METHODOLOGICAL ANALYSIS OF QUALITATIVE AND QUANTITATIVE APPROACH

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Abstrak

Dalam penelitian ilmu sosial dikenal dua pendekatan yaitu pendekatan kuantitatif dan kualitatif yang masing-masing menganggap dirinya lebih unggul baik dari sisi reliabilitas maupun dari sisi validitas hasil penelitian. Namun perkembangan terakhir menunjukkan bahwa kedua pendekatan ini semakin saling mendekat dan kedua pendekatan tersebut memberikan kontribusi untuk mengurangi kekurangannya masing-masing sebagaimana diproposisikan pentingnya triangulasi dalam pengumpulan data atau uji hipotesis. Walaupun demikian, kecenderungan untuk memilih salah satu pendekatan dapat tetap diapresiasi sejauh didasari oleh relevansi atau kesesuaiannya dengan pertanyaan penelitian. Berkembangnya pendekatan multi-disiplin atau bahkan interdisiplin guna memahami lebih komprehensif fenomena sosial, betapapun sebagian ahli resisten akan kecenderungan baru ini, menunjukkan bahwa pemahaman komprehensif lebih merupakan sumbangan dari penggunaan berbagai metode dan teori, bukan sebaliknya.

Kata Kunci: Metodologi, Pendekatan Kuantitatif dan Kualitatif, Triangulasi, Pertanyaan Penelitian.

This article discusses two methodological points of view of research namely qualitative and quantitative research. These are important topics for discussion (again), as some researchers see sharp distinctive procedures and methods that cannot entirely be reconciled. In reality, these two methods indeed can be combined to fulfill each other weaknesses. To achieve this goal, this article shall compare succinctly and concisely the two approaches in the following three sections. The first section outlines one of the very popular methods of a quantitative approach that is the survey. Survey has been widely used in time of

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election in order to predict the winner or the loser of the event. Survey has also been applied in research among academics. To investigate further, this paper examines one study that applied this approach. In this section, the article also analyses the epistemological assumptions, the limitation as well as benefits of adopting survey.

The next section outlines a qualitative approach. Here, the article discusses the commonly used method in a qualitative study that is the unstructured interview. To make a balance evaluation, this article also examines one study that used this unstructured interview. This article goes further to examine the epistemological assumptions, strengths, and limitations as well as benefits of this unstructured interview. Then, this articles argues that a combined method, --now known as triangulation-- shall be encouraged by briefly offers a short analysis of one study benefited from this approach. To put it succinctly, qualitative and quantitative approaches should have an equal status and interact. Finally, several conclusions are put forward to highlights several important points.

Survey in Quantitative Study

Survey is one method of collecting, organizing and analyzing data. As a methodological technique, survey requires a systematic collection of data from samples through the use of a self-administered questionnaire of a structured interview. Through a survey, a group of people are observed at one point in a certain time and asked about potential that is widely acceptable. The survey method is able to generate data, which can describe, compare and establish causal relations among variables. This correlation is possible because survey is characterized by a structured or systematic set of data called a variable by case data matrix, which means that the researcher collects information about the same variables or characteristics from at least two or more cases and ends up with a data matrix. The variable by case matrix is fundamental for the survey analysis based on a comparison of cases. This method of data is the second distinguishing feature of a survey (Rockan, et. Al., 1996:3).

The sample of a survey is usually divided into sub-groups that differ in the variables being analyzed. For example, if attitudes toward secularization among young Muslim people are being studied, the researcher will divide the sample into two groups, those pious ones

(*santri*) and those are not (*abangan*). By developing variables, the researcher intends to 'objectively' measure respondents' attitude and behavior (Lourie and Sullivan, 2001:126).

There are number of ways to generate data using survey, such as questionnaires (the most common), structured interviews, and content analysis. The unit of analysis can be individuals, countries, a period of time, or virtually anything as long as one collect attributes of that case (Miller, 1982:15-16).

Survey cannot be considered atheoretical if data is explained inductively and deductively involving two related processes: theory construction and theory testing. Survey, according to de Vaus, can also explain the meaningful aspects of social behavior because finding a correlation between two variables or more is possible by using multivariate analysis. Thus, the meaning of particular variables for particular cases can be examined within the context of other variables (1997:331-332).

