Focus Groups and Surveys as Complementary Research Methods

A Case Example

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Combining qualitative and quantitative techniques within a single research design represents a methodological union between two divergent research traditions within sociology. Survey research, the paragon of quantitative analysis with its emphasis on measurement standardization and representativeness owes much to the Durkheim tradition of broad, comparative analysis and the search for social facts. Research approaches that favor qualitative methods to analyze social phenomena may be seen as closer descendants of Weber, emphasizing the importance of finding the subjective meaning of actors in a social setting. Because conclusions about meaning are necessarily interpretive and usually contingent on the context in which the actions take place, such qualitative analysis is typically resistant to either quantification or standardized comparison. Implicit in the two approaches to social research are fundamentally different, some might say fundamentally incompatible, views about reality and the best way to explain it. It is not surprising, then, that the respective practitioners from quantitative and qualitative domains of sociological research have been known to react with as much skepticism as enthusiasm to this eclectic mix of methods.

Our major aim here is to concretely illustrate how incorporating a qualitative approach, represented by the focus group method, into an integrated research design with a major sample survey component can enhance the quality of the resulting analysis and the confidence that can be placed in it. As elaborated in several recent publications devoted to the method, focus groups typically bring together a small number of participants from a well-defined target population to discuss a set of preselected topics under the guidance of a trained moderator (Merton, Fiske, & Kendall, 1990; Morgan, 1988). Transcripts of the discussion serve as the source of data for qualitative analysis.

Although survey and focus group techniques are derived from divergent theoretical approaches, there is nothing inherent in the methods themselves that forbids their combination. In fact, the particular strengths and limitations inherent in different methods might suit them ideally to complement one another in a unified research design. Focus groups can never claim to be representative of a much larger inferential population that surveys obtain through random sampling methods. In the first place, the selection of group participants is typically purposive and based more on suitability or convenience rather than representativeness. Second, the absolute number of focus group discussions feasible in a single research design will always be small by survey standards.¹ The time-consuming nature of data collection and textual analysis in addition to the general qualitative nature of conclusions limit the utility of large numbers of group discussions, at least for the sake of replication alone. Finally, although the level of structure imposed on discussion can vary considerably, focus groups will never be able to attain the degree of standardization possible through adherence to a fixed questionnaire format.

¹The same token, surveys lack the flexibility of qualitative approaches to pursue particular issues in any greater depth or to accommodate a wider range of explanatory categories than foreseen in the original questionnaire design. Surveys are also less adept at capturing the kind of in-depth contextual detail that focus groups can provide.

Most important from a qualitative research standpoint, survey research may be seen as hostage by its own design to conceptual research priorities of the investigators. Survey research is characterized at every step by the extraordinary unilateral control exercised over measurement and interpretation by the researchers, guided by their own theoretical concerns. The selection of items on the questionnaire certainly reflects research priorities established before data collection, even if new hypotheses can be generated and tested using the same data. Questionnaire
pretests may provide critical feedback on the choice or wording of questions, but this process is inherently conservative, sensitive to design flaws arising from questions included and not from questions omitted. In the analysis phase, the relationship between measurement categories is either tested or presumed in the modeling process, whereas the relevant context for the relationships is determined through the choice of control variables. In focus group research, both the social context of the relationships under study and the subjective meaning attached to them by the social actors themselves are allowed to emerge more or less spontaneously within the framework of discussion guidelines. While qualitative analysis need not be accepted as the authoritative truth, it can provide independent verification of original theoretical conceptualization on which an isolated survey research design relies so completely.

In summary, survey and focus group approaches to social science research each offer a distinct set of strengths and limitations that are markedly different yet potentially complementary when combined in a mixed-method research design. Given their association with different approaches to social science, however, it is essential to be clear about what theoretical assumptions are guiding the use of these methods, what are the goals of the research project, and what are the limits of interpretation of the resulting data.

