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## EXPERTS' OPINIONS ON FREQUENTLY ASKED QUESTIONS

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Four experts in the field of ELT research were interviewed via email on some questions which are frequently asked by ELT research students, and sometimes misunderstood by researchers more at home with quantitative than qualitative research.

Their responses to the following four questions are provided in this column.

1. Under what circumstances are qualitative research methods more suitable than quantitative ones?
2. When (if ever) is it appropriate to use volunteer subjects in a qualitative study?
3. How does using volunteers in ethnographic research affect the reliability, validity, and generalizability of the findings?
4. When is it appropriate to use convenience sampling when selecting subjects to complete a survey questionnaire?

The four interviewees were :

Dr. J.D. Brown who is currently Professor of Applied Linguistics on the graduate faculty of the Department of ESL at the University of Hawai'i at Manoa, USA;

Dr. Francis Mangubhai who is an associate professor and Head of the Center for Language Learning and Teaching and the Office of Preparatory & Continuing Studies (OPACS), University of Southern Queensland, Australia;

Dr. John Read who is an associate professor in the School of Linguistics and Applied Language Studies at Victoria University of Wellington, New Zealand; and

Dr. Sharon L. Pugh who is currently Associate Professor of Education Emerita in the Department of Language Education, Indiana University, Bloomington, Indiana, USA.

*Francis Mangubhai*

Under what circumstances are qualitative research methods more suitable than quantitative ones?

In one sense this is a non-question; in another, it is not. Research methodology arises out of the question that one asks and the data that one is seeking. So if a researcher wants to understand a particular phenomenon, e.g. teachers' practical theories, a qualitative design is more appropriate. On the other hand, if a researcher wants to determine some relationship between variables, e.g. ability in music and ability in learning a second language, or effects, e.g. providing strategy training to one group but not to another, then quantitative methods are more suitable. So the suitability of a research method depends upon the purpose of the research.

*John Read*

Under what circumstances are qualitative research methods more suitable than quantitative ones?

This is a very broad question and there are several ways to answer it. First, qualitative methods may offer a better means of understanding the complexity of language teaching and learning, as they take place in the natural setting of the classroom. Secondly, many researchers find that the qualitative approach fits better with their philosophy of language teaching and their understanding of how language learning occurs. Thirdly, qualitative research designs are flexible in nature, so that they can be adapted when the researcher makes new and unexpected discoveries during the process of gathering and analyzing the data. And finally, it is not in fact an either-or choice: many research studies in our field combine qualitative and quantitative methods in order to take advantage of the strengths of each approach.

*Sharon L. Pugh*

Under what circumstances are qualitative research methods more suitable than quantitative ones?

The choice of methodology always depends upon the research questions and issues being pursued. If the purpose of the research is relatively open-ended, for example, to gain deeper understanding of a phenomenon in a given context, to gain perspectives and perceptions of individuals, or to understand complex social and cultural interactions in concrete situations, then qualitative research will probably yield richer and more useful information. Survey research may be either quantitative or qualitative, depending on the research questions, the nature of the questions asked in the survey, the number of the participants involved, and whether the findings are intended to be generalizable to a large population or transferable to particular situations.

*J. D. Brown*

When (if ever) is it appropriate to use volunteer subjects in a qualitative study?

Given the current rules of ethics for research in applied linguistics, I would say that it is impossible (or at least unethical) to study language learners who do not consent in writing to participate in the research. This shift in attitudes is even reflected in the labels we use to refer to these folks: we used to call them *subjects* but now they are almost universally called *participants*. The new terminology implies willingness on the part of the participants, which by definition means they are volunteers, even if after the fact.

Since most qualitative research (rightly) makes no claims for the generalizability of the results, the sampling procedures need not be random. However, it might be useful to use *rational sampling* so that the participants who are selected will prove *relevant* from a research perspective. It is also

essential that qualitative researchers clearly describe the participants when reporting their research (using *thick description* of both the participants and the environments in which they are being studied). Rational and relevant sampling often means selecting participants from (or asking for volunteers from) different groups of potential participants representing relevant categories that will further the goals of the particular research project. For example, a qualitative researcher might want to select six participants who are native speakers of English and six Thais learners of English (two each from low level, intermediate, and advanced learners), but only if those rational categories would prove relevant to the overall goals of the research.

*Francis Mangubhai*

When (if ever) is it appropriate to use volunteers in qualitative research?

