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Research Practices of Music Educators: A Review of the Journal of Research in Music Education

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RESEARCH PRACTICES OF MUSIC EDUCATORS: A REVIEW OF THE *JOURNAL OF RESEARCH IN MUSIC EDUCATION*

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ABSTRACT

Music Education researchers face the same challenge of producing valid, reliable, and thorough work as any field in education. A content analysis was conducted on the *Journal of Research in Music Education* from *Volume 58*(4) to *Volume 63*(4) to determine what research trends were occurring and whether or not those trends are continuations of existing literature. Investigation included distributions of research designs as well as the four components Crotty recommended for quality of research. Findings supported previous research indicating more qualitative studies within the journal. Also, for those articles having three or four of Crotty's components, qualitative coding of these components were categorized into constructive-where articles discussed attributes of existing examples substantiating the quality of the article; and contributive-where articles expressed qualities that would help lead to future articles being quality of research.

Keywords: music education, research methodology, content analysis, constructionism

CHAPTER ONE

PROBLEM STATEMENT

Area of Study

Music education has been subjected to the same definitions of quality of research as any other area in general education or social sciences. Its leaders have attempted to keep standards parallel with other fields of research in regards to philosophy, validity, reliability, and applicability (Colwell, 2002; Colwell, 2006). Some music education researchers have also explicitly charged others in the field to adhere to more rigorously defined guidelines in order to present the research studies as examples of excellent scholarly inquiry (Jorgensen, 2009; Burnard, 2006a; Reimer, 2008). These leaders have even written about the importance of utilizing these best practices in handbooks distributed by the National Association for Music Education (NAfME). Burnard (2006a) narrowed the argument by specifying particular guidelines for music education researchers to follow and urging them to be "explicit about the assumptions and theories that underpin their work" (p. 143). Specifically, she pointed out how using Crotty's (1998) components of methods, methodology, theoretical framework, and epistemology would allow music education research studies to be viewed as systematic and trustworthy (Burnard, 2006a, p. 148). Some authors have examined how general research practices are used in the *Journal of Research in Music Education* (*JRME*) and have discussed basic trends in music education research (see Yarbrough, 2002; Lane, 2011). One particular music education research leader, Yarbrough (2002), has examined research classifications such

as historical, philosophical, experimental, descriptive, behavioral, and qualitative based on author eminence. However, there have been no investigations of the *JRME* that specifically used Crotty's components.

Problem Statement

Using these components, this study investigated whether or not Crotty's guidelines were being put into practice and whether or not authors clearly articulated them within the text of their articles. Therefore, the problems this study addressed were: (a) whether music education researchers are utilizing previously discussed and investigated research guidelines in current publications, specifically the *JRME* from *Volume 58*(4) to *Volume 63*(4) and (b) whether the authors incorporate these frameworks into discussions about their research findings.

Purpose Statement

The purpose of the current study was to examine the most recent *JRME* articles using Crotty's (1998) definitions of quality of research as applied to music education by Burnard (2006a). Each peer-reviewed article, as opposed to a commentary or convention address, had its research method(s), methodology, theoretical framework, and epistemology examined as well as general authorship descriptors, such as the number of authors and the academic appointment of each author. Additionally, this study used a content analysis to investigate how the authors specifically articulated their use of these research characteristics. Since the current study was a qualitative investigation, descriptors and themes regarding how the authors described their own problem statements were expected to emerge as the study progressed.

Ultimately, music educators can use this study's findings to see which methods, methodologies, theoretical frameworks, and epistemologies have or have not been explicitly

discussed and decide which strategies need to be better represented within the realm of music education research so it can be considered as rigorous as other fields of study.

Research Questions

The research questions pertaining to the current study were:

(a) What are the distributions of the general research approaches such as qualitative, quantitative, mixed methods, and historical?

(b) How are the terms *methods*, *methodology*, *theoretical framework*, and *epistemology* utilized within the *JRME* from *Volume 58*(4) to *Volume 63*(4) and how are they distributed?

(c) How are these elements discussed and employed in the text of the studies? In other words, how do authors incorporate them into their own discussions and findings?

(d) What kind of appointments do authors have and does this influence the usage of Crotty's research components?

This research will benefit current and future music education researchers by expanding on previous analyses of research characteristics on previous studies. They will see if previous trends have continued or changed over the past five years within the journal and make more informed decisions on future research activities.

Definition of Terms

In order for the current study to succinctly follow Crotty's (1998) structure, it was important to set forth specific definitions of terms. There were a few that were either used too generally or that may be misrepresentative--depending on the area of study or journal. In order to reduce confusion in the discussion of literature and results, as well as to guide the content

analysis itself, a guide was constructed to elucidate and clarify terminology; it was also intended to be flexible and able to be expanded as the research progressed (see Appendix B).

One set of terms that needed to be explained was (a) *quantitative*; (b) *qualitative*; (c) *mixed methods*; and (d) *historical*. While some researchers categorized these terms as methodologies (see Roulston, 2006, pp. 154-155; Sims, 2009, p. 288), others specifically reserved them for research methods descriptions (see Lane, 2011, pp. 65-66; Crotty, 1998, p. 14) and still other authors described them as both methods and methodologies (see Heller & O'Connor, 2006, p. 40). For the use of this study, we considered these to be examples of research design.

Given the nature of the current study, there needed to be a consistent usage and accurate description for these terms. Similarly, to follow Burnard's (2006a) charge to music educators to agree on terminology, it was best to refer to each of these four terms as neither a specific *methodology* nor *method* but as a descriptor of an overarching research design. While the term *paradigm* has been used to describe these four categories (see Colwell, 2002, p. 1207; Johnson & Christensen, 2012, p. 31), Lincoln, Lynham, & Guba (2011) reserve *paradigm* to describe theoretical perspectives within several types of research. Therefore, (a) *quantitative*; (b) *qualitative*; (c) *mixed methods*; and (d) *historical* were investigated as descriptors of the research design authors chose and were separated from discussions of methods and methodologies.

Following this, the term *method* also needed to be clarified. Methods were defined as the "techniques or procedures….we engage in so as to gather and analyse our data" (Crotty, 1998. p. 6). To further incorporate this perspective on quality of research, this project used methods to suggest specific practices the authors used to collect data, such as questionnaires, interviews, and participant observations (p. 6).

Methodology was defined within this study as "the identification, study, and justification of research methods" (Johnson & Christensen, 2012, p. 32) and as the "research design that shapes [the] choice and use of particular methods" (Crotty, 1998, p. 7). In other words, it was considered as the "rationale" that drove the choices of research methods in the examined articles. For example, Roulston (2006) was described by Burnard (2006a) as having a "hermeneutic enquiry" methodology while the methods were described as a "critical review of existing studies" (p. 146). Again, a guide was utilized during the coding of the *JRME* articles for the current study and was used to minimize confusion of these terms (see Appendix B). While the guide was not completely exhaustive, it was intended to lead the researcher to use one set of distinctive terms.

Another set of terms that needed to be distinguished was the use of *constructionism* and *constructivism*. Schwandt (2007) also distinguished these two terms and best defined the former as focusing on "social process and interaction" and the latter as dealing with the individual "knower" (pp. 38-39). Since the purpose of the study was to use all the peer-reviewed authors to construct the reality of research in music education, I used the term *constructionism* to describe this study's theoretical framework.

It was also important to discuss the use of the term *reality* within the context of constructionism. Using Crotty's (1998) definition of constructionism, meaningful reality comes from the "practices being constructed" (p. 42). Subsequently, Crotty also reiterated the difference between creating meaning and constructing meaning (p. 44). From this perspective, we examined how the *JRME* authors constructed their own reality of research practices. Remembering Burnard's (2006a) investigation, authors may not have been explicit about an aspect of their

research practices, but still may have exemplified that aspect through their language. Therefore, the reality of research was comprised of both explicit discussions and inferred practices.

Another set of terms that stood to be clarified were *constructive* and *contributive*. In this study, these terms described how authors contextualize their discussions of Crotty's four research components. Constructive denoted that the authors described quality of research from past literature to indicate that their current research was also rigorous. Contributive, on the other hand, implied the authors pointed to characteristics within their study, first, that would make future studies just as rigorous. A more inclusive context for these terms was included in Chapter Four within the findings of Phase Two.

Paradigm and Assumptions

As stated earlier, this study was a qualitative investigation using a content analysis method to determine the usage of Crotty's research protocols in the *JRME*. This tactic was appropriate because a primary goal was to investigate the reality these authors have built in regards to quality of research. Such a sense required independent consideration for each article's usage and articulation of Crotty's (1998) four components.

Assumptions stemming from this approach were that some data would be straightforward (e.g. determining if the research is qualitative, quantitative, mixed methods, or historical) while others would be emergent (e.g. finding understanding and articulation of methods, methodologies, epistemologies, and theoretical framework). Further discussion on this study's epistemology and theoretical framework is discussed in Chapter Three.

Organization

In addition to the introduction, this study included five chapters. Chapter Two investigates current literature that involved guiding principles in research within music education

as well as any sources that implied gaps or the need for further examination into the subject matter. The chapter looks at existing discussions on the best practices of research as guided by leaders in music education and what previous studies found when examining how those practices were employed in published literature. In Chapter Three, the methodology of the study and the data collection procedures, sampling, and analysis approaches are explained. Chapter Four clarifies the themes and trends found within the articles examined while Chapter Five analyzes and discusses them in detail as well as provides implications and recommendations for further research in this area. Also included in Chapter Five is a discussion and reflection on the process of the study.

CHAPTER TWO

LITERATURE REVIEW

There are many issues that influence how those in music education conduct research (Burnard, 2006a; Elliott 2002). To ensure validity, reliability, and thorough investigations, music education research leaders like Colwell (2002 & 2006) try to focus and guide efforts using specified strategies parallel with other areas of educational research (Elliott, 2002; Bartel, 2006), psychology (Burnard, 2006b; Jorgensen, 2009; Heller & O'Connor, 2006; Shuter-Dyson, 2002; Taetle & Cutietta, 2002), and life sciences (Reimer, 2006; Jorgensen, 2009; Flohr & Hodges, 2002; Brandfonbrener & Lederman, 2002). While music education research can be similarly structured, there are a few differentiating qualities--like historical research and the assessment of creative endeavors--that warrant some specific modifications of theory and philosophy (Jorgensen, 2009; Heller & O'Connor, 2006; Hickey, 2002).

Within a philosophical discussion, Jorgensen (2009) succinctly summarized the charge for rigorous research in music education:

> In whatever area of research, it is important to critically examine what scholars are doing, why they are doing it, how they are doing it, and what its effects are, potentially and actually on the situations in which music education takes place. And no area of scholarship in the field is exempt from the need for this theoretical reflection over the whole cloth of music education as well as its particular aspects. (p. 408)

Included in her reasoning was the discussion of limitations to how methods are not mutually exclusive to both theory and empirical data (pp. 417-418).

Generalized Music Education Research

The National Association for Music Education (NAfME), formerly Music Educators National Conference (MENC), publishes handbooks to guide research within music education. As the editor of *The New Handbook of Research on Music Teaching and Learning* (2002) and a co-editor of the *MENC Handbook of Research Methodologies* (2006), Colwell mentioned primary objectives, such as epistemology, that researchers may encounter in their projects. Colwell and Richardson (2002) charged any research with "the task of building a better educational system that upholds American or Western democracy" (p. vi). Beyond that, they structured the handbook by beginning with discussions on general education policy and philosophy and then focusing on music education research applications.

Crotty (1998) described the starting point of social research, which is similar to that of music education, as charging the researcher to define and discuss the epistemology--also referred to as paradigms by some authors (see Cowell, 2002; Elliott, 2002; Reimer, 2006)--theoretical perspective, methodology, and methods of the project (Crotty, 1998, p 2). Specifically, he stated that epistemology informs theoretical perspective, which subsequently informs methodology, which finally informs methods (Crotty, p. 4). Crotty further defined epistemology as "how we know what we know;" theoretical perspective as the philosophy that provides context for "logic and criteria" of the data; methodology as what connects the methods to desired outcomes; and methods as the activities researchers engage in to collect data (pp. 6-8). While the rest of his text detailed specific epistemologies and theoretical perspectives, the introduction laid a groundwork upon which a research project in the social sciences and even the arts can be built solidly.

In an editorial for a *Music Education Research* issue devoted entirely to "scholarly inquiry," Burnard (2006a) explicitly addressed the ambiguous definitions of methodology and

methods within the field and how those definitions have "underpinned" previous research (p. 144). She indicated a general lack of specific application of Crotty's taxonomy within the text she was editorializing, but pointed out that there are illustrations of that structure in that journal issue as well as ones in the past.

> Music education research is not, however, filled with achievements in terms of what *methods* are used and what *methodology* governs choice and use of methods and what *theoretical perspective* lies behind the methodology in question, and what *epistemology* informs this theoretical perspective. There are, however, illustrations of the range of traditions of enquiry peppered in past issues (and in the present issue) in which researchers justify, account for and disclose their approach to all (or many) aspects of the research process. (p. 148)

She further suggested that music education research "would be enhanced if researchers explicitly mapped out their assumptions, theories of action, and their research process, including the 'what', 'how', and 'why' of methods and methodologies as distinct but interrelated dimensions" (p. 149).

Bartel (2006) uncovered familiar "trends in data acquisition and knowledge development" within research in both music education and general education contexts. He categorized his findings into seven groups of "complexities"--construct, ethical, methodological, data, analytical, representation, and dissemination (pp. 343-344)--bringing about a broader discussion of "ontology and epistemology, reality and knowledge, external and internal representation" (p. 377). The trends were similar to Crotty's in that his ideas of construct had broader epistemological and theoretical implications (p. 348). Also, his overview of dissemination--how to facilitate knowledge development in others (p. 376) --could also be considered inclusive within Crotty's epistemology category since epistemology deals with "nature of knowledge and justification" (Schwandt, 2007).

Further, Bartel's conversations on ethical complexities similarly flowed alongside

Crotty's theoretical perspective (pp. 350-352, p. 354), while his methodological, data, and analytical groups reflected the methodology classification (pp. 355-359). Bartel utilized linguistic examples for his representation complexity, but in this uncovered the broad implication of methods choices (pp. 369-375). While Bartel's explanations of current trends were thought-provoking and relevant to broader educational research, they were not specifically limited to existing music education research projects--warranting an examination focusing on music education projects.

Epistemology

Some researchers have used the terms *epistemology* and *philosophy* to encompass the idea of "the nature of knowledge and justification" (Schwandt, 2007, pp. 87-88). Within music education research, Reimer (2006) simultaneously used these terms to discuss specifically the lack of epistemological considerations within music education, specifically "what they can help us know and how their presumptions influence what they allow us to know" (p. 26). He utilized historical research as an example of how the emphasis was on "certain procedures" (methodologies) rather than making evident a "framework of explanations" (p. 26). In other words, this kind of research should "infer and explain" the subject--defining how the information is valid and authentic while constructing a viewpoint determined by "values and choices" (p. 27).