Combined Uses of Focus Groups and Sample Surveys

Focus groups can be used to complement sample surveys in several ways, depending on the sequential order with which the research components are combined. Conducted before the survey, focus groups can be used to facilitate questionnaire design, from the formulation of whole question categories to fine-tuning wording on particular questions (e.g., Knodel, Havanon, & Pramaturatana, 1984; Morgan, 1988). They have also been used before surveys to anticipate survey nonresponse or refusal problems in hard-to-reach populations and to explore ways to minimize these potential sources of sampling bias (e.g., Desvousges & Frey, 1989). A second approach is to conduct focus groups among actual survey respondents shortly after the survey has taken place to evaluate the survey process. Discussions might be used to assess reaction to the survey and to trace more carefully the cognitive and social processes that influenced respondents' comprehension of survey questions and their subsequent responses. A third approach is to conduct focus groups after the survey results have already been analyzed with an aim to corroborate findings or explore in greater depth the relationships suggested by the quantitative analysis (e.g., Knodel, Chamratrithirong, & Debaalaya, 1987). Yet a fourth approach is to conduct focus groups more or less concurrently with surveys as complementary components of a unified research design. Survey questionnaire and focus group discussion guidelines are designed in advance to yield independent quantitative and qualitative research perspectives on the topics under investigation. Focus groups might be held during the same time as the survey fieldwork, with participants drawn either from the survey respondents themselves or from others who are similar or complementary in their characteristics. The results of the survey would not inform the contents of the focus group discussion guidelines, or vice versa, in the sequential manner that characterizes the previously described approaches. Instead, the survey questionnaire and the discussion guidelines would have been jointly designed before the results of either component were known. Survey data and transcribed texts from focus group discussions could then be analyzed together or independently according to the research objectives. The goal of such a complementary research design is the mutual enhancement of the analysis and understanding of each component by the other, sometimes called triangulation between qualitative and quantitative data (Denzin, 1970; Miles & Huberman, 1984; Webb et al., 1965).

This last approach is the focus of this chapter, drawing illustrations from a study of the consequences of family size for socioeconomic well-being in rural Thailand. Examples of three different ways in which the focus group findings complemented the survey results are discussed. More specifically, the examples chosen show how focus groups may be used to illustrate and confirm survey findings, how they may be used to clarify or elaborate survey results that might otherwise lead to unexpected or contradictory conclusions, and finally, how they may be used in a more exploratory fashion to suggest explanatory categories that were unanticipated at the time of project design. Before proceeding to these examples, however, a brief description of the project design is necessary.

Project Description

The concurrent use of focus groups with sample surveys was an integral part of the design of a study titled the Socioeconomic Conse-
quences of Fertility Decline for the Thai Family, conducted in 1988 in Thailand. The project was carried out by the Institute for Population Studies at Chulalongkorn University to explore the impact of dramatic changes in the demographic regime in Thailand on several dimensions of family well-being. The average family size in Thailand declined from more than six children per couple in the early 1960s to just above two children by the mid-1980s (Chayovan, Kamnuansilpa, & Knodel, 1988). This represents a remarkably short period of time for the kind of fertility transition that required half a century or more in North American and Western European countries. The purpose of the study was to test assertions commonly made by advocates of family planning in Thailand and elsewhere that fertility declines resulting in smaller average family size should yield direct short- and long-term benefits for the well-being of individual families. The addition of a focus group component allowed the study to examine the consequences of changing family size through the perceptions as well as through more objective measures gathered by the survey.

The degree of success in combining different methods in a single study may ultimately depend on a research design that can accommodate the strengths and limitations of each measurement instrument. In the study under consideration, the use of survey and focus groups was coordinated to ensure that the resulting data would be reasonably comparable. The survey was limited to two small areas that were purposively selected to exploit regional differences in the timing of the onset and subsequent pace of fertility decline. The first consisted of two adjacent districts in northern Thailand, where fertility decline began early, probably by the early 1960s, and proceeded rapidly to approach replacement level fertility by the end of the 1970s. The second site consisted of two adjacent districts in central Thailand. There fertility decline started later and proceeded at a more moderate pace than in the north.

