

Bias in Social Science Journals: A Content Analysis

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Background of the Study

The common factor among acceptable research studies was the fact that it was created within a sphere of objectivity. A serious threat to a study's validity was bias. When research was labeled to be biased it meant that at one point the data collected or the analysis of data leaned towards one direction, which resulted in failing to provide a good representation of the studied phenomenon (Holsti & Wesley, 1969). In social science, bias was posed as a larger threat because of the nature of the field. The field of social science dealt with issues of concern within the society. Most of these issues involved debates and conflicts that have to do with the protection of human rights and the rights of one sector of society or another.

There were different forms of bias that could be observed in research studies. One form of bias involved intentional deception wherein data was "cooked" or manipulated. It was described as the practice of manipulating experimental designs to produce a desired outcome or not subjecting a hypothesis to rigorous testing (Shamoo & Resnik, 2003). There were also unintentional biases. Since researchers are human beings, they are also susceptible to self-deception. It is not always possible to see the biases in one's work, thus measures of validity are important in eliminating bias in a research.

There were three major forms of bias that were directly linked to affecting the validity of a research study. These biases included selection biases, which were described as the inaccurate representation of the population of interest; measurement biases, which involved the inaccurate measurement of the outcome of interest; and intervention or exposure biases that involved the differences in the treatment or intervention that were carried out (Hartman, Forsen, Wallace, & Neely, 2002).

Selection biases usually occurred when participants were selected based on a volunteer or referral basis or if non-respondent biases occurred. Measurement bias was a significant form of bias because it could occur even from the collection of the relevant data. Measurement biases included instrument bias, insensitive measure bias, expectation bias, recall or memory bias or verification biases (Hartman et al., 2002). When it came to evaluating groups in intervention biases, the research that compared a group would experience contamination bias, co-intervention bias, timing biases, compliance bias, withdrawal bias and proficiency bias.

Personal prejudices and interests served as threats in the interpretation of evidence when it came to research methods. This was a notion that existed even in the earlier years of research (Maccoun, 1998). However, while it was easy to point fingers at researchers, it was also equivocally difficult to prove that biased judgments existed. Conflicting perceptions about certain issues made it difficult to gauge bias in research. The process of eliminating bias tends to impact both sides of the dispute (Maccoun, 1998).

A direct comparison of judgments from different judges would reflect that each observer held biases over their attributions. Bias was established through the measure of the discrepancy between the judgment and the true status of the object of judgment (Maccoun, 1998). Most of the time, there is absence of objective measures for a true or real state of the sociopolitical environment. Thus, presence and content of different information indicated experienced manipulation at one point or another in the course of the study.

Bias was described as using the bad cue or overusing a cue that were relative to normative standards. It could also occur when a judge missed a good cue or underutilized a cue that was relevant to normative standards. Thus, bias could occur through sins of commission and omission (Maccoun, 1998).

In social research, it was considered as a sacred taboo when it came to problems that addressed research bias (Tanner, 1998). Discussion about research bias was something that was avoided, if not ignored all together. There was a time when social issues did not require empirical evidence or research methods in order to present conflicts or problems in the society. However, as years had gone by, especially since the so-called Coleman Report of 1966, social researchers strived to generate data banks of studies for its potential with regard to social progress. The findings that social research projected resulted in the political interests that dominated the society. This resulted in the movement of social research like that of a flock. Social researchers generated data that portrayed the popular view of society or magnified existing problems that concerned specific groups that researchers could be closely associated to (Tanner, 1998).

Statement of the Problem and Purpose of the Study

Social science research had a significant influence in the public policies that are implemented in the society. Research findings could make a difference in people's lives in a variety of ways. Public funding allocations, social policies and legislation were only some areas that the research in social science could affect. The generation and interpretation of data exposed social science research to bias.

The intent of this research is to measure the presence of bias in social science journals to reveal the validity of social science research findings. Findings from this study will provide critical attention to the results of social science research in terms of the research methods that were employed in the process.

Current research did not concentrate on a direct analysis of social science journals that would quantify the amount of bias in their articles. There existed a gap in the literature which offered a quantitative analysis of the bias that existed in social science journals. It was

important to reflect on the increased susceptibility that the field of social science experienced when it came to research bias.

The purpose of this study is to measure the bias that exists in social science journals through a content analysis of articles about common social issues such as abortion, capital punishment and death penalty. Bias would be generally defined as a systematic error for providing an accurate interpretation of the phenomena due to subjective tendencies (Holsti & Wesley, 1969). The analysis of the bias that existed in social science journals would reveal that systematic problems in the research methods of social science studies.

