Research Methods Critique

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Abstract

This paper is a critical appraisal of "Evaluating Reference Transactions in Academic Music Libraries," a study by Cassidy R. Sugimoto (2008) that uses unobtrusive techniques to evaluate virtual and e-mail reference services in academic music libraries. Essential elements of the paper are analyzed in order to determine its credibility, integrity, and usefulness to information professionals. According to guidelines recommended by Ryan, Coughlan, and Cronin (2007) for critiquing qualitative research, Sugimoto's study is found to be trustworthy. She has appropriately identified the research problem, the relevant literature, and her methodology. Data collection and analysis are clear and rigorous. Findings and recommendations are derived from the evidence and logically presented. Despite some minor limitations, Sugimoto's work adds to the body of knowledge in library and information science and is applicable to library services.

Introduction

The following paper is a critique of Cassidy Sugimoto's (2008) study entitled "Evaluating Reference Transactions in Academic Music Libraries." The strengths and limitations of this research will be appraised according to guidelines recommended by Ryan, Coughlan, and Cronin (2007) for critiquing qualitative research. Key elements of Sugimoto's study will be scrutinized to ascertain its trustworthiness, robustness, and usefulness in library practice.

Author Credentials and Writing Style

Cassidy R. Sugimoto is a doctoral student at the University of North Carolina at Chapel Hill, where she earned a Master's degree in Library Science in 2007 and a Bachelor's degree in Music Performance in 2005 (Sugimoto, 2008, p. 1). The academic credentials of the author lend to the credibility of the study. The reader can expect research that is skillfully presented by an author who has extensive knowledge both in music and in librarianship. The author's qualifications are apparent in the writing style, which is engaging, grammatically correct, organized, concise, and avoids the use of jargon (Coughlin, Cronin, & Ryan, 2007, p. 659).

Report Title

The title of Sugimoto's (2008) study does not indicate whether the paper is a descriptive paper, a theoretical paper, a review, or qualitative research. The purpose of the research would be clearer with a title reflecting the paper's qualitative research nature.

Abstract

The abstract of Sugimoto's (2008) study provides a brief summary of her research, including the purpose of the study, the methodology, and the size of the sample. Sample

selection is not addressed in the abstract. Results, findings, implications, and recommendations are not specified (p. 1). If these points had been presented succinctly in the abstract the reader would be better able to ascertain the relevance of the research. (Coughlin et al., 2007, p. 659).

Statement of the Phenomenon of Interest

The evaluation of reference services is not concrete, in that interpretation of the same experience may vary among individuals. The interactions being studied in this report can therefore be considered to be phenomena (Ryan et al., 2007, p. 738). The phenomena to be studied are indicated clearly when the author states her intention "to evaluate the relationship between the quality of the reference transaction and the medium through which it is offered" (Sugimoto, 2008, p. 3).

Purpose of Study

Sugimoto (2008) clarifies, "The purpose of this study is to observe, analyze, and evaluate the quality of reference services in academic music libraries" (p. 3). She points out the differences between reference services in general libraries and music libraries, and the need for "research that evaluates academic music libraries distinctly from general libraries" (p. 2). The significance of the research is justified on the basis of the lack of existing research in music library reference services, in addition to the emergence of new media in which these services are delivered (p. 3).

Sugimoto's (2008) research is mainly qualitative, as it "uses language, not numbers, as its primary data source" (Beck & Manuel, 2008, p. 68). It "follows the naturalistic paradigm based on the assumption that multiple realities exist and such realities are constructed by the research participants" (Ryan et al., 2007, p. 738).

Sugimoto (2008) defines unobtrusive evaluation, which occurs when "an event is observed and evaluated without the knowledge of those being observed" (p. 5). She justifies its use by citing Weech and Goldhor (1982) who, "suggest that reference evaluation was done more accurately with unobtrusive technique" (p. 5). Sugimoto refers to several prior studies that evaluate reference services using unobtrusive techniques, as well as articles that evaluate the methodology (pp. 5-8). She points out that, "chat/virtual and e-mail reference are particularly well suited for unobtrusive evaluation due to the anonymity and the production of scripts from each transaction" (p. 8). Consequently, the researcher's qualitative approach by unobtrusive observations is justified to the reader (Ryan et al., p. 738).

Research Question

The research question forms a link between the "purpose of the study and how the study will be undertaken" (Coughlin et al., 2007, p. 660). Sugimoto (2008) presents two research questions: "(1) What electronic media do academic music libraries use in their provision of reference services? and (2) Are there any differences in the quality of services provided between differing types of electronic media?" (p. 3). These questions inform the reader of the reasoning behind the research design.

Literature Review

Sugimoto's (2008) literature review, in which all sources are secondary, is well structured. Research on music reference is followed by literature on unobtrusive evaluation techniques and studies evaluating chat and e-mail reference in general libraries. Sugimoto reveals her intention to "build on this previous literature" (p. 10).