In some circumstances the only option open to a researcher is to call for volunteers. For example, in a recent study of ours (Mangubhai et al., 2004), we asked for volunteers from amongst the foreign language teachers to participate in a qualitative piece of research that sought to understand the practical theories of foreign language teachers. We could not make a choice of various types of teachers, e.g. beginners, 5 years experience and so on for a number of reasons. The choice of subjects is governed by many factors, not the least of which is what is feasible in the situation. Seeking volunteers from teachers is likely to lead to subjects who are fairly confident about their teaching and therefore one has to be very careful not to generalize any findings to all teachers.

*John Read*

When (if ever) is it appropriate to use volunteers in qualitative research?

How does using volunteers in ethnographic research affect the reliability, validity and generalizability of the research?

These two questions need to be answered together. First of all, the problem with using volunteers in *quantitative* research is that the sample of subjects in the study may be a biased one, so that it affects the researcher's ability to make valid generalizations about the whole population from which the sample is drawn. However, *qualitative* researchers are not so concerned about generalizability in this sense. In ethnography and other forms of qualitative research, it is usually more important to give a rich holistic account of a small number of cases. This means that the researcher may need to collect a large amount of data using different research methods, often over

quite a long period of time. If the researcher is to do so, the participants in the research must be willing to cooperate in the time-consuming process of data-gathering. Therefore, in this sense it is actually essential that the participants in a qualitative study should be volunteers, although of course the researcher still needs to make the decision about which case(s) to include in the research.

*Sharon L. Pugh*

**When (if ever) is it appropriate to use volunteers in qualitative research?**

Actually, all participants in any kind of research must, ethically, be volunteers in the sense that they are invited to participate in the study, given full information about the purpose, requirements, risks if any, and potential benefits of their participation. They must also be given the opportunity to withdraw from the study at any time and have their data destroyed.

There is a difference between obtaining volunteer participants randomly or purposively. Random sampling, characteristics of quantitative research intending to support or refute a specific hypothesis or treatment, is done from a population that is itself very purposively defined. The purpose of such sampling is to obtain two groups, one that receives the intervention and one that does not, to compare outcomes. Qualitative research, on the other hand, characteristically uses

purposive sampling. Because the goal of qualitative research is to provide rich description of a phenomenon in particular cases so as to illustrate its manifestation and perhaps providing grounding for a new hypothesis, participants are selected for their willingness to spend time and mindful effort toward the end of collecting details, following up on observations, and delving into both positive and negative aspects so as to provide as complete and accurate a picture of a phenomenon as possible. Also, rapport and shared understandings between the participants and researcher are also crucial to the value of the research. This kind of research grows out of the tradition of anthropology and ethnographic field research, in which informants are purposively selected on the basis of the kind and amount of information they can and will share.

*J. D. Brown*

How does using volunteers in ethnographic research affect the reliability, validity, and generalizability of the findings?

I think this question is phrased inaccurately in several ways. First, I believe that *ethnographic* research is a specific subtype of qualitative research, so I will sidestep that particular subtype and instead address my answer to the broader category of *qualitative* research. Second, qualitative researchers in other fields long ago abandoned any need to demonstrate the quantitative research concepts of *reliability*, *validity*, *replicability*, or *generalizability* in their research, offering instead four parallel and analogous concepts: *dependability*, *credibility*, *confirmability*, and *transferability*. Since these concepts are fairly new in the field, perhaps I should briefly describe them here in more detail.

*Dependability* requires accounting for any shifting

conditions in the participants or in the study's design while it was taking place so that the complete context of the study can be better understood. *Dependability* (analogous to *reliability* in quantitative research) can be enhanced by using techniques like *overlapping methods*, *stepwise replications*, and *inquiry audits*. *Credibility* requires showing that the research was conducted in such a way as to maximize the accuracy of identifying and describing the participant(s), especially as viewed by the multiple groups of participants themselves. *Credibility* (analogous to *internal validity* in quantitative research) can be enhanced by using techniques like *persistent observations*, *prolonged engagement*, *triangulation*, *referential analysis*, *member checking*, *negative case analysis*, and *peer debriefing*.

*Confirmability* requires showing the data, or at least full revelation of the availability of the data, upon which the study was based. Regardless of whether or not this is ever actually done, the possibility must exist for another researcher to confirm

the data and interpretations. Confirmability (analogous to *replicability* in quantitative research) can be enhanced by using careful *field notes*, *record keeping*, *retention of data*, and *audit trails*.

*Transferability* requires the demonstration of the applicability of the results and interpretations of a study to other context(s). *Transferability* (analogous to *generalizability* in quantitative research) can be enhanced by using *thick description*.

So in direct answer to question 2, in my view, the use of volunteers only impedes effective qualitative research to the degree to which it (a) disrupts the rational and relevant sampling I mentioned in my answer to question 1 and (b) interferes with dependability, credibility, confirmability, and transferability.

*Francis Mangubhai*

How does using volunteers in ethnographic research affect the reliability, validity and generalizability of research findings?

The way the subjects have been chosen in a study is not going to affect the reliability, which is generally thought of in terms of internal and external. Much of ethnographic research in a classroom, for example, ends up with counting frequencies of behavior, or identifying particular types of behaviors. Internal validity would, in such cases, refer to the ability of the researchers involved in this study to match the data to some construct or a coding scheme consistently (hence coding reliability index is provided in articles that describe ethnographic studies). External reliability refers to whether other researchers, working in the same or very similar contexts, would obtain the same consistent results using the coding procedure used by the first researcher(s). In terms of



validity, we also talk of internal and external,

internal referring to whether any conclusions can be drawn from the data with any confidence, and external referring to the extent to which the results can be generalized. To be able to generalize the researchers would need to show the typicality of phenomena they have looked at. When we have volunteers, then it is evident that you cannot generalize to the whole population of teachers but may be able to generalize to a particular type of teachers (information got through surveying subjects) in a particular context under particular conditions.

*Sharon L. Pugh*

**How does using volunteers in ethnographic research affect the reliability, validity, and generalizability of research findings?**

The criteria of reliability and generalizability, which are relevant in quantitative research that compares treatment and control groups from a defined population, are usually not applied in qualitative research. Rather, the criteria of trustworthiness, inherent in the thick description, member checks, and triangulation, and of transferability, in which the consumer of the research finds analogues and applications to his/her situation, are used. Therefore, purposive selection of participants is usually done in qualitative and ethnographic research.

*J.D. Brown*

When is it appropriate to use convenience sampling when selecting subjects to complete a survey questionnaire?

For me, the phrase *convenience sampling* conjures up a sort of lazy person's my-students-and-my-friend's-students sampling procedure. This sort of convenience sampling is only appropriate when: (a) the resulting sample is described *very* clearly (in terms of, e.g., age, educational background, language proficiency, socioeconomic status, etc.) in the research report; (b) the results from the convenience sample are narrowly interpreted as applying only to that sample or a very similar sample; and (c) the results of the convenience sample are rational and relevant for some useful purpose that applies to that group of students or a very similar group (e.g., purposes like needs analysis, program evaluation, or other curriculum development projects for the particular institution involved). Clearly, I do not generally endorse the

use of convenience sampling, except in very narrowly defined circumstances for very narrowly defined purposes.

*Francis Mangubhai*

**When is it appropriate to use convenience sampling when selecting subjects to complete a survey questionnaire?**

The answer to this question also depends upon what the purpose of gathering such data is. When the purpose is not to make any generalization about the population from which a sample has been taken, a convenience or purposeful sampling is an acceptable procedure. If students at Chulalongkorn were studied for their attitude towards exhaust from cars, their responses may be different from those students surveyed at a regional university in another part of Thailand. The important thing is to be explicit about your sample and to ensure that you do not fall into the trap of generalizing to the whole population.

Generally in research it is not very helpful to ask what is the best method. Rather the question to be asked is that given X is the purpose of my research, what methods would provide me with data that

would enable me to achieve my purpose. This is only the first step because the best of a number of possible methods may not be feasible for a variety of reasons, not the least of which can be a lack of resources.

*John Read*

When is it appropriate to use convenience sampling when selecting subjects to conduct a survey questionnaire?

A convenience sample does not involve any systematic selection procedure; the researcher simply uses people who are readily available. It may be appropriate when the questionnaire is being tried out at the developmental stage, or for an informal survey. However, if the aim is to have a representative sample of a particular population, a more formal sampling procedure is necessary and the most reliable results are achieved by using random sampling.

On the other hand, in our field it is quite common to administer questionnaires on certain topics (such as learner strategies, for example) to students in a number of classes in a language teaching program. In this case, the researcher cannot claim that the results of the survey can be generalized in a formal sense to a larger population,

but the findings may still provide very useful insights into the learning behavior or attitudes of the students, especially if the classes that are chosen are judged to be “typical” or “representative” of the students in the whole program.

*Sharon L. Pugh*

When is it appropriate to use convenient sampling when selecting subjects to compare a survey questionnaire?

It is appropriate when the context of the participants irrelevant to the research questions posed and there is a sound rationale for using this group of participants. The term "convenience sampling" may be misguided in qualitative research and might be replaced by "purposed selection of participants".

