Consensual Quality: Bridging the Gap Between Qualitative and Quantitative Research Holy-Trinity

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ABSTRAK

The scientific "wrestling" between qualitative and quantitative approaches seems to be interesting, yet also a never-ending story in the research inquiry. A great deal of literature argue that this unfinished struggle stems from the differences in philosophical background and research method, which accompany each research approach, and even, sometimes, the personal preference and competence of the researcher. Through a systematic pursuit of a substantial classical as well as recent literature, the author try to propose a new, but actually a disregarded ancient standard in order to bridge the gap between qualitative and quantitative approaches, especially concerning the criteria of the research holy-trinity (validity, reliability, and objectivity). Except the extremists, many people, unsurprisingly, seldom dichotomize research inquiry as pure qualitative or quantitative. Some people even already try to promote consolidation between the two poles of research approach and encourage the broadening of "traditional" criteria so that they can be legitimately applied across the entire spectrum of research approaches. While alternative criteria may not in the end be feasible or even, desirable, it will certainly still be useful to prevent confusion among the newcomers in this discussion. However, these alternatives do serve to remind us that qualitative and quantitative approaches are not as discrete as many people thought earlier.

Keywords:
consensual quality, consensual, validity, quantitative, qualitative

The pursuit of high quality research seems to flourish through qualitative inquiries, following the steps of its counterpart, the quantitative approach. This trend even seems to proliferate faster due to the overwhelming demand concerning the evaluation criterion for the qualitative approaches. Unfortunately the absence of an agreement about what "valid" is, especially in researches using the qualitative approach, invite lots of debates. Through a systematic review, the author recognizes the existence of five main/cardinal positions toward the quality criteria in the qualitative research (Smith & Deemer, 2000; Spencer,

Ritchie, Lewis, and Dillon, 2003; Sia, 2004). At first glance, this situation was assumed to happen only in the qualitative inquiries, but further readings reveal hardly the almost same situation in quantitative approaches. Despite its firm and solid rules, the quality criteria in quantitative approaches also spread into few main positions either.

One of the main reason for developing a high quality research (HQR) is the commitment of many research departments and also commitment of several policy makers, including the government from several countries to conduct evidence-based policy which lately put great efforts and attentions to ensure that research and evaluation should fulfill highest standards. Both quantitative and lately the qualitative techniques are used extensively in natural and social researches. The other, more practical reason for developing a HQR is the effectivity and efficiency of the resources that were allocated to support the research process. Large amount of resources will go to waste for nothing if we don't have a high quality criteria to measure the quality of any given research (Adcock & Collier, 2001; American Educational Research Association, American Psychological Association, and National Council on Measurement in Education (1985).

Keeping track of these conditions force the author to undertake a systematic review of quality standards in both qualitative and quantitative approaches. The aim of this study was to produce an overview of the current guidance for assessing the quality of researches and evaluation programs. This little step is indeed an important step for ensuring that researches will be more valid and well supported by appropriate research evidence so that they can provide better credibility, rigor and at the same time promoting the relevance of research studies. This study, hopefully, can also contributes to resolving the ongoing debate in the research and academic community, espescially on the quality of all types of social research.

Despite the rapid demand of a high quality research, there is still little agreement about the quality criteria for assessing research quality, especially in the qualitative inquiries. Many people, who claim to be called qualitative experts, argue that it isn't appropriate to measure qualitative research's quality, especially its holy trinity (*validity, reliability, and objectivity)*. However, when the demand became stronger, some people start to propose a new way to make sure that their researches are valuable. In spite of a quality criteria they introduce some guiding principles for conducting qualitative research. Suddenly, many people start introducing their self-made guiding principles. Recently, Dixon-Woods and her research group have identified over a hundred different quality criteria in relation to qualitative research. Unfortunately, this situation was not supported by a well-planned and designed criteria, which result in many unhelpful and wasteful proliferation of criteria (Dixon-Woods, 2003).