An overview of the literature on the evaluation of music reference services yields only two existing studies, neither of which were written within the previous five years. Christensen, Du Mont, and Green (1994) focus on the differences between reference services in music and general libraries (p. 4). Szymanski and Fields (2002) assess the extent of virtual music reference services (pp. 4-5). Sugimoto uses themes from these studies as a framework for her research.

Sugimoto (2008) then discusses benchmark studies that utilize and evaluate unobtrusive techniques in library and information science (pp. 5-8). The fact that many of these studies were conducted in the 70s and 80s does not diminish their significance, since they establish accepted research methods. This section of the literature review justifies Sugimoto's choice of methodology, as stated in the previous section.

Next, Sugimoto (2008) reviews research that evaluates e-mail and chat reference services in general libraries (pp. 8-10). Studies from the 1980s to the present day are used to represent and compare various methods for analyzing the quality of chat and e-mail reference interviews. Sugimoto concludes that since there is no standard metric for observing quality reference transactions, the researcher must "choose whichever metric seems most relevant to the research question" (p. 10).

Theoretical Framework

Sugimoto (2008) uses the Christensen et al. (1994) and Szymanski and Fields (2002) studies to frame her research. The Christensen et al. (1994) paper, "which provided evidence that music libraries conduct reference transactions in a different way from general libraries" (Sugimoto, 2008, p. 10), forms a basis for evaluating music reference services as distinct from general library reference services. The Szymanski and

Fields (2002) paper, which pinpoints virtual "media in which reference services are provided in music libraries" (p. 5), defines "boundaries or parameters for the study and guides all stages" (Ryan et al., 2007, p. 740). Sugimoto's research focuses on aspects of reference services particular to music libraries, and addresses electronic media in which these services are offered.

Method and Philosophical Underpinnings

In Sugimoto's (2008) unobtrusive observation approach, researchers "observe participants in natural settings without the participants' awareness of the observation" (Beck & Manuel, 2008, p. 111). She refers to Babbie's (2004) description of unobtrusive research, which "involves methods of studying social behavior without affecting it" (Sugimoto, 2008, p. 10). The reasoning behind this choice is "an attempt to elicit responses that were less biased" (Sugimoto, 2008, p. 11). This approach affects "the focus and manner in which [she] undertake[s] sampling, data collecting and analysis," (Ryan et al., 2007, p. 740). Sugimoto's "well-thought-out design allows for assurance that the evidence has practicality" (Boswell & Cannon, 2009, p. 294).

Study Sample

Sugimoto (2008) makes a considerable effort to include in her study all academic music libraries in the United States staffed with a full-time music librarian and separate from the main library. Sampling techniques include purposive and snowball sampling (p. 11). Libraries are located with membership lists of the Association for Research Libraries and the Music Library Association Membership Handbook. "In total, 128 academic music libraries in the United States were included in this project" (p. 12). Although the author points out that "no data could be found to provide an accurate count of the total

number of academic music libraries in the United States" (p. 12), the sample selection and size appear adequate and appropriate for this research.

Ethical Considerations

Sugimoto (2008) briefly mentions that ethical considerations in unobtrusive evaluation have been addressed in a previous study (p. 6). Since the nature of unobtrusive observation requires that participants are unaware of being observed, obtaining consent would be counterproductive. Sugimoto does not explicitly address the autonomy and confidentiality of the participants, or discuss any ethical permission for the study. It appears obvious, however, that because participants are not named or identified by their institution, and are observed while performing their jobs, it is not possible for them to have been harmed. Perhaps the study would have benefitted from this clarification.

Data Collection/ Data Analysis

The author "outlines the rationale for the chosen method of data collection and offer[s] sufficient information of the process" (Ryan et al., 2007, p. 742). In order to replicate real life, Sugimoto (2008) selects five questions from a collection of recorded reference interviews. The "criteria were that these be actual questions and that they be representative of a typical range of questions asked in a music library" (p. 14). The process of assigning questions to each library is fully described and illustrated in a table (p. 14). The rationale and method behind forming an alias for the researcher when utilizing virtual reference services are then sufficiently explained (pp. 14-15).

Sugimoto (2008) details her methods of recording transcripts of reference transactions, coding the transcripts, and analyzing the results. Quality assessment is based Ward's (2004) Completeness Scale, which was "devised for an unobtrusive reference

evaluation study" (p. 15) and coding is, "based on the number of predetermined criteria present in each transaction" (p. 8). This scale is chosen because of its compatibility with Sugimoto's research (p. 15), and its proven validity and reliability in previous studies (pp. 8-9). Despite noted limitations, the scale objectively "[assesses] overall response quality by the number and types of responses received in the course of each transaction" (p. 15-16).

The author indicates that data was collected in the summer, but does not specify the year. The methods of collection and analysis of data appear sufficient for the reader to understand how the findings are grounded in the evidence generated by the study.