The sample within each site was split evenly between couples with small families having a completed size of one or two children at the end of child bearing and large families defined as having four or more children. Roughly equal numbers of couples were selected in each study site and typically both husband and wife were interviewed jointly. Eligibility was limited to couples who started their child bearing between 1962 and 1974, thus controlling loosely for access to modern contraceptive methods, which started to be widely available sometime during the 1960s. A detailed description of the study design can be found in the first report of the project (Knodel, Podhisita, & Sittitrail, 1988).

The focus group component was also designed to enhance comparability between qualitative and quantitative analyses. Focus group participants were purposively selected from among survey respondents, based on considerations of convenience and suitability to contribute to a group discussion. The usual practice of choosing participants who do not know each other was not practical to enforce in a local rural setting. To minimize primary group dynamics that may impede the flow of the discussion and threaten the validity of the results, eligibility to take part in a focus group was restricted to only one member of a couple, either the husband or wife but not both. The groups consisted of seven to nine participants, one moderator and a note taker and lasted approximately 2 hours. The composition of each group was homogeneous with respect to family size. A total of 12 focus group discussions were conducted altogether, evenly divided between northern and central study sites and, within each site, between large and small families. The symmetrical design produced 3 focus groups for each family-size category in each of the two regions, sufficient to discern differences in the qualitative analysis between any two cells in this two-by-two research design. Note that the consideration of region and family size was employed to introduce a simple level of analytic control that might be similarly accomplished in a quantitative analysis through the use of statistical methods.

A uniform set of focus group guidelines was used for all sessions. Research categories reflected in the discussion guidelines were decided in advance, based on theoretical considerations and on exploratory in-depth interviews conducted during the preparatory stages of the project. The moderator maintained a relatively high level of control over the discussion, introducing general issues from the guidelines for discussion and probing or interjecting to make sure the groups covered all the essential points and to keep the conversation focused. Although the main discussion topics were generally introduced in the same order, there was a good deal of variation between groups in how the moderator introduced questions and how much discussion was devoted to any one point in the guidelines. The transcript record leaves little doubt that considerable latitude was maintained to permit free discussion of issues, unsolicited opinions and unanticipated responses. Despite these variations, the relatively uniform structure of the focus group discussions achieves a minimum level of standardization in the language of survey research that permits comparison on particular guideline questions across groups.
Analysis

Although the strategy of triangulation has been advocated for quite some time, the specific combination of focus group discussions and surveys as an integrated multimethod approach appears to be relatively recent. A primary aim of this chapter is to provide a realistic assessment of the potential for the combined use of the methods with examples of how it works in practice. We have selected examples from the study described above to suggest a range of possible applications of triangulated analysis.

The main aim of the study was to explore the relationship between completed family size and three socioeconomic outcomes: educational attainment of children, the ability to accumulate material wealth in the form of savings and assets, and the ability of women to participate in income-earning activities outside the household. Although the main conclusions of the study will not be discussed in any detail here, examples of the interplay between focus group and survey findings have been selected from each of the three outcome categories. As summarized previously, each example illustrates one of the three ways focus groups complemented survey analysis within the constraints of this research design.

Example 1: Illustration and Confirmation

The use of focus groups to illustrate and confirm conclusions from the survey analysis represents the least ambitious if most reliable objective of this type of multimethod design. To the extent that survey questions are well conceived, well understood, and accurately measured and to the extent that focus group discussions yield unbiased information from participants roughly typical of the survey population, the two should point to similar conclusions. Of course, the qualitative method inevitably adds a degree of contextual nuance that is impossible to extract from the cold parsimony of a statistical analysis. Consequently, the argument could be made that combining methods enriches the analysis, even if the substantive conclusions are the same for both.

