EXPLORING THE COMPARATIVE ADVANTAGES AND DISADVANTAGES OF QUESTIONNAIRES AND INTERVIEWS; MAKING REFERENCE TO RECENT RESEARCH STUDIES IN THE EDUCATIONAL FIELD

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SUMMARY

This study focuses on the advantages and disadvantages of the use of questionnaires and interviews in educational researches as non-observational data collection methods. First, definitions and types of questionnaires and interviews are given. Then, advantages and disadvantages of the use of questionnaires and interviews over each other's are presented. In addition, some of the current studies from educational field in which interviews and/or questionnaires were used are given as examples.

Key words: Interview, questionnaire, educational research,

ÖZET

Bu çalışma, deneysel veri toplama yöntemleri olan anket ve görüşmenin (mülakat) eğitim çalışmalarında kullanılmasının birbirlerine göre avantaj ve dezavantajlarını incelemektedir. Birinci bölümde metotların tanımları yapılmış ve çeşitleri hakkında kısa bilgi verilmiştir. İkinci bölümde ise, metotların birbirlerine göre avantaj ve dezavantajları tartışılmıştır. Burada, eğitim alanında yakın geçmişte geniş kapsamlı olarak yapılmış ve bu iki yöntemin kullanıldığı bir kaç çalışma ele alınmıştır. Bu çalışmalarda iki metotla ilgili rapor edilen avantaj ve dezavantajlar ortaya konularak bunların pratiğe yansımaları irdelenmiştir.

Anahtar sözcükler: Anket, görüşme (mülakat), eğitim araştırmaları

I. INTRODUCTION

Kane (1983) defines science as i) the getting of systematic and reliable knowledge about any aspect of the universe, carried out by means of observations, and ii) the development of means for interrelating and explaining your observations. To do this we do research. According to Breakwell (1995), "we do research to find out what has happened, how it happened, and, if possible, why it happened (p.5)." The first goal of all

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scientific research then is to obtain new knowledge, which we might call 'the truth', about the natural world. Therefore, the data collection is the fundamental and vital stage in any research.

There are several information-gathering techniques in doing a research. In educational research, various methods 'are used in order to obtain adequate, accurate and reliable information. The most general word for them is a survey, a technique in which a set of questions is presented to a group of respondents; either a sample, or, less commonly, an entire population. More specifically, surveys may be divided into two categories, depending upon who administers them. If they are self-administered, that is, the respondents him/herself writes the replies on the form, they are referred to as a questionnaire. Postal questionnaires are one of this type. On the other hand, guestions delivered in a face-to-face encounter by an interviewer are usually referred to as an interview. These two types of the methods are the most commonly used information gathering techniques in educational research for their apparent advantages. As Gall et. al. (1996) note that questionnaires and interviews are used in educational researches to collect information that is not directly observable such as, feelings, motivations, attitudes, accomplishments, and experiences of individuals.

This study is an attempt to explore the comparative advantages and disadvantages of the methods.

II. DEFINITIONS

The two educational research methods are going to be explained in this section.

II.1 Questionnaires

Fife-Schaw (1995) states that "the humble questionnaire is probably the single most common research tool in the social sciences (p.174)." He gives the principle advantages of the questionnaire as "its apparent simplicity, its versatility and its low cost as method of data gathering (p.174)." For many research topics, questionnaires provide data that are of a good enough quality to both test hypothesis and to make real-world policy suggestions.

Dyer (1995) notes that questionnaires are a sort of a list of written or printed questions but this list should have minimum misunderstandings or ambiguities in it to gain more information on respondent's attitudes, behaviour, belief or experience. It is considered as "the basic research tool

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in the social sciences which is capable of being tailored to the demands of almost any research topic (p.112)".