This discussion of how knowledge has been conceptualized within music education was also evident in publications from music education leaders. For example, Mahlmann (2002), once the president of NAfME, generalized broader guiding principles through discussion on research policy within education and music education without a specific label for NAfME's philosophical, or epistemological, stance. Stemming from policy as a means of organizational orientation and keeping focus within NAfME, Mahlmann did, however, emphasize the

importance of research as guiding the purpose of music education and keeping NAfME from "shooting itself in the foot" (p. 20). While highlighting this importance, Mahlmann left a more thorough discussion on philosophical variation to Elliott (2002).

Elliott (2002) provided a conversation on various schools of thought within research and education although he did not directly discuss the application to music education in this text. However, he did discuss epistemology--namely, the "how" of inquiry--as part of his focus on philosophical perspectives (p. 85). He also pointed out the tendency for research in the field to be only on "designs, methods of data collection and procedures of data analysis" and to lack applicable context and the "interdependencies among research modes, ideological convictions, and cultural values" (p. 85). He then discussed the "rich variety of research frameworks" and how these "socio-cultural" epistemologies might apply to the music educator (p. 85; p. 92). However, since the chapter was contained within a music educator's research handbook, it can be assumed that music educators can apply these philosophies to their own research projects.

Within the same handbook, Flinders and Richardson (2002) contextualized their own discussion on epistemology within "race, class, gender, and ethnicity" implying that "cultural experience and identities" suggest varying standpoints on epistemology (p. 1166). Specifically, the epistemological standpoint "implies a privileged position for researchers within a given group" (p. 1166). They labeled such postmodern conflicts as a way of giving voice to researchers and providing their perspectives instead of prohibiting them from topics of which they are not necessarily a part.

Similarly, Phelps et al. (2005) defined music education research as "a carefully organized procedure that can result in the discovery of new knowledge, the substantiation of previously held concepts, the rejection of false tenets, and the formal presentation of data collected" (p. 3).

While they categorized epistemology as a branch of philosophy (p. 119), their discussions on philosophical inquiry involved concepts of how knowledge is obtained (pp. 122-124). Also, Jorgensen (2009), while not specifically naming epistemology, debated the nature of how knowledge is obtained in order to form a theoretical basis within music education (p. 406). While Phelps et al. (2005) and Jorgensen (2009) provided starts to the process of researching within music education, other authors (e.g. Burnard, 2006a; Reimer, 2006; Elliott, 2002) felt further examinations of epistemology, theories, methodology, and methods are needed to refine the quality of a research project. And while some authors provide some investigation into these categories (see Lane, 2011; Killian, Liu, & Reid, 2013; Miksza & Johnson, 2012), none offer an all-encompassing perspective currently utilized within music education.

Theoretical Perspective

Theoretical perspectives may "come in many shapes and sizes depending on levels of sophistication, organization, and comprehensiveness" (Schwandt, 2007, p. 292). The terminology associated with theory, similar to epistemology, is sometimes included in philosophical discussions. The distinction is that theory identifies, frames, and explains the "social reality" of the research project (p. 292).

Reimer (2006) claimed there is "no profession-wide structure [existing] to generate, coordinate, and disseminate music education research" (p. 11). He proposed to close this gap between educational philosophy and the practice of music education research by applying philosophical principles (i.e. theoretical perspectives) to the research and learning of music (p. 4).

> Issues are seldom raised as to what is valid music education research; how music education research should be organized and conducted; who should do music education research; what science means; how science has radically questioned its own nature during the twentieth century; the uncertain relationship of the physical, biological, and social

> sciences with the domain of art; [and] the vexing dilemmas of the relation of basic research to applied research. (p. 5)

Reimer also note that in music education there is a fixation on "methodological concerns" and that it is often only an attempt to be "scholarly" (p. 5) but then recognized the issues that arise without proper attention being paid to those methodologies (p. 6). He stressed the need to focus on "what it is we need to know in order to improve music education." Reimer also brought up the point as to whether or not there are "practical payoffs" in such a research project (p. 7).

Similarly, Miksza and Johnson (2012) detailed theoretical perspectives found in the *Journal of Research in Music Education* (*JRME*) using a content analysis and highlighted the use of theoretical frameworks as defined by Cady (1992). Their definition of theoretical framework had a broader scope than that of Crotty (1998). Namely, it was used to encompass any theory that *JRME* authors cited including learning theories, theories on musical cognition, and those theories centered on musical preference.

The most prominent frameworks Miksza and Johnson (2012) noted were "interactive theory of musical preference, genetic epistemology, and attribution theory" (p. 14). While only focusing on *JRME* articles that specifically cited theories, they emphasized the importance of these frameworks within music education (p. 8). In doing so, they reiterated the importance of the idea "that theoretical frameworks have the potential to aid music education researchers in their pursuit of understanding and meaning of musical experiences" (p. 19). While building off of Elliott's (2002) and Hellen and O'Connor's (2002) calls for investigation into theory, Miksza and Johnson (2012) urged the continuing analysis and discussion of the "essential components and potential benefits of theoretical framework" (p. 18).

Jorgensen (2009) also addressed the importance of "robust conceptual theories" to drive music education research. Specifically, the author discussed the pragmatic stance of research

mattering to “music teachers and other stakeholders in music education” and added that it “cannot just be an academic exercise carried forward without regard to the implications of research for [music teachers]” (p. 415). Jorgensen also pinpointed a lack of an historically “strong and critical scholarly tradition in music education” that in recent decades transformed into “more philosophically robust theories of music education and more critically examining what passes for research in the field” (p. 411). She went on to reiterate that this change can “benefit music education research generally by clarifying the conceptual terrain in the field and forwarding interesting ideas that can enhance other research in music education as it also draws from it.” (pp. 411-412).

Taetle and Cutietta (2002) similarly addressed that within music education the tendency to confuse theory and methodology:

> Far too many examples within the music education profession exist where justifying a study from a cognitive standpoint is based on the premise that all earlier research was behavioral or on the assumption that behavioral studies are tested with quantitative and cognitive theories with qualitative methodologies. Thus, learning theories are confused with research methodologies and constructs with design. (p. 293)

They called on music education researchers to be “well-guided to increase the practice of grounding research in theory” (p. 294).

Methodology and Methods

Schwandt (2007) discussed methodology as how “inquiry should proceed” (p. 193) while Krippendorff (2013) succinctly explained the purpose of methodology as the ability of “researchers to plan and examine critically the logic, composition, and protocols of research methods; to evaluate the performance of individual techniques; and to estimate the likelihood of particular research designs to contribute to knowledge” (p. 5).

Reimer (2008) exemplified this idea of methodology while calling for sound research

within music education:

> We need to develop ways for individual researchers, steeped in a particular research methodology by their training and experience, to work in close cooperation with others who are experts in their particular mode of research, all of them focusing on the very same issue, aiming for the very same goal…with at least some of such projects (perhaps many) being longitudinal. (p. 200)

He continued to emphasize the importance of collaborative efforts of music education researchers on various topics and "complexities" (p. 201).

In the preface to the *MENC Handbook of Research Methodologies,* Colwell (2006) did not specifically indicate the reason behind the text's publication other than a subsequent reference to his earlier handbooks (e.g. Colwell, 2002). However, the direction and intention of setting forth guidelines for methodologies within music education was evident through the collaborations in the handbook. Similar to Crotty (1998), Colwell (2006) led the text with Reimer's discussions on philosophy, epistemology, and theory and Heller and O'Connor's (2006) chapter on quality of research and reporting. By giving specific research examples within music education, Heller and O'Connor directed the discussion within the text more toward that of methodological concerns.

Phelps et al. (2005) discussed how "the content of a particular philosophy is inextricably linked to its underlying method," which, by definition, is a methodology (p. 119). While the authors blurred the distinction between methods and methodology (p. 56), they emphasized the differences between "treatment of data" (*methodology*) and "sources of data" (*method*) (p. 69). In disseminating the methodology section of a research paper, Phelps et al. emphasized that its importance is to "let [the] reader know where data come from and what will be done with them" (p. 70).

Heller and O'Connor (2006) primarily limited their focus of research to that which was

done in the dissertation stage but acknowledge how such studies have lacked the contribution of "credibility to the music education research enterprise" (p. 41). Within their discussion on methodologies, they grouped music education research into three major categories: historical, descriptive, and experimental--similar to Phelps et al.'s (2005) categories of qualitative, experimental, and historical (and philosophical). They also recognized combinations of these approaches as well as "other divisions of the research process" (p. 40). Heller and O'Connor (2006) suggested guidelines for all aspects of the research project, not just methodologies, to produce a quality piece of work (pp. 49-62) while providing the start of methodological discussions for a later chapter within the text.

Besides Heller and O'Connor, other authors writing in the *MENC Handbook of Research Methodologies* went into more specific detail about the general methodologies including historical (Cox, 2006), quantitative (Asmus & Radocy, 2006), philosophical (Jorgensen, 2006), and qualitative (Bresler & Stake, 2006; Flinders & Richardson, 2006).

Cox (2006) acknowledged the debate about having history--specifically music education history--as being listed as a methodology (p. 73). While he examined specific examples of historical research, Cox also charged the music education historian to "illuminate our understanding of music education's function in fostering a sense of identities that have to be constantly invented, transformed, and recovered" which "encourage[s] music educators to question aspects of their own music education tradition" (pp. 79-80). Ultimately, Cox stated that the context historical research in music education provides can give greater vision to music educators and "transform" the field (p. 89).

Asmus and Radocy (2006) discussed within their chapter the methodology dealing with quantitative research. While leaving the definition of quantification open, they focused on the

application of quantitative research techniques to the field of music education. The authors also dictated that "good measurement must (1) be operationally defined, (2) be reproducible, and (3) produce valid results" while "assigning numbers in an objective, empirical manner to objects, behaviors or events" (p. 97). They also brought up in their quantitative conversation the importance of reliability, validity, subjectivity and types of indirect measurement (pp. 100-101). The rest of Asmus and Radocy's chapter can be described as a discourse in statistical definitions and applications with pertinent examples of music education research.

Jorgensen (2006) specifically addressed "philosophical method" and utilized the terminology "doing of philosophy" within published research (p. 176). In the interest of clarity, the author focused on broader research questions that approach relationships as "connections between ideas"--ultimately with the purpose of "clarifying terms" (p. 177). While exemplifying individual studies that deal with the philosophy of a particular subject (e.g. music appreciation), many of the author's points could be summarized using Crotty's (1998) category of epistemology. However, Jorgensen's discourse was on how to do philosophical research in particular (p. 178) and not just how to think philosophically about the research.

The discussion within the *MENC Handbook of Research Methodologies* regarding qualitative research methodology begins with Bresler and Stake (2006). These authors even acknowledged the importance of theory and review such before expanding on what qualitative inquiry means (pp. 271-274). Bresler and Stake recognized music education as a cultural science that requires observation and description and should not be viewed as simply "problems of measurement, validity, and reliability" (p. 274). In other words, where quantitative studies try to find "the most general and pervasive explanatory relationships," qualitative research focuses on "the uniqueness of the individual case, the variety of perceptions of that case, and the different

intentionalities of the actors who populate that case" (p. 277). They also described qualitative research as being holistic, empirical, descriptive, interpretive, empathic, working "from bottom up," and having validation in observation and immediate interpretations (pp. 278-279). Bresler and Stake also pointed out that the "emphasis in formal music education research [is] on quantitative methodology reflected in books, reports, journal papers, and dissertations" (p. 279) where the use of qualitative research has been an "important tool" in music education but has not been utilized as much (p. 281).

Flinders and Richardson (2006) also added to the conversation of the involvement of qualitative research within music education. They investigated the growing number of qualitative studies in the field and investigate the approaches used. The authors began by explaining that this methodology is "designed to examine meaning as a social, psychological, or political phenomenon" (p. 314) and discussed the roots and growth in education and sociological research throughout the latter part of the 1900s (p. 315). Flinders and Richardson also specifically examined the use of qualitative research in music education (p. 328). Unlike the other discussions on methodology mentioned above, they cited examples of case studies, participant observation, action research, ethnography, and verbal protocol analysis (pp. 331-335) and propose similar work for future studies in the field.

Likewise, some of Burnard's (2006a) main issues with research within music education were the explicitness of "the assumptions and theories that underpin research" and the idea of "being articulate about the research process" (p. 144). She emphasized how Roulston (2006) correctly identified how "*methodological* choices *relate* to issues of research *design* and research *methods* and *why* all researchers' choices need to be justified in relation to the research questions" (p. 144; emphasis in original). Burnard (2006a) differentiated Crotty's four categories

for each of the articles in the journal issue she was editorializing and pointed out how some were not explicit within these categories (p. 146). She then drew from Colwell and Richardson (2002) to begin a specific discussion on methodologies and methods (pp. 147-148). Her point was that music education researchers "should not obscure how we understand and conduct research…nor fail to make the distinction between methodologies and methods at the frontiers of new knowledge" (p. 149).

Yarbrough (2002), Miksza and Johnson (2012), Roulston (2006), and Lane (2011) do not directly mention mixed methodology (i.e. using *mixed methodology* in reference to research methodology) as being evident in music education research and the approach was not mentioned in either of the handbooks (see Colwell, 2006; Colwell & Richardson, 2002). However, Johnson and Onwuegbuzie's (2004) conversation of mixed methods research can be applied here by discussing a stance on valid research similar to Crotty's (pp. 15-16), teasing out the strengths and weaknesses of both qualitative and quantitative approaches (pp. 19-20), and finally suggesting a mixed methods research process model (pp. 21-22). Fitzpatrick (2011) utilized this research approach in a study aimed to gain insight into an urban instrumental music program. She justified her methodology by pointing out that "the mixed methods researcher hopes to lessen the weaknesses of either [qualitative or quantitative] and view the problem [of the study] from several vantage points" (p. 232). Fitzpatrick was quite up front with the triangulation and convergence needed in order to incorporate such a methodology.

In another example of mixed methods, Butler (2001) utilized a more exploratory approach than Fitzpatrick (2010). The use of mixed methods seemed secondary to the research question although she justified her methodology as a need for triangulation. Butler also stated that she uses both qualitative and quantitative methodologies--citing Miles and Huberman

(1994)--to provide "richer detail within the framework of data analysis, and [to] accommodate unexpected findings, leading to a more open-ended interpretation of results" (p. 261). Butler (2001) used the term "mixed methodology" only once in her paper although she utilized some main points from that type of design--particularly a research question focusing on incorporating data from both quantitative and qualitative sources.

Finally, Jorgensen (2009) stated that research methods are "to be seen as means to rather than ends of music education research" (p. 416). However, her focus was to ensure that the theoretical questions guide the methods:

> Were discussions concerning research questions to be paramount, music education researchers would see immediately the limitations of particular methods, the need to place various methods in particular contexts or discover new methods that fit the exigencies of the questions or situations under investigation. (p. 417)

Jorgensen then continued the discussion of the importance of teaching this distinction in undergraduate courses, where research ideas begin.