One example of this illustrative function of focus groups is the analysis of family size and educational attainment. Theory holds that families with fewer children are better able to concentrate resources and invest proportionally more in each child’s education. Such a mechanism would be mitigated, however, if children work to pay for their own education or if costs could be defrayed by the public sector or among an extended kin network that might include the grandparents, aunts and uncles, or older siblings. Information was gathered in the survey and focus groups to explore how Thai villagers finance the education of their children, particularly past the primary level, when the cost of tuition is no longer covered by the government. The conclusions from both survey and focus groups were unequivocal: regardless of family size it is the parents and the parents alone in these rural Thai settings who are expected to shoulder the main burden of education costs. Relatives or siblings may contribute some on an occasional basis, but such support is clearly limited.

The results from the survey question on education finance are presented in Table 8.1. Alternative means of educational support were assessed for each child in a respondent’s family. Two main conclusions may be taken from these figures. The first is the low level of financial support parents receive to educate their children. With little child fostering or direct support from outside the nuclear family, the largest category of nonparental support comes from siblings within the family; 8% to 14% of children reported having given such support. Net monetary contribution of children to their own education was usually quite small, under 500 Baht or $20 U.S. The second main conclusion that can be taken from Table 8.1 is the lack of meaningful differences with respect to how small and large families shoulder education costs. Note that with respect to sibling support, typically the direction would go from older to younger siblings. Thus the largest difference found, namely for support of another sibling, is probably an artifact of the greater chance that any particular child in a large family will have younger siblings. It may also reflect the fact that the wider age difference between siblings in larger families will make it more likely that an elder sibling could be old enough to work while a younger sibling is still in school.

Evidence from the focus groups strongly confirms the survey findings and reflects some of the human complexities that enter into the decision to help or not to help. The following excerpted quotes are typical of the dominant opinions expressed in the focus groups:

Participant 1: One grandma has a lot of grandchildren. If she supports one, the others complain. The solution is to support none at all. [Large family group, central region]
Table 8.1  Percentage of Children in Small and Large Families Whose Education Was Partially Supported by Sources Other Than Parents

<table>
<thead>
<tr>
<th></th>
<th>Small Families</th>
<th>Large Families</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children who lived at least a year with someone other than parents before reaching age 12</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Children who received educational support from someone other than parents or siblings</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Children over age 12 who helped pay own educational expenses</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Children over age 12 who paid more than 500 Hait ($20 U.S.) toward their educational expenses</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Children over age 12 who provided support for siblings' education</td>
<td>8</td>
<td>14</td>
</tr>
</tbody>
</table>

NOTES: a. Includes those who covered all their expenses as well as those who covered their tuition fees.
b. Excluding children from one-child families.

Example 2: Clarification and Elaboration

The second example is drawn from the analysis of the effect of family size on material wealth accumulation. It is hypothesized that smaller families who are spared the cost of raising many children should have a relative advantage over larger families in their ability to accumulate savings, invest in housing improvements, and acquire modern consumer goods. Of course, a number of mediating factors such as educational investment or wealth status before child bearing begins may affect this empirical relationship. The task of assessing current and retrospective wealth status was left to the survey component of this study for obvious reasons (see Havanan, Knodel, & Sinnirai, 1990).

The study was also interested in how family size affects the perceived ability to accumulate material wealth, a topic well suited for a combined approach. Focus group participants were asked if the number of children in a family affects its ability to save money or afford housing improvements and consumer goods. Survey respondents from large and small families were asked to speculate on the effect of having as many or as few children as the opposite group on their relative wealth status. For example, respondents from small families were asked whether they would be able to afford more, fewer, or the same number of consumer goods if they had decided to have four or more children. Respondents from large families were asked the same question, but assuming they had decided to have two or fewer children instead. Three variants on the same question were posed for overall material well-being and two specific aspects of material wealth, consumer goods and housing quality.