Types of Questionnaires: Questionnaires may be divided into three categories, depending upon who administers them (Oppenheim, 1992). *Mail (postal) questionnaires* are posted to the respondent to answer and return. *Self-administered questionnaires* are presented to the respondent by someone in an official position, such as teacher, researcher etc. At the beginning, the purpose of the study is explained, and then the respondent is left alone to complete the questionnaire. After that, they are taken back. *Group-administered questionnaires* are self-explanatory and given to groups of respondents assembled together, such as school children. They takes place under the control of administer persons. Respondents fill in the questionnaire and take help when needed from those persons. The controllers may check finished questionnaires for completeness.

II. 1. a. General Advantages and Disadvantages of the Questionnaires

The questionnaires are one of the most commonly used methods in educational researches because of their usefulness in collecting both closed and open ended information from a widespread sample. As mentioned earlier, questionnaires have many different types and each of them has some advantages and disadvantages over each other's. For example, self administered and group administered questionnaires have some advantages over the postal (mail) questionnaires; 1) In self and group administered questionnaires, the researcher have the opportunity to give some explanation to complete the questionnaires and can correct the misunderstandings, therefore, they could ensure a high response rate. 2) Also, in groupadministered questionnaires, all the respondents answer the questions in the same order and same amount of time, thus, many responses can be collected in a short time with a very high response rate. One disadvantage of groupadministered questionnaires could be the contamination through copying, talking or asking questions.

Also, the respondents themselves fill in self-administered questionnaires. This type of questionnaire administration saves the researcher's time and effort (Robson, 1995). Postal questionnaires with close-ended questions can lessen the respondent's work, although it could require more time, money, and effort by researchers since it may be needed to send follow-ups to respondents.

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On the contrary, the data, which are obtained from the questionnaire, are necessarily, superficial (Robson, 1995). There is little or no check on the honesty or seriousness of responses. Robson also suggests "for the results to have any hope of meaningfulness, the questionnaire must be painstakingly constructed, with very clear and unambiguous instructions, and careful wording of questions (p.243)."

II.2 Interviews

Another most effective data collection method is the use of interviews in educational researches. According to Greenfield (1996), we use interview to find out what is in and on someone else's mind which can not be directly observable. According to Cannel and Kahn as cited by Robson (1995) an interview is a kind of conversation "initiated by the interviewer for the specific purpose of obtaining research relevant information and focused by him on content specified by research objectives of systematic description, prediction or explanation (p. 229)."

It is considered as a useful tool to seek what people think or how they feel about something (Fraenkel and Wallen, 1996; Powney and Watts, 1987).

Types of Interviews: There are various types of interviews. Robson (1995) and McKernan (1996) divide interviews into three categories from the point of their content and organisation. In structured interviews, a sets of specific questions are asked to the respondents and responses are recorded on a standardised list or table by the interviewer. In an highly structured interview, interviewer has a carefully worded interview schedule which includes predetermined closed type questions and their response alternatives. Interviewer conducts the schedule and controls the direction of interview. Thus, it is less subjective in terms of response analysis and lesser the time-consuming. In semi-structured interviews, interviewers have a set of certain questions, but they can change their order and can give explanations and examples. Also they can use open-ended questions related to the context of the interview. Interviewers can leave out some questions and add some new ones through some flexibility. 'Probes', 'cues' or 'prompts' allow interviewer to change the direction of interview (Powney and Watts, 1987). In unstructured interviews, interviewers give respondents a problem or topic and let them to raise the topic, but let the conversation develop around the problem or topic. Although interviewers have no welldesigned schedule they have a general plan in their mind and conduct the

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interview around the general interests or concerns according to objectives of the survey. This method provides more flexibility to the interviewer but, it requires more skilled interviewer to use this technique. Therefore, it could be more time-consuming and more subjective.