While there was much discussion on the interpretations of the term *methodology* and its use in governing specific ways of gathering data (see Burnard, 2006a), little was specifically published on the topic of methods. Lane (2011) conducted a descriptive analysis of qualitative research in *JRME* and the *Bulletin of the Council for Research in Music Education* (*CRME*) and while he described author and subject eminence within qualitative research, he discussed the frequencies of corresponding methods, namely, ethnography, case study, grounded theory, action research, phenomenology, and program evaluations (p. 72). Reimer (2006) went so far as to say that interest in music education research was "methodological and technical rather than substantive" (p. 26). While authors like Bartel (2006) specifically addressed methodologies and attempted to simplify the understanding of data components, how to build these components, and how they should be interpreted (pp. 344-349), there is still a general lack of regard toward

methods. Reimer (2006) might have explained this while describing interest in music education research as "methodological and technical rather than substantive" (p. 26).

Research Investigations in Music Education

As mentioned above, Colwell (2006) laid the methodological groundwork for music education researchers with the *MENC Handbook of Research Methodologies*. Reimer (2006) provided just cause for the need of philosophical foundation (p. 8) and the practical application of research within music education (pp. 12-13). Heller and O'Connor (2006) did address the broad discussion and application of methodology in music education by stating how research can be categorized into historical, descriptive, and experimental methodologies and also more importantly, any combination thereof (p. 40). They also specifically maintained that methodology should be appropriate, sensitive, and balanced (p. 45).

Bartel (2006) summarized his methodological complexity as a "plan employed to acquire data and make meaning (develop knowledge) out of those data" (p. 355). Bartel also defended the utilization of research methodologies:

> [They are] not simply the data acquisition method, but, rather, as an interaction among the question posed, the analysis required to answer the question, and the data appropriate for the analysis. An important role of the orientations [of research methodology] is in influencing what questions will be asked, but they also influence who will be asked, how answers will be obtained, what will count as valued representations and as knowledge, and what analyses will be conducted. (p. 358)

He concluded his discussion on this *complexity* by suggesting the implication of multimethod studies-also known as mixed methods (p. 359).

While Cox (2006) discussed the formative capabilities of historical research in music education, Asmus and Radocy (2006) were the authors charged with leading the conversation of quantitative analysis. Their stance on quantification was "the association of numbers with behaviors, objects, or events" (p. 95) and that researchers should use quantifications to decrease

"biases and prejudices" (p. 100). Asmus and Radocy utilized their chapter as an opportunity to describe various statistical principles as well as implications and drawbacks of utilizing quantitative analysis.

General Examinations

Beyond the handbooks, very little literature exists that details specific discussion on methodology within music education. While Jorgensen (2009) discussed the "fiction that methods are discrete and mutually exclusive" (p. 416), she transitioned her focus more to research questions rather than the specific discussion of methodology. This left investigations of general utilizations to Fung (2008), Killian, Liu, and Reid (2012), and Burnard (2006a) (see Table 1).

Table 1. Investigations into Methodologies in Music Education.

Author(s)	Data source(s)	Years	Focus
Burnard (2006a)	*Music Education Research*	July 2006 issue	General research guidelines (Crotty, 1998)
Farmer (2008)	*JRME, CRME, Psychology of Music, Journal of Music Therapy, Contributions to Music Education, Missouri JRME, Journal of Bands*	1984-2007	Gender, methodology use
Fung (2008)	Music education researchers	2005-2006	Open-ended survey, built themes
Killian, Liu, & Reid (2012)	*JMTE*	1991-2011	General research
Lane (2011)	*JRME* & *CRME*	1983-2008	Qualitative inquiry
Miksza & Johnson (2012)	*JRME*	1979-2009	Theoretical frameworks
Randles (2012)	Various journals		Phenomenology
Schmidt & Zdzinski (1993)	*JRME, CRME, Psychology of Music, Journal of Music Therapy, Contributions to Music Education, Missouri JRME*	1975-1990	Quantitative, eminence of cited works
Sims (2009)	*JRME* reviewers' comments	2003-2005	Quantitative articles
Yarbrough (2002)	*JRME*	1953-2002	General research guidelines

Fung (2008) surveyed music education faculty at American research universities and discovered within their responses themes dealing with "*methodological concerns* in music education research" because his participants felt methodology was "critical to produce high quality research" (p. 36). Specifically, one respondent emphasized the "need to solve problems in research methodology that are peculiar [*sic*] to music and music education" (p. 37). He did, however, detail methodology and gave examples of how the respondents categorized methodology: "observational research, both pure and applied research, product-process research,

historical research, experimental research, and qualitative research" (p. 37).

Killian, Liu, and Reid (2012) discussed the results of their content analysis of the *Journal of Music Teacher Education* (*JMTE*) and the various ways the journal articles can be categorized. They first grouped their articles into two areas: peer-reviewed (research) or non-refereed (interest)--with the latter including editorials, commentaries, and statements (p. 87). The authors then further classified research articles into quantitative, qualitative, or historical using Cox (2006) as a basis to include historical separately. Killian et al. (2012) then categorized interest articles as general, philosophical, or reviews of literature, making sure to "avoid judging whether an article followed established philosophical methodology or only seemed philosophically-oriented" (p. 87). They also specifically discussed the authorship of the *JMTE* (p. 90) and went into detail about the topics addressed in the articles (p. 91).

The most prolific discussion on methodology in music education could be attributed to Burnard (2006a). While this discussion was limited to the articles within the journal issue she was editorializing, her discussions and definitions of methodology within a music education context are a beginning to specific investigations of what methodologies are used in this field. Burnard also took it upon herself to tease out from each of the articles (a) a research question, (b) the methods used, (c) the methodology guiding those methods, (d) the theoretical perspectives, and (e) the sources of data, even though the authors may not have specifically articulated them (p. 146).

In her ongoing content analysis of the *JRME*, Yarbrough (2002) has separated the methodologies of the articles into historical, philosophical, experimental, descriptive, behavioral, qualitative, and other (p. 278). Since she did not go into detail about her own research methods and methodologies in the 2002 report, it would be interesting to see if the trends in her categories

have continued since 2002. In other words, it seems that her categories could be further divided into specific methodologies like Burnard's (2006a) editorial (e.g. hermeneutic enquiry, correlational enquiry, phenomenological enquiry).

Additionally, Farmer (2008) studied methodology utilized in music education among academic journals and discussed the distribution of these methodologies and how such distributions were related to the author's gender. This author also broadly applied the usual categorizations of methodology (i.e. qualitative and quantitative) as well as mixed methodology as defined by Creswell (2005). While there have been several music education publications that have utilized mixed methodology (e.g. Hickman, 2015; Hawkinson, 2015; Fitzpatrick, 2011), Farmer (2008) and Burnard (2006a) are the only authors who have investigated its use within the field.

Similarly, Yarbrough (2002) uncovered a total of 158 examples of historical research methodology within the *JRME* while Killian et al. (2013) found five instances within the *JMTE*. Cox (2006) devoted an entire chapter to the discussion of music education history and Reimer (2006) uses historical research as a basis of his conversation on "doing research responsibly" (p. 26). Despite this evidence for the inclusion of historical inquiry as its own separate methodology, there have been no publications which have investigated characteristics or trends in historical inquiry within music education.

Quantitative Research Studies

Schmidt and Zdzinski (1993) brought the quantitative methodology discussion into music education research by conducting a study on the number of citations used within quantitative articles in the *Journal of Research in Music Education*, the *Bulletin of the Council for Research in Music Education, Psychology of Music*, the *Journal of Music Therapy, Contributions to Music*

Education, and the *Missouri Journal of Research in Music Education*. While dividing the articles into descriptive and experimental, they found the most cited articles within the quantitative studies. Schmidt and Zdzinski also examined the top 26 most cited articles and described the subjects (i.e. samples), dependent variables, and independent variables used in each of those 26 (pp. 10-14).

Sims (2009) discussed the findings of Yarbrough and Whitaker (unpublished) where they analyzed *JRME* reviewer comments on "accepted quantitative manuscripts" (p. 287). Sims also summarized Yarbrough and Whitaker's disseminations into manuscript section (e.g. abstract, introduction, research questions) and the subject of the reviewer comments (e.g. accuracy, citations, dependent measure) (p. 290). While Sims did not formally publish Yarbrough and Whitaker's study, this forum discussion was one of the few examples of an investigation into the use of quantitative analysis in music education.

Besides Daniel's (1993) analysis on statistical power within quantitative articles in the *JRME,* there have been very few recent studies detailing the use of quantitative analysis within the field of music education. While Yarbrough (2002) did not specifically use the term *quantitative* in the methodology table within her forum, she did discuss the "dominance of quantitative research" in *JRME* articles (p. 278). Therefore, the eminence of quantitative studies warrants investigation of trends and usage.

Qualitative Research Studies

Some authors delve into a more focused discussion of the utilization and practice of research methodologies. Roulston (2006) prescribed in her "primer" specifics of qualitative methodology and gave distinct direction when utilizing such in music education research. While not a broad study of the utilization of qualitative inquiry, Roulston rather gives examples within

music education of Lather's (2004) framework of "understanding, emancipation, and deconstruction" (pp. 161-163).

On the other hand, Lane (2011) researched qualitative articles from both the *Journal of Research of Music Education* (*JRME*) and *Bulletin of the Council for Research in Music Education* (*CRME*) from 1983 through 2008. While limiting his search within the two publications to qualitative studies, Lane described the distribution of the following criteria: author, title, number of participants, specific method used, and the eminence of specific citations (p. 68). His overall focus was to describe the "state of qualitative research in [music education] and to provide some insight for future directions for research grounded in naturalistic inquiry" (p. 73). Lane largely uncovered in the two journals methods of ethnography and case study while also finding usage of collective case study, grounded theory, action research, phenomenology, and program evaluations (p. 72).

Randles (2012) completed a literature review on the use of phenomenology within general education, music research, ethnomusicology, music education research, and dissertations (p. 11). While maintaining that the methodology is qualitative as well as a "mode of philosophical inquiry" (p. 11), his investigation was on how phenomenology investigates the "lived experience" (p. 12). He also discussed its usage within music education research primarily in international journals--mostly within *Research Studies in Music Education, British Journal of Music Education,* and *International Journal of Music Education* (p. 15). Interestingly, Lane (2011) found six articles in the *JRME* and the *CRME* that utilized phenomenology, whereas Randles (2012) listed only one coming from the *CRME*. Since neither author listed how inter-rater reliability was conducted in their respective studies, one can only speculate as to why this discrepancy occurred.

While these research projects shed some light on the use of specific qualitative methodologies, they are only focused on specific time periods, only a few music education publications, or only a specific methodology. Therefore, a closer investigation into research methodologies beyond quantitative and qualitative is necessary within the field of music education.

Conclusion

While many researchers are concerned with providing reliable work, those observing research through the music education lens have uncovered significant trends. First, there are resources available to music education researchers--namely, the handbooks guided by Colwell (2006) and Colwell and Richardson (2002). Most of these chapters introduced key concepts in research as discussed by Crotty (1998) and some discussed issues that are specific to the plight of the music educator. While these guidelines are helpful to beginning a research project, they do not collectively cover all aspects of research in music education, or they omit key research components like discussions on epistemology or methodology.

Second, there are sporadic examples of literature that address a lack of structure in music education research. While some demand clear philosophy (Reimer, 2006; Reimer, 2008), others emphasize a more important distinction between methodology and methods (Burnard, 2006a). However, within these discussions there is a consensus of understanding of qualitative, quantitative, and mixed methods paradigms with an additional acknowledgement of historical research. Also,

Finally, given this set of paradigms, there have been some academic works focused on how they are used and understood within music education research, particularly in published journals (Lane, 2011; Fung, 2008; Randles, 2012). While there are broad investigations into

trends in the *JRME* (Yarbrough, 2002), there are very few researchers who have recently investigated specifically how methodology is used and how it is guided by epistemology and theoretical framework.

It is evident that music education leaders are concerned with providing frameworks for solid, reliable, and applicable research (Colwell 2006; Colwell & Richardson, 2002). And while there are some who are advocating further refinement of those frameworks (see Burnard, 2006b; Fung, 2008), their utilization is part of an ongoing discussion within the field (Lane, 2011; Farmer, 2008; Yarbrough, 2002).

CHAPTER THREE

METHODOLOGY

Overview of Study

The goal of this study was to explore research behaviors within the *Journal of Research for Music Education* (*JRME*) from 2011 to 2016 (volume 58, issue 4 through volume 63, issue 4, inclusive). More specifically, the study primarily examined (a) epistemologies, (b) theoretical frameworks, (c) methodologies, and (d) methods as prescribed by Crotty (1998) and how they are used within this set of articles. Based on Burnard's (2006a) argument how these components should be explicitly discussed in order for a study to be considered "quality of research," I examined if and how these guidelines are articulated within the articles and whether the findings are congruent with Yarbrough's (2002), Lane's (2011), and Miksza and Johnson's (2012) previous analyses of the *JRME*. Additional characteristics included the type of article, research description, and the number of authors and their occupations. I conducted this content analysis by using a form to code each article for the properties listed above and I used subsequent findings to guide a deeper investigation.

A content analysis was considered an appropriate methodology for conducting this study based on a review of literature focusing on research principles within music education. This qualitative approach was meant to explore and interpret a set of research-centered themes within a series of texts, namely *JRME* articles (Krippendorff, 2013; Schreier, 2012, p. 3). Furthermore, this project was primarily constructed on similar processes and questions brought forth from

Burnard's (2006a) editorial in the *Music Education Research*--a British music education journal--especially the author's conversation regarding "researchers being explicit about the assumptions and theories that underpin their work" (p. 143). What drove the structure of codes in Phase One and the subsequent questions guiding Phase Two was Burnard's idea that this explicitness was a requirement for a study's "rigorous rational argument" (p. 149). In order to extend this same awareness and explicitness to the current study, I felt it was imperative to first acknowledge the four components, as follows.

Epistemology

This project was guided by the epistemology that Crotty (1998) described as a constructionism. Given the distinction from constructivism discussed in Chapter One, this study will adhere to the idea that the knowledge gained "is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context" (p. 42). In other words, instead of the notion of the "individualistic understanding," or constructivism, I focused on the overarching "social dimension" depicted by the *JRME* authors bound in our timeframe (pp. 57-58).

Common themes and characteristics from each article were examined to conceptualize how research was conducted within music education. These descriptions gave a setting and a sense of reality to music education research (Krippendorff, 2013, p. 28). As Krippendorff (2013) has described, one of the features of content analyses is that "texts have meanings relative to particular contexts, discourses, or purposes" (p. 29). The articles to be examined constructed such contexts as well as implied and conceptualized the reality of music education research. While the purposeful sample of articles for this study was not specifically intended to generalize the entirety of music education research, its primary purpose was to explore particular research

characteristics and themes restricted within this time frame and particular journal (see Merriam, 2009, p. 224).

Furthermore, an additional function of this content analysis was to compare findings with relevant existing literature. Schwandt (2007) described in detail Lincoln and Guba's (1985) concepts of "judging the quality or goodness of qualitative inquiry" (p. 299). In regards to their idea that "confirmability" needs to link "assertions, findings, [and] interpretations," the final chapter of this study discussed in detail any themes and patterns that supported or conflicted with existing literature that also explored the *JRME* via a content analyses.