The survey results shown in Table 8.2 indicate that a strong majority of respondents from large and small families—81% and 84%—respectively, perceive that families with one or two children enjoy a relative advantage over families with four or more children when gauged by overall economic status. Only a small proportion of respondents, between 5% and 8%, reported they would be better off economically with many instead of few children. The same attitudinal measure for consumer goods yielded far more equivocal results, however, seemingly inconsistent with the previous finding. Although a majority of respondents in each family size category still support the general perception that small families experience a relative advantage over large families with respect to the ability to purchase modern consumer goods, 22% or roughly one in five of small family respondents thought they would own
Table 8.2 Percentage Distribution of Perceived Effects of Opposite Family Size on Current Economic Status and Number of Consumer Goods by Actual Family Size

<table>
<thead>
<tr>
<th>Actual Family Size</th>
<th>Small</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic status if family size were opposite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Better</td>
<td>8</td>
<td>81</td>
</tr>
<tr>
<td>Worse</td>
<td>84</td>
<td>5</td>
</tr>
<tr>
<td>Same</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>Depends, don’t know</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Number of consumer goods if family size were opposite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Better</td>
<td>22</td>
<td>59</td>
</tr>
<tr>
<td>Worse</td>
<td>54</td>
<td>8</td>
</tr>
<tr>
<td>Same</td>
<td>23</td>
<td>29</td>
</tr>
<tr>
<td>Depends, don’t know</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

NOTE: Percentages do not necessarily sum to 100 due to rounding.

more if they had a larger family. Moreover, a relatively high proportion of respondents from both family size categories thought the number of children would not make a difference one way or the other. How can these attitudinal measures be reconciled?

The focus group discussions on this topic helped clarify the relationship of family size to material wealth accumulation. Two points emerge from the focus group analysis that suggest the hidden logic behind the somewhat inconsistent findings of the survey. First, the extent to which children detract from the ability to accumulate wealth is a function of where they stand in the life course. There was strong consensus that while children were still dependent, and especially when they were attending school, they represented a distinct economic burden on the family. In a poor rural setting where cash incomes are low, many children of school age or below can represent a real economic drain on the couple’s finances. The length of time children can be net contributors to the family income is ultimately limited by marriage, after which little direct support to the parental family from either sons or daughters can be expected. Before marriage, however, children who are old enough to work for a wage or help with family farm work or home improvement may become real assets to the family’s economic status. In addition, children themselves often provide the main incentives to buy modern consumer goods, even sometimes lobbying their parents to make purchases and offering to share the costs.

Moderator: And the children, when they get some money from their work, do they help you pay for these things, when they grow up?

Participant 1: Have they separated their family from us [the parents]?

Moderator: Suppose they still live with you.

Participant 1: Then they do help. Like when they get some money from cutting sugar cane, we’ll contribute for a television.

Participant 2: Yes, contribute.

Participant 3: They’ll spend more than us.

Participant 1: They’ll say, “Let’s get a TV, Dad.”

Participant 2: [We respond,] “Let’s help each other if you want one.”

[Large family group, northern region]

Participants 1 and 2: Children won’t help us any more after they get married. They help themselves.

Participant 3: They help their spouse and children.

Participant 4: After they have left home, they belong to a different family. They will help only when it is necessary or an emergency.

[Large family group, northern region]

The discrepant results of the attitudinal measures on the survey can then be understood as the result of poorly conceived question wording that did not anticipate either life course dynamics underlying the link between family size and material wealth or the active role of children themselves in the accumulation of material wealth. This particular point may be trivial in itself, but it exposes a potentially important role of triangulation in the interpretation and explanation of study results. Two independent observations are better than one, and similar conclusions derived from different methodological approaches are stronger than those derived from one approach alone. In this case, triangulation
revealed a conceptual flaw in the survey instrument that alone might lead to erroneous or contradictory interpretations.

Example 3: Determination of New Explanatory Categories

In its most ambitious form, triangulation involves the complementary use of methods to examine different dimensions of the same underlying concept, thereby arriving at a better understanding than would be possible using either approach alone. This last example, from the analysis of the effects of family size on women’s employment, illustrates the use of focus groups to suggest a new explanatory category that was not fully anticipated at the time that the project was being designed and, moreover, would have been difficult to accommodate within the more rigid constraints of the survey questionnaire.