Multivariate analysis is the basic model of inference underlying the survey. It involves several steps, as follows: cross-classifying two variables, one independent and dependent; measuring the degree of association between them; and introducing a third variables to assess its effect upon the original association. Before we do this analysis, we first have to demonstrate *co*-variance between the primary variables. The causal status of variables, namely test, independent or dependents should also be anticipated. This anticipation must be theoretically directed, though as suggested by Denzin, there is an emergent quality to the analytic process that cannot be ignored. This means that a relationship may not appear when it is supposed to, or it could disappear under the effect of unanticipated variables such as intrinsic factors. Therefore, multivariate analysis should be positioned as a strategy of analysis, not as a strategy of design (Denzin, 2009:140).

There are six basic types of survey designs that should be mentioned but will not explained due to limited space of this article-- namely the one-shot case study; the one-group pre-test—post-test design; the static-group comparison survey; the same-group recurrent-times-series survey without comparison groups, the different-group recurrent-time-series without comparison groups; and the same group recurrent-times-series with comparison groups. The types of survey designs share several features as follows: the use of questionnaire or

structured interview, collection of data from large numbers of persons; and the use of multivariate analysis as the major method of analysis (Denzin, 2009:145).

Although survey is a very popular and useful method in collecting intended data, the researcher should consider several problems that inherently attached to survey. One of the most difficult problems to solve is the question of whether or not the survey is appropriate for the analysis of complex forms of human interactions. Human interactions always change, while the survey method that relies on structured questionnaires is ill-equipped to capture this aspect of human behavior. As Argued by Denzin, where interactional patterns are continually being redefines survey will be found insufficient due to its structured and relatively inflexible nature (1994:146). This problem has challenged sociologists to use another method, namely the qualitative approach that will be explained in the second section.

Analyzing an examples of the survey

To begin an analysis, this article will locate, discuss, and evaluate a study that adopts the research approach outlined above. The Quantitative analysis of social survey data that will be analyzed here, is a book written Brian Graetz and Ian McAllisster (1988), namely "Dimensions of Australian Society" in which they use a variety of statistical applications and procedures. The original data came from a kind of survey in which the respondents are varies from different status and classes. Descriptive statistics are used to provide information about samples. Elementary technique is used to describe samples attributes (univariate analysis), and relationships (bivariate analysis), and multivariate statistics is also used to investigate complex relationships in a systematic way. They also use multiple regressions to examine causal relations among several variables simultaneously by removing or controlling for confounding influences. Factor analysis has also been used to explore the multi-dimensional measurement of concepts and to improve the quality of the measure for analysis.

To estimate further likely values for population characteristics and relationship, they also apply inferential statistics. The values are usually expressed in terms of statistical significance in which it will then be reasonably safe to conclude that a sample relationships also occurs within the population.

Sociological research that uses survey procedures are based on several epistemological assumption (neo-positivist sociology) as follows:

(1) Sociology is an empirical science, therefore theories must be tested because the empirical findings are the touchstone of the truth that could falsify theories or hypotheses.

(2) Science do start with theoretical propositions, it does not start with the observation of facts.

(3) Deductive logical reasoning (DL) is the only reasonably way of thinking.

The function of empirical research from a methodological point of view is a critical instrument of theoretical statements. This deductive approach implies:

(1) Freedom to construct theories and hypothesis;

(2) Theories and hypotheses must be reliable to empirical scrutiny;

(3) Falsification is what researchers have to do;

(4) The rules of logic (syllogism) must be applied in the process of the research;

(5) The research findings are temporal.

From this methodological point of view, good research is one that minimizes interpretation-freedom afterwards. For this reason, every researcher must make his/her procedures as explicit as possible because academic enterprises are certainly open to public that guarantee criticism. The objectivity of the researcher is also guaranteed by establishing standard-procedures. Through standardized procedures, any personal bias is, --and have to be-- excluded. In this approach, any researcher must define the object of study and operationalize concept and methods as accurately as possible and keep distance from his/her study object to achieve highly possible degree of objectivity. Social scientists, in this approach, act like a physical scientist when he/she must meet his/her object of the study. From this methodological point of view, the criteria for true scientific findings are the degree of correspondence of the theoretical formulation with the empirical findings (Durkheim, 1982: 62; Cochrane, 1973:374).