Rigor

The rigor of Sugimoto's research can be demonstrated by examining the credibility, dependability, transferability and confirmability of her work (Ryan et al., 2007, p. 743). Credibility is ascertained by the author's apparent attempts to represent reference transactions truthfully and realistically. The research design and data collection methods appear to provide sufficient representations of reference transactions (Sugimoto, 2008, pp. 17-18). Because the processes of the researcher are well documented and could easily be followed by another researcher, the study is dependable. Sugimoto's decisions regarding her theoretical framework and methodologies are presented clearly and logically, and another investigator could "potentially arrive at the same or comparable conclusions" (Ryan et al., 2007, p. 743). The results of the study are meaningful not only to academic music libraries, but may also be transferable to other subject-specific libraries (Sugimoto, 2008, p. 23). The analyses of the results of Sugimoto's unobtrusive observations lead to logical interpretations. Since conclusions of the paper are based on

the evidence, the study is confirmable. Additionally, the overall goodness of every aspect of the study is an indication of its robustness.

Findings/ Discussion

Results of Sugimoto's (2008) study are presented in clear language and in a series of tables that are logical and easy to understand (pp. 16-19). The first research question is answered by results showing that, "chat transactions were only available at 25 (or 19%) of the libraries in this study for those unaffiliated with a particular academic institution" (p. 21) and "although e-mail transactions were initiated in 112 instances, responses were only received from 74 (66%) of the institutions" (p. 22). The results address the second research question by suggesting that chat lends itself better to question negotiation, bibliographic instruction and referrals, while e-mail was better at providing sources (pp. 20-21). Findings are derived from the evidence.

Sugimoto discusses her findings "in the context of what is already known...and relates the findings back to the original research purpose" (Ryan et al., 2007, p. 743). Sugimoto (2008) relates the results of her study with Szymanski and Field's (2002) work that forms the framework for her research. Although "Szymanski reported 49% of music librarians used chat for reference services," Sugimoto (2008) finds, "that these services are not necessarily staffed by a music librarian, or are they necessarily available to the general public" (p. 22). She also reports a lower rate of email responses compared with the Szymanski and Field (2002) study (p. 22). Much of the discussion addresses incomplete answers to reference questions due to a lack of trained music librarians staffing chat services. Although this topic is directly tied to the Christensen et al. (1994) study, on which the present research is based, Sugimoto (2008) does not mention this

study in the discussion. The discussion would have been stronger if this relationship had been expressed.

Sugimoto (2008) avoids exaggerating the significance and implications of her study by citing precise and accurate figures derived from the evidence. She uses terms such as "perhaps," "may indicate," "may have arisen because," "may account for," "may call for," "may result from," "one might speculate," and "it appears from our data" (pp. 22-24). Thus, although the author makes speculations based on the results of the study, the reader is reminded that conclusions are not definitive, and is encouraged to question these interpretations.

Sugimoto (2008) only addresses limitations of the study in terms of the scale used to measure the quality of reference transactions (p. 16) and the "unknown sample frame" (p. 12). The author could perhaps discuss additional limitations, such as the data having been collected in the summer. Response rates may have been higher if the transactions had occurred during fall or spring term, when chat and e-mail services might have been better staffed.

In the discussion section, the author raises issues that demand further study. Sugimoto (2008) indicates the need to evaluate aspects of e-mail reference services, compare the relative accuracy of chat and e-mail reference, evaluate the shared needs of subject-specific libraries, investigate specific question types on differing media, and assess the strengths and weaknesses of electronic reference media (pp. 23-24). In this way the author establishes that in addition to adding to existing knowledge, the current study also introduces topics that require more investigation.

Conclusions, Implications and Recommendations

In her summary and conclusion, Sugimoto (2008) places the findings of her study in the context of reference services in academic music libraries. The information derived from her research "suggests that more complete answers can be garnered by means of e-mail in comparison to chat reference services. However, chat reference services were found to better facilitate [certain] reference techniques" (p. 24). She recommends that music libraries provide specific information regarding their electronic reference services, such as to which populations they are available, whether services are restricted to certain question types, which services are provided by music librarians, and which services are staffed by non-music librarians (p. 24). These recommendations are directly linked to the study's findings. The author also reiterates the need to establish a standard metric with which to evaluate reference services (p. 25). The conclusion explains how findings of this study are relevant not only to academic music libraries, but also to other subject-specific libraries (p. 25).

References

Sugimoto (2008) includes a complete list of references, which gives the reader adequate details of sources for further study (pp. 29-32).

Conclusion

By evaluating key elements of Sugimoto's (2008) study according to guidelines by Ryan et al. (2007), its comprehensiveness and relevance become apparent. Although not without some minor weaknesses, "Evaluating Reference Transactions in Academic Music Libraries" proves to be a credible study, conducted with appropriate integrity. The author's process is clear, logical, and rigorous. Findings and recommendations are derived from the evidence, applicable to library practice, and add the body of knowledge.

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