The study of this complex subject is simplified to some extent by the virtually universal precedent in rural Thailand for women to participate in agricultural and income-earning activities, often working together with their husbands. Consequently, women’s work cannot be seen as a matter of individual tastes or preferences. Rather work appears to be more of a cultural and economic imperative for women, one that poses competing demands on time devoted to child care. The fertility-work relationship in this setting can be reduced to three dimensions: exclusion of women from income-earning activities while dependent children are present, temporary interruption of women’s work for a variable period following each birth, and interference with women’s work when child care and work responsibilities overlap.

Both the survey and focus groups were used to explore the first two dimensions, and both provided mutually confirmatory information. The exclusion of women from income-earning activities to assume full-time child-rearing responsibilities can be quickly ruled out as a viable alternative for rural Thai women. Detailed retrospective birth and work histories collected by the survey reveal that more than 90% of women worked between marriage and their first birth, between every pair of consecutive births and following the birth of their last child (Podhisita, Havanan, Knodel, & Sittitrai, 1990). The inescapable conclusion is that regardless of completed family size or birth order, virtually all women contribute directly to household economic productive activities. Qualitative analysis yields similar conclusions. The contribution to the household income by women was frequently described as a matter of necessity, making full-time child care a fanciful notion at best.

If we don’t go out to work, we won’t have anything to eat. No food to take in if we spend all of our time bringing up children only.

[Small family group, northern region]

The extent to which child rearing and ultimately family size relates to the temporary interruption of economic activity for women was also explored in the survey and focus group discussions. Quantitative analyses of survey data seen in Table 8.3 show very slight differences between small and large families in the median length of time that women spent away from work outside the home after each birth, on the order of 2 weeks. For both family sizes, the time of work interruption was short, between 2 and 4 months on average. Consequently, the survey suggests that the only real effect of family size on women’s work would appear in the cumulative sum of time spent not working after every birth. A woman with six children by this calculation would spend up to 1 year longer away from work than a woman having two children—a relatively insignificant difference when measured out over a full lifetime (Podhisita et al., 1990).

Focus groups similarly found little difference between small and large family groups with respect to the timing of work resumption following birth. Most participants emphasized the economic pressure placed on the household and the husband when the wife is not working, and the strong incentives to return to work as soon as the child is old enough to accompany the mother out to the fields.

An additional dimension of the relationship between family size and women’s work emerged from the focus group discussions, namely the tendency of child care to interfere with the productivity of the mother once she resumes economic activity following the child’s birth and initial withdrawal from the labor force. The focus group discussions also make clear that, as in the case of education finance, rural parents must assume almost all of the responsibilities for early child care themselves. Until children reach school age, little support outside the family is available. Thus although rural Thai mothers manage to accommodate both work and child care at the same time, it often comes at some cost to their economic productivity. Even if we had been fully cognizant of this effect at the time of the study design, we doubt there would have been any easy
way to obtain survey data to quantify work interference. As the following quotes make clear, the focus group transcripts suggest that work interference represents an extremely salient factor in the view of villagers and an important if poorly measured cost of high fertility.

[We are] very busy! While the mother works, the child asks for this and that. Now food, now drink. The mother has to frequently leave her work to take care of the child. She can't work fully.

[Small family group, northern region]

Moderator: When they are still breast feeding, do you still go out to work?

Participant 1: We do. If there's nobody to take care of him, we take him with us.

Moderator: Is it hard?

Participant 2: Quite hard. We can work only when the child is asleep. When they're awake, we can't.

Participant 3: [She] has to feed him.

Participant 4: If the child is easy, that helps because he'll sleep quite long. He'll get up to be fed before noon. But if it's a difficult child, he'll be crying when we haven't finished transplanting two bunches of sprouts, then we'll have to tend to them. Then they sleep, we resume work.