Method

This systematic review analyze many articles about research quality evaluation. The review include evaluation guidelines of

quantitative & qualitative approaches, and combination of both. Articles were drawn from a number of different searches conducted on the worldwide web like findArticle, Scirus and Google. This search strategy also included the grey literature, unpublished literature, such as conference presentations. Due to space limitation, only results from some of these endeavor together with additional related references are presented as this somewhat abridged version.

Result and Discussion

Smith and Deemer once proposed the *foundational*, *quasi-foundational and non-foundational* approach to classify positions of qualitative research quality criteria (Denzin & Lincoln, 2000). At the moment, the author recognizes five major positions concerning the quality criteria of research in general. These positions starts from rejecting any criteria until using the positivist classical criteria (see Figure 1.)

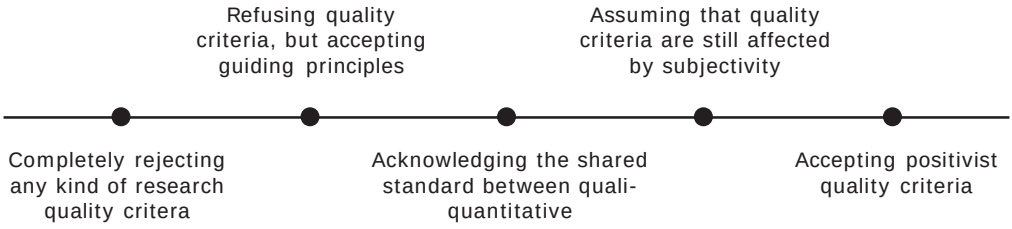

Figure 1. Five major positions on research quality.

Completely rejecting any kind of research quality criteria

This first position completely rejecting any thought about quality criteria, especially every question about research reliability and validity. This position argue that there shouldn't be any privileging of methods above all other research considerations or "methodolatry". Chamberlain at 1999, argues that methodolatry marks a carry-over from the predominance of positivist methodological assumptions where rigid adherence to method functions as the justification for the research claims being made (Aguinaldo, 2004). This position usually associated with Smith's articles at 1984 and 1990 (Sia, 2004). This position argue that qualitative and quantitative approaches have different philosophical backgrounds. Qualitative researchers commonly use the idealist and anti-foundational, whether quantitative followers use the realist and foundational approaches. Smith proposed that the quality criteria should be rejected because, implicitly it admit the existance of a "real/right" research procedure, which was considered as a foundational approach. However, lately Smith tend to admit the necessity and promote usage of an open and flexible criteria, not a predetermined and rigid criteria (Spencer, et al, 2003).

Refusing quality criteria, but accepting guiding principles

Although separated into different positions, generally many researchers already admitting the need of a quality criteria, and this need proliferate faster recently. Larger support were given to the quality criteria which manifest into research guiding principles, especially for the qualitative approaches. This type of quality criteria produce some criteria which could then be constructed into a framework. These framework, even if it were created to evaluate research quality, still provide enough room for the researcher concerning flexibility and creativity. This framework usually presented in a group of questions which smoothly direct and guide the research processes.

Acknowledging the shared standard between quali-quantitative approaches

This position lay in the middle of two extremist position. The supporters of this position argue, that compared to the opposite, "invalid" term, the term "valid" defined as something holistic, with justified and strong foundations. This situation, according to Stake, at 1974, is an eternal criteria and should always be fullfilled by a qualitative researcher. It's believed that there are some generic criteria, and some other unique and special criteria for every approach. Some examples of the generic criteria are well supported conclusion, researcher's justification and expertise, and present certain benefits to certain communities (Camic, Rhodes, & Yardley, 2003).

Assuming that quality criteria are still affected by subjectivity

Although quantitative approaches were already well recognized for its validity and reliability measurements, some researchers still remind and argue about its objectivity. This doubt came into surface due to the need of personal judgement for evaluating research results, which was known as inter-rater reliability. In these circumstances, the researcher's opinion, educational, political background and personal interest can influence and produce different results.