Gall et al. (1996) categorise the interviews in a different point of view. They give three types of research interviews. The first one is key informant interviews. The interviewer collect data from informants who have special knowledge or perceptions that would not otherwise be available to the researcher. Key informants have some specific skills than other members of the population such as, more knowledge, better communication skills, and/or different perspectives. The second type is survey interviews. There are also, three types of survey interviews. Confirmation survey interviews are a kind of structured interviews. It confirms earlier findings and produces some evidences. These interviews are especially useful in large-scale questionnaire studies where in-depth interviewing cannot be carried out for all respondents. Participant construct interviews looks like the informant interviews. It is used for learning how informants describe their physical and social world. Projective techniques let researchers to understand how respondents see, perceive and interpret objects and events. They use ambiguous stimuli to elicit subconscious perceptions that cannot be observed in the natural setting or solicited through regular interviewing. These techniques may take the form of; open ended stories, unfinished sentences, role-playing, word association tests, etc. The third one is group interviews. In this technique, questions are asked to a group of respondents selected for a specific purpose. The respondents are usually selected for their knowledge about the research topic. Powney and Watts (1987) state that both one-to-one and group interviews may be in the forms of highly structured, semi-structured and unstructured.

In addition to these, another kind of interviewing is *telephone interviews*. In this interview technique, the same items can be used as in the face-to-face interviews.

II. 2. a. General Advantages and Disadvantages of the Interviews

Interviews can be preferable for some problems, or under some conditions. For example, collecting information from educationally disadvantaged adults, such as respondents who have reading or writing difficulties, or from very old or very young respondents (children under the age of ten) might require interviews. Such respondents might lack the motivation to collect data by the use of any other data collection method,

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such as questionnaire even if the items were written in an understandable manner.

In general, the interviews are considered as a flexible and adaptable way of finding things out. But, of course, different kinds of interviews have some advantages and disadvantages over each other's. For example, the use of semi-structured interviews gives greater freedom to the interviewer to sequence the questions. Moreover, greater depth may be obtained from the use of semi-structured interviews by giving attention to the different points. Because semi-structured interviews involves a series of structured questions, similarly with the structured interviews, and then probe more deeply using open form questions to obtain additional information.

The use of unstructured interviews does not involve a detailed interview guide. Instead, the interviewer asks questions that gradually lead the respondent to give desired information. Usually, the use of unstructured interviews is difficult for the respondents to express or may be psychologically sensitive. For these reasons this format is considered highly subjective and time consuming (Powney and Watts, 1987; Robson, 1995).

Although, telephone interviewing is cheaper than face-to-face interviews, especially when the sample is geographically dispersed, they have other significant advantages as well;

- Sample can be selected from a greater accessible population. Many groups, such as school personnel and parents, can easily be reached by telephone than personal visit. Telephone interviews also provide safe access to dangerous and restricted locations where interviewers might not to be admitted. In some cases, such as home interviews, a telephone call would not be threatening if potential respondents may be threatened by a visit from a stranger. So that travel time, safety and cost to individual respondents can be eliminated. Gall et al. (1996) state that there is some evidence in which telephone interviews can be used to collect sensitive data.
- There will be no cost if there is no answer to the call. Or even only
 little time and money could be lost because of the refusals in telephone
 interviews than if a potential respondent does not keep a face-to-face
 interview appointment.
- Also, data collection can be centralised by locating all the interviewers in a central location. Thus, the facilities and monitoring can be made easier. Automatic data entry is possible, if any computer assist the telephone interviews. So that the data are ready for statistical analysis as soon as all the interviews are completed. Response accuracy can also be

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increased with such computer assisted interview technique, because the interviewer can concentrate on responses rather than worry about question to ask next.

Despite the advantages, there are some disadvantages of the telephone interviews over to face-to-face interviews;

 Although the telephone is more effective for hard-to-reach location respondents, refusal rates for telephone interviews are slightly higher than the face-to-face interviews. Also, the telephone number of each selected individual is needed. They have to be determined in some ways. Something, such as city telephone directory etc. could be useful in this manner, but unlisted numbers may not be found, or even some individuals may not have telephones. Thus, they should be eliminated for the sample. In this case, it may create a biased sample, and the generalisability of the research results may be weak.

Similarly, group interview has some advantages and disadvantages over one-to-one interviews:

Group interviews could be used by practising teachers with the minimum of disruption to their normal teaching procedures. Respondents can be allowed to discuss to develop the topic, so that, a wide range of responses can be collected. The group interviews works best when all members are on an equal basis, like all the teaching staff of a school. On the other hand, if the group size is too large, it can be difficult to manage, and can make to follow up the views of individuals impossible. Or even, some individuals may not have the opportunity to speak. Sometimes one or two person could dominate and may not let others to contribute, or group dynamics or power hierarchies affect who speaks and what they say. For example, if the school principal is included, the teachers may not share their actual perceptions of the phenomena being investigated. In contrast, one to one interviews are easy to manage, issues can be kept relatively confidential and analysis is more straightforward. The interviewer can arrange to meet with each respondent at his/her mutual convenience in interviewing individuals. But, in-group interviews, all respondents must be assembled at the same time and place. This is not an easy task and the researchers need to follow systematic procedures to ensure that it is accomplished successfully (Powney and Watts, 1987; Robson, 1995, Gall et. al. 1996; Cohen and Manion, 1994)).

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III. COMPARATIVE ADVANTAGES AND DISADVANTAGES OF QUESTIONNAIRES AND INTERVIEWS MAKING REFERENCE TO RECENT RESEARCH STUDIES IN THE EDUCATIONAL FIELD

In general, as a data collection tool the questionnaire is easy to manage. You do not need any trained interviewer or someone to do the job. But, sometimes this advantage can be disadvantage, if there is not anybody to explain the questionnaire items that can not be understood by the respondents (usually in the postal questionnaire). Researchers have to prepare the questionnaire items clear and unambiguously expressed in simple language to prevent misunderstanding. In other words, each questionnaire items should be understood at the same level by the respondents to increase the reliability of the questionnaire. In this case, questionnaires can take rather longer time to prepare than interviews. But in general, an interview takes longer time and more costs than a questionnaire to apply. For example, self-administered questionnaires are quicker for the researcher than interviews. Copies of the questionnaire could be distributed in a school (where the number of respondents could be 100 to 1000 or more). Respondents could complete and return back about same amount of time that it takes to complete a single structured interview. In addition, all the records have to be transcribed if they are kept in an electronic form for an interview. Transcription work is more expensive and time consuming.

Although transcribing is a costly process, researchers prefer to use some kind of recording such as tape recorder, video recorder etc. Patton (1990) states that "increasing the accuracy of data collection, the use of a tape recorder permits the interviewer to be more attentive to the interviewee (p.348)". Interviewer may have more time to probe further information and clarification with tape recording. And also, recording the interview also allows a later check (Slavin, 1984). For example, in the PRINDEP study, Alexander et. al. (1995) used

"the technology of radio microphones in order to combine schedules and field notes completed on the spot with tape recordings of all the interviews and observed teaching sessions for later transcription and analysis (p. 104).

On the other hand, Patton (1990) warns that the poor-quality recordings can cause the loss of data obtained from interview. It decreases validity and reliability of interviews. Some researchers may choice to use their hand writing to take notes during the interview. But it may cause to miss some crucial points from respondent answers.

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Interviews and questionnaires can be compared with the following criteria for their advantages and disadvantages over each other's.

1. Flexibility and Adaptability: The major advantages of interviews are their flexibility and adaptability in data collection in general. Powney and Watts (1987), stress that interview "offers a very flexible and accessible research tool (p.9)." Flexibility permits the possibility of getting more information. Especially, an informal interview gives maximum flexibility to interviewer because, most of the questions will occur on an immediate context. They can push to go deeper into the interviewee's responses. Through the face-to-face interviews, researchers can convey their feelings and ideas with questions to respondents and respondents to interviewers. If researchers cannot fully understand respondent's answer they can probe or explain questions. Probes can consist of verbal and non-verbal cues. Interviewers may ask a number of questions, or open ended probes and may obtain more details about the same problem. According to Robson (1995) face-to-face interviews offer

"the possibility of modifying one's line of enquiry, following up interesting responses and investigating underlying motives in a way that postal and other self-administered questionnaires cannot. Non-verbal cues may give massages which help in understanding the verbal response, possible changing or even, in extreme cases, reversing its meaning (p.229)"

Especially, semi-structured interview and unstructured interviews allow the respondents to think and say more about questions. For example, In the study of CICADA (Changes in Curriculum-Associated Discourse and Pedagogy in the Primary School), Alexander et. al. (1995) stated that

"rather than simply presenting a series of questions reflecting the research team's preconceptions in the matter, these interviews were designed to give teacher the maximum opportunity to voice their own individual National Curriculum preoccupation (p.226)."

However, the flexibility in using probes needs some specific skills, in other words, trained interviewers. The well-trained interviewer can adapt the responses gained from one interview to another interview especially, in semi-structured interview and unstructured interview (Jones and Embery, 1996; Oppenheim, 1992; Patton, 1990). Skilled interviewers can follow up respondents' answers by using in-depth probing to obtain more information.

On the contrary, questionnaires cannot probe deeply into respondents' opinions and feelings. If you try to probe into respondents' opinions and feelings in a questionnaire, this can affect the respondents' answers and they

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can try to produce incorrect response. And this situation causes to reduce the standards of validity and reliability. Gall, et, al.(1996) states that you need to keep in mind that questionnaires and interviews are forms of measurement and, as such, they must meet the same standards of validity and reliability as apply to standardised tests and other measures used in researches.

Therefore, the flexibility is very low in the questionnaires. This can be considered the main disadvantage of questionnaires. This is because when the researcher designs and conducts the questionnaire once, and then he/she may not be able to have immediate feedback. Once the questionnaire has been distributed, it is not possible to modify the items, even though they may be unclear to some respondents. Thus, it is nearly impossible to give an explanation and probe (Dyer, 1995). Questionnaires are not verbal and explanation any question is nearly impossible during the administration. But, if the researcher is present at the time of administration he/she can clarify some points. However, this could not be possible for every question and every people. But, you have this chance in the use of interviews. You have the opportunity to correct or change any item that could cause trouble. However, highly structured interviews are similar to the questionnaires.

In the use of mailed questionnaires, there is no control over the order in which questions are answered, and there is no check on incompleteness. Contrary, interviews can built trust and rapport with respondents thus making in possible to obtain information that the individual probably would not reveal by any other data collection method.

2. Analysis: May be, the most important issue in any survey is the analysis. Analysing open-ended questions are considered difficult and time consuming both in interview and questionnaire, because, respondents give wide range of information including their feelings about the items. Also, interpretation can be problematic. Therefore, responses require more time and thought to interpret such variety of responses. Moreover, coding operation (usually in interviews) can take much time and money, if openended questions are used.

On the other hand, in the use of close-ended questions one can make data processing and analysis easy because, respondents only give what you have asked for. In the study of CICADA, Alexander et. al. (1995) reported that

"At the same time they (the interviews) had to be structured enough to yield comparable material irrespective of interviewer and interviewee,

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partly to aid analysis, and partly because there would inevitably be issues which individual teachers might not happen to raise spontaneously but upon which they would have plenty to say if asked. (p.226)"

In this case, questionnaires, generally, have advantages over interviews. Usually, the questionnaires are easier than interviews to analyse. The questionnaire provides direct responses of both factual and related information. The respondents do not deal with unrelated information. Therefore, you do not lose your time in analysing such kind of information. This is truer when the close-ended questions are asked. It could also be considered the advantages of quantitative analysis. In an interview, analysis time is generally underestimated because qualitative analysis usually requires much time and effort.

3. Anonymity: Anonymity is also an important issue for the surveys. Questionnaires provide anonymity that is important to respondents who do not want to be recognised. Cohen and Manion (1994) state that the questionnaire "tends to be more reliable; because it is anonymous, it encourages greater honesty (p. 319)". On the other hand, in interviews respondents cannot hide their identities. Although interviewer never reveal their names and just use the given responses, even so, some individuals can refuse to conduct interviews. The interviewer should assure all data, which would be gathered via respondent, would be kept in confidence. Also, the interviewer should explain briefly the aim of research to respondents. The interviewer should avoid listing names of the participants or the interviewer should ask whether the respondents want their names to be used in any publications (Powney and Watts, 1987; Seidman, 1991). In that case, for anonymity the interviewer can promise to use pseudonyms in the final report of survey. For instance, this issue has been reported in the study of Alexander et. al. (1995) that "the schools participated on the understanding that they would not be identified in any published account of enquiry, and they have all been given pseudonyms.(p. 105)."

Nevertheless, interviewers may not be able to guarantee anonymity. If the research is based on the experience of the participant, any reader who knows the participant may recognise him/her after the interviews report.

4. Bias: Interviews are usually considered to have more biases than questionnaires. Wragg (1984) highlights the interviewer biases. He states that interviewers unconsciously or consciously may lead the respondents with their questions. Likewise, some biases may occur because of the

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contact between interviewer and respondent if it is conducted in face-to-face base. Interviewers are human beings so they have their own perspectives and biases. Characteristics of the interviewer, such as age, education, socioeconomic status, race, religion, sex, etc. may affect the respondents' answers. Also, perceptions, attitudes, expectations and motives of the interviewer may affect the respondents' answers. Unintentionally, interviewers may give clues to their own attitudes and values and even the kinds of answers they would like to receive from the respondents. Behavioural factors, such as incorrect reading, recording, probing of the questions etc. also affect the respondents' answers. Especially, bias may occur during asking open ended questions in an interview (Cohen & Manion, 1994).

Oppenheim (1992) reveals that interviewer have to be aware of who the respondents are and what can be particular problems with them. For example, children are led easily. Many of untrained and inexperienced interviewers may not appreciate the difference between a probe and a prompt, where to use check list, where to keep silent. If the interviewer reflects after the respondents' answers, such as 'good', 'oh really', 'I do agree', these reflections will inform the respondents about the interviewer's own position and can cause bias. Furthermore, some people may be unwilling to respond to the questions. Some of them may hide their feelings or may not tell the truth about questions, especially in-group interviews due to group power or they may not want to be known their feelings or experience by the other participants.

To collect unbiased data the interviewers should pre-test the interview in a smaller number of samples. After piloting, interviewers will yield reasonably unbiased data and also, can check wording of the interview items. In an interview, the interviewer should try to obey the rules and standardise the interview. Although the standardisation of the interview situation is difficult, it must be scheduled since they involve an interchange between two people so that the interviewer does not influence the respondent to answer a question a certain way. Therefore, to prevent the biases the interviewer needs more special skills, and should be trained against the possible bias problems before starting interview visits. On the other hand, biases less occur in the questionnaires. However, same biases possibly occur, if the length of the questionnaire is quite long and the layout is not clear enough.

5. Response rate: It is often suggested that interviews brings high responses

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in contrast to questionnaires. As Oppenheim (1992) reported that it has been estimated for the UK that achieving a 70 per cent successful interview response rate in a probability sample requires an average conducting time of about forty-five minutes, and this time increases rapidly if a higher response rate has to be achieved (p.41).

On the other hand, questionnaires, especially postal questionnaires, generally get low response rate. The completeness of questionnaires, in particular mailed questionnaires, may depend on some factors. Tuckman (1972) states the possible reasons of low response rate for questionnaires as respondent's undesirability, misunderstandings or ambiguities of the questionnaire. Also some other factors could affect the response rate such as interesting topic clear and understandable content, nice layout of the items and questionnaire length. For example, if respondents cannot understand the questions or misunderstand them, then respondents may fill in half of the questions or they may leave the questions. These problems may be recognised in pilot survey and the questionnaire design may be developed (Dyer, 1995).

In mailed questionnaires, to get high response rate, questions must be simple, clear and unambiguous because you cannot interrupt while the respondent answers the questions in a questionnaire. Asking close-ended questions might increase the response rate, since they are answered easily. Also, using colour paper, pre-addressed and post-paid return envelope and choosing a low workday of the week for arrival time of the questionnaire may increase the response rate. Also response rate may depend on the anonymity and confidentiality of the questionnaire. For example, Alexander et. al. (1995) reported in CICADA study that "in spite of the usual assurances about anonymity and confidentiality, a number of respondent left one or more of the items blank (p.227)."

Also one of the other reasons for low response rates in postal questionnaires could be the lack of personal relations. If the respondents do not know anything about the researcher, they cannot be interested with the questionnaire.

To increase the response rate in postal questionnaires, the researcher should do the following things:

- Pre-contact the Sample; The pre-contact can take the form of a letter, postcard or telephone call. The telephone contacts are the most effective way (Gall et al., 1996).

- Writing a Cover Letter; A carefully designed cover letter with brief information and impressions could help to increase the response rate. Also,

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the purpose of the study should be explained to clarify the respondents that the study is significant and that their answers are important.

-Follow up with Non-respondents; A few days after the time limit specified in the cover letter, it is desirable to contact non-respondents by sending a follow up letter, along with another copy of the questionnaire and another self addressed envelop (Gall et al., 1996).

It is considered that the response rate is slightly higher in selfadministrated questionnaire. Likewise, the group questionnaires have nearly as same amount of response rate as interviews have. Depending on the size of the group and its level of literacy two or more persons will observe the administration of the questionnaire. They also control the finished questionnaires for completeness. On the other hand, if the number of respondents are overcrowded the researcher or some one who help the researcher may not control the group to avoid contamination through copying, talking or asking questions.

CONSIDERATION	INTERVIEW	QUESTIONNAIRE
1. Personal need to collect data	Requires interviewers	Requires a clerk
2. Major expense	 Payment to interviewers 	 Postage and printing
 Opportunities for response- keying (personalisation) 	• Extensive	Limited
4. Opportunities for asking	Extensive	Limited
5. Opportunities for probing	Possible	Difficult
 Relative magnitude of data reduction 	 Great (Because of coding) 	Mainly limited to roistering
7. Typically, the number of respondents who can be reached	Limited	Extensive
8. Rate of return	Good	Poor
9. Sources of error	 Interviewer, instrument, coding, sample 	 Limited to instrument and sample
10. Overall reliability	Quite limited	Fair
11. Emphasis on writing skill	Limited	Extensive

The table below summaries the possible advantages and disadvantages of the methods.

Table: 1 Summary of the possible advantages and disadvantages of the methods (adapted from Cohen & Manion, 1994)

IV. CONCLUSION

As mentioned earlier, questionnaires and interviews are used in educational researches to collect data, which is not directly observable, such as feelings, motivations, attitudes, accomplishments, and experiences of

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individuals. A wide range of educational problems can be investigated with questionnaires and interviews.

The use of questionnaires and interviews can be distinguished as; questionnaires are more commonly used in quantitative research because of its standardised and highly structured design, and interviews are more commonly used in qualitative research, because of its permission open ended exploration of topics and responses. However, both methods can be used in either type of research.

On the other hand, there is no exact answer to the question 'Which data collection method is better?'. Either of the methods has their own advantage and disadvantages. Researchers can prefer one of them related to the purpose of their study. The choice of the method is usually affected by many reasons. These can be the simplicity in preparation and analysis, the costs, time, resources, sample, and type of data, which should be collected. Interview usually requires much time, more money and too much effort. Also analysis can be difficult. But, it offers a great flexibility, adaptability and depth to the research. Interview also have high response rate. Alternatively, the questionnaire is not flexible, and has lower response rate than interview. But, questionnaire is cheaper, time saver and easy to administer. For example, if the researcher has low budget and limited time, he/she can use postal or self-completed questionnaires to reduce cost and time. On the other hand, if the researcher needs detailed information for a the study or the topic is too complex and needs deep probing, then, he/she can prefer to use face to face interviews, or even he/she can use telephone interviews which can be cheaper than face to face interviews.

Besides, both methods can be used in different stages of a study to support each other's. For example, in the CICADA study, Alexander et. al. (1995) stated that

"the questionnaire items were all derived from responses given by practising primary teachers during the extended interviews which formed part of the project field work in two local authorities.(p.226)"

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