[Large family group, northern region]

The analysis of the relationship between family size and women's work demonstrates the truly independent yet complementary use of survey and focus group methods to measure one underlying concept. Focus groups are clearly limited in their ability to produce detailed individual-level information that allow the kind of retrospective birth and work histories seen in Table 8.3. Surveys suffer from their selectivity in measuring only that which can be easily quantified. Ardent advocates for either method might argue that this study might be done using only one methodological approach, but it seems clear that the combined approach in the project under discussion has extended the limits of the analysis and contributed to a better understanding of the phenomenon under study.

Table 8.3 Median Number of Months the Mother Is not Economically Active in Her Main Occupation Following the Birth of a Child, by Order of Birth and Family Size

<table>
<thead>
<tr>
<th>Order of Birth</th>
<th>Small Family</th>
<th>Large Family</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
<td>N</td>
</tr>
<tr>
<td>After 1st birth</td>
<td>3.5</td>
<td>302</td>
</tr>
<tr>
<td>After 2nd birth</td>
<td>3.4</td>
<td>281</td>
</tr>
<tr>
<td>After 3rd birth</td>
<td>2.1</td>
<td>45</td>
</tr>
<tr>
<td>After 4th birth</td>
<td>—</td>
<td>10</td>
</tr>
<tr>
<td>After 5th birth</td>
<td>—</td>
<td>2</td>
</tr>
<tr>
<td>After 6th birth</td>
<td>—</td>
<td>2</td>
</tr>
</tbody>
</table>


Conclusion

The preceding examples demonstrate the ability of focus groups and surveys to complement each other in a social science study. When they are concurrently designed and implemented, focus groups and surveys provide asymmetrical but independent observations of the study population that strengthen the ability to draw conclusions as well as confidence in the nature of the conclusions themselves. When surveys and focus groups point to the same conclusions, the results of independent analyses tend to confirm each other. When analysis of either one appears to be internally inconsistent or contradictory, the other source of data may help to elaborate or clarify the underlying mechanisms that produce these inconsistencies. On those occasions in which surveys and focus groups examine different dimensions of the same underlying concepts, such as the relationship between women's work and fertility examined above, the results may lead to deeper insights into the nature of those concepts than would be possible using either methodological approach alone.

Before the implementation of the study, in the design phase of focus group guidelines and survey questionnaire, it is impossible to plan or predict how analyses will be distributed among these three possible outcomes. Unpredictability means that investment in a complementary design is a risk with no guaranteed gains, but on the other hand the gains possible usually justify the extra effort involved, and in some respect,
it is precisely the unpredictability of outcomes that adds to the interest and excitement of doing this kind of research.

From a broad social science perspective, the justification for integrating survey and focus group methods might best be summarized as the potential gains to the validity of conclusions from any one study and to the generation of new hypotheses that advance research agendas. Mutual enhancement of validity provides the underlying theme for the illustrative examples of triangulation selected above. The survey research component strengthens external validity or representativeness that are the inherent weakness of small-scale, in-depth qualitative studies (Campbell & Stanley, 1966; Cook & Campbell, 1979). The focus group component in this integrated design reinforces internal validity, or the extent to which conclusions from the analysis can be said to be true of the original study population. In the alternate design language employed by Kish (1987), such a combination of qualitative and quantitative methods would mutually enhance the respective qualities of realism and representation that can be used to judge quasi-experimental and observational studies.

From the standpoint of advancing research agendas, two independent measures of the same phenomena, particularly if they involve separate methodologies, should yield not only greater analytic leverage than one approach alone but very likely conflicting, inconsistent, or unexpected results that naturally prompt the development of new explanatory hypotheses. The more conventional path to advancing theory is through repeated measurement over time, incorporating the findings from one study into the design of those that follow. Mixed method approaches simply concentrate and accelerate the process by combining the testing of hypotheses with the generation of new ones in the same step. In this respect, the combination of surveys and focus groups also synthesizes elements of grounded theory with a more conservative hypothesis-testing approach (Glaser & Strauss, 1967).