Theoretical Framework

As Crotty (1998) described, "the theoretical framework provides a context for the process involved [in a methodology] and a basis for its logic and its criteria" (p. 66). Building upon the epistemological ideas of constructionism, the methodologies and methods of this study were conceived and driven by the assumptions of interpretivism. Specifically, I relied on the inherent meanings of the *JRME*'s authors' "actions," e.g. their explicit discussions of quality of research (Schwandt, 2007, p. 160). I was also guided by the principles of intentionalism: the assumption that the authors' language reveals--or not--their intentions of promoting Burnard's (2006a) concept of quality of research within music education research (p. 156). This framework of interpretivism, enhanced with ideas from intentionalism, was what some authors have considered being "at the heart of the [qualitative] research process" (Schreier, 2012, p. 21; Bressler & Stake, 2006, p. 274). Also, it was these concepts of interpreting texts that guided the decision to use a content analysis-type methodology.

Methodology

While some authors define content analysis as a research method (see Schreier, 2012; Vogt, Gardner, & Haeffele, 2012), some refer to the practice as a complete methodology in and of itself (see Krippendorff, 2013). Furthermore, a content analysis also does not fit Crotty's (1998) definition of a method, as discussed in Chapter One. However, in order to discover and interpret how the *JRME* authors constructed their practices of research, I decided that a document content analysis guided by a phenomenological methodology was best suited for such an inquiry. Since this technique is specifically an analysis tool with certain implied data collection practices, I have used the term within this study as a methodology with an understanding that it uses certain implied methods, but kept the term in the form as a method (see Appendix A).

While selecting *JRME* articles within a defined timeframe may allow it to be described as a phenomenon, there were no particular events or boundaries that usually describe a researchable phenomenon (Schwandt, 2007, p. 226). This logic was used similarly to Merriam's (2009) point that many consider all qualitative to be phenomenological (p. 24). Therefore, I have drawn from the philosophy of phenomenology to "depict the essence" of these articles (p. 25) and labeled the current study as a content analysis methodology with caveats similar to those of phenomenological research.

A content analysis also allowed the means of investigating the articles and providing general descriptions and distributions of some of the codes (see Appendix C). This approach therefore allowed me to interpret how the authors were explicitly discussing their underpinning research assumptions, like epistemology and theoretical frameworks.

Other researchers have also used content analysis within a music education context.

Authors have focused on state and national standards for music education (e.g. Alsobrook, 2013; Saeler, 1996; Shepherd, 2015), music education texts (e.g. Swanson, 1986; Simmons, 2008; Stover, 2003), and various musical works (e.g. Buckles, 2003; Rozen, 1998; Spivak, 2008). Several other have also analyzed research such as questionnaires distributed to music teachers (e.g. Bley, 2015; Guzman, 1999; Gelbert, 2010), interviews (e.g. Jacobs, 2007; Kinney, 1990, Hufft, 2013), and historical texts (e.g. Chrisman, 1985; Keithcart, 2008; Resta, 2008). Since content analysis has obviously been used in music education research, it was appropriate that such a familiar approach also be used in the current study.

Methods: Phase One

Using the form found in Appendix A, I coded each full length article (*N*=130) of the *Journal of Research in Music Education* (*JRME*) between Spring 2011 (volume 58, issue 4) and Spring 2016 (volume 63, issue 4). The journal allowed for authors to submit "short form" articles that were 4-10 pages long and were considered "related to an ongoing line of research" (see NAfME, 2016) rather than the submissions being full length studies themselves. I did not include these, speeches, or book reviews in order to directly focus on peer-reviewed studies (see Appendix D for a full list of the articles).

Online resources. Google offered a free online software tool in its Drive service called Google Forms wherein a user can create a survey with an assortment of responses. It allowed the possibility of multiple responses from the same user, so I used this feature and single-response questions to complete codes for all 130 articles. Once completed, the software generated simple charts and graphs as well as offered the survey designer the opportunity to export the responses to Microsoft Excel. What was convenient about this tool was that I could send a sample of articles to an additional reader who could code for inter-rater reliability, including responses with

the original data. The first question in my form asked for a reviewer code where the principal investigator was indicated as 001 and the additional reader was 002.

Adaptations. After coding the first complete two issues of the journal (*n*=11), I stopped to reflect on the usability and applicability of the form. Within these articles, I noticed that seven were using quantitative designs and statistical analyses that I felt might be representative of more issues I was to investigate. Therefore, I included an additional question on the form to detail the use of a particular statistical analysis. Since there were also form questions constructed around the explicitness of methods used in the article, I adjusted my coding to reflect that if the author mentioned the statistical procedure used, that it was, in fact, an explicit mentioning of a method. I made the question multiple choice with an "other" option in order to capture statistics that I may not have listed. After this change, I continued to code the rest of the articles with the new statistics-related question and returned to the first 11 articles and recoded them completely again with this new question added.

The other form questions were based upon existing content analyses in music education, namely Killian, Liu, and Reid (2012); Lane (2011); Miksza and Johnson (2012); and Yarborough (2002). Additionally, they were formulated around authors' explicit use of Crotty's research components similar to Burnard's (2006a) examination. The fields were intended to identify the following:

- the number of authors
- if the authors were in a music-related profession (including academic appointments), in non-music-related professions, or a mixture of the two
- each author's appointment

- if the type of article was empirical, reflective, or creative
- the research description the article used (quantitative, qualitative, mixed methods, or historical) and whether or not this was specifically stated by the author
- what the peer-reviewed articles listed or implied for each of:
    - epistemology
    - theoretical framework
    - methodology
    - method
- the research question for each article

Additionally, there were open-ended questions that asked the reviewer to describe certain language usage regarding how research was articulated within the article (see Appendix A). However, as the coding progressed, it was determined that these questions could not be applied to the authors' discussions since most authors were not explicit regarding a field-wide discussion of rigorous research.

Data Compilation. Once the articles were coded into the online form, I exported the responses into a Microsoft Excel spreadsheet. Upon visually inspecting the responses, I noticed that some individual answers were missing. I opened the article PDF and input the correct code and saved the resulting dataset. I also randomly selected articles to ensure the codes were correctly identified. Once this was satisfied, I found my data to be complete and ready for preliminary analysis.

Since Google Forms used the title of each question as the name of the field, I found it necessary to simplify and rename the columns. To maintain clarity for the question and

applicability for extracting multiple responses, I used abbreviations for the construct of each question. For example, Google Forms originally listed the field name as “Component 1 - What are the research methods used in the article?” and I renamed it as Comp1.1 to indicate the first of Crotty’s components and to allow for multiple responses for the question. I made a copy of the data with original labels and hid the spreadsheet before applying the new names.

Additionally, some of the multiple choice questions needed to be altered before analysis could begin. More specifically, the four questions regarding Crotty’s components, plus the newly added query investigating statistical methods used, all allowed for multiple responses. Google Forms stored this data in one field, labeled with the question title, with each user choice separated by a comma. I split each of these multiple response fields using a comma as the text string delimiter and extracted each individual response. As in the example above, the method question was relabeled as Comp1 and when I extracted the multiple responses, each new field was labeled Comp1.1, Comp1.2, etc. The result was a spreadsheet containing 43 columns/fields for each of the 130 rows/articles. Of course, the fields were only completed where the article called for more.

Explicitness. In order to determine within these articles their explicitness of Crotty’s four components and their research design, I searched the individual articles for key words and partial words relating to each form question. For the research design description, I searched for specific usage of the words *quantitative* (using *quant*), *qualitative* (searched *qualit*), *mixed methods* (searched *mixed*), and historical (searched *histor*). In order to determine if the search results were, indeed, focusing on research designs, I had to consider the context of each. For example, I deliberated if *qualit* was used in describing qualitative research versus a discussion on the quality of music or produced sound. I used Crotty’s methods concept that guides the type of

methodology used, like case study methods informing a phenomenological research methodology. Therefore, I would search for *phenom* and examine the context to determine if the study in fact used a phenomenological methodology. For theoretical perspective, I searched for *theor* and included any results for theoretical perspective, theoretical framework, or any other theory framing the article. I also searched for *ism* since it would produce results that informed systems such as feminism, idealism, postmodernism, etc.

As mentioned above, many authors confuse the terms *method* with *methodology* and vice versa. So, again using Crotty (1998) as a guide, I coded them appropriately (see Appendix B) after inspecting each article's abstract and their sections on methods or methodology, whichever they used. I used this as a context-driven examination of both their explicitness as well as which tools they used to gather or to analyze their data (methods) and what kind of methodology guided that tool (methodology). The complete results of all explicitness can be found in Chapter Four.

Methods: Phase Two

While the intention was for the open-ended responses in Phase One to guide Phase Two, the lack of responses prohibited the approach. Instead, I used the results of the explicitness questions in Phase One to investigate further. Specifically, I took the articles that were coded as having three or four of Crotty's components (n=10) and loaded the PDFs into Dedoose, a cloud-based qualitative software. My purpose was to then use data-driven categories and investigate particular examples of research informing my research questions (Schreier, 2012, p. 219).

Online Resources. Dedoose was one of the only qualitative analysis software tools that allowed for the importing of PDFs, which was how all of the *JRME* articles were downloaded for the study. The software automatically labeled each article as a unit of analysis. Upon inspection

of each article, I was able to create codes and descriptors as I read each article and label passages as I came across them.

Dedoose also automatically created useful displays of qualitative data such as word clouds, frequency tables, and component matrices. One such table that was useful was the sum of the distribution of codes within each article. This allowed the analysis of codes and which articles contained combinations of the codes.

Adaptations. While Dedoose's conversion of PDF to text was not 100%, most of the analysis was still able to be completed without too much hindrance. Particularly, the headers and footers contained in the journal were imported as text and were not separable, except by sight, from the study itself. Also, many of the tables from the articles were not imported as such and I had to glance over the data to find where the paragraph began again.

A feature of Dedoose was the ability to restructure the categories after the coding was completed. Specifically, I created a hierarchy of parent and child codes in cases that needed it. For example, I began one code that was constructive research which I then created subcategories of music education research and general research. The final version of descriptors I used are listed and findings discussed in Chapter Four.

Sample

The study was limited to the articles found within the *JRME* because of its broad representation of music education research. This study, however, was intended to analyze and describe research processes within the articles and not be generalized to all occurrences of music education research. However, transferability is left to the reader. Also, while the *JRME* was just one of a few music education journals, it was used because of its focus of research by music

educators primarily in the United States and was not concerned only with music teacher preparation.

The investigation looked at *Volume 58*(4) to *Volume 63*(4) and totaled 130 *JRME* articles. They were examined for characteristics of research trends as well as the use of Crotty's (1998) protocols which Burnard (2006a) said needed to be explicitly discussed in research. Unlike Lane's (2011) content analysis, the *Bulletin of the Council for Research in Music Education* (*CRME*) was not considered for this study because of the numerous papers from conferences, opinion commentaries, and other reviews contained therein. The timeframe selected also allowed for the extension of examinations of research similar to Lane (2011); Miksza and Johnson (2012); and Yarbrough (2002).

Most of the content analyses mentioned earlier either focused primarily on the *JRME* (see Yarbrough, 2002; Miksza & Johnson, 2012) or used the *JRME* as one of the sources of data (see Lane, 2011; Farmer, 2008). Also, Killian et al's (2012) study, while not derived from the *JRME*, provided insight on research practices that would be useful when applied to this journal. Therefore, synthesizing these authors' approaches in the online form and comparing the newer articles' patterns to Yarborough's earlier works provided further justification for limiting the study to the *JRME*.

Furthermore, Yarbrough's (2002) discussion focused on *JRME* articles from the first 50 years of the journal (1953-2002) and this current study examined similar trends and patterns within publications after 2011. The articles were limited to those that had utilized empirical research or referred to previous studies. Forum discussions, speeches, and reviews of literature were not included in the study because none were found that were research-based, peer-reviewed conversations.

Analysis

Phase One analysis consisted of simple descriptive counts and frequencies of the close-ended questions. The open-ended questions, such as dealing with research questions and the determinations of epistemologies and theoretical frameworks, attempted to uncover any themes that would also inform Phase Two. In-depth discussion on findings of both phases are found in Chapter Four.

Phase Two focused on themes and descriptions found in particular articles from Phase One. In order to do this, this study utilized Microsoft Excel and the software, Dedoose, to allow for textual and computational content analysis where needed (Krippendorff, 2013, p. 213). To triangulate data with Phase One and the reviewed literature in Chapter Five, the computer-aided portion was used to supplement and strengthen those connections.

Strengths and Limitations

Strengths for this study rely on those for qualitative inquiry in that themes and patterns emerged and were interpreted as the study took place. Again, it was not meant to generalize all instances of music education research, but instead, it was intended as a snapshot of research processes that have specifically occurred within the *JRME* from 2011 to 2016. The limitations were similar in that analysis was contingent upon the biases and experiences of the researcher. The primary investigator was experienced in teaching various types of music in K-12 and college-level institutions and has obtained a master's degree in music. Therefore, these research lenses strengthened the research and analyses and allow for appropriate interpretations of the findings. A more specific limitation would be that the articles were published in the *JRME* therefore have the filter of editorial and peer-reviewed approval in that they had additional criteria to be met before publication.

Validity and Reliability

An additional reader for this project was another doctoral candidate in the same program and had experience with terminology used in the Google Form. He was given 13 articles, which represented a standard 10% of the original sample, to code and the link to online form. Once he completed, we spoke over the phone to discuss any immediate changes or issues with the form itself.

First, he commented on the author explicitness of the various descriptions. Specifically, he noted that most authors do not state something like "this article is quantitative." However, their specific words were intended to help this study focus on how the authors contribute to quality of research-similar to Burnard's (2006a) argument. Given the responses to all the articles, these fields were intended to guide further research questions and not give a specific end to the study. Still, it is noted that some of the articles' authors did comment on the type of design, methods used, etc. The additional rater and I discussed this and he amended his responses to more accurately reflect the authors' explicitness.

Similar to what was discussed in the section above, the other rater felt that some of the methods responses overlapped others, such as a case study that could include interviews as well as questionnaires, and that they could be collapsed into just one response. Again, the way these codes were applied allowed for broader and sometimes multiple responses, even if they might seem redundant. However, we also discussed how we could not infer methods and just indicate how they collected and analyzed data and whether or not the authors explicitly called them "methods."

Lastly, in regards to the epistemology section, the rater felt responses could have been expanded to capture pragmatism. While the idea was noted and would make an interesting

addition to the study, pragmatism does not reflect Crotty's idea of epistemology and the "nature of knowledge" (Crotty, 1998, p. 8) like constructionism, objectivism, and subjectivism.

Despite the discussion regarding expanding and collapsing certain responses, no changes to the online form were recommended by the additional rater. While there was confusion in regards to the where the authors' occupations were located in the articles, no other amendments were made to the form itself. Additionally, there were three questions that had an agreement of less than 70.0% and the second rater recoded Question 9, Question 10, and Question 11. The resulting agreement percentages are indicated in Table 2.

To determine a simple interrater reliability, my original codes were compared to that of the additional rater. Taking out the free response/open ended questions and the identifying fields of the rater code and citation label, there were 195 (15x13) possible responses. By taking the number of units where the raters agreed and dividing by the total possible number of units, an overall 85.2% level of agreement was achieved. Schreier (2012) describes that interpretation of the percentage of agreement depends on the complexity of the fields involved--namely, if there were only two choices for the fields, then 85.2% would be considered by some as low. However, since most form responses were multiple choice and even included an open-ended "other" option, it is appropriate to say there was a high level of agreement and that the form is reliable for this study.