Accepting positivist quality criteria

Researchers who belong to this extreme position diferentiate research quality into two common categories. The first one is research reliability and the second is research validity. It's important to stress that the two criteria mentioned were about the research quality criteria, and not about the measurement quality criteria. The common category for reliability is test-retest and split-half methods, whereas validity, were categorized into internal and external validity. Internal validity concern about research ability to provide plausible explanations to support its conclusion. External validity will take care about the appropriateness of research conclusion to generalize to other situations and conditions.

Realizing all the positions above, concurrently make the author aware of the difficulties in facing research quality criteria. The question is, which position is the most effective and efficient? The answer of that question won't satisfy every position,

perhaps even won't satisfy any position. To answer that question, the author likes to redefine the concept of research as a consensus agreement from some relevant persons about the criteria of high quality research. The author was inspired with this definition by considering previous definitions about consensual validity, the concept of research validity estimated by numerous persons, including experts, colleagues and respondents in different situations about a certain thing.

The author found that many research criteria qualities were actually based on expert's agreement about certain aspects of the research. For example the reason to determine .05 as the cut off/borderline to determine the significance or unsignificance of certain statistical results is based on previous agreement from previous researchers. This situation is supported by the presence of a phenomena showing the difference in quality standards between social and physical sciences. In the social sciences the number .05 is considered significant in statistical testing, not to mention 0.01. The other way round occur in physical sciences, where the significant number .00001 is not uncommen in their statistical testing. Such phenomena are easy to recognize through statistical testing programs offered in the market, like SPSS, which determine .05 as its significancy threshold, reflecting the program's goals, i.e. for the social sciences. Besides the statistical testing evaluation, the role of consensus in research report quality assessment is easy and frequently seen in inquiries using qualitative approaches; rarely revealing results in numbers. When the role of consensus is so powerful in evaluating the research report quality, which could be observed and measured, the role of consensus in assessing the research report quality containing symbolic nuance certainly become more rigid. These are reflected through efforts to transform individual evaluation of the jury/expert into numbers such as 1 to 10, then seeking for means from all related juries/experts. The transformation into numbers is needed to reach mutual understanding, which is also artificial because score 8 from jury A, most certainly would be different from score 8 from jury B. These are reflections of each evaluator subjectivity in determining attitude.

Considering these facts, it could be concluded that so far there has been indirectly efforts to compromise research quality evaluation. These are attained through testing and assessing research result reports, such as minitheses, theses, and dissertations, or program implementation reports. Mutual understanding could also be discovered in national, regional, and even international symposia held by certain institutions, usually professional associations, or governmental institutions. One such example came from the British governmental institute, namely the National Centre for Social Research, recently, to construct a qualitative research quality evaluation general standard. Another example is the joint decision of some of American Psychological Association (APA) task force on controversial topics which invite polemics, such as the role of statistical

testing in research and the phenomenon around intelligence testing known as the Flynn Effect. It seems that a general compromise concerning the research quality either qualitative or quantitative is certainly demanded. It's high time for professional associations and government institutions to confer for the sake of mutual understanding on research quality to achieve consensus, a consensual quality – the author christen it as a *concensuality*. This is not impossible due to the fact that there are already several parties mapping cardinal positions in assessing research quality. Many others propose new quality criteria to assess research results.

The existence of such mutual understanding would diminish polemics and debates around the assessment of research results. On the other hand, it could help the researcher to construct a proposal and conduct a research, because he/she has owned a clear assessment guide, as clear as the .05 in social research and .00001 in natural research entity. Finally, consensuality should enlighten policy makers to assess whether accepted research reports are already adequate to be a foundation in creating new policies, either at organisational or at regional/national levels

Conclusion

Some experts in the research enterprise suggest that the answer to the scientific debate about research quality criteria won't be solved by proposing new criteria. Dixon-Woods, Shaw, Agarwal, & Smith (2004) and Trochim (2004) suggest that the emerging of alternative criteria aren't always worthwhile. Sometimes they even stimulate more debates and rejections among the newcomers in the scientific world. In-depth understanding about classical criteria will rejuvenate our appreciation on their usefulness in assessing research quality.

It's true that huge expenses and efforts have been spent for achieving high quality researches, but the benefit they offer were really worthwhile. Consequently such high costs should be continuously affordable. Through a high quality research we can get reliable and valid information to guide our path in search for better living for the human kind. We don't have to make a perfect and conclusive indicator which only can be fullfiled by a super-mega high quality research. It's enough to make a standard quality criteria, based upon the accomplishment of previous researches. This conclusion was based upon the asumption that the suggestion of consensuality aims to stimulate further acquisition of knowledge and developmental work on research issues, which would support the lifelong effort in promoting high-quality research.

References

American Educational Research Association, American Psychological Association, and National Council on Measurement in Education (1985). *Standards for educational and psychological testing*. Washington, DC: American Psychological Association.

Adcock, R., & Collier, D. 2001. Measurement validity: A shared standard for qualitative and quantitative research. *American*

Political Science Review, *95*(3), 529–546.

Aguinaldo, J.P. 2004. Rethinking validity in qualitative research from a social constructionist perspective: From "is this valid research?" to "what is this research valid for?". *The Qualitative Report, 9* (1) pp. 127-136.

Camic, P. M., Rhodes, J. E., & Yardley, L. 2003. Naming the stars: Integrating qualitative methods into psychological research. In P.M. Camic, J.E. Rhodes, & L. Yardley (Eds.). *Qualitative research*: *Expanding perspectives in methodology and design*. Washington, DC: American Psychological Association.

Denzin, N.K., and Lincoln, Y.S. 2000. *Handbook of qualitative research* (2nd ed.). Thousand Oaks : Sage Publications, Inc.

Dixon-Woods, M., Shaw, R.L., Agarwal, S. & Smith, J.A. 2004. The problem of appraising qualitative research. *Qual Saf Health Care*;13:223–225.

Dixon-Woods, M. 2003. *Commentary on: Quality in qualitative evaluation: A framework for assessing research evidence.* Paper presented at research seminar organised by the Cabinet Office and the ESRC Research Methods Programme. Admiralty Arch, London.

Sia, T. D. 2004. Lima jalan menuju penelitian kualitatif berkualitas: Manakah yang anda pilih? *Anima, Indonesian Psychological Journal, 19* (4), 333-369.

Smith, J. K. & Deemer, D. K. 2000. The problem of criteria in the age of relativism. In N.Denzin, and Y. S. Lincoln (eds). *Handbook of qualitative researc*. Thousand Oaks, CA: Sage Publications, Inc.

Spencer, L., Ritchie, J., Lewis, J., & Dillon, L. 2003. *Quality in qualitative evaluation*: *A framework for assessing research evidence*, Government Chief Social Researcher's Office: National Centre for Social Research, London.

Trochim, W. M. 2005. *The research methods knowledge base (2nd ed.)*. Retrieved at 20 January 2005, from http://www.socialresearchmethods.net/kb/qualval.htm.

Bibliography/Further reading

Aronson, E., Ellsworth, P.C., Callsmith, J.M., and Gonzales, M. H. 1990. *Methods of research in social psychology* (2nd. Ed.).New York: McGraw Hill Publishing Company.

Banister, P., Burman, E., Parker, I., Taylor, M, and Tindall, C. 1994. *Qualitative methods in psychology: A research guide*. Buckingham : Open University Press.

Berg, B.L. 2001. *Qualitative research methods for the social sciences (4th ed.)*. Boston: Allyn and Bacon.

Bogg, T., and Roberts, B.W. 2004. Conscientiousness and health-related behaviors: A meta-analysis of the leading behavioral contributors to mortality. *Psychological Bulletin 130* (6) pp. 887-919.

Bono, J.E., and Judge, T.A. 2004. Personality and transformational and transactional leadership: A meta-analysis. *Journal of Applied psychology 89* (5), pp 901-910.

Campbell, D.T., and Stanley, J.C. 1963. *Experimental and quasi-experimental designs for research.* Dallas :Houghton Mifflin Company Boston

Creswell, J.W. 1994. *Research design:Qualitative & quantitative approaches*. Thousand Oaks, California: Sage Publications, Inc.