Turning back to the example of this approach, Graetz and McAllister examine key dimensions of social and political behavior in Australia. They examine family formation and attachment, the impact of gender within and outside the home and on ethnic and religious

cleavages. They also examine education and its outcome, processes of social mobility and occupational attainments, attitudes towards inequality and class relations, as well as political issues and voting behavior. This variety of topics could be investigated relatively quickly by using survey method and this is one of its benefits.

Graetz and McAllister's strategy is theory testing. They begin each topic with a review of existing theory and research, and complement this with basic descriptive information and elementary analysis. They proceed to more detailed and systematic analysis using multivariate statistical procedures. Interestingly, they have attempted to locate their explanation within the body of knowledge but they do so in recognition of available evidence. Their strategy is on the right track because they see knowledge and understanding are derived not only from a body of theories but must be tested by a sound empirical base in the light of properly constructed research evidence.

Their research report is primarily based on data from the 1984-1985 Australian National Social Survey. The data are used to quantify the magnitude of various individual attributes, group characteristics and social processes and to generalize sample findings to the broader Australian population. This is possible because sampling procedures give the possibility generalizing the research results. This is an important benefit of survey research especially for sponsors (often state-departments) that are more interested in information valid for the whole population (or part of it) than in detailed information about specific individual or small groups, which are generally the object of participant observations or unstructured interviews.

Another benefit of survey research that should be mentioned here is that it is less risky. The goals of the research project are clear, that is, to test theories related to socio-economic, socio-cultural and socio-political aspects of Australian society through available data. It seems that survey research has higher scores on the reliability continuum. The survey research is advantaged by an enormous achievement of a quantitative analysis especially multivariate ones like factor analysis, correlation analysis, discriminant analysis and various attitude scaling. Thus, though their research scope is broad, Graetz and McAllister have effectively described and analyzed several dimensions of Australian society and compare their findings with previous research findings.

However, it should be acknowledged that survey method also have limitations, one of them is that its research findings seem superficial. In terms of church attendance, for instance, the researchers simply describe how often respondents attend religious services, and then determine that the more often they attend the more religious they are. In fact, this is not always the case, because attendance could be affected by, for example, social pressure, not religious zeal. This limitation is due to structured data that is ill-equipped to capture the process-orientation of human behavior and interactions.

Another limitation is the inability of the researcher to make statement about collectivities of individuals because the researchers depend on statistical sampling models, which leave the researcher with individual observation. This is because the researcher do not use new method of structuring data collected from individuals, namely hierarchical and relational data handling technique. This technique actually enables data aggregation into various units of analysis from individuals through very complex collectivities.

If the basic scheme in social researcher is 'stimulus-interpretation-response', then the survey researcher shall stresses and emphasizes the elements stimulus and responses and reduce interpretations. It is for this reason that within qualitative research, interpretation is not taken for granted, but as an essential part of the research itself, which should be undertaken. Another solution for this problem, that should be taken, is starting with an exploration of pilot study or pretest survey. In this process, participatory observation through unstructured interviews is suitable and appropriate. This exploration of pilot study was unfortunately not undertaken by Graetz and McAllister.

Consequently, this survey research has a lower score in validity compared to the qualitative research or participant observation (this will be explored below), due to the fact that Graetz and McAllister investigate the subject from outside without understanding or even knowing the research field very well. Meanwhile, empirical knowledge is certainly *'conditio sine quo non'* for valid operationalization of theoretical concepts.

However, as long as the concern is the implementation of their analysis, it seems that they have effectively described and analyzed available data. This can be seen in their multivariate analysis in which

they use the best known technique, namely multiple regression particularly Ordinary Least Square (OLS) regression. This regression is measured on an interval scale, and the relationship between them are linear and additive.

This regression analysis can effectively provide a good deal of valuable data especially about relationships between variables. For example, two sets of estimates for the strength and direction of causal association can be gained by standardized partial regression coefficients (Betas). These measures vary between scores of 0 (no association) and 1 (perfect association).[1] For example, a Beta of .32 for the relationship between devotion to God and national aims such as 'fight crime', suggests that there is a moderate causal link between them. A further illustration can be seen on page 140, Table 5.13 which shows that the consequences of religion are confined to specific domains. This table confirms that religion, indicated by church attendance, devotion and belief (betas .18 and .17 respectively) is an important determinant of stance on moral issues. It would go beyond the scope of this article to evaluate their report in much more detail. In the next section, this paper will now examine a qualitative approach.

