Experience of Students' Participation in Household Surveys - A Case Study

Shir-Ming Shen and Shirley K W Yue - Hong Kong

1. Introduction

The teaching of survey sampling in universities has long been criticised as too mathematically oriented and short of practical guidance. Singh (1982) says that it is because the teachers lack experience in the practical application of the subject. In fact, even if teachers have sufficient practical experience, the subject still cannot be satisfactorily taught through lectures. The lecture theatre environment will reinforce the over-emphasis on the mathematical side and the ignorance of the practical side. Students then realise that there are a lot of theories involved in sampling methods and a lot of mathematics involved in the calculation of sampling errors. The daunting task of data collection, the fieldwork stage of a survey, however, can hardly be conveyed to the students.

The results obtained from surveys are therefore very often taken too lightly, without realising that the data were obtained through a labour-intensive, time-consuming and expensive exercise, that they have shortcomings due to various non-sampling issues, and that, because social surveys are dealing with human populations, a lot of things are not under the control of the experimenter. Techniques are required to handle the problems and to overcome these difficulties.

Although some of the practical techniques can be mentioned to the students, the actual difficulties involved in conducting a survey and hence the value of survey findings, are very rarely fully appreciated if students have not taken part in a real survey themselves.

To conduct a real sample survey properly is, of course, a very tedious and costly exercise which, with the present system of universities in Hong Kong, could not be implemented as part of the coursework of survey sampling. As an alternative it is hoped that students can take part in some research projects outside of their curriculum study in order to get exposure to the applied side of survey sampling. This paper tries to investigate the feasibility of such a supplementary programme including (1) the feelings and opinions of the students who have participated in such projects, (2) whether there

exists a sufficient supply of such research projects, and (3) the possible benefits the participating students can give to the research investigators.

2. A case study

In 1988, the first attempt to develop some subjective social indicators for the development of Hong Kong was launched. This was a project jointly conducted by three tertiary institutions in Hong Kong and the fieldwork was mainly in the hands of their students. The project was very suitable for investigating the feasibility of supplementing the teaching of survey sampling by letting students take part in surveys. It was a territory-wide household survey covering all areas in Hong Kong, and students from the three tertiary institutions were recruited as interviewers. This project was carried out during the summer break and the students all responded voluntarily as interviewers in this project which did not carry any loadings for course assessment. A total of 169 students participated in this project, of whom 36 were students of the University of Hong Kong, and most belonged to the Faculty of Social Sciences.

Questionnaires were sent to all the students who had participated in the project and 76% of them responded to the questionnaire. Group discussions were held only with those studying at the University of Hong Kong. A total of 30 out of 36 took part in seven group discussions.

Of the students who responded to the questionnaire, half had no previous surveyrelated experience and the others minimal experience, mainly from small-scale and often poorly formulated surveys organised by student bodies. Given this background, participation in a well-formulated survey would be a useful educational experience.

The extension of survey sampling teaching outside the normal teaching schedule can only be successfully implemented with students' consent. It is of interest, therefore, to learn the motivation of students who participate in surveys which are not part of the course requirements.

Respondents in our survey were asked why they chose to become an interviewer. The students' foremost reason for participation was their monetary concern, which was listed as the most important reason by about one-third of the students. This is not surprising because the project was intended to provide a summer job for the students. On the other hand, many students considered their participation as a learning experience, and a number of students joined the project because they were interested in research or surveys. Other reasons included "interest in the social indicator", "to gain some working experience" and "to accompany a friend", etc.

In spite of the diversity in the students' reasons for participation, 87% of the respondents indicated that they had gained knowledge from the project, particularly the "techniques of interviewing", "techniques of dealing with people", and "techniques of random selection". This conclusion was further confirmed during the group discussions. Although techniques were demonstrated and difficulties were emphasised in the training and briefing sessions, students found that they began to master the techniques and to understand the difficulties only after they had gone through the fieldwork. In spite of the comment given by the fieldwork supervisor that the door-to-door interview was indeed a very expensive way of data collection, the students confessed that they were not convinced until they had tried that out themselves. In fact, the students regarded the

whole process as painful as well as expensive. The students concluded that nothing could be more useful than practice.

In the group discussions, referring to things they had learnt, students explained that they had a chance to encounter people of different socio-economic status, different educational background, different family composition, etc. The very different and even unexpected responses to some of the questions reminded them that a personal opinion will not be representative of the population and that any specific non-random sample could produce very biased results. Furthermore, they also experienced different attitudes towards answering questions and change of the respondents' mood as the interviews went on. By recalling and reconstructing what they had gone through during their fieldwork stage, the students were able to bring together their experiences and started to express their concern about the validity and reliability of the information collected as well as the sufficiency of the data in describing social situations. This was a particularly valuable finding as the students were able to demonstrate better insight into the methodology of data collection in a practical situation.

Concerning students' attitudes, half of the respondents reported that their interest in surveys remained unchanged. Among the other half, the ratio of students reporting that their interest had increased to those who said it had decreased was 2:3. Although it seems that some students grew less interested in surveys, 80% of the respondents in fact responded that they would like to know more about them. These findings looked contradictory and were clarified during the group discussions. Students said that they wanted to know more about surveys because they had taken part only in the interviewing stage and had not had a chance to learn about the other components of a survey. The students who responded that their interest had decreased meant that they had lost interest in interviewing because they had unpleasant experiences as interviewers.