Identification of Variables

Independent Variable

The independent variable in this research would be the field of social science. For the purpose of specificity, the independent variable in this research would be in terms of social science issues and nature of specialization in the publications.

Dependent Variable

The dependent variable in this research would be the representation of bias in the research studies. The measurement of bias representation in the studies would be the variable that depended on the factors that influenced bias.

Research Questions

The following research questions were used to guide the research for a quantitative content analysis of the bias in social science journals, American Journal of Sociology and Feminist Studies:

1. Was there a significant amount of bias revealed in social scientific research periodicals?
2. Does the level of bias in publications increase with the level of specialization?

3. What is the significant relationship between social science issues and the amount of bias that was observed in the selected publications?

Hypotheses, Assumption and Scope

Since this will be a small-scale study, the scope and limitations of this research involve two publications: The American Journal of Sociology, as the control sample and the Feminist Studies, to analyze specialization in social science research. This research would operate under the assumption that the publication, Feminist Studies, was a specialized journal that focused on issues regarding feminism. The hypothesis of this study will be significant biases that would be measured in the publications and the measured biases that would increase due to the nature of the specialization of the journal publication.

Theoretical Framework

There were significant theoretical perspectives from past literatures that explained bias. This could be utilized in relation to this study in the formation of a theoretical framework. There were three prototypes that would be offered and they include intentionality, motivation and normative justifiability, as the basic theoretical foundations of this study.

Intentionality refers to the level of consciousness and controllability that exist in the study. Bias is intentional if the judge is aware of the bias yet has chosen to express it even if he or she could do otherwise (Maccoun, 1998). Motivation is considered as the origin for factors for biases. It includes the judge's preferences, goals, and values. Intentional biases considered as motivated or motivated biases are assumed to be intentional (Maccoun, 1998). Normative justification involves the distinction between appropriate and defensible biases from inappropriate or indefensible biases. The focus on this framework was on the first and second prototype.

The first prototype was based on fraud. It was intentional and there was a conscious effort to fabricate, conceal or distort the truth. There were different reasons why researchers would succumb to this bias. The reasons were based on motivations from material gain, the enhancement of professional reputation, and the protection of one's theories or influence in a political debate. The second prototype motivation, referred to advocacy. This was the selective use and emphasis of evidence in order to promote the hypothesis at hand without intentional concealment or fabrication (Maccoun, 1998).

The first perspective associated with advocacy involved strategy-based errors wherein the judge was described to be either ignorant or incompetent in applying the normative rules of interference. Another factor for advocacy was observed with mental contamination. This was a process described as the existence of unwanted judgment, emotion, or behavior that reflected unconsciously in the collection and interpretation of the research evidence data.

Theories of motivated cognition were observed to integrate motivational and cognitive processes. Under this theory, the judge would only be motivated to evaluate information in a rigorous and systematic manner if he or she was motivated and able to do so. The absence of motivation and ability would reveal judgments to be superficial and filled with cognitive shortcuts (Maccoun, 1998).

Review of Related Literature

Introduction

This section of the proposal would discuss about the general problems in validity when it came to the field of social science studies. It would also involve the different factors that were attributed to bias, specifically the personal perception regarding social issues. It would also provide a review of the biases that were observed in topics of gender, religion and race. Finally, it would be concluded by the literatures' provision of ways to address bias.

Factors for Bias Susceptibility

There were different cases wherein situations would reveal why individuals were susceptible to bias when it came to the research process. A number of psychological, social, economic, political and institutional influences could corrupt the research process. One of which involved the pressure to produce results. Researchers could be functioning from government funds or organizational funding by which they were pressured to produce results or face discontinued funding (Shamoo & Resnik, 2003). In reality, researchers were pressured to produce results just for the sake of producing them because of the fear that funding would stop if they did not. Result-oriented funding could pressure the researchers to overlook numerous things for the sake of a speedy completion of the project. Research was no longer a vocation. It was already considered as a career. Career advancement was a motive that was related to research work. This was something that could lead researchers to violate standards of ethics and integrity in order to advance themselves in the career ladders (Shamoo & Resnik, 2003).

Conflicts of interest, in terms of financial or other factors, could undermine the objectivity and level of trustworthiness in a study. When the interests of a funding organization could be potentially harmed by the findings of a research, the tendency would be to manipulate the research in order to eliminate the conflict. Other factors behind the

existence of bias involved social and political pressures, as well as the complexity of the research process.