Qualitative Approach: Unstructured Interview

Interview is the most popular qualitative sociological method. It may be defined that interview is a face-to-face verbal interchange, which attempts to get information or expression of opinions or belief from interviewee (Maccaby, 1984). There are at least three types of interviews. The first one is schedule-standardized interview in which the order and wording of all questions are exactly the same for each respondent. The second one is the non scheduled-standardized interview or unstructured schedule interview which attempts to elicit certain types of information from all informants. In this type of interview, the particular phrasing of questions and their order are redefined to fit each informant's characteristics. The third one is the non-standard interview or unstructured interview which has no pre specified set and order. This

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[1] A Study that applies this measure has also been conducted by the Centre of Social and Cultural Studies, to see causal association between several variables namely social capital, anomie, socio-economic conditions and collective actions. See further Syahra R., *et.al.,* 2007, *Social Early Warning System for Post Tsunami in Ac eh*. Jakarta: PMB-LIPI, 2007.

third type is actually the logical extension of the non-schedule standardized and rest on basically similar assumptions, such as that questions must be formulated in words familiar to those interviewed; no fixed order of question is satisfactory to all informants; and an equivalence of meaning for all respondents can be achieved through tailoring the question and their sequence (Denzin, 2009:106-107). Due to a qualitatively characteristic we are now evaluating, this paper focuses only on the third one.

Generally, the interviewer and interviewee came from totally different social worlds, so there is a possibility that respondents consider the interviewer as critical or even ignorant. Therefore, it is important to establish initial relationship between the researcher and the researched. This should be an emotionally and intellectually natural process in familiarizing oneself with the situation of the interview because in this situation, people can spontaneously enter into discussion with their friends (Denzin, 2009:111).

In interviews, the researcher should be seen as a friend with confident who has an interest and sympathy to understand the respondent's life. This can not be achieved unless the interviewer is prepared with detailed knowledge about the informants, which can be obtained through observing people (Bailey, 1988:183-184). As stated by Webb, the unstructured interview as a "conversation with purpose" should be pleasing to the informants. If this can be achieved, the unstructured interview seems to be an agreeable form of social intercourse. The advantage of the unstructured interview is that it can generate rich detailed data (1985: 139).

In order to achieve an effective interview, informants should be given a chance to determine where and when the interview shall take place because the most effective sequence for any respondent is determined by his/her readiness and willingness. Creative interviewing is also another requirement in achieving an effective interview. This should involve attentive and creative listening, which demands trust and empathetic relationships. Then, the interviewer will be able to enter into a relationship intended by informants, because they can create the ground for understanding, which include the process of interpreting, knowing and comprehending the meaning expressed, intended and felt by another. One strategy to have an empathetic relationship is that respondents and interviewers should be placed in an equal position.

Middle class interviewers who contact lower class persons, for example, should not force their morality upon the informants or talk down to them (Denzin, 2009:109-115).

It is argued that a good interview is also a participant observation. By this mean that the interviewer must participate in life experiences of a given informants and observe them during the interview conversation. The interview in short, should attempt to become a part of the social world of experiences he/she is observing. Thus, the interview should not be treated as an atomized research technique (Denzin, 2009:118).

The very basis of all interviews is questions which are crucial in every interview. These questions make the interview possible. The interview should not end until the interviewer has got satisfactory answers to the research questions. There are three main types of questions which are crucial in every interview. The first one is descriptive question that allow informants to provide statements about their activities. The second is structural questions that intend to explore how informants organize their knowledge and the third one is contrast questions. Contrast questions allow informants to discuss the meaning of situations and provide a chance for comparisons to take place between events and situation in the informants' world (Burgess, 1994:112).

Researchers, however, should pay attention to several problems involved in interviews. These include rapport, question wording, loaded questions and time. Rapport is simply defined as depicting the degree to which interviewers and interviewees are able to take one another's role. According to Burgess (1994:120), to avoid these problems, the interviewer must constantly monitor their direction, depth, the detail of the interview, and the topic to include and/or exclude.

As conversations, interviews are inevitably gendered production. This means that gender stratification of the larger society can affect the interview situation. In a patriarchal society where males interrupt and speak more than females, and in certain studies in which the interviewers are men, this situation will affect an interview process, the informants will have greater power to control the process (Oakley, 1991:30).

Personal experience may also be a crucial issue in conducting interviews. Burgess, for example, in the course of his own research, notes that being a teacher, his teacher-colleagues and pupils often asked him about his biography, about his previous teaching experience and his view of school. This has influenced some of his unstructured interviews, where discussion on evaluation of social situation took place. Beside gender and personal experience; age, social status, race and ethnicity will also create an immediate impression of the interviewer and will partly pace limits on the roles, which an interview may adopt. Therefore, it is a good advice to keep as closely as possible the characteristic of respondents and interviewers. In other words, researchers who employ interviews in their field research should consider the extent to which their personal characteristics will influence the practice of interviewing (Burgess, 1994:06).

Having explored this field research of data collections, then, a question need to be proposed: how this unstructured interview is applied? To answer this question, Aronson's study will be examined succinctly in the following section.

Based on a qualitative study (unstructured interviews) of women who care for their elderly mothers, Aronson explores women's experiences of feeling responsible for elderly relatives. According to her, the material constraints shaping women's sense of obligation emerged from the minimal provision of public services for old people and the relative absence of brothers and husbands from family care-giving. This is confirmed by ideologies and assumption about women's association with caring and family ties that permeate subjects' accounts of their situation (Aronson, 1992:15-19).

The data are drawn from an unstructured interview of women who identified as relying on the support of daughters or those feeling responsible for their mother. Her report actually focuses on the experiences of 28 women between the ages of 35 and 80. They were taped throughout the interview. These women identified themselves as key to their mother's informal support system that is a range of practical assistance such as cleaning, transportation and personal care, help with heavy shopping and so on.

This unstructured interview and qualitative research in general are epistemologically based on the perspective of interpretative sociology that treats social realities as quite different from

natural/physical realities. People are active and reactive human being, which in turn create social realities. 'Objectivity' of social realities is not similar to physical realities. Culture pattern, social institutions, social norms, values are not determinant factors of human being because at the same time human beings also create these cultural elements. Giddens's structuration depicts these social phenomena.[2] In everyday life, human beings construct their own world in a continuing process of their interpretation and exchanges of meaning.

Back to Aronson qualitative research, she classified the study subjects into three groups. The first group consisted of eighteen people (aged 35-63) who described their current feeling of responsibility toward their aging mothers. The second group consisted of ten people (aged 59-74) who spoke retrospectively about assisting their mothers in the past. The remaining group consisted of five people (aged 68-80) who described more distant recollections of assisting their mothers. Her strategy to include both retrospective and current feeling is beneficial because it permits exploration of women's experiences of responsibility at different stages of their whole lives, which in turn, can emphasize social processes and the dynamic aspects of feeling of responsibility.

The researcher sought subjects who had worked outside the home and had some degree of economic independence. None of them was in serious financial hardship. This enables her to maximize the likelihood of finding respondents who questioned assumption about women's primary association with home and family ties. This is another benefit of interviews in which she can *intensively* obtain data from the right person.

The sample is taken from membership of a provincial association of retired and working school teachers by snowball sampling. In other words, the study subject is chosen by virtue of an occupational affiliation, rather than by virtue of their identification as service recipients with problem. This is a good strategy to explore the ordinary processes of assuming responsibility for their elderly mothers, rather than a critical care-giving situation, Most of subject's mother, in

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[2] This expresses the reciprocal dependency of human agency and social structure. Social structures should be seen as intimately involved in the production of social action that provide the means by which human beings act and they are the outcomes of their action. See further his book, *Central Problems in Social Theory*, London: Macmillan (1979).

fact, were widows living alone, experiencing a variety of chronic health conditions, which led them to rely on other for practical assistance.

However, sampling procedures used in this field research, -- that is the snowball sampling -- seems to exclude study subjects from different socio-cultural backgrounds. The reason for that is because this approach involves several informants who are asked to put the researcher in touch with their friends (and friends of their friends) who are subsequently interviewed (Burgess, 1994:55). It is a fact, for instance, that resulting sample of teachers or former teachers consisted of mainly white Canadian-born women. In other words, to some extent this approach has systematically excluded people from other socio-cultural backgrounds or other ethnic groups such as Chinese Canadian or Native Canadian women.

Instead of using the structured interview, Aronson applied the unstructured interview. It is assumed that she could not easily manipulate the situation through executing a set list of questions which have been formulated before the interview. Through unstructured interviews, she, therefore, could rephrase, discuss, and re-order questions suitable for any situation and personality.

The informants do not seemed to be in subordinate position because she consistently applied feminist methodology, -- that is sociology *for* women --, which according to Acker should fulfill three principles: the study should contribute to women's liberation through producing knowledge which can be used by women; should apply methods of obtaining knowledge which are not oppressive; and should develop a feminist critical perspective which questions dominant intellectual traditions and can reflect on its own development (Acker, 1983; 424-425).

It seems that Aronson's research has fulfilled the three principles on the ground that in her report, she tries to uncover the origin and costs to women with this care-giving patterns.. She asserts that examining women's experiences of the division of care can contribute to our understanding of the social processes, which perpetuate women's disadvantage within the social system. According to her, as may feminist critics of social policy argue, research related to the experience of female family caregivers have provided us with knowledge of the sheer hard work of assisting an elderly, relative with the task of their day to day lives; the complexity of the physical and

emotional labor involved; and the implication of caring that may run counter to the caregivers own later economic independence (Aronson, 1992:2).

It seems that the notion of gender justice has become her obsession. She, for instance, asserts that exploring women as caregivers is crucial for understanding how the gender division of labor is perpetuated and based on that knowledge; possibilities for change can be gained (1992:10).

She is also able to explore how structural realities (the availability of alternative sources of assistance) and ideological forces (prevailing ideas and norms about gender roles, family ties, responsibility for others) intersect and shape women's sense of obligation. Through the unstructured interview, she can explore and identify contextual constraints that shape women's obligations, namely the limit of public responsibility and the limits of male family members as well as internal constraints that is women's internal limits. This women's sense of obligation can be representatively depicted from within perspectives (an inside-view). It is one reason why qualitative approaches have a higher score in validity than quantitative ones.

Repeatedly unable to locate her mother in nursing home, she finally met the head nurse: (the limits of public service):

> I said: "I want the doctor to know that I thing this should be investigated for home care. Because if don't ask for it, you don't get it." [Interviewer]: "and the system responded or...? " "A little grudgingly, a little grudgingly… I had to fight or it. I felt it should have been offered. I felt somebody should have been there, talking to my mother and finding out what was her situation. "

One women, married with small children, noted the differences between herself and her brother after their father died three years before the interview: [the limits of men's responsibility].

> "My brother, was still not married so he was very supportive, too. But, you know, he is a male—he doesn't realize what little things…he is very good, but just doesn't think…just: 'Oh, she'll be home with nobody there…' So, just a phone call even or; "I think I'll go and do my washing over there tonight—it'll be an excuse to go and I'll get something done in the meantime."

They spoke of setting limits in terms of physical space, finances, time, energy and a hierarchy of commitments to others [women setting the limits].

> "I push came to shove, she would end up here (sharing informant's home). I'm hoping in some ways that she doesn't… because I think it'd be very difficult for her. I know it's going to be difficult for me". [47 year old subject, separated and working to support herself and two children].

> "I used to go over there every evening and stay. My husband really put up with a lot…he missed me and I cut down to five days a week. [79 year old informant, looking back on caring for her confused and frail mother 20 years before].

> She [mother] was out here quite a bit…"I just had to draw the line"…."I couldnk't, you know….keeping an eye" -- they 're teenagers, but sometimes I think they take more care than when they're younger, you know. [47 year old subject, working part-time, with two children].

As can be seen, her interviews can effectively depict women's efforts to set limits on their obligation to their mothers served to resolve some of the tension between the expectation that they faced as daughters and their own will for themselves. Inner conflict is 'the price' which must be paid for resolution. This inner conflict has prevented transition of their dilemmas into complaints or demand for more shared responses for their elderly mothers' needs.

However, due to lack of standardized research procedures, this research finding (using unstructured interview) is quite difficult to compare with previous studies. This is complicated by the fact that the interview processes are also influenced by age, social status, ethnicity and gender of the interviewer. In interview as a gendered production, for example, findings might be different if the interviews of two studies are different genders.

Another problem of unstructured interviews is that check and controls to improve the degree of 'objectivity' are limited. In Aronson's case study, for instance, it should be questioned whether or not her findings are biased because of her commitment to feminist methods. Her conclusion that women's sense of obligation is shaped by material constraints is difficult to check. That sense of obligation may be shaped by psychological factors of maternal feelings, which is usually stronger

in women's life, while material constraints may not be determinant factors. Thus, perception of the informants and interpretation of the researcher are always the real game of the qualitative research and to some extent, this is also applicable to the quantitative one.

Triangulation

Triangulation may be defined as the mixing of methods in conducting social research. This can help in validating information that may arise from an initial pilot research. Denzin (2009:236), for example, has proposed 'triangulation', namely, linking the construction of theory with the use of various research methods. This triangulation is justified by Denzin (1979, 1989. 2009) and credited by several scholars with initiating the way to integrated social research which mixes methods. To Olsen, the mixing of methodologies such as mixing the use of quantitative survey with other qualitative methods such interviews "is a more profound form of triangulation" (Olsen 2004:3).

One study that applies triangulation is conducted by a team of researchers of the Indonesian Institute of Sciences. This strategy can be read in a published book, entitled "Civic Culture of Muslim Community in a Peaceful Areas and Vulnerable Conflict Areas or *Budaya Kewargaan Komunitas Islam di Daerah Aman dan Rentan Konflik.*"[3] Data were gathered through now known as triangulation, using methods of focus group discussions, depth interviewing, and survey. The Survey was administered to capture or 'snapshot' respondents' attitude and behavior toward statements that indicate what had been conceptualized as civic cultures[4]. However, snapshot of civic cultures through survey is necessary but not enough to describe dynamic or 'cinematography' of Moslem communities' civic culture in relatively different areas representing peaceful areas and vulnerable conflict areas. Thus, depth interviewing was used to fulfill this goal. Through attitude, behavior and diverse viewpoints could cast light upon a research topic. In short, the mixing of quantitative and qualitative methods was not only aimed at validation but also at widening and deepening researchers' understanding of civic cultures among Moslem communities.

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[3]See Dundin Zaenuddin, *ed*. 2008. Budaya Kewargaan Komunitas Islam di Daerah Aman dan Rentan Konflik. Jakarta: LIPI Press, 2008.

[4]These include participation, solidarity, reciprocal trust, tolerance, equality, social networking for cooperation and association.

Conclusion

To sum up, qualitative research specifically the unstructured interview which has been an example of qualitative approaches in this article, emphasizes unstandardized methods. Meanwhile, quantitative research specifically the survey as a focus of this analysis emphasized standardized procedures and methods. However, this distinction is not as sharp as the terms suggest. In research reality, we have to face and deal with a continuum of quantification. The quantitative social scientists realized that when he/she measures anomie, deprivation, social capital, alienation and so forth, he/she is not measuring empirical objects as the physical scientists measure geological structures. Social scientists know that there are different levels of measurement. Indeed, there are interval or ratio type-level variables, but most variables in quantitative social research are nominal and ordinal level types.

Conversely, a qualitative research has also a methodological status of real value as far as qualitative researchers explain explicitly detailed information of methods applied that is compatible to the research questions which in turn can hinder biased research result. To guarantee the objectivity and reliability of data is indeed the most likely problem faced by the qualitative research. However, similarly, the quantitative approach also faces the problem of reliability and validity, if the quantitative researcher does not fully explain operationalization and the measured concept. In this context, the quantitative researcher should administer an empirical basis of respondents' view through pretest questionnaires.

Thus, there are no superior method that belittle another one. The choice of research methods and techniques depend on research problems. In certain studies, it may even be better to combine several research methods to gain benefits from them. Denzin's triangulation for instance, could be linking the construction of theory with the use of various research methods. Furthermore, in the US universities, multi-discipline or even inter-discipline approaches have been an increasing significant development in social sciences to understand and investigate comprehensively certain social phenomena. However, to elaborate these current academic phenomena would go beyond the scope of this article.

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