Table 2. Interrater Reliability (IRR) by Question.

Form Question	Rating Sum	Interrater Reliability
Question 3 (Number of Authors)	13.0	100.0%
Question 4 (Author Profession)	13.0	100.0%
Question 5 (Author Association)	13.0	100.0%
Question 6 (Article Description)	12.0	92.3%
Question 7 (Research Description)	11.0	84.6%
Question 8 (Research Explicitness)	10.0	76.9%
Question 9 (Methods)	9.3	71.8%
Question 10 (Methods Explicitness)	11.0	84.6%
Question 11 (Statistical Analysis)	9.25	71.2%
Question 12 (Methodology)	11.0	84.6%
Question 13 (Methodology Explicitness)	10.0	76.9%
Question 14 (Theoretical Framework)	9.5	73.1%
Question 15 (Theoretical Explicitness)	11.0	84.6%
Question 16 (Epistemology)	10.0	76.9%
Question 17 (Epistemology Explicitness)	13.0	100.0%
Total IRR	166.1	85.2%

Timeline

Once the topic for the research project was approved and adjustments suggested by the committee were made, the articles were downloaded and stored on the primary investigator's cloud service. This first part took two weeks (see Figure 1). The online form took an additional two weeks to be developed and implemented using Google Drive. The actual coding of the 130 articles into the form took approximately two and a half months and the analysis an additional month and a half. Also, during this time, I spoke with the additional rater; changed and modified the online form; and calculated the interrater reliability. Phase Two analysis required

approximately one month once Phase One was completed. The entire project took approximately six months from approval to final product.

Figure 1. Timeline for Dissertation Components.

Task	Weeks
Articles downloaded to researcher's computer	1-2 weeks
Online form developed	1-2 weeks
25 articles coded into Google Drive and additional rater's coding discussed (Phase One)	2-3 weeks
Phase Two analysis performed and guided by initial coding; compared to previous literature	3-5 weeks
Analysis articulated and explained in final chapters	4-5 weeks
Total Approximate Time	Approximately 5-6 months

Summary

This qualitative inquiry into the utilization of research protocols by music education researchers will unfold in two stages: using the online form to code and gain broad ideas and descriptions and then using Dedoose to help uncover themes surrounding the authors' understanding of method, methodology, theoretical perspective, and epistemology. The analyses will also be compared to similar studies like those of Yarbrough (2002), Lane (2011), Miksza and Johnson (2012), and Killian et al. (2012) to see if initial patterns are continuing or if others have been uncovered. The study will inform on the research practices and awareness of the four components set forth by Crotty (1998) and how this relates to the reality of research practices in the field.

CHAPTER FOUR

RESULTS

This study's findings and results progressed as the investigation evolved. Therefore, I decided to detail them within the two phases. The form that I used to code the articles listed basic descriptive questions first, because data regarding the authors and their professions was thought to be easier for the reviewer to find within the articles (see Appendix A; Table 3). The form questions regarding Crotty's research components involved more investigating and followed second. Subsequently, the structure of my findings conversation paralleled how the questions were listed in the form.

Table 3. Distributions of Author, Article, and Research Descriptions (*N*=130).

Form Question	*n*	%
Question 3 (Number of Authors)		
One Author	76	58.5%
Two Authors	33	25.4%
Three Authors	14	10.8%
Four Authors	5	3.8%
Five or More Authors	2	1.6%
Question 4 (Author Profession)		
Music-Related	116	89.2%
Non-Music	6	4.6%
Mixture	8	6.2%
Question 6 (Article Description)		
Empirical	125	96.2%
Reflective	5	3.8%

Table 3. Distributions of Author, Article, and Research Descriptions (*N*=130) (continued).

Form Question	*n*	%
Question 7 (Research Design)		
Quantitative	78	60.0%
Qualitative	40	30.8%
Mixed-Methods	4	3.1%
Historical[a]	8	6.2%

[a]Historical designs can be considered also a subset of Qualitative, but past music educators have separated historical into its own category.

Phase One

Findings

Authorship. While author description was only a minor research question for this study, it needed to be mentioned because the previous literature prolifically discussed such descriptions. The *JRME* allowed for an easy inspection of the authors and their professional appointments in that each article had short biographies on the last page. These indicated where the author was employed and in what capacity, as well as any other research interests. To guide the reader and clarify some occupations, my online form listed examples of each type of appointment next to the choices.

Most of the articles in the sample were written by one (*n*=76, 58.5%) or two (*n*=33, 25.4%) authors; only two articles had more than four. Codes for the authors' occupations were divided into music-related, which included all branches of the field including music performance and music therapy, non-music, and mixture, which counted all combinations of authors from music-related or non-music-related fields. Results were that 116 (89.2%) articles' authors were from music-related occupations, six (4.6%) were from non-music fields, and eight (6.2%) were from a mixture of the two categories. Since 95.4% of the articles were written with some sort of

influence from a music-related author, the original research question regarding the influence of authorship on use of Crotty's components would not produce interesting results without changing the focus of the question.

Research Design. Two questions in the online form dealt with descriptions of how the articles' research can be categorized--built around suggestions from Burnard (2006a, p. 145). The first such question differentiated the investigation of data in the studies. Specifically, if the article started with the collection of new data or investigating and existing dataset in a new way, it was labeled *empirical*. On the other hand, if the study was focused primarily on existing research and contributed to a conversation started by an empirical study, it was labeled *reflective*. Results for this question were 125 (96.2%) articles in the study were empirical while only five (3.8%) were considered reflective. There was a third choice, creative, however, no articles fell under the description of new systems, solutions, or ideas dealing with data collection.

The second question examining the articles' research designs contained five options: quantitative, qualitative, mixed methods, historical, and philosophical inquiries. For the purpose of this study, quantitative articles were considered as those that used any type of inferential statistical analyses, hypothesis testing, or that attempted to generalize populations. Qualitative articles were those that focused on descriptive cases and "how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences" (Merriam, 2009, p. 5). Articles that were labeled as mixed methods usually utilized the term *mixed methods* to denote they were concurrently using quantitative and qualitative methods to triangulate data. If the term was not explicitly stated but both quantitative and qualitative methods were obviously used concurrently, then the article was labeled as a *mixed methods* research design. Historical research, while technically a qualitative means of inquiry, has traditionally been separated in the

field of music education research (see Chapter Two) and therefore warranted the use of a separate category.

Using these parameters, 78 (60.0%) articles examined were coded as *quantitative*, 40 (30.8%) were *qualitative*, four (3.1%) were *mixed methods*, and eight (6.2%) were *historical*. No articles in this study were found to be categorized as philosophical. Implications of these results are discussed in Chapter Five while an examination of how authors were explicit about their design follows in the next section.

Explicitness. Burnard (2006a) drove the concept of explicitness within this study and called for "awareness of the importance of researchers being explicit about the assumptions and theories that underpin their work" (p. 143). While all of the articles contained at least some the components, they were not necessarily explicit about each one. In order to determine how the authors of articles in question construct the research reality--mentioned above--for these particular *JRME* articles, I investigated whether the authors were straightforward in discussing various research qualities and also recorded what each component was for the article. As discussed in Chapter Three, explicitness for research design was calculated based on the five possible options in the form question while explicitness for the four components reflected a combination of searches for exact phrasing, partial word segments, and context of any discussion of the component. The results for each of these explicit-centered questions are listed in Table 4.

Table 4. Results of the Explicit-Related Questions.

	Yes		No	
Form Question	n	%	n	%
Research Design	42	32.3%	88	67.7%
Methods	106	81.5%	24	18.5%
Methodology	43	33.1%	87	66.9%
Theoretical Perspective	19	14.6%	111	85.4%
Epistemology	11	8.5%	119	91.5%

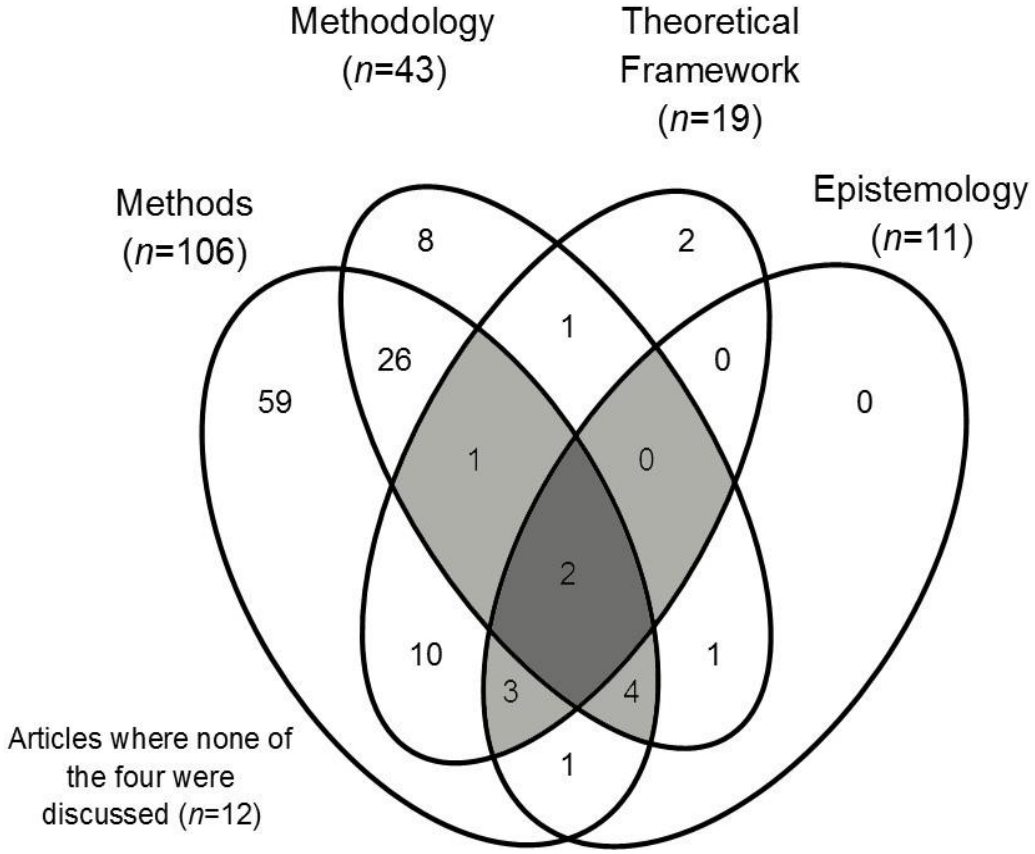
The results for the research description were that 88 (67.7%) articles did not explicitly discuss the research design, while 42 (32.3%) did use an explicit terminology to classify or describe the design. Originally, five articles were classified as unsure; however, I re-investigated them and reached the conclusion that they did not contain explicit discussion on the research design. I then recoded them to *no* and adjusted the spreadsheet accordingly.

In regard to Crotty's four components, 106 (81.5%) articles discussed methods either directly or indirectly; only 43 (33.1%) mentioned what methodology the article used; 19 (14.6%) discussed any type of theoretical perspective or framework; and 11 (8.5%) involved an explicit mentioning of epistemology (see Table 3).

Interestingly, the overlap of the explicitness of the components was not straightforward. The acknowledgement and discussion toward methods was more prominent than any other factor. There were only a total of 12 (9.2%) articles that were coded as having components but did not contain methods. Furthermore, eight (6.2%) only mentioned methodology; two (1.5%) articles mentioned theoretical framework alone; and no articles contained discussions of only the epistemology component. The ten articles that discussed three or more components, in various

combinations, were those studied in Phase Two of the current study. The display of Figure 2 shows the explicitness intersected among the articles in the study.

Figure 2. Diagram of Explicitness Regarding Crotty's Four Components.



Components. As exemplified by Burnard (2006a), articles can contain one of Crotty's components without the authors being explicit about them. Therefore, the following conversations were guided by my interpretations of the components when they were not explicitly discussed by the authors.

Methods. While looking at the number of methods utilized in each article, 52 (40.0%) discussed using a combination of two methods while 41 (31.5%) only included one method; 25 (19.2%) used three methods and 12 (9.4%) used four or more methods. After counting the number of methods used (*n*=280) throughout the articles, the most commonly used were

statistical analysis (*n*=72), questionnaire (*n*=45), observation (*n*=39), document analysis (*n*=25), interview (*n*=25), case study (*n*=19), and sampling/measurement and scales (*n*=10). There were six instances where the authors used and discussed methods not listed on the form (see Appendix C).

Statistical Analysis. Statistical analysis was considered by Crotty (1998, p. 5) to be a particular method of research, and resulting analyses were varied in their representations throughout the quantitative and mixed methods articles. Primarily, the most used procedures were ANOVA (*n*=34), MANOVA (*n*=16), any type of correlation calculation (*n*=14), and chi-square analysis (*n*=13). Extracting the statistical technique sometimes required searching for full spellings of the acronym, like "analysis of variance" for ANOVA. Exploratory factor and component analyses were used in ten articles while linear and non-specified regression (listed in the text as merely "regression") constituted 12 articles. While discussions regarding statistical analyses seemed vague most of the time, I extrapolated the specific procedures and, where available, created broad categories-like using "regression" for instances involving linear or logistic regression techniques.

Methodologies. For the methodology options of the form, I used options similar to what Crotty listed as examples (1998, p. 5). In this study, there was one particular article where the authors were explicit about using three different methodologies. Besides the nine articles that used two methodologies, all other articles were coded as having only one main methodology producing a total of 43 articles that were explicit about this component. The three most prominent methodological categories, both explicit and not, were phenomenological research (*n*=51), experimental research (*n*=45), and survey research (*n*=27).

Theoretical Perspective. There were six articles where the authors explicitly discussed more than one theoretical perspective/framework. All the other articles were coded as having only one theory driving their research based on Crotty's (1998) discussions of various frameworks, their corresponding epistemologies, and appropriate methodologies. Primarily, the theoretical perspectives were labeled by the reviewer as positivism/post-positivism (*n*=75), interpretivism (*n*=37), and historical/historicism (*n*=8). Again, historicism gained its own category due to the nature of how music educators delivered historical research studies: a retelling of the story of an institution, individual, or phenomenon (like music contests) detailing the music and educational methods used therein. While arguments could be made to put historically driven studies into interpretivism, the music education historical authors construct their studies in a unique and purposeful way.

Epistemology. The theory of knowledge and how it is "embedded" in the theoretical perspective (Crotty, 1998, p. 3) was generally dispersed across the *JRME* articles into objectivism (*n*=79), where "meaning resides independently of consciousness and experience" (Schwandt, 2007, p. 209); and constructionism/constructivism (*n*=45), where individuals construct their own reality individually (constructivism) or as a group (constructionism) (Crotty, 1998, p. 57). Additionally, coding for this component was based off results for searches within articles for the terms *ism* and *epistem*.

Themes

Phase One of this project was intended to provide a broad, descriptive scope of the music education research articles and to guide a more specific, deeper investigation for Phase Two. One theme that arose was that qualitative, mixed methods, and historical authors seemed to better include in their writing the argument of how their study contributed to quality of research.