The most problematic aspect of combining different methodologies is the comparability of results. A basic ability to generalize the findings of both surveys and focus groups to some common inferential population is implicit in the notion of triangulation. Yet the same properties that make these two methods mutually complementary from a substantive analytic point of view—the breadth and abstracted individual-level detail possible in surveys and the narrow focus and depth of contextual detail possible in focus groups—tend to restrict the ability to reach common conclusions about a study population, at least not without bold simplifying assumptions. This is the juncture where instincts learned through the different training received by qualitative and quantitative researchers begin to make them feel uncomfortable. Proponents favoring quantitative approaches caution skepticism of anything labeled typical without careful definition and positivistic verifications of the fact. Qualitative researchers may be equally skeptical of the need to generalize at all. Generalization and interpretation will continue to be a point of issue when combining methods. In the study reviewed above at least, we believe we have shown that appropriate research design can address potential incompatibilities in the analysis of these two different but complementary methods.

Notes

1. The number of focus groups in the type of research design described in this chapter is determined by the structure of the analysis. Focus groups were organized according to break and control characteristics to provide analytic contrasts between groups (see Kaodel, Sittitra, & Brown, 1990). Within any comparison category, three focus groups were conducted to reduce the possibility that the analysis would be based on an unusual set of participants or an aberrant discussion dynamic. In principle, a study design calling for numerous contrast categories and multiple groups within each category might require very large numbers of discussion sessions, although the potential cost in time and money would be considerable.

2. This use of focus groups would yield at best qualitative, approximate indicators of response error or bias. The literature reviewed by Groves (1989) on cognitive and social processes that give rise to survey error or bias relies primarily on measures embedded in the survey instrument itself. This type of interpenetrated design allows more precise estimation of error or bias for particular response items. It assumes, however, that questionnaire designers anticipate measurement error in advance.

3. It is not necessary, however, that the focus group sessions and the survey be strictly concurrent. Under some circumstances it might be more convenient for logistical reasons to conduct the fieldwork of each component separately, although typically there would not be a long gap between them.

4. The decision to limit the study frame to two sites rather than conducting a nationally representative sample was based as much on budget constraints as on compatibility between surveys and focus groups.
5. For a thorough exposition of the guiding principles and practice of this application of focus group research, see Knodel, Sittitrai, and Brown (1990).

6. All tables and focus group quotations presented below are taken from previously published reports issued in connection with the project. Each of the tables indicates the specific reference from which it is taken. In the case of the focus group quotations, those dealing with education are taken from Knodel, Havanon, and Sittitrai (1990). All other focus group quotations come from Sittitrai, Wolff, Knodel, Havanon, and Poehlitis (1991).

Selecting Individual or Group Interviews

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Reverend Alex Trevor has devoted his life to helping people with their problems, but he has not had much success with his own problem of living with diabetes. Trevor was diagnosed with diabetes 17 years ago at the age of 52 and for 16 years has been on insulin. When he talks about having diabetes, his stories center around his struggle with weight, issues surrounding food, and the technical aspects of daily glucose monitoring and insulin injections. He describes his doctor throwing up his hands and proclaiming, “I don’t know what to do with you.” This, Trevor believes, is the worst thing a doctor can do for him. Overall, Trevor wishes that technology and science had more to offer. Nevertheless, Trevor is now guardedly optimistic since changing to a specialist in endocrinology whom he hopes will be more knowledgeable about the day-to-day reality of living with diabetes and more familiar with recent advances in diabetes care.

Herbert Oliver is a family physician who has cared for many people with diabetes during 20 years of private practice. During the early years of his practice, he thinks he tried to “medical school them to death,” resulting in his losing patients. He now tries to “soft-pedal the whole thing,” thinking it is sufficient to “see their random blood sugar under 200.” He prefers that his patients not be on insulin and thinks the vast