DeVellis, R. F. 1991. *Scale development: Theory and application*. Newbury Park: Sage Publications, Inc.

Eisner, E. W. 2000. On the art and science of the qualitative research in psychology. In P.M. Camic, J. E. Rhodes, and L. Yardley (Eds.). *Qualitative research: Expanding perspectives in methodology and design*. Washington, DC: American Psychological Association.

Fahsing, I.A., Ask, K., and Granhag, P.A. 2004. The man behind the mask: Accuracy and predictors of eyewitness offender descriptions. *Journal of Applied Psychology, 89* (4), pp. 722-729.

Field, A., and Hole, G. 2004. *How to design and report experiments*. London : Sage Publications, Inc.

Greene, J. 2000. Understanding social programs through evaluation. In N. Denzin, and Y. S. Lincoln (Eds.) *Handbook of Qualitative Research,* Thousand Oaks, CA: Sage Publications, Inc.

Issac, S., and Michael, W. B. 1980. *Handbook in research and evaluation*. San Diego: EdITS Publisher.

Judge, T.A., and Calbe, D.M. 2004. The effect of physical height on workplace success and income: Preliminary test of a theoretical model. *Journal of Applied Psychology, 89* (3), pp428-441.

Kang, S. J., and Park, J.H. 2004. *Validity: A unified concept*. Paper presented at AAHPERD National Convention: Korea National Sport University.

Lemke, E., and Wiersma, W. 1976. *Principles of psychological measurement*. Chicago : Tand McNally College Publishing Company.

Lincoln, Y. S. and Guba, E. G. 2000. Paradigmatic controversies, contradictions, and emerging confluences. In N.Denzin, and Y. S. Lincoln (Eds.) *Handbook of Qualitative Research,* Thousand Oaks, CA: Sage Publications, Inc.

Marshall & Rossman 1989. *Designing qualitative research*. Newbury Park: Sage.

Meltzoff, J. 1999. *Critical thinking about research : Psychology and related fields*. Washington, DC: American Psychological Association.

Mehrens, W. A., and Lehmann, I. J. 1984. *Measurement and evaluation (3rd ed.)*. New York: CBS College Publishing.

Miles, M. B., and Huberman, A. M. 1994. *Qualitative data analysis: An expanded sourcebook (2nd ed.).* Thousand Oaks : Sage Publication, Inc.

Netemeyer, R. G., Bearden, W. O., and Sharma, S. 2003. *Scaling procedures: Issues and applications*. Thousand Oaks: Sage Publications Inc.

Neuman, W.L. 2003 *Social research methods"Qualitative and Quantitative approaches*. New York : Allyn and Bacon.

Patton, M. Q. 1990. *Qualitative evaluation and research methods* (2nd ed.). Newbury Park : Sage Publications.

Shaughnessy, J.J. , Zechmeister, E.B, and Zechmeister, J.S. 2003. *Research methods in psychology* (6th ed.). Boston: McGraw Hill.

Shenkin, S.D., Starr, J.M. and Deary, I.J. 2004. Birth weight and cognitive ability in

childhood: A systematic review. *Psychological Bulletin 130* (6), pp. 989-1013.

Silverman, D. 2000. *Doing qualitative research: A practical handbook*. London: Sage Publications, Inc.

Sommer, R., and Sommer, B. B. 1980. *A practical guide to behavioral research: Tools and techniques.* New York: Oxford University Press.

Stroup, D.F., Berlin, J.A., Morton, S.C., Olkin, I., Williamson, G.D., Rennie, D., Moher, D., Becker, B.J., Sipe, T.A., & Thacker, S.B. 2000. *Meta-analysis of observational studies in epidemiology: A proposal for reporting.* Paper presented for the Meta-analysis Of Observational Studies in Epidemiology (MOOSE) Group.

Yin, R. K. 1989. *Case study research: Design and methods*. Newbury Park : Sage Publications, Inc.

Younggren, J.N., and Gottlieb, M.C. 2004. Managing risk when contemplating multiple relationships. *Professional Psychology : Research and Practice 35* (3), pp. 255-260.

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