Within the 52 (40.0%) articles that were in this group, the percentage of explicit discussions increased for all components when compared to the overall sample except the discussions on methodology, which marginally decreased by 0.4% (see Table 5).

Table 5. Qualitative, Mixed Methods, and Historical (QMH) Explicitness.

	QMH Subgroup *n*=52		Quant Subgroup *n*=78		Overall *n*=130	
Form Question	n	%	n	%	n	%
Research Design	35	67.3%	7	9.0%	42	32.3%
Methods	45	86.5%	61	78.2%	106	81.5%
Methodology	17	32.7%	26	33.3%	43	33.1%
Theoretical Perspective	14	26.9%	5	6.4%	19	14.6%
Epistemology	9	17.3%	2	2.6%	11	8.5%

Note: Percentages are calculated based on the subgroups, not on the whole sample of articles.

Another theme that emerged came from my use of searching for the methodology experimental research. Only 21 (50.0%) of the articles coded as *experiment*, where studies determine the influence of manipulating a treatment, stimulus, or intervention (Creswell, 2014, p. 242), were explicit in describing the research as experimental. This and other themes warranted full discussions as detailed in Chapter Five.

Challenges

I found that after coding all 130 articles, only two discussed research language in the way befitting my last four questions of the Google Form. While I still wanted to use Krippendorff's ideas of language in a content analysis as a guide for my research project, the lack of accurate coding indicated that such an investigation would better be left a different study than the current one. After reaching this conclusion, I informed the additional reader that these final responses did not have to be completed.

Another challenge that arose during Phase One was assessing whether each quantitative article appropriately used the correct statistical method. Specifically, the analyses did not seem to precisely answer the authors' proposed research questions. While this challenge may be an important one, such an investigation was worthy of its own, separate research project and would not contribute to the research questions at hand.

Implications to Phase Two

As noted above, the themes and challenges of Phase One led to restructuring some of the research questions in the current study. Notably, while an examination of the influences of the *JRME* authors' appointments would be interesting, music-related professionals constituted 95.4% of all the articles and therefore did not warrant as deep an investigation as the other questions. This particularly inquiry, however, was initially a secondary question and while it might prove to be an interesting focus of another study, it should be omitted from this one.

The two research questions dealing with the distributions of research design and Crotty's components, listed as (a) and (b) in Chapter One, have been addressed and implications will be discussed in Chapter Five. However, the inquiry dealing with discussions of Crotty's research components in music education needed to be altered to reflect insight provided by Phase One. More importantly, the spirit of the original question was intended to uncover the ways in which authors are discussing their roles in quality of research. New iterations of this question not only reflected a broader view of the authors' contributions, but also disseminated discussions in general research from that in music education. Therefore, the research questions were revised as follows and used to guide Phase Two where indicated:

(a) What are the distributions of the general research approaches such as qualitative, quantitative, mixed methods, and historical?

(b) How are the terms *epistemology*, *theoretical framework*, *methodology*, and *methods* utilized within the *JRME* from *Volume 58*(4) to *Volume 63*(4) and how are they distributed?

(c) Of the articles that explicitly discussed Crotty's components of quality of research, how did the authors contextualize this in these articles?

This streamlining of the research questions led to a better informed coding structure that guided Phase Two of this study.

Phase Two

This part of the investigation was to focus on the research question dealing with how music education researchers, who have exemplified quality of research, discussed this aspect within their publication. In other words, what were some characteristics of their discussions regarding quality of research.

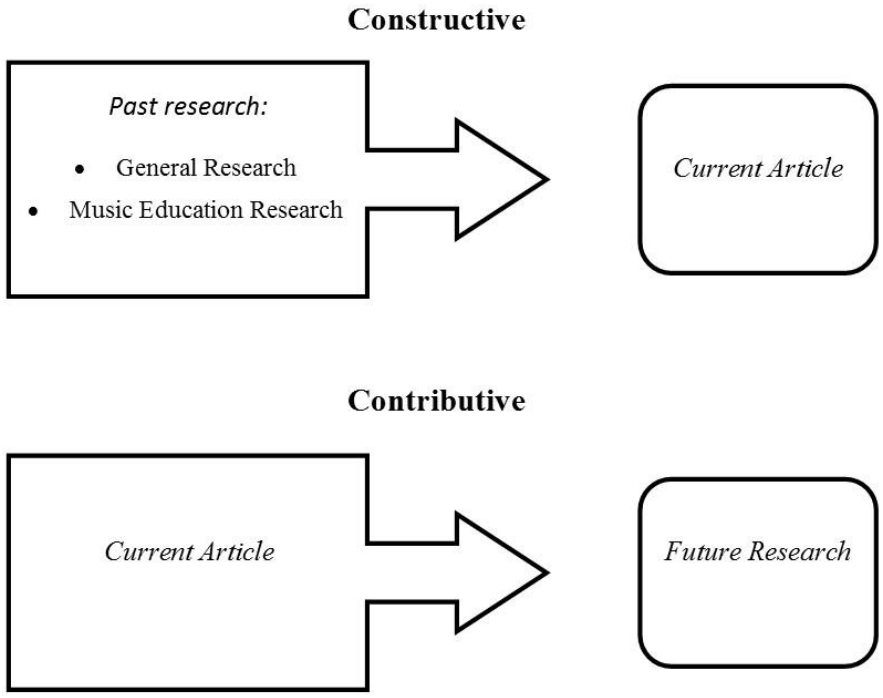
Therefore, Phase Two investigated the ten articles where I found three or four of Crotty's components being mentioned by the authors (see Appendix D and shaded portions in Figure 2). Within the software, Dedoose, I was able to code these articles based on how the authors contributed to the quality of music education research. This was an attempt to uncover any patterns or relationships within the documents where the four research components were most prominent (Krippendorff, 2013, p. 188).

Inferences

After reading this subset of articles, I found there were several references where the studies were part of a larger discussion of quality of research. The main categories of emerging codes were what I termed *constructive* and *contributive*. I used constructive to label the passages where authors discussed previous sources as being quality research, and that their current study

was also quality of research. Contributive was used when the passages referred to the study contributing to future research (see Figure 3).

Figure 3. Differentiation Between the Two Main Codes in Phase Two.



Furthermore, these two categories referred to references that went beyond the typical review of literature or any general discussion of further study or research which are common in published articles. In order for passages to be coded *constructive* or *contributive*, the authors must have contextualized the passage with explicit reasons or descriptions referring to research processes and connecting those processes to their article. The notes I added to keep the two categories separate included a description for contributive: “These are reasons why our article is good research for future studies.”; and for constructive: “These are examples of good research, which are like ours.” These codes helped group the authors’ discussions around their roles in producing quality of research within music education.

Subsequently, these codes uncovered how authors acknowledged the value of past research and how that connected to their research (constructive) or how their study was quality of research and how future research can relate to it as such (contributive). The codes were applied to passages discussing strengths and shortcomings of particular designs or methods (see Kelly-McHale, 2013; Bell-Robertson, 2014) or how the authors specifically overcame issues and problems in a music education context (see Nichols, 2013).

Finally, as a reminder, every article studied in both Phase One and Phase Two contained a review of literature or substantial footnotes in the case of historical studies. The emergent codes that were used, however, indicated how the authors decided to include their own studies in a larger context of research. The codes did not describe the authors' rationale for performing their studies. They were intended for an indication of some self-acknowledgement by the authors in how their research can be considered of value given the current state of research discussed in Chapter Two. In other words, discussions needed to be beyond a focus on the results of studies and instead explicitly acknowledge attributes of previous practices, methods, and methodologies that the authors were building upon.

Findings and Themes

Once the coding was finished, some relationships among the articles were discovered. Two major categories emerged--constructive and contributive--with constructive having a few instances specifying music education research as sources. Depending on the level of detail within the context (e.g. if the reference was an introductory clause to a sentence), the discussion of a research component may not have constituted being labeled constructive or contributive. Distributions of the categories among the ten articles are found in the following table:

Table 6. Resulting Themes From Phase Two.

Article Author(s)	Constructive		Contributive
	General Research	Music Education	General Application
Abramo (2011)	3		2
Bell-Robertson (2014)	2		1
Buonviri (2015)	1		
Carter (2013)	3		1
Gerrity, Hourigan, & Horton (2013)	9		2
Jorgensen & Ward-Steinman (2015)	5	3	3
Kelly-McHale (2013)	1	1	
Nichols (2013)	1		2
Parker (2014)	3		
Van der Merwe & Habron (2015)	6		1
Total	34	4	12

Constructive. As indicated in Table 6, all ten articles contained a total of 38 passages that were coded as *constructive*. In other words, these authors directly and explicitly connected the application of quality of research, as opposed to the findings of previous research, to their current studies. Of these, 34 codes were specifically distinguished as coming from general education research. For example, Gerrity, Hourigan, & Horton's (2013) explicitly justified their selection of research design:

> Employing a mixed-methods research design was imperative for ultimately allowing the researchers to make the previous claim that the students with special needs experienced musical growth….As is common in mixed-methods research, a summation of the results was more powerful than the results of individual components. (p. 156)

In this passage, the authors specified attributes of the research design itself to justify actions within their study instead of only discussing findings of past research. Although the authors discussed elsewhere previous research and appropriate findings, they strengthened the reasoning

behind their choice of design by addressing the strengths and requirements applicable to their article.

Similarly, van der Merwe and Habron (2015) discussed and cited general education authors to justify using certain qualitative approaches to their study. “We embedded vignettes…[to] explicitly claim how our experiences relate to the phenomenon” (p. 50). By doing this, these authors strengthened their contribution to quality of research.

A third example of explicit justification came from Jorgensen & Ward-Steinman (2015) with their examination of research paradigms within the *JRME*. These authors had a similar scope to the current study in examining the *JRME* and in a specified timeframe. However, their focus was more philosophical in scope rather than investigating practices and their timeframe was more historical in that they looked at publications in 1953-1978. Nonetheless, the article exemplified the same explicitness Burnard (2006a) prescribed for quality of research. Jorgensen & Ward-Steinman (2015) defend and strengthen their choice of a historical research design by summarizing prolific researchers in music education and in general education (p. 268).

In addition to these authors, there was one other article, that contained references to music education research sources. While no articles used solely music education references, it is important to discuss the articles that did include such. Jorgensen & Ward-Steinman (2015) utilized several music education resources to justify their research as well as their findings (p. 268). Kelly-McHale (2013) also specifically referenced a music education source to begin a discussion of a “theoretical framework based on the constructs of musical identity and immigrant adaptation” (p. 198). Again, this was an example of using a source to strengthen the choice of one of Crotty’s components of quality of research.

Contributive. Some of the articles in the subset from Phase One went beyond justifying their research practices and offered up reasons as to why their research would useful to future research. This was similar to the articles coded as *constructive* in that the authors were explicit in discussing the quality contribution their article possessed. Many authors viewed their research as innovative as it related to one of Crotty's components. These twelve coded articles (see Table 6) were exemplified by their authors as perpetuating the conversation of quality of research within music education.

For example, Abramo (2011) took the standpoint that applying gender theory to music education's study of popular music would benefit future research (p. 37). Nichols (2013) similarly supported the article's usefulness in music education research containing narrative framing, especially in how it "can erase the potent ambiguity of lived experience" (p. 275). Bell-Robertson (2014) was even more specific by stating "this research aligns with [previous] findings and adds a music education perspective" (p. 447).

One final observation was that five of the ten articles in this subset for Phase Two were from volume 61 of the *JRME*. The codes that emerged did not indicate any further or noticeable connection beyond what this study allowed.

In summary, Phase One gave an overview of behavioral patterns of how the *JRME* authors explicitly discuss and exemplify their use of Crotty's four research components. Guided by the same questions that Burnard (2006a) posed to music education researchers, the online form utilized in this study showed that music educators are proficient in their discussion of methods and methodologies, even with some convoluted usage of the two terms. Phase One also showed a lack of conversation of the relationships among epistemology and theoretical framework and especially how those are associated with methods and methodological choices.

According to Burnard (2006a), given these explicit discussions would indicate quality of research, Phase Two of this study used a qualitative research design to uncover patterns and themes among the articles containing those discussions. Specifically, it was found that articles were either seen as constructive: authors using explicit reasons to justify their study as being quality of research; or contributive: authors giving reasons that their research is rigorous and useful in future studies. Discussions and implications of these findings will be elucidated in the following chapter.

I constructed a table with excerpts exemplifying the Phase Two authors' constructive or contributive discussions in addition to any specific references to research design or Crotty's four components (see Table 7). These excerpts contextualized the authors' utilization of the components and detail how the authors viewed their own studies as either resulting from previous quality research or exemplifying future quality research.

Table 7. Excerpts From Phase Two Articles (*n*=10).

Phase Two Article	Methods	Methodology	Theoretical Framework	Epistemology
Abramo (2011)	Incorporating both observations and the participants' perspectives allowed for a diversity of sources and for a "thick description" (p. 28)[a]		This study adopted a social constructionist perspective that viewed identity as a construction of social acts (p. 25)[b]	
Bell-Robertson (2014)	Because Stake (1995) recommended that case studies should revolve around issues, this case was designed to focus (p. 434)[a]		With an interpretive orientation (p. 434)[a]	Interpretive, social constructivist lens to guide methodological issues. (p. 434)[b]
Buonviri (2015)	To establish content validity by ensuring they were typical of tonal melodic dictations (p. 105)	The independent variable was experimental (p. 105)[a]		
Carter (2013)	I employed by what Stake described as a collective case study (p. 29)[a]		Specific to this study, poststructural theory provided a way to reexamine and redefine concepts (p. 28)[b]	The term poststructural denotes the remediation of academic theory within the culture of postmodernism (p. 28)
Gerrity, Hourigan, & Horton (2013)	Regarding validity, the researchers used the student interviews… (p. 152)		Research that employs the explanatory…begins with a postpositivist orientation (p. 148)[b]	Constructivism, another philosophical foundation for this research (p. 148)[a]

Table 7. Excerpts From Phase Two Articles (*n*=10) (continued).

Phase Two Article	Methods	Methodology	Theoretical Framework	Epistemology
Jorgensen & Ward-Steinman (2015)	As with most published content analyses, our study… (p. 269)[a]	Descriptive research embraces a broad category of studies (p. 264)	This study illustrates the importance of theoretical or heuristic models (p. 276)[b]	This content analysis was conducted as a philosophical and conceptual study in accordance with definitions for each category (p. 268)
Kelly-McHale (2013)	A collective case study design was chosen (p. 200)[a]	A context to investigate a phenomenon (p. 200)	Through…the theoretical framework based on…music identity (p. 198)	
Nichols (2013)	This article presents a narrative account (p. 262)[a]	Consistent with the ethics of narrative inquiry and the practices of participatory research (p. 264)[b]	As a work of critical storytelling (p. 264)	
Parker (2014)	The purpose of the interviews and observations was to triangulate the data (p. 21)[a]	The goal of grounded theory is to explain a process when existing theories do not fit (p. 20)[a]		Sought to reflect constructivist writings (p. 20)[a]
Van der Merwe & Habron (2015)	We describe and interpret these documents…to convey(p. 51)[b]		We adopted a hermeneutic phenomenological theoretical framework (p. 50)[a]	The philosophical worldview of this article is interpretivism (p. 50)

Note. Not all codes are represented in this table and some excerpts may encompass more than one of the categories and therefore totals will not be exactly the same as in Figure 2.
[a]Excerpts that exemplify constructive usage. [b]Excerpts that exemplify contributive usage.

Challenges

A challenge that emerged from reading Phase Two articles was discerning when an author was describing a basis for the subject of their study or substantiating their choices for one of Crotty's research components. The conclusion I arrived at dealt with the context and subject of the authors' discussions. Phase Two was ultimately an exercise in semantics as I attempted to uncover the authors' intentions. For example, if an author discussed one of Crotty's components as part of an introductory clause of a sentence, I had to determine whether or not that discussion implied what Burnard (2006a) meant in requiring explicitness (see Table 7). While sentence clauses tended to indicate superficial acknowledgement of a component, I still included them in counts of author explicitness, but they were not necessarily included in counts for contributive or constructive.

More specifically, if the authors focused on findings of cited literature, then the passage was not coded whereas if their discussion was centered on justifying their research practice (e.g. methods, methodology, or theoretical framework), it was labeled either contributive or constructive. This challenge brought an additional focus to Burnard's (2006a) discussion on explicit conversation about research components.

A challenge that encompassed the entire study was interpreting what assumptions the authors had about readers, especially in regards to what appropriate conclusions can be made from certain methods, methodologies, and even analyses. While some authors seemed to adequately explain assumptions of statistical analysis (e.g. Lorah, Sanders, & Morrison, 2014, p. 327), others seemingly omitted research concepts like generalizability and transferability of findings where they might be considered necessary, especially in coordination with the use of

statistical analysis. As mentioned earlier, such auditing the articles for accuracy was not the intention of this study and such detailed inspection can be applied in further research.

Summary

This chapter described the results of the research questions in this content analysis of the *JRME*. In particular, current research practices with the music education were shown to be trending to have more qualitative and mixed methods designs. However, there was little evidence of explicit discussions of these designs and of Crotty's four research components within the articles. While some authors did acknowledge the components, there was little conversation connecting the choice of the components to each other or to a more general conversation of quality of research withiin music education.

Within the context provided by the explicit authors, emergent themes were twofold: discussions of quality of research being built from previous works and conversations of how the study can be considered quality of research for future studies.

Chapter Five details conclusions of this content analysis and implications for future music education researchers.

CHAPTER FIVE

DISCUSSION

In the following chapter I will summarize my exploration of research practices among music education researchers as well as explain the final versions of my research questions as they developed throughout the study. I will then discuss how these authors demonstrated quality of research by inspecting for certain traits as prescribed by Burnard (2006a) and Crotty (1998). The section that follows will be devoted to how those traits were being explicitly expressed by the authors and the description of the contexts of these discussions. I will compare my findings with related existing literature and finish the chapter with a discussion of implications for future research as well as a reflection on the advantages and disadvantages of using a content analysis for this project.

Summary of Study

This study was designed to investigate music education research that was published in the *Journal of Research in Music Education* (*JRME*) from *Volume 58*(4) to *Volume 63*(4). Part of this investigation sought to discover patterns within the authors' research practices as well as their explicit discussions of underpinning components that Burnard (2006a) warranted were needed for quality of research (p. 143). I used content and document analyses as my methods which drove a phenomenological research methodology for this study. These were informed by a theoretical framework made up of a combination of positivism and interpretivism and a constructionist epistemology.

Portions of this study were emergent and evolving during the process of investigating the data. Unlike Yarbrough (2002), I found no peer-reviewed philosophical articles in the sample leaving only the four research design categories listed below. Also, explicit discussions of quality of research were lacking so I had to broaden the research question (c) in order to encompass the ten articles for Phase Two. The final versions of the research questions are as follows:

(a) What are the distributions of the general research designs such as qualitative, quantitative, mixed methods, and historical?

(b) How are the terms *epistemology*, *theoretical framework*, *methodology*, and *methods* utilized within the *JRME* from *Volume 58*(4) to *Volume 63*(4) and how are they distributed?

(c) Within the articles where authors explicitly discussed Crotty's components of quality of research, what was the context of their explicitness?

The basis for these questions was previous literature directed toward an overview of how music education researchers were practicing and discussing research within their work. Specifically, Burnard (2006a) recognized inconsistent usage of terminology in music education research and used Crotty's (1998) components of rigorous research as a lens to further examine published music education studies. After the deliberation of the articles in the journal issue Burnard was editorializing, she went on to say:

> future research would be enhanced if researchers explicitly mapped out their assumptions, theories of action, and their research process, including the 'what', 'how', and 'why' of methods and methodologies as distinct but interrelated dimensions….[and] it is the clarity of justification, detailed explanation and description provided by the researcher which allows judgments of validity to be made by the reader. (Burnard, 2006a, p. 149)

This call for specifying and justifying research choices required this study to differentiate a separation of what the authors were using in their studies (reality) and what were the discussions surrounding these choices (context).

After investigating the articles using an online form guided by previous research (see Appendix A), I took a closer look in Phase Two at how authors contextualized quality of research into discussions of their studies. In addition to general findings found in Chapter Four, I discuss their implications separated into the following sections.

Music Educators' Research Reality

Though the findings discussed in Chapter Four focused on a five-year snapshot of music educators' research practices, these articles do not represent all of music education research. As indicated in Chapter Two, there have been recent studies that have also concentrated on particular aspects of the journal. I compared my findings with the appropriate studies in the following section.

This study categorized *JRME* articles' research designs into qualitative, quantitative, mixed methods, or historical. Yarbrough (2002) also labeled these as methodologies (p. 278), but given Burnard's (2006a) argument presented above regarding the convoluted use of the term *methodology,* I compared these to what I have referred to previously in this study as research designs.

Aggregating Yarbrough's (2002) categories for *JRME* articles from 1953-2002 resulted in overall distributions being 76.9% for quantitative, 1.4% for qualitative, 14.1% for historical, 2.3% for philosophical, and 5.3% for other. Comparatively, the current study's journal articles from *Volume 58*(4) to *Volume 63*(4) reflected Yarbrough's call for a "wider dissemination" of the categories (p. 279). While the sample of articles saw a greater representation of qualitative

articles (30.8%), quantitative and historical articles decreased to 60.0% and 6.2%, respectively. Also, Yarbrough even noted an increased representation of qualitative inquiry from 1984-2002 (p. 278) and the current study supports a continued growing trend of using this design.

Also, while Yarbrough (2002) specifically addressed the categories quantitative, qualitative, historical, and philosophical in the text of the forum article, the frequency table reflects a further dissemination of quantitative into experimental, descriptive, and behavioral (p. 278). So, in order to make a comparison with the current study, I combined the author's categories of experimental, descriptive, and behavioral to represent a sum total of quantitative articles. Given that Yarbrough had a qualitative category separate from descriptive, it is assumed that descriptive referred to descriptive, quantitative-based studies. Interestingly, Yarbrough made no acknowledgement of mixed methods research.

Lane (2011) also discussed this growth of qualitative studies within both the *JRME* and the *Bulletin of the Council for Research in Music Education* 1983-2008 (p. 65). The author limited investigation of journals to 65 peer-reviewed articles explicitly identified as qualitative by the authors (pp. 67-68). Lane found that qualitative articles' representation within the *JRME* increased from 2% in the 1980s to 10% in the 2000s (p. 69). The author's approach to his investigation was limited to searching for the keyword *qualitative* and where the authors were explicit about their study being qualitative. However, within this study, I categorized articles as qualitative whether or not the authors specifically discussed the design of their research (see Table 5). Lane's findings suggested an increase in qualitative research representation in both journals whereas this study's findings within the *JRME* reinforced this idea.

While there have been studies looking at quantitative articles in music education (e.g. Schmidt & Zdzinski, 1993), most investigated the units of measure used within articles and not

the applied statistical techniques that this study analyzed. In an editor's forum, Sims (2009) introduced Yarbrough and Whitaker's study "Analysis of Reviewer Comments About Quantitative Manuscripts Accepted by the *Journal of Research in Music Education*" and presented its major points. While Yarbrough and Whitaker were describing reviewers' comments, they stressed the importance of being "careful in succumbing to trends in statistical analysis" and that "the use of simple descriptive statistics is the most effective way to describe one's results." Also, they found that the reviewers had issues with incorrect interpretations of statistical results and possible errant conclusions. In particular, they used an example of a study needing to justify the difference between means that were statistically significant and not practically significant (p. 291). By examining specific statistical analyses, the current study highlighted that such misrepresentation of mean differences could very well surface given the proliferation of ANOVA (n=34) and MANOVA (n=16) within the quantitative articles (see Appendix C).

Miksza and Johnson's (2012) content analysis of *JRME* articles examined patterns of cited theoretical frameworks in addition to those articles' units of analysis and "the academic field of knowledge in which the theory was generated" like psychology and sociology (pp. 7-8). They used a broader definition of theoretical framework than how the current study captured Crotty's (1998) assumptions of theoretical perspective. While their findings were still comparable to the current study, a distinction needed to be made to compare the results of both studies.

Miksza and Johnson (2012) coded their articles guided by Cady's (1992) definition that a theoretical framework was "a logical deductive relationship among declarative sentences whose propositional quality yields the attitude found in statements of belief that offer an explanation of

a phenomenon" (Cady, 1992, p. 62). This resulted in representations of *any* statements of belief--learning theory, musical preference, or otherwise (Miksza & Johnson, 2012, p. 14). This differed from how Crotty (1998) and Burnard (2006a) emphasized that a theoretical framework was the "assumptions brought to the research task" (Crotty, 1998, p. 7; see also Burnard, 2006a, p. 148).

Despite this difference, some of the instances that Miksza and Johnson (2012) coded for their study encompassed theories that fell under Crotty's definition. For example, they coded articles as citing theoretical frameworks of genetic epistemology (n=12), social constructivism (n=5), and gender theory (n=5) which would have been separately coded in the current study as *epistemology* and *theoretical framework*. These authors examined 30 years of the *JRME* publications while the current study just looked at five years. Therefore, comparing counts of particular codes would not produce any meaningful results. While the 2012 study discovered basic counts of citations, there was no particular evidence of how the investigated authors were explicit about their own research, like Burnard (2006a) prescribed for music educators.

Music Educators' Research Contexts

Phase Two of this study focused on the ten articles where the authors were explicit about three or four of Crotty's components. As mentioned above, the context of how the discussion of the components were used was taken into account for the codes. Detailed examination of these codes resulted in two categories--constructive, in which authors used previous examples of quality of research to build an argument that theirs was also quality of research, and contributive, in which authors described attributes of their research that future researchers could look upon as quality of research. These contextualized discussions contributed to Burnard's (2006a) argument that quality of research be explicit "about assumptions and theories that underpin their work" (p. 143). Since ten articles were found to have discussions of three or four of Crotty's components,

this means that most articles (*n*=120) in the study still lacked the adequate connections Burnard suggested and did not contain explicit justifications of the authors' research choices (p. 149). Therefore, what Burnard has charged to music education researchers in order to enhance the quality of their work could not be represented in most of the articles in this study, even those in Phase Two. Despite this, investigation of the contexts of the components' discussions was still warranted.

The articles in Phase Two were those that made explicit three or four of Crotty's components. The resulting categories described the ways in which they were explicit. For example, authors like Abramo (2011) overtly stated reasons for their choice of qualitative design (p. 28). While this acknowledgement contributed to the explicitness that Burnard (2006a) required, it also showed how their choice was constructive in that there was a factor that made their study also an example of quality of research. In contrast, authors focused on the quality of research components of their study to indicate similar future studies were also going to be quality research (see Jorgensen & Ward-Stenman, 2015, p. 276).

These categories brought up several aspects about Burnard's charge for being explicit. First, the mere act of mentioning one of Crotty's component does not imply that the authors were clear about how their research choices inform each other. Burnard even acknowledged certain publication limitations like page length and space constraints factor into authors' final publications (p. 145). However, Burnard reiterated how explicit justifications and context for the components should be priorities for authors (p. 149).

Additionally, these conversations of justification should also be more substantive than what this study found. I did not find any article within my sample that exemplified a connection for all four of Crotty's components. While this did not discredit any of the research accomplished

in the *JRME*, it certainly demonstrated the lack of coherence that many of the music education research leaders prescribed (see Colwell, 2006; Burnard (2006a); Colwell & Richards, 2002).

Therefore, when the connections of research components become commonplace in music education publications like the *JRME*, whether or not Crotty's four components, authors should build a context beyond that of just identifying their choices. In other words, rather than simply adhering to a list of criteria, authors should combine these decisions throughout their publication to strengthen their justifications and findings. This would contribute to the growth of research in music education (Burnard, 2006a, p. 150).

Implications for Future Research

After examining the sample of recent *JRME* articles, several points became apparent to me that music education researchers would find useful. Despite the suggestions of research leaders like Colwell (2006) and Burnard (2006a), there was very little demonstrated coherence among the articles in regard to justifying research designs and choices. While some researchers may find recommendations like Burnard's too restrictive or cumbersome to their final publication, these connections and clarifications of choices and how this relates to outcomes would only serve to strengthen the quality of research.

This study also continued to find evidence of misconstruing of the terms *methods* and *methodology*. As a research field, there needs to be a definitive prescription to authors, perhaps at the editorial level of journals and other publications. There is already a plethora of speeches, articles, chapters, and discussions of standardizing this verbiage, but there no evidence was found that supported any particular accepted definition or utilization.

Consequently, a more specific, and arguably simpler prescription is that of Burnard. While this study found disjointed practices of research components and the justification of their

use, following Burnard's suggestions would help music education studies contribute to scientific inquiry (p. 147). Adherence to these would help build confidence in what we produce as music education researchers (Colwell and Richardson, 2002, p. vii).

While researching the questions mentioned above, there arose tangential questions that could be addressed in future studies, especially those dealing with research practices within music education and assumptions implied with particular methods, methodologies, and designs.

As mentioned above, using Crotty's (1998) definitions may have been too narrow of a focus because certainly quality of research was achieved within the *JRME* articles investigated in this study, even if they were not explicit about the four components. However, what was represented was an inconsistent strategy regarding the acknowledgement of overall philosophical assumptions where certain methodologies and methods are concerned.

Future researchers may want to consider a content analysis that examines music education research questions and whether or not there are any underlying assumptions, especially in regard to generalizability to populations as this would contribute to the discussion of quality of research in the field. This would address questions of accuracy and appropriateness of statistical analyses as mentioned above. Similarly, a study could ask if music education researchers appropriately address bias within their samples when they attempt to generalize findings to broader music contexts. Another question may ask if results of a study using one or two high school orchestras in a suburban setting are appropriate when applied to a marching band program in rural middle schools or an inner city guitar programs?

Another investigation may be about how research in music education deals with particular issues of validity and reliability. Are they using the concepts accurately in describing their research tools as well as the applicability of findings? Are authors considering the

implications of improper usage? This would allow for an external comparison to a number of fields such as psychology and general education practices.

One final suggestion for future research would be a survey or even interviews with the editorial board of the *JRME* to see what their ideas of quality of research are and whether or not they implement those when they review articles. Or to take a step further, are there specific criterion in regards to language before the reviewers even see possible publications?

Any of these suggestions would contribute to the overarching conversation of how music educators are achieving a level of quality of research comparable to other fields of study. By acknowledging bias, assumptions, and issues of validity, researchers in music education can then being resolving those issues and enhance the quality of studies within the field.

Limitations

In reflecting upon my approach to the study, I realize some of the limitations therein. A primary issue I had with the study was assuming that Burnard's (2006a) suggestions for Crotty's components were either being widely by *JRME* authors or that it was such use was easily detectable. I had originally hoped that searching for key terms like Lane (2011) would yield usable data. This forced me to investigate the contexts of any discussions of Crotty's components and code them accordingly. While this was not ideal, it did lead to a usable description of the components' utilization in the articles.

In preparation for this project, I began with an interest of research practices of music educators. Since previous studies existed like Yarbrough (2002) that investigated at general categories, I found it necessary to use a specific lens, in particular, Burnard's (2006a) charge to increase the quality of music education research. While this allowed me to set guidelines for my study, it proved to be cumbersome in some areas.

Burnard (2006a) was upfront and allowed me to differentiate between what authors term *methods* versus *methodologies*. However, even using this clarification, it became apparent quickly that the authors in the articles I was investigating did not have any clear standards in justifying their research in practice or in explicit discussion. Seemingly, it was enough to just have a literature review and clear, logical connections need not be present in the papers in order for them to be published. So, I felt like each article approached research in a different manner, making analysis continuously more difficult.

However, while it was important to refer to the handbooks for support and guidance, I had to set aside my urge to audit the articles in my study for specific criteria. I finally realized that it was ultimately up to the reader to decide if the article was quality of research or not. Since I had experienced the *JRME* in a music setting at Southern Illinois University and a non-music setting at Loyola University Chicago, I felt that only some of the articles could be considered quality of research in both arenas. And although there were prescriptions for research in the Colwell's handbooks, the articles did not reflect adherence to such guidelines.

Burnard (2006a) presented clear arguments for music education researchers to achieve more quality within their studies or in the very least, acknowledge accurate assumptions in regard to choosing methods and methodologies. Using this lens, I investigated a sample of recent articles to see if *JRME* authors were producing quality of research. While producing useful descriptions of research practices, there were very few articles meeting Burnard's expectations even though with only slight alterations within a few sentences, the authors could have.

Suggested Alternatives to Crotty's Components

Burnard's (2006a) applications of Crotty's research components are not without their own complications when investigating practices within music education. Throughout this study,

it was apparent that an article without explicit discussions of epistemology, theoretical framework, methodology, or methods was not indicated as quality of research. This does not mean that the studies were not of high quality, just that the specific indicators were not applicable. However, as Burnard indicated, there needs to be a clear set of standards that will advance music education research (p. 143).

While Burnard required explicit discussion of Crotty's four component's specifically, the articles could be missing them due to editing to meet word limits, broadly applying readership assumptions, or the review committee for the JRME requiring no such statements. Despite these reasons, there should still exist within music education a convention applicable to all research designs (quantitative, qualitative, mixed methods, or historical) that would clearly indicate quality of research.

All non-historical articles contained a method or methodology section. As indicated in previous literature and in findings within this study, a clear definition or a set of quality standards needs to be understood and executed by the authors, as well as audited and required in the peer review process. So, a standard of research is the responsibility of not only the researchers, but also music education organizations, like NAfME, journal reviewers and editors.

The first, and possibly most important, component a research article should have is a definition of how the data were collected. Similar to Crotty's methodology component, researchers should be clear on any driving influences or implications that impacted their data collection. For example, the author needs to ask whether the intent of the research was to compare stimuli, as in an experiment; describe an occurrence, as in a phenomenon; or test a research tool, like a survey. An additional level of explanation might also be that the author

would indicate the type of analysis that is going to be used and any particular lens or bias that the data will be examined, like feminism or action research.

At a deeper level of explanation and disclosure, the researcher should also discuss the data and how it should be construed, particularly if there are chances of misinterpretation. For example, issues could arise in interpreting a particular outcome variable as quantitative and dichotomous when it should be viewed as qualitative and subject to other interpretations. This is also the opportunity for authors to indicate ideas and limitations of generalizability or individualistic application. Though it may be obvious to the researchers, the application and implication of the data may not be so clear to every reader. While Crotty and Burnard would separate this explanation into theoretical perspective and epistemology, authors may want to succinctly marry the two ideas into a statement explaining the consequences of the research and data.

While the above parallel a lot of Burnard's utilization of Crotty's components, the practical element needed to advance music education research to that of other fields is the explicitness of research *choices* and how those significantly affect the utilization of findings. Since researchers make decisions affecting their projects based on a wide range of influences, emphasis within the explicit discussions will be just as individualized. In other words, while an author may choose to explain one decision more than others, it should not mean the other choices are omitted from the discussion. For example, a survey may not be original to the project, so existing implications and assumptions within that tool should be discussed as well as the logical reason as to why that survey instrument was chosen.

To summarize with an adaptation of ideas presented by Burnard, music education researchers should explicitly discuss the following:

- Data collection
- Data interpretation
- Analysis

With each of those components, there also should be additional discussion of any assumption, appropriate applicability, or implication of the usage of that component. For example, using a series of interviews of university choir members to learn more about their additional involvement in LGBT organizations would require discussions on who was interviewed and how they were chosen (data collection), understanding the community environment where the interviews took place (part of data interpretation), as well as the meaning behind the interview results (analysis). The additional components would expand on assumptions on the context of the choir members (e.g. why would there be a connection to LGBT organizations?), the application of findings (e.g. can the same be said of the university band or orchestra programs? Or is this phenomenon just found at this one university?), and the implications found in the research summary (e.g. There's a correlation between two variables, but is this meaningful and applicable to similar university choral programs?).

In any research write up, there are going to be labels defining each facet of the study and Burnard focused very heavily on the explicit acknowledgement of these wherever possible. The broad idea is that the researcher is aware of appropriate application and prevents false interpretations. This simple, clear, and concise discussion would extend and acknowledge the value of the study to readers and possibly broaden the scope of future studies.

Conclusions

Again, five years of publications in one journal does not reflect the entire field's practice of research but it does indicate extensions of trends and patterns found by Yarbrough (2002) and Lane (2011). Using Burnard's (2006a) approach as a particular lens may have been too narrow of a focus using one particular set of standards or components. This may be because Crotty is an Australian author and the *JRME* was a publication guided by prominently American philosophies, editors, and authors in addition to a different set of national standards for music education. Also, while NAfME explicitly charged authors to consider research ethics in their publication submissions (NAfME, 2016), there was no requirement for publications listed that prescribed particular discussions or justifications of research design choices, let alone any of Crotty's components. However, such an inspection as the current study can still indicate patterns and characteristics of recent publications in music education research.

Some music education research leaders have challenged the field's constituents to consider particular research practices and structures that are exemplary in other fields (Colwell, 2006; Colwell & Richardson, 2002). Even more specifically, scholars like Burnard (2006a) have included within this challenge the need for and acknowledgement of the four components which Crotty (1998) required for quality of research. While authors were overall explicit regarding their methods and methodology, as detailed in Chapter Four, they were not openly and explicitly discussing the underpinning epistemologies and theoretical frameworks that solidify their research. With these components, a research can "ensure the soundness of [their] research and make its outcomes convincing" (Crotty, 1998, p. 6). In other words, it can reduce confusion directly related to results and to assumptions found in, say, statistical analyses. It may also add to credibility the study when compared to similar approaches in other fields.

A question kept occurring to me, too, as I concluded my findings: would I have found more prevalent themes if I had encompassed ten years' or even 20 years' worth of articles? Yet, after comparing my findings with other authors, I felt this disparity has been a trait within music education research for some time. This was evident in the production of the handbooks that attempt to reign in the various approaches to research (see Colwell, 2006; Colwell & Richardson, 2002). Unfortunately, even after consulting these handbooks, it was apparent that authors rarely adhered to these research guidelines and suggestions.

Standardizing research practices within music education will continue to be an ongoing practice. It is important that researchers in the field not only continue to acknowledge seasoned music education researchers like Colwell, Richardson, and Burnard but they should demonstrate these suggestions in their own writings and encourage the use of the guidelines in others' publications. This would continue the charge that Burnard brings forth and enable future researches to "reference, extend, test, build, and make links" (p. 149) to their own works and tell the "whole, not half, of the story" (p. 151) of the research choices.

APPENDIX A

ONLINE FORM

Research Protocols in the JRME

Data collection for dissertation; Clifton McReynolds; Loyola University Chicago

* Required

1. Reviewer *
   C. McReynolds=001; External Reviewer=002
2. Citation *
   Use the following format:
   "Year.Volume.Issue.Article#"
3. Number of Authors
4. Author(s) Profession Mark only one oval.

   ◯ Music related appointment (full time musician, music educator or professor, music therapist, and similar)
   ◯ Non-music related appointment (psychologist, sociologist, non-music professor)
   ◯ Mixture of the above
5. Specific Author Profession/Association
   List for each author; Number beginning with the first LISTED author followed by colon and profession (e.g. 1-Mcreynolds: Real Estate Agent, 2-Faust: Editor) If the author is a student, list the type program they are associated with.
6. Article Description Mark only one oval.

   ◯ Empirical (data collection is main discussion)
   ◯ Reflective (empirical findings are starting points)
   ◯ Creative (new systems, solutions, and ideas are main points)
   ◯ Other:

7 Research design * Mark only one oval.

   ◯ Quantitative (inferential statistics, hypothesis testing, generalizing data set(s))
   ◯ Qualitative (descriptive cases, particular phenomenon/not generalized, program evaluation)
   ◯ Mixed Methods (using concurrent quantitative and qualitative methods)
   ◯ Historical (story-telling, specific data that expands on pre-existing people or ideas)
   ◯ Philosophical
   ◯ Other:

8. Was this description explicitly stated by the author(s)? Mark only one oval.

- ◯ Yes
- ◯ No
- ◯ Unsure

Use of Research Components

Please refer to Crotty (1998) for definitions of the components

9. Component 1 - What are the research methods used in the article? Check all that apply.

- ☐ Case Study
- ☐ Cognitive Mapping
- ☐ Comparative Analysis
- ☐ Content Analysis
- ☐ Conversation Analysis
- ☐ Data Reduction
- ☐ Document Analysis
- ☐ Focus Group
- ☐ Interpretative Methods
- ☐ Interview
- ☐ Life History
- ☐ Narrative
- ☐ Observation Participant or Non-Participant
- ☐ Questionnaire
- ☐ Sampling/Measurement and Scales
- ☐ Statistical Analysis
- ☐ Theme Identification
- ☐ Visual Ethnographic Methods
- ☐ Other:

10 Are these methods specifically articulated by the author(s)? Mark only one oval.

- ◯ Yes
- ◯ No

11. If Statistical Analysis is a method, which specific analyses were performed? (check as many as apply)
Check all that apply.

- [ ] ANOVA
- [ ] Chi-Square
- [ ] HLM
- [ ] Linear Regression
- [ ] MANOVA
- [ ] Other:

12. Component 2 - What is the methodology used in the article? Check all that apply.

- [ ] Action Research
- [ ] Discourse Analysis
- [ ] Ethnography
- [ ] Experimental Research
- [ ] Feminist Standpoint Research
- [ ] Grounded Theory
- [ ] Heuristic Inquiry
- [ ] Phenomenological Research
- [ ] Survey Research
- [ ] Other:

13. Is the methodology specifically articulated by the author(s)? Mark only one oval.

- ◯ Yes
- ◯ No

14 Component 3 - What is the theoretical perspective in the article? Parenthetical may be possible references/author/citations the author(s) used Check all that apply.

- [ ] Critical Inquiry (Bernstein, Calhoun, or Horkheimer)
- [ ] Feminism (Alcoff, Antony & Witt, Harding & Hintikka, or Nicholson)
- [ ] Historical/Historicism (Grondin, Fay, or Henderson)
- [ ] Idealism (many)
- [ ] Interpretivism (Symbolic Interactionism, Phenomenology, Hermeneutics; Rabinow & Sullivan)
- [ ] Positivism/Post-Positivism (many)
- [ ] Postmodernism (many)_
- [ ] Rationalism (Bunge or Hollis)
- [ ] Other:

15. Is the theoretical perspective specifically articulated by the author(s)? Mark only one oval.

- ◯ Yes
- ◯ No

16. Component 4 - What is the epistemology of the article? Check all that apply.

- [ ] Constructionism
- [ ] Objectivism
- [ ] Subjectivism
- [ ] Other:

17. Is the epistemology specifically articulated/discussed by the author(s)? Mark only one oval.

- ◯ Yes
- ◯ No

18. Research Question(s)

If articulated within the article, please copy and paste the research question(s) otherwise summarize using your own words.

Krippendorff's Semantical and Attribution Discussion

In regards to Crotty's components, the following section details HOW these components are utilized within the articles.
(If the author does not articulate the components, then leave this section blank.)

19. Describe attributions in regards to research
    What terms do authors use in their articles that are attributed to quality research?

20. Describe social relationships in regards to research
    How do authors articulate relationships of their own work to previous literature that is considered quality research?

21. Describe public behaviors that reflect research in music education
    Is there a specific narrative/conversation within the article where the author discusses quality research?

22. Describe institutional realities that were used in regards to research
    Do the authors contribute to the reality of quality research in the field music education? Or is their research guided by another field?

APPENDIX B

DEFINITION GUIDE

Article Description

Term	Definition	Example(s)
Empirical	(Burnard, 2006a) Original data collection and findings are main discussion	--
Reflective	(Burnard, 2006a) Empirical research is starting point but lead to other discussions/questions	--
Creative	(Burnard, 2006a) New systems, solutions, and ideas are the foci	--

Research Description

Term	Definition	Example(s)
Quantitative	Use of statistics beyond descriptive like inferential statistics, hypothesis testing, and generalizing data set(s) and populations	--
Qualitative	(Merriam, 2009) Discovering how people interpret, construct, or attribute meaning to their experiences.	--
Mixed Methods	(Creswell & Plano-Clark, 2011) Using quantitative and qualitative simultaneously	--
Historical	Retelling or description of a person's story, an event, or a musical phenomenon.	--
Philosophical	Discussion of a particular set of ideas that are being used	--

Crotty's Four Components

Term	Definition	Example(s)
Methods	(Crotty, 1998) Techniques and procedures used to gather and analyze data	Case Study Cognitive Mapping Comparative Analysis Content Analysis Conversation Analysis Data Reduction Document Analysis Focus Group Interpretative Methods Interview Life History Narrative Observation Questionnaire Sampling/Measurement and Scaling Statistical Analysis Theme Identification Visual Ethnographic Methods
Statistical Analysis	Inferential, parametric, and non-parametric tests- usually described when discussing results	ANOVA Chi-Square HLM Linear Regression MANOVA
Methodology	(Crotty, 1998) Strategy, plan, process, or design lying behind the methods choice	Action Research Discourse Analysis Ethnography Experimental Research Feminist Standpoint Research Grounded Theory Heuristic Inquiry Phenomