Senior lecturer	School leadership and management
C	Senior lecturer	Network governance, policy network, leadership, and public education reform

The sample size for the pilot research was determined by the information power associated with the goal of the study [23]. The pilot research attempted to improve the validity of the interview procedure by detecting any potential defects early on and identifying areas that may require protocol revisions [24]. This interview methodology was used to investigate teacher retention methods and issues. Thus, the pilot study used convenience sampling to select four participants from schools in Johor Bahru and Putrajaya, providing ample information for refining the interview procedure. The selected participants expressed a strong willingness to participate in the pilot study, contributing rich data to the study. Besides, the sample was selected based on five criteria mirroring those of the main study, including: i) school administrators from high teacher retention schools; ii) school administrators currently working at one of the international schools in Malaysia; iii) school administrators involved in the recruitment process; iv) school administrators closely collaborating with teachers, and v) school administrators with at least five years of experience in international schools. These criteria enable the researchers to obtain meaningful information from participants to address the research questions in the main study. Table 2 shows information about the four respondents from two international schools who participated in the pilot study.

Table 2. Participant's profile

Participant	Current position	Gender	Education level
P1	Head of the school	Male	Doctorate
P2	Secondary school principal	Female	Master's degree
P3	Primary school principal	Female	Doctorate
P4	Human resource director	Male	Master's degree

3.2. Methodology

The interview protocol in this study underwent two main stages: i) developing preliminary questions based on the literature review, and ii) refining these preliminary questions. This methodology was adapted from the interview protocol refinement (IPR) framework proposed by Castillo-Montoya [2]. The selection of the IPR framework as the foundation for the study methodology was motivated by its simplicity and its potential to enhance data quality, particularly in terms of interview protocol reliability [2]. Figure 1 shows the roadmap for developing and refining the interview protocol in this study.

The development stage spanned from phase 1 to phase 3, while the refining stage extended from phase 4 to phase 5. In the first step, researchers formulated preliminary questions based on previous research, requiring a strong understanding of the research topic [25] and the early development of suitable interview questions. During phase 2, researchers aligned interview questions with the two research questions in the

study. This phase is proposed by Castillo-Montoya [2], which can increase the utility of interview questions in the research process, confirm their purpose and ensure their necessity for the study by eliminating unnecessary ones. In phase 3, researchers focused on embedding interview questions within an inquiry-based conversation. Engaging in informal discussions about research topics with participants contributes to building rapport and establishing positive relations.

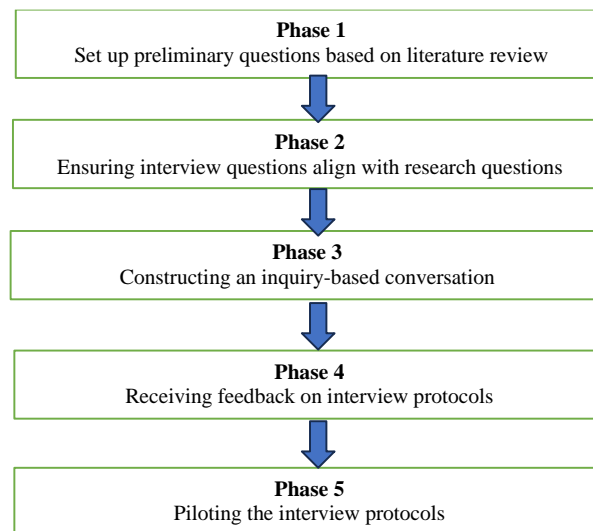


Figure 1. Roadmap of the interview protocol development and refinement [2]

After the preliminary questions were developed, phase 4 involved a comprehensive review and verification of the interview protocol by three experts in the leadership field to enhance the reliability of the instrument. Subsequently, pilot testing of the interview protocol not only allowed researchers to assess interview duration and clarity of other aspects, but also facilitated the practice of interview skills. Potential participants were identified through the website of the school and LinkedIn. Invitations were sent via email that explained the purpose of the study and requested permission to interview. Participants were informed about data collection procedures and were granted rights, including the option to withdraw at any time, seek further clarification, maintain anonymity in reporting, and clarify or omit data. The letter of informed consent detailed the study and communicated all participant rights. Furthermore, the researchers ensured that information obtained from or shared respected the dignity and autonomy of the participants and did not violate their interests, adhering to the principles proposed by Bos [26]. Transparency in reporting was maintained by sharing transcripts with participants.