The Problem of Social Science

Research problems in social science did not consistently fit into the tidy dichotomy of research studies. There were numerous matters that were involved, confusing conflicts of issues and conflicts of interests that made it difficult to classify disputes. Social science studies were described to take up an adversarial or an advocacy-oriented perspective (Maccoun, 1998).

The merge of adversarial or advocacy with inquisitorial modes was observed to be problematic. Adversarial and advocacy systems had different features that lacked scientific systems of practice. There were differences in terms of the explicit nature of the said systems. There were also at least two opposing sides that were represented.

The so-called paradigm of exactness was associated with the study of every field of knowledge that prevailed in the 19th century. This was not something that social scientists could strain to achieve. On the other hand, they could not use this inapplicability in a glorifying uncertainty (Madge, 1953). The aim still held value for social science and the quest for it could not be renounced. Laziness and incompetence were not sufficient grounds for imprecision, moreover, bias and systematic error also had high levels of unacceptability.

Social scientists were placed in a position wherein they were accountable in contributing their experiences at the gain of a specific social group. In the fulfillment of such social function, they were required to use their experiences to benefit the group and guide them in their actions and aims (Madge, 1953). It was often argued that the social scientist must avoid the final identification with this group and it was only through a healthy degree of detachment that one could avoid taking sides in intra-group conflicts that periled most societies (Madge, 1953).

While a detached stand was intelligible, the problem of social science research was that it was not realistic. No one could suggest that these social researchers should submerge their identities, individual or collective, for the benefit of providing completely bias-free research findings. For example, Jaschik (2005) pointed out the presence of political bias in the academe. The study revealed that most social science professors were leftists or statist. However, numerous researchers and critics voiced out their defense saying that their political denominations should not have to be the basis for their works' validity. It was difficult to assess these things because of the mentioned taboo that was associated with identifying bias in social research studies.

Personal Perception of Social Issues

When individuals adopt an understanding about a certain issue, their opinions draw all things to support and agree with it. Even if there would be instances wherein they would encounter data or information that would prove their understanding to be wrong, they would either neglect or despise such information. Individuals had the tendency to set aside or reject ideas that conclude against what they initially understood.

Even if it was hard to admit, individuals' attitudes on important social issues reflected personal preconceptions, vague impressions and untested assumptions (Lord, Ross, & Lepper, 1979). Studies had shown that beliefs could survive even in the absence or subtraction of critical formative evidence by which they were formally based. Strongly entrenched beliefs could stand against non-supportive evidence.

According to Lord and his colleagues (1979), when individuals held strong opinions about complex social issues, they were more likely to examine evidence in a biased manner. When the evidence could produce proof for issues they feel strongly about, they were more apt to accept evidence at face value and discontinue critical evaluation of the evidence. As a result, this produced undue support for their initial positions in terms of analyzing the mixed

empirical findings. Sometimes, the results of exposing contending factions in a social dispute through social researches could increase polarization, rather than narrow the disagreement (Lord et al., 1979).

This theory was tested on a group of participants that supported and opposed the capital punishment. Two groups were exposed to two purported studies wherein one confirmed and the other disconfirmed their existing beliefs about the effectiveness of the death penalty. Lord and his colleagues (1979) revealed in the findings that both proponents and opponents of the issue rate results confirmed their beliefs to be more convincing than those that did not. Instead of shifting opinions, there was a postulated increase in the attitudes for and against the death penalty.

Existing personal biases served as one of the most influential factors why bias existed in the collection and interpretation of data in research studies. When it came to social issues, topics were even more difficult to handle because of the social value of the issues that social researchers dealt with. Since these social researchers were a part of society, they were influenced in one way or another by their personal biases towards these issues.

There were important links between social policies, public attitudes and the personal beliefs of individuals. Social scientists could not escape from this association. It was acceptable to consider how they would deal with complex social issues, in which they would be emotionally attached to some of them. It would be valid to assess the role of social scientists in the shaping of public policy; however, there was also a need to evaluate the roles of their personal beliefs in the manner by which they conducted studies that influenced public policy.

Bias from Research Evidence

There were perceived violations that were connected to valid research studies. Judgmental biases occur in the selection and interpretation of research evidence (Maccoun, 1998). Bias could be observed in different areas in the research process such as the selection of the research design, the choice of study populations, statistical analysis, and data presentation among others.