3. Students' opinions about interviewing as a job

In the questionnaire, the respondents were asked whether their participation in the project fulfilled its original purpose and whether they would like to be interviewers again. Before assessing the students' opinions we need to explain that research grant committees in universities in Hong Kong usually allow very little money for surveys and hence student interviewers get a very low pay in comparison with part-time jobs they can get outside the universities. The difference in monetary rewards is growing. It is therefore crucial for research investigators to have some idea of how viable their research projects would be if they intend to recruit student interviewers in their projects. In fact, in our case study, only a quarter of the respondents went through the whole fieldwork stage and over half of them quit the job at an early stage.

Among the respondents, 30% claimed that "a greal deal" of their objective was fulfilled, 60% said "a little" and 6% said "not at all". These numbers looked optimistic and did not seem to suggest a high drop-off rate. The reasons for quitting the job were therefore worth investigating.

The major reasons put forward were "too difficult to complete an interview", "did not like being rejected" and "got another job". In the group discussion the students explained that they often had two difficulties in addition to seeking cooperation from interviewees. The first was to get in touch with the selected households. This is typical

in Hong Kong as many residents live in high-rise buildings with guards employed to stop non-residents entering the buildings. To avoid trouble, the guards usually turned down interviewers' requests to enter the building even when student identification etc. was produced.

Their other difficulty was to get the interviewee to complete the questionnaire. For this particular survey the average time to complete a questionnaire was 45 minutes. Such a time span is considered to be quite long in the very fast pace of Hong Kong. In addition to the length of the questionnaire, the last part of the questionnaire dealt with religion, death and eternity which, according to the traditional Chinese culture, are unpopular topics for discussion. Elderly people, in particular, might forbid their family members to talk about these topics, or even consider such questions offensive.

The reason "did not like to be rejected" ties in with the seeking of cooperation. Students got very frustrated when they had got through the guard's barrier and were rejected by a household member. Again the fieldwork supervisors and research investigators had explained the harsh situations and tried to prepare the students psychologically. Their frustrations, however, were much greater than they had thought, and exceeded an acceptable limit. Therefore, 60% of the respondents claimed that they would not like to be an interviewer for similar projects.

On the whole, the students regarded an interviewer's job as difficult and receiving low pay. On the other hand, they regarded their experience as highly valuable in expanding the scope of their exposure to surveys as well as to society. They would also like to encourage their friends to be interviewers in future projects.

4. The availability of relevant research projects

Students' participation in surveys is a valuable educational experience, but the implementation of such a supplementary activity is subject to the availability of relevant research projects, especially on a regular basis. Questionnaires were sent to all teaching and research staff of the university departments which tend to carry out research involving surveys. About 36% of the questionnaires were returned. Some were returned by individuals and some were returned by department heads where the past records of their departments were summarised. Some projects were reported repeatedly because they were conducted by several investigators.

Overall, the number of surveys carried out in the university and employing undergraduates as interviewers has been rather small. The earliest project reported was carried out in 1973. From this incomplete information we learnt that about 500 students had been employed in survey-related projects as interviewers since 1973. Judging from these observations there did not seem to have been an ample supply of projects to supplement the teaching of survey sampling regularly. The opportunities are, however, increasing as most of the surveys were conducted in the past three years, and within the Faculty of Social Sciences alone there are already a couple of projects lining up for this year and a number to be implemented next year. This is partly because the Government of Hong Kong has promised to give more financial support to research in tertiary institutions. Hence the availability of projects is improving. Some arrangement between the Department of Statistics and the researchers is essential and the willingness of the researchers to give consent is, of course, vital. Such cooperation

should not be too difficult to achieve since the quality of the fieldwork will be better when students are doing it to fulfill part of their course requirement.

5. Concluding remarks

One colleague in the Faculty of Medicine reported that his surveys did not involve students because he "had seen too many differences in results between student-conducted versus hired and trained interviewer-conducted surveys".

To overcome this problem, cooperation between colleagues in the Department of Statistics and the investigator is required. The students taking up the project will then be students having acquired reasonable knowledge of survey sampling and will be more likely to take up the fieldwork seriously and with enthusiasm.

Furthermore, as mentioned above, more research funding will be available in the near future, hence the demand for interviewers will increase. As the unemployment rate in Hong Kong has been consistently below 2% for a long period of time and the monetary attraction to students to take up part-time employment as interviewers will still be low, recruiting qualified interviewers for such projects will be a problem. In fact, "too little money for the workload" was quite a common reason claimed by those students in our study who quit the job before the end of the fieldwork. Cooperation between researchers and the Department of Statistics should be able to ease the manpower problem to a large extent.

In summary, involving students in properly formulated surveys, as a way of supplementing the formal survey sampling course, has been found to be fruitful in achieving a balance between theoretical and practical aspects, and in educating the data explorer and the data user. Such involvement is best implemented by notifying researchers and seeking cooperation from them. Cooperation will benefit both sides.

One difficulty could be time scheduling since the most convenient time for fieldwork is the long vacation which comes after the announcement of students' yearly academic results. If students taking survey sampling in an academic year are required to participate in some practical work, their results in the subject will not be known before the vacation which could affect students' course selection and violate certain university regulations. Some loopholes are needed to allow such a supplementary programme.

In addition, there is still the problem of the regular availability of relevant projects. Furthermore, if students are involved in different projects, the workload could be different between projects. These and other aspects might also need to be looked at.

Acknowledgement

The first author acknowledges support from the University Research Grant (University of Hong Kong) 335/017/0009.

Reference

Singh, D (1982) Teaching of survey sampling. Proceedings of the First International Conference on Teaching Statistics, 552-565.