4. RESULTS AND DISCUSSION

4.1. Phase 1: set up preliminary questions based on literature review

The search for eligible studies for review utilized the 'Universiti Teknologi Malaysia (UTM) Library,' which incorporated various multidisciplinary databases. The database search utilised key terms such as 'teacher retention,' 'school,' 'expatriates,' 'teacher stay,' 'retention factor,' 'retention strategies,' and 'retention challenges.' Table 3 shows a sample literature review on human resource management strategies that affect teachers' retention and possible retention challenges. This phase contributed to the formulation of the initial interview questions.

4.2. Phase 2: ensuring interview questions align with research questions

An interview protocol matrix is important to align interview questions with the research questions, ensuring that all the research questions can be answered during the interview. This method also helps in identifying any gaps before researchers assess, adjust or add interview questions. Table 4 displays the preliminary interview questions developed from past literature in an interview protocol matrix.

Table 3. Sample of literature review on the research topic

HRM retention strategies	Sources	Retention challenges	Sources
Attractive compensation package (e.g., bonus, incentive, allowance, yearly increment)	[27], [28]	Job burnout	[29]
Improve leadership and career advancement opportunities.	[30], [31]	State government policies (e.g., temporary leave, cross-district movement)	[32]
Improve teacher working conditions.	[33], [34]	School leaders fail to reveal and reflect on the uncertain and unpredictable circumstances and scenarios.	[35]
Flexi working	[36]	The problem in dealing with diversity	[37]
Family-related factors (support for the family, job security, work-life balance)	[38], [39]		
Personal-related factors (age, gender, education level, experience)	[40], [41]		

Table 4. Preliminary interview questions

A. Retention practices	RQ 1	RQ 2
1. How many teachers stay a bit long in this school? What makes them stay longer than other teachers?	x	
2. Are there any differences concerning teachers' length of stay in school and their relationships with students and parents?	x	
3. Are there any differences between local and expatriate teachers regarding the length of stay in school?	x	
4. What factors motivated teachers to stay in school?	x	
5. What motivational steps are taken to retain teachers to stay in school?	x	
6. What motivational packages are created to retain teachers at your school? Financial (such as allowances, bonuses, promotion, and incentives) and non-financial (such as holiday, recognition, training (development), and holiday offer)	x	
7. To what extent are those motivational packages effective in retaining teachers?	x	
8. What strategies do you employ to motivate teachers to stay in school?	x	
9. To what extent are family-related factors considered in motivating teachers to remain in school? What are family-related factors involved in teacher retention? (Location, marriage status, children's age, working hours)	x	
10. To what extent are school-related factors considered in motivating teachers to remain in school? What are school-related factors involved in teacher retention? (Admin support, mentoring program, school resources, workload)	x	
11. To what extent are personal-related factors considered in motivating teachers to remain in school? What are personal related factors involved in teacher retention? (e.g., age, gender, education level, experience)	x	
B. School policies		
1. What elements are considered in school policies to retain teachers? (e.g., salary policy, holiday policy, welfare policy) (request teacher contract sample/ policy documents)	x	
2. To what extent are school policies effective in retaining teachers?	x	
3. What personnel are involved in drafting policies related to retaining teachers?	x	
4. How frequently do you revise policies related to retaining teachers?	x	
5. Besides school policy, are there other practices you employed to retain effective school teachers?	x	
6. What changes have you made to improve teacher retention? How effective are these changes?	x	
7. What kind of assistance do schools render to assist teachers to adapt in school culture?	x	
8. How does school contribute to the professional development of teachers?	x	
9. How do school practices influence the decision of teachers to stay?	x	
C. Retention challenges		
1. What are the teacher retention challenges?		x

*RQ=research question

Based on the research questions, the interview protocol was divided into three parts: retention practices, school policies and retention challenges. In addressing the first research question, the interview data included both informal retention practices and formal school practices which aimed at retaining teachers. This approach aligns with the recommendation from Sharanya [42], who defined employee retention as encompassing various policies and practices designed to keep employees with an organization for a longer period. The protocol started with questions about retention practices as preliminary inquiries. These questions sought to elicit information [1] about the informal retention strategies used in the school. These questions were non-threatening and allowed participants to become accustomed to describing their experiences [1]. The next section delved into the school's formal policies for retaining teachers, which can be included in the hiring contract or document as a set of guidelines or regulations. The final section addressed the research question, which explored the administrator's challenges in the retention process. The interview protocol matrix clearly showed that all research questions were incorporated into the interview protocol to ensure no gaps existed in the data collection.

4.3. Phase 3: constructing an inquiry-based conversation

After drafting the preliminary interview questions, researchers proceeded to construct the interview script. The opening of the interview protocol started with a self-introduction, explained the objectives of the study and assured participants of interview confidentiality. The researchers also informed participants of their rights, including the anonymity of their responses and the option to discontinue or decline to answer any questions. Furthermore, the script explained the concept of informed consent and instructed interviewers to have participants sign the informed consent statement [3].

Next, the researchers included essential and transition questions to initiate the interview with easy, non-threatening inquiries that prompted narrative descriptions [2]. These questions ease interviewers to bring up the main questions, which aimed to address the research questions and fulfil the research purpose. The use of open-ended questions allowed participants to freely express their thoughts on the research topic. As the interview ended, the researchers posed the closing question, “Before we wrap things up, are there any last comments you have regarding this area of research?”, which allowed the participants to raise any issues that might not have been addressed. Exploring unknown issues in this research area was also encouraged. Then, the researchers provided important information about member checking, where transcripts would be returned to the respondents for review to ensure the accuracy of the interview contents. This step allowed participants to correct, delete or add new data if necessary. Phase 3 ensured that the constructed interview questions were not as manipulated but as a means to foster meaningful discussion during the interview process [11].

4.4. Phase 4: receiving feedback on interview protocols

During this phase, the developed protocol underwent verification by experts. Three experienced senior lecturers, who are specialized in educational leadership, provided valuable input. They examined the protocol for structure, length, writing style and comprehension as recommended by Castillo-Montoya [2]. The review process was aided by an activity checklist outlined in Table 5, which facilitated a thorough examination of the interview protocol [2]. This checklist served as a framework for experts to evaluate the interview protocol based on the specified criteria. The experts were instructed to place themselves in the participants’ shoes, anticipating how the questions might be understood [11].

Table 5. Activity checklist [2]

Aspects of an interview protocol		Yes	No	Feedback
A. Interview protocol structure	<ul style="list-style-type: none"> Beginning questions are factual in nature. Key questions are the majority of the questions and are placed between beginning and ending questions. Questions at the end of the interview protocol are reflective and allow participants to share closing comments. A brief script throughout the interview protocol provides smooth transitions between topic areas. Overall, the interview is organized to promote conversational flow. The interviewer closes with expressed gratitude and any intent to stay connected or follow up. 			
B. Writing of interview questions and statements	<ul style="list-style-type: none"> Questions/statements are free from spelling error(s) Most questions ask participants to describe experiences and feelings. Questions are written in a non-judgmental manner. Only one question is asked at a time. Questions are mostly open-ended. 			
C. Length of interview protocol	<ul style="list-style-type: none"> All questions are needed. Questions/statements are concise. 			
D. Comprehension	<ul style="list-style-type: none"> Questions/statements are devoid of academic language. Questions/statements are easy to understand 			

Overall, Expert A fully agreed with all the interview items and provided positive comments on the instrument. He concurred that it was a comprehensive instrument for interviews. However, expert B mentioned that the instrument lacked follow-up questions to obtain more information and clarification. He also suggested establishing a good relationship with interviewees by expressing gratitude and an intent to stay connected with them. Expert C identified the same sentence in the introduction and further proposed considering the “Asia as method” lens to construct this Malaysia case, emphasizing Malaysia’s rich cultural context.

International schools in Malaysia adopt Western education systems, policies and practices but integrate Asian knowledge about their own specific evolving cultures, contexts and politics [43]. Therefore, Expert C suggested exploring how Western schools adapt to local cultures and contexts regarding teacher retention with the interviewees. Based on feedback from the experts, the researchers removed duplicated sentences in the introduction and incorporated a closing section at the end of the interview. Additionally, some questions were modified to serve as follow-up questions, aiming to enhance the rapport with the interviewee.

4.5. Phase 5: piloting the interview protocol

After revising the interview protocol based on the suggestions from experts, the researchers conducted a pilot test to improve the validity of the instrument. The pilot testing yielded valuable and unexpected findings, indicating that the interview sessions did not strictly adhere to the prescribed sequence. This indicates the importance of allowing participants the flexibility to express their opinions, with the interview protocol serving as a guideline to avoid the omission of important information.

Moreover, it was also observed that the participants with higher education levels tend to think broadly, providing rich data when responding to leading questions. However, it was noted that the listed questions in the interview protocol may not be universally suitable for every participant, considering variations in knowledge and experience. For example, HR personnel may find certain questions such as “Is there any difference in teachers' length of stay in school and their relationships with students and parents?” challenging to answer. Thus, interviewers should exercise flexibility in selecting appropriate questions that are tailored for each participant. As previously mentioned, the interview protocol mainly serves as a checklist to ensure coverage of the areas relevant to addressing the research questions.

In addition, the researchers identified the need to improve participant selection. The job title across all schools is different, despite having the same job scope. For example, some schools use the title “Heads of School” instead of “Principal” to designate the individual leading the school. In such case, the term “Principal” is reserved for the heads of secondary and primary schools. It is crucial for the researchers to thoroughly understand the school structure before selecting suitable participants. Participants should actively engage in retaining teachers and work closely with the teachers to provide the researchers with substantial information to address the research questions in this study.

Moreover, the pilot test revealed that the initially estimated interview duration of one and a half hours was too long for participants, thus reducing their willingness to engage in the interview process. In response, researchers decided to shorten the interview to one hour. The one-hour interview was sufficient for the researchers to gather rich and detailed information during the pilot study.

From the pilot study, irrelevant or unsuitable questions were either discarded or modified. Besides, some questions will serve as main questions that cover each part of the research question and provide an overall structure to the interview. The remaining questions serve as follow-up questions, which help to explain, better understand and explore the opinions, behaviors and experiences of research subjects related to the main questions. To enhance clarity and participant expression, the sequences of the listed interview questions would be rearranged, with main questions followed by corresponding follow-up questions as suggested by the experts. Table 6 shows the questions that have been removed, modified and added to the revised interview protocol.

The procedure was separated into two major stages based on the aforementioned roadmap: development and refining. The development stage spanned from phase 1 to phase 3, while the refining stage lasted from phase 4 to phase 5. Before beginning the construction of interview questions, it is critical to evaluate the literature to aid in identifying suitable themes to investigate in the early phases of a study [5]–[8]. Unfortunately, the IPR approach proposed by Castillo-Montoya [2] does not include a literature review to generate starting queries. In addition to the literature review, Busetto *et al.* [44] suggested reviewing previous research and conducting a preliminary data collection method such as a document study or observations in the actual field to obtain the content of interview questions.

In phase 2 of the study, advocating the use of an interview protocol matrix to link interview questions with research topics proved to be more practical. This approach aligns with the IPR method [2]. After establishing the content of the interview questions, phase 3 of this study focused on the sentence design of the interview questions. According to Brinkman and Kvale [45], interview questions should be carefully prepared and delivered in a way that allows research participants to speak freely. Although researchers may have a predetermined focus to guide them during the interview process, this emphasis should not lead researchers to pose leading questions. This interpretation aligns with Robert's [5] recommendation that interview questions should be free of preconceptions, allowing for nuanced replies and indicating that the researcher is receptive to all aspects of the positive and negative experience.

The refining process requires collaboration among specialists and the target sample, with experts' evaluation preceding the level of refinement. According to Harris and Muvuka [46], expert review and comments should focus on the contents, wording and clarity of the interview questions. Castillo-Montoya [2] suggested using an activity checklist to guide the reviewing process, analyzing essential components of the interview protocol, including question structure, length, clarity, language and topic. Harris and Muvuka [46] suggested incorporating topic areas and qualitative research professionals such as dissertation/thesis committee members, peers or practitioners in the expert panel selection. Novice researchers should allocate more time to this step as the interview procedure may undergo multiple reviews and revisions until both experts and researchers are satisfied with the content of the protocol.

Table 6. Revise interview questions

	RQ 1	RQ 2	Remarks
A. Retention practices			
1. How many teachers stay a bit long in this school? What makes them stay longer than other teachers?	x		
2. Are there any differences concerning teachers' length of stay in school and their relationships with students and parents?	x		Removed (participants' feedback on this question similar to question A10)
3. Are there any differences between local teachers and expatriate teachers regarding the length of stay in school?	x		
4. What factors motivated teachers to stay in school?	x		Main question
5. What motivational steps are taken to retain teachers to stay in school?	x		Question A5 to A8 are removed
6. What motivational packages are created to retain teachers at your school? Financial (such as allowances, bonuses, promotion, and incentives) and non-financial (such as holiday, recognition, training (development), and holiday offer)	x		(participants' feedback answer for these questions similar to the main question A4)
7. To what extent are those motivational packages effective in retaining teachers?	x		
8. What strategies do you employ to motivate teachers to stay in school?	x		
9. To what extent are family-related factors considered in motivating teachers to remain in school? What are family-related factors involved in teacher retention? (Location, marriage status, children's age, working hours)	x		
10. To what extent are school-related factors considered in motivating teachers to remain in school? What are school-related factors involved in teacher retention? (Admin support, mentoring program, school resources, workload)	x		
11. To what extent are personal related factors considered in motivating teachers to remain in school? What are personal related factors involved in teacher retention? (e.g., age, gender, education level, experience)	x		
B. School policies			
1. Does the school have a formal retention policy?	x		Main question (Added)
2. What elements are considered in school policies to retain teachers? (e.g., salary policy, holiday policy, welfare policy) (request teacher contract sample/policy documents)	x		
3. To what extent are school policies effective in retaining teachers?	x		
4. Who are involved in drafting policies related to retaining teachers?	x		Modified words in the sentence
5. How frequently do you revise policies related to retaining teachers?	x		
6. Besides school policy, do you employ other practices to retain effective school teachers?	x		
7. What changes have you made to improve teacher retention? How effective are these changes?	x		
8. What kind of assistance do schools render to assist teachers to adapt in school culture?	x		
9. How does school contribute to the professional development of teachers?	x		Removed (participant's answer is similar to question A10)
10. How do school practices influence the decision of teachers to stay?	x		
C. Retention challenges			
1. What are the teacher retention challenges?		x	Main question
2. What changes have you made to improve teacher retention? How effective are these changes?		x	Follow-up question (Suggested by Expert B)

*RQ=research question

The final step of this study involved evaluating the interview procedure in the field, which was agreed upon by many academics [3], [5], [47]. This phase is critical for improving the quality of interview questions and the researchers' abilities, especially for novice researchers because the researcher is a key tool in gathering qualitative data. Daniel [48] outlined the benefits of conducting a pilot study: i) allowing researchers to test the understandability of questions by participants, ii) providing an opportunity for researchers to become familiar with the interview procedure, and iii) gaining interview experience to improve skills in questioning and listening. During this stage, researchers can evaluate the effectiveness of each interview question and make adjustments based on input from interviewees [5].

In summary, the development stage (phase 1 to phase 3) was considered an incubation stage for creating basic interview questions, which can be further refined to ensure that they effectively acquire data to address the research objectives. However, the refining stage (phase 4 and phase 5) was viewed as a hatching stage. The preliminary questions would be updated, adjusted, eliminated or added in this stage based on expert reviews and pilot test results, ultimately resulting in the final set of interview questions. The theoretical contribution of this study lies in expanding on the concepts from IPR by including a literature review in preliminary questions, which is not present in IPR. Several recommendations are offered to novice researchers in this study: i) conduct a literature review on the topic of interest before starting a research; ii) craft interview questions based on research questions to avoid deviating from the scope of the study; iii) develop an interview protocol as suggested in this study to guide the interview;

iv) test the interview questions and practice interviewing strategies; v) review and reflect on the effectiveness of the interview questions and interviewing techniques; and vi) record significant points during the pilot study.

This study provided practical and empirical insights into excellent methods for forming an excellent interview protocol. It drew on real research experiences and data to offer tangible insights, specifically targeting novice researchers. This study provided beginner researchers with comprehensive and straightforward guidance on developing qualitative instruments. The outcomes of this study have the potential to contribute to the body of knowledge on qualitative research. Furthermore, the outcomes of the study may prove valuable for new and aspiring academics in understanding the process of increasing the validity and reliability of the research instrument. Using this road map can help novice researchers to better prepare for the interview process, fostering openness to new findings and enhancing the effectiveness of qualitative interview tools. During qualitative data collection, novice researchers may sometimes lose sight not only of their role but also of the purpose of the study, unintentionally steering the interview towards confirming their suspicions. This tendency may guide the process to validate their expectations rather than capturing the perspectives of research participants [49]. As a result, they might fail to obtain useful data for their research aims. Thus, this study offers novice researchers a user-friendly roadmap for developing and refining qualitative interview protocols.

In terms of practical implications, the findings of this study offer valuable insights for novice academics in performing qualitative research, particularly postgraduate students. Interview data collection involves communication skills, and skilled researchers are crucial for obtaining data to address research questions. Asking interview questions that cannot provide useful information to address the research question may result in a significant amount of data that is of little use to the researcher, which may also be deemed a waste of the research participant's time and energy [5]. As a result, the findings of this study have the potential to significantly improve the effectiveness of qualitative research.

Furthermore, the sample interview questions included in this study can serve as a reference for practitioners and academics interested in workforce engagement to promote teacher retention. The questions predominantly focus on retention procedures, aiming to enhance private educational practices and policies. This HRM practices and policies outlined in this interview protocol can also contribute to school sustainability, performance and the economy of the local community.

5. CONCLUSION

As qualitative research gains increasing importance in research methods, particularly for scholars exploring novel phenomena, understanding the process of developing and refining interview protocols becomes crucial. This research outlined a strategy for developing and refining an interview procedure for a study on the retention of international school teachers. This study proposed five stages in the creation and improvement of an interview protocol: i) establishing preliminary questions based on literature review; ii) ensuring interview align with research questions; iii) constructing an inquiry-based conversation; iv) receiving feedback on interview protocols; and v) piloting the interview protocols. The findings of this study contribute to the growing body of literature on qualitative research techniques by providing empirical data on interview protocol creation and refinement using a set of interview questions related to teacher retention in international schools. The interview technique developed in this study can be used by practitioners and scholars interested in addressing school human resource management issues in schools.

The following shortcoming of this study is recognized. Only three university experts were involved in this study to analyze the interview questions, and their assessment focused solely on the content validity and philosophical relevance of each item rather than considering the relativeness of the context to the research issue. Based on the findings of this study, it is suggested to involve practitioners as they are more familiar with the challenges of teacher retention in international school settings. Further research is needed to investigate the characteristics of experts and their contributions to consistency or disagreement in the instrument review process.

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REFERENCES

- [1] M. Q. Patton, "Qualitative interviewing," in *Qualitative Research & Evaluation Methods: Integrating Theory and Practice*, 4th ed, Thousand Oaks, CA: Sage, 2023, pp. 339–428.
- [2] M. Castillo-Montoya, "Preparing for interview research: the interview protocol refinement framework," *The Qualitative Report*, vol. 21, no. 5, pp. 811–831, May 2016, doi: 10.46743/2160-3715/2016.2337.
- [3] O. Doody, and C. M. Doody, "Conducting a pilot study: case study of a novice researcher," *British Journal of Nursing*, vol. 24, no. 21, pp. 1074–1078, Nov. 2015, doi: 10.12968/bjon.2015.24.21.1074.
- [4] E. Magnusson, and J. Marecek, "Designing the interview guide," in *Doing Interview-based Qualitative Research: A Learner's Guide*, Cambridge, UK: Cambridge University Press, 2015, pp. 46–57.
- [5] R. E. Roberts, "Qualitative interview questions: guidance for novice researchers," *The Qualitative Report*, vol. 25, no. 9, pp. 3185–3203, Sept. 2020, doi: 10.46743/2160-3715/2020.4640.
- [6] H. Kallio, A. M. Pietilä, M. Johnson, and M. Kangasniemi, "Systematic methodological review: developing a framework for a qualitative semi-structured interview guide," *Journal of Advanced Nursing*, vol. 72, no. 12, pp. 2954–2965, May 2016, doi: 10.1111/jan.13031.
- [7] N. Pearce, "An illustration of a deductive pattern matching procedure in qualitative leadership research," *Electronic Journal of Business Research Methods*, vol. 17, no. 3, pp. 143–154, Sept. 2019, doi: 10.34190/JBRM.17.3.004.
- [8] N. Naz, F. Gulab, and N. Aslam, "Development of qualitative semi-structured interview guide for case study research," *Competitive Social Sciences Research Journal*, vol. 3, no. 2, pp. 42–52, 2022.
- [9] W. C. Adams, "Conducting semi-structured interviews," in *Handbook of Practical Program Evaluation*, 4th ed. K. E. Newcomer, H. P. Hatry and J. S. Wholey, Eds., New Jersey: John Wiley & Sons, 2015, ch 19, pp. 492–505.
- [10] M. Dikko, "Establishing construct validity and reliability: pilot testing of a qualitative interview for research in Takaful (Islamic Insurance)," *The Qualitative Report*, vol. 21, no. 3, pp. 521–528, Mar. 2016, doi: 10.46743/2160-3715/2016.2243.
- [11] M. Yeong, R. Ismail, N. Ismail, and M. Hamzah, "Interview protocol refinement: fine-tuning qualitative research interview questions for multi-racial populations in Malaysia," *The Qualitative Report*, vol. 23, no. 11, pp. 2700–2713, Nov. 2018, doi: 10.46743/2160-3715/2018.3412.
- [12] COBIS "Teacher supply in British international schools", COBIS, London, UK, 2018. Accessed: Oct. 10, 2021. [Online]. Available: www.cobis.org.uk
- [13] M. Adnot, T. Dee, V. Katz, and J. Wyckoff, "Teacher turnover, teacher quality, and student achievement in DCPS," *Educational Evaluation and Policy Analysis*, vol. 39, no. 1, pp. 54–76, Mar. 2017, doi: 10.3102/0162373716663646.
- [14] A. Q. Noori, H. Said, S. N. Orfan, and S. N. M. Anis, "The influence of school climate on high school teachers' job satisfaction in a conflict-affected country," *International Journal of Evaluation and Research in Education (IJERE)*, vol. 13, no. 1, pp. 321–328, 2024, doi: 10.11591/ijere.v13i1.22890.
- [15] A. Brake, "Right from the start: critical classroom practices for building teacher–student trust in the first 10 weeks of ninth grade," *Urban Review*, vol. 52, no.2, pp. 277–298, 2020.
- [16] B. Aeschlimann, W. Herzog and F. Sander, "Irregular teacher turnover and student academic achievement in high schools: a study in the subjects Mathematics, German, French and History," *Journal of Education and Learning*, vol. 8, no. 2, pp. 25–36, Feb. 2019, doi: 10.5539/jel.v8n2p25.
- [17] S. Ledger, "Breaking through the cultural bubble: international schools engaging at the local level," *International Schools Journal*, vol. 36, no.1, pp. 27–39, 2016.
- [18] Performance Management & Delivery Unit, PEMANDU, "Economic transformation programme annual report 2012," Prime Minister's Department, Putrajaya, Malaysia, 2013. [Online]. Available: https://www.pmo.gov.my/dokumenattached/Eng_ETP2012_Full.pdf
- [19] N. Juhdi, J. Hashim, and R. A. Rahman, "Job embeddedness and retention: a study among teachers in a private Islamic school in Malaysia," *Malaysian Journal of Consumer and Family Economics*, vol. 21, no. S1, pp. 125–138, Jul. 2018.
- [20] K. K. Maurya and M. Agarwal, "Organisational talent management and perceived employer branding," *International Journal of Organizational Analysis*, vol. 26, no. 2, pp. 312–330, May 2018. doi: 10.1108/IJOA-04-2017-1147.
- [21] A. Boel, "Teacher retention in China: the role of effective leadership," *Lessons from Glob. Classrooms*, vol. 1, no. 1, pp. 30–48, May 2020.
- [22] L. W. Bolden, "The role of school leadership in teacher retention in title 1 schools," Ph.D. dissertation. The College of Graduate and Professional Studies, Univ. of New England, Portland & Biddeford, 2019. [Online]. Available: <https://dune.une.edu/cgi/viewcontent.cgi?article=1266&context=theses>
- [23] K. Malterud, V. D. Siersma, and A. D. Guassora, "Sample size in qualitative interview studies: guided by information power," *Qualitative Health Research*, vol. 26, no. 13, pp. 1753–1760, Nov. 2016. doi: 10.1177/1049732315617444.
- [24] A. Gani, N. Imtiaz, M. Rathakrishnan, and H. N. Krishnasamy, "A pilot test for establishing validity and reliability of qualitative interview in the blended learning English proficiency course," *Journal of critical reviews*, vol. 7, no. 5, pp. 140–143, 2020, doi: 10.31838/jcr.07.05.23.
- [25] M. J. Goertzen, "Introduction to quantitative research and data," *Library Technology Reports*, vol. 53, no. 4, pp. 12–18, 2017, doi: 10.5860/ltr.53n4.
- [26] J. Bos, "Confidentiality," in *Research Ethics for Students in the Social Sciences*, Cham: Springer, 2020, pp. 149–173.
- [27] J. Donley, R. Detrich, J. States, and R. Keyworth, "Retention strategies," in *Teacher Retention Analysis Overview*. Oakland, CA: The Wing Institute, 2019. Accessed: Jan. 2, 2022. [Online]. Available: <https://www.winginstitute.org/teacher-retention-strategies>.
- [28] T. L. Colson, and C. Satterfield, "The effects of strategic compensation on teacher retention," *Power and Education*, vol. 10, no. 1, pp. 92–104, Mar. 2018, doi: 10.1177/1757743818758782.
- [29] M. Fusco, "Burnout factories: the challenge of retaining great teachers in charter schools," *Phi Delta Kappan*, vol. 98, no. 8, pp. 26–30, May 2017, doi: 10.1177/0031721717708291.
- [30] S. M. Areias, Supports for teacher leadership: teachers' perceptions in American-sponsored overseas schools in Africa. Ph.D. dissertation. Lehigh Univ., Bethlehem, 2016. Available: ProQuest Dissertations and Theses database.
- [31] B. S. Dieterle, "I'm leaving!": Understanding the effects of action research communities on teacher retention in one international school, Ph.D. dissertation. Arizona State Univ., Tempe, 2018. Available: ProQuest Dissertations and Theses database.
- [32] J. P. Papay, A. Bacher-Hicks, L. C. Page, and W. H. Marinell, "The challenge of teacher retention in urban schools: evidence of variation from a cross-site analysis," *Educational Researcher*, vol. 46, no. 8, pp. 434–448, Nov. 2017, doi: 10.3102/0013189X17735812.





- [33] M. C. Teodori, Why do they stay? A phenomenological study on the lived experiences of teachers who persist in urban K-12 Christian education, Ph.D. dissertation, Liberty Univ., 2015. Available: ProQuest Dissertations and Theses database.
- [34] T. Geiger and M. Pivovarova, "The effects of working conditions on teacher retention," *Teachers and Teaching*, vol. 24, no.6, pp. 604–625, Apr. 2018, doi: 10.1080/13540602.2018.1457524.
- [35] M. A. Kraft, J. P. Papay, S. M. Johnson, M. Charner-Laird, M. Ng and S. Reinhorn, "Educating amid uncertainty: the organizational supports teachers need to serve students in high-poverty, urban schools," *Educational Administration Quarterly*, vol. 51, no. 5, pp. 753–790, Dec. 2015. doi: 10.1177/0013161X15607617.
- [36] A. Idris, "Flexible working as an employee retention strategy in developing countries," *Journal of Management Research*, vol. 14, no. 2, pp. 71–86, Apr. 2014.
- [37] L. Gaikhorst, J. Beishuizen, B. Roosenboom, and M. Volman, "The challenges of beginning teachers in urban primary schools," *European Journal of Teacher Education*, vol. 40, no. 1, pp. 46–61, Jan. 2017, doi: 10.1080/02619768.2016.1251900.
- [38] M. Watanabe and C. D. Falci, "A demands and resources approach to understanding faculty turnover intentions due to work–family balance," *Journal of Family Issues*, vol. 37, no. 3, pp. 393–415, Feb. 2016, doi: 10.1177/0192513X14530972.
- [39] M. B. Wells, "Predicting preschool teacher retention and turnover in newly hired head start teachers across the first half of the school year," *Early Childhood Research Quarterly*, vol. 30, pp. 152–159, Jan. 2015, doi: 10.1016/j.ecresq.2014.10.003.
- [40] A. J. Hill and D. B. Jones, "The impacts of performance pay on teacher effectiveness and retention does teacher Gender Matter?," *Journal of Human Resources*, vol. 55, no. 1, pp. 349–385, Jan. 2020, doi: 10.3368/jhr.55.2.0216.7719R3.
- [41] B. Billingsley and E. Bettini, "Special education teacher attrition and retention: a review of the literature," *Review of Educational Research*, vol. 89, no. 5, pp. 697–744, Oct. 2019. doi: 10.3102/0034654319862495.
- [42] T. Sharanya, "Employee retention challenges and strategic dimensions towards it sector: a study," *International Journal of Applied Business and Economic Research*, vol. 15, no. 23, pp. 559–567, 2017.
- [43] J. Kenway, "Asia as method: Chen's conceptual opening," in *Asia as Method in Education Studies: A Defiant Research Imagination*, H. Zhang, P. W. K. Chan and J. Kenway, Eds., New York, NY, USA: Routledge, 2015, pp. 13–31.
- [44] L. Busetto, W. Wick, and C. Gumbinger, "How to use and assess qualitative research methods," *Neurological Research and Practice*, vol. 2, no. 14, pp. 1–10, May 2020. doi: 10.1186/s42466-020-00059-z.
- [45] S. Brinkmann and S. Kvale, "Research interview, philosophical dialogues, and therapeutic interviews," in *Learning the Craft of Qualitative Research Interviewing*, 3rd ed. Thousand Oaks, CA: Sage, 2015, ch 2, pp. 21–38.
- [46] M. J. Harris, and B. Muvuka, "Qualitative research methods," in *Integrated Research Methods in Public Health*, 1st ed. Hoboken, NJ: Wiley, 2022, ch 3, pp 149–205.
- [47] N. Ismail, G. Kinchin, and J. A. Edwards, "Pilot study, does it really matter? Learning lessons from conducting a pilot study for a qualitative PhD thesis," *International Journal of Social Science Research*, vol. 6, no. 1, Mar. 2018, pp. 1–17. doi: 10.5296/ijssr.v6i1.11720.
- [48] Y. C. N. Daniel, "Method," in *Effective Personal Disciple-making: A Qualitative Study*, Bandung: STT Bandung, 2022, ch 3, pp. 21–26.
- [49] E. Gesch-Karramanlidis, "Reflecting on novice qualitative interviewer mistakes," *The Qualitative Report*, vol. 20, no. 5, pp. 712–726, May 2015, doi: 10.46743/2160-3715/2015.2145.

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