Discrimination Issues

Bias was observed to affect decisions due to seriously skewed data gathering techniques (Lanque, 1993). The anecdotal approach was something that could be valuable if gathered and analyzed properly. It was a common technique that was used for hearings and case studies. Disparity studies were often used to display discrimination issues. Anecdotal approaches were widely utilized in such methods.

However, the motive for gathering anecdotal data has to be considered. This data was used to make a case, instead of analyzing a problem. There was a rare attention that was given to fundamentals of research such as sample construction, response rate or replication of results. This provided for errors in the data gathering process. There were even cases wherein researchers missed the chance to verify the truth concerning the data they have gathered from anecdotes. In other cases, authors were forced to interpret these anecdotes in order to obtain the desired conclusion to make their case (Lanque, 1993).

Statistical proof of a social science problem, like that of discrimination, was also complex. Data and test results could receive different interpretations even from the most competent researchers. There was an initial problem for the availability of proper measurements. There were also pitfalls that were attributed to the exaggeration of the problem and as a result, provided even worse problems. For example, flawed studies could worsen racial polarization for discrimination studies.

Gender

Hurd (1997) presented a content analysis about women's portrayal in college textbooks. Gender was also an issue in social science that received much attention. Bias was observed to be present in the theorist's or the researchers' work in different ways according to their association to certain issues. Disconfirming evidence was observed to be omitted. As a unit of study, gender could be either overemphasized or ignored and different findings could be presented without examining the contextual variable that were involved (Hurd, 1997).

Even in gender research, there were specific biases that were observed. Alpha bias, the first type of bias in gender research, involved the representation of the tendency of the research to exaggerate gender differences. On the other hand, beta bias involved the representation of the researchers' tendencies to minimize them (Hurd, 1997). Alpha bias was known to celebrate the ways why women were superior, unique or special, while beta bias tends to deemphasize gender differences by promoting gender blindness. These researches promoted that men and women should be treated in a similar manner.

Brayton (1997) stated that the overall goal of social science research was to capture or convey a reality in the most accurate way possible. The recognition about the researcher as part of the research process constituted to its changing nature according to the researcher's age, race, orientation and class. Women, as researchers, were bound to bring their own experiences and history into their roles as researchers. The feminist researcher could be both an insider and an outsider to the environment they were studying.

The insider has a stronger understanding of the dynamics of social relationships. The researcher, as an outsider, would enable one to perceive the change in the imbalance of gender power relations. The key to avoid balance in this area was the equality in the roles of the researcher as an insider and as an outsider. It was important to review the relationship of bias with controversial topics. One of the most controversial social research issues was

abortion. When it came to feminism, abortion was viewed with a great deal of importance (Schrems, 1997). However, despite the fact that it was an issue that directly involved women, it was also important to discuss the topic from an outsider's perception that would set aside personal motivations.

Religion

Religion dictated significant beliefs in individuals. This was something that brought about important research topics that provoked strong emotions and convictions, even for the researchers. As a result, another form of bias could take place through over concentration on the disagreements within the church towards important issues.

While the lack of unity within a faith group was news worthy, it was bound to reflect personal issues for the researchers as well. Most of the time, published research findings would tend to report issues that were valued for the public's interest. This was the reason why most publications usually released articles that would criticize the church.

Bias in the selected topics was usually based on the inclination to offer the public what was unusual, sensational or something that involved high conflict. Most of the time, this represents religious stories in a negative light so as to maintain the news-worthiness of a research study (Manilasco, 2002).

Summary

The review of related literature involved discussions regarding the problem of social science studies and their susceptibility to bias. It was further emphasized by the presentation of bias in specific areas such as religion, gender and racial discrimination. The next section would present the methodology that would be used to conduct this research study.

Methodology

Research Design

The study will be conducted within a quantitative research design. This was a design that was meant for the discovery of developing knowledge through the employment of strategies of inquiry in the form of experiments, surveys and content analyses (Bryman, 1992). The aim of quantitative approaches was to evaluate or measure the hypothesis that was offered. The data collection of this research design involved predetermined instruments that would yield statistical data. The aim of the quantitative research design would be to construct statistical models in order to classify what was being observed. This design would function to test the hypothesis of the research through seeking precise measurement and analyses of concepts.

The aim of this study was to measure the bias present in a social science publication, specifically journals such as the American Journal of Sociology and Feminist Studies, to present the susceptibility of social science issues to biased problems. The evaluation of this study would be quantified through a content analysis of articles from these two publications.

Research Method

A content analysis was described as a multipurpose research method that was designed to investigate any problem that used communication outputs as the basis of inference (Holsti & Wesley, 1969). Social sciences and humanities depend on careful analysis of texts that would enable them to gather evidence about their issues of focus. A content analysis was described as a research method that used a system to make valid evaluations and observations from a text (Riffe, Lacy, & Fico, 1998).

A quantitative content analysis was described to be systematic through the use of replicable examination of symbols of communication. Most of the time, numeric values were assigned as a valid measurement. Content analyses were also observed to evaluate

relationships of values through statistical methods. These procedures were designed to describe the communication material and to draw meaning for its production and consumption (Riffe et al., 1998). A content analysis was something that was systematic. The inclusion and exclusion of content were dictated by a consistent system of rules. This eliminated the tendency of the investigator to commit bias (Holsti & Wesley, 1969).

The common purpose of a content analysis was to describe the trends in a communication text. It was used to reveal the characteristics of texts as well as the hidden or evident messages they produced. They were also used to audit communication content against the accepted standards (Holsti & Wesley, 1969). This was something that was used to measure the level of bias that the sample publications had in their articles.

Content analyses measured and revealed messages through analyzing techniques or persuasion or through the evaluation of the styles that were used. Patterns of communication and attributes of the audience, even the publishers of the texts were also factored in the analysis.

This research method was effectively used to evaluate the agenda-setting function of mass media through the analysis of different coverage, such as political campaigns (Riffe et al., 1998). The frequency of coverage, length and placement communicate certain messages to the public about different candidates. This research method could also be used to analyze other fields of study. They could be applied to any type of available materials.

Sampling

The population chosen for the study was the publication for social science research. The selected samples for this study included the American Journal of Sociology, as the control sample and the Feminist Studies, so as to analyze the implication of specialization to the formation of bias in the research.

The American Journal of Sociology was established in 1895. It was the leading publication for research in social sciences. They were known for their emphasis on theory building and the provision of innovative methods in the field. The Feminist Studies was established in 1972, during the time when women's liberation groups from different colleges were brought together in a wide network of feminists that wanted to create a scholarly journal that possessed high standards and relevance in the community. The sample publications could be described as a representative of social science literature and specialized social science research publication, respectively.

Data Analysis

The articles would be analyzed through content analysis. The researcher would formulate a set of rules and indicators that would be utilized for the coding system of this study. The coding system would involve indicators for article biases. This would be observed in terms of the frequency of keywords and the tone of the article. The significant amount of articles that were biased would be recorded and evaluated. The researcher would gather five percent of the total articles from both publications. The measure of bias would also be evaluated according to the specialization of the publication. The analysis would include the differences between specialized publications from the ones that discussed general social science issues.

References

- Brayton, J. (1997). What makes feminist research feminist? The structure of feminist research. *Gender and Technology Research Resources*. Retrieved July 19, 2009, from <http://www.unb.ca/PAR-L/win/feminmethod.htm>
- Bryman, A. (1992). *Quantity and quality in social research*. London: Routledge.
- Hartman, J. M., Forsen, J. W., Wallace, M. S., & Neely, J. G. (2002). Tutorials in clinical research: Part IV: Recognizing and controlling bias. *Laryngoscope*, *112*, 23-31.
- Holsti, O., & Wesley, A. (1969). *Content analysis for the social sciences and humanities*. Reading, MA: Addison Wesley.
- Hurd, T. (1997). Presentation of women and Gilligan's ethic of care in college textbooks, 1970-1990: An examination of bias. *Teaching of Psychology*, *24*(3), 160.
- Jaschik, S. (2005). Social Scientists lean to the left, study says. Retrieved July 19, 2009, from <http://www.insidehighered.com/news/2005/12/21/politics>
- Lanque, G. (1993). Social science and minority "set-asides." *Public Interest*, (110), 49.
- Lord, C., Ross, L., & Lepper, M. (1979). Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology*, *37*(11), 2098-2109.
- Maccoun, R. (1998). Biases in the interpretation and use of research results. *Annual Review of Psychology*, *43*, 259.
- Madge, J. (1953). *The tools of social science*. London: Longmans Green.
- Riffe, D., Lacy, S. and Fico, F. (1998). *Analyzing media messages: Using quantitative content analysis in research*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Schrems, J. (1997). Note on political science and the abortion issues. *Catholic Social Science Review*, 245-252.

Shamoo, A., & Resnik, D. (2003). *Responsible conduct of research*. New York: Oxford University Press.

Tanner, D. (1998). The social consequence of bad research. *Phi Delta Kappan*, 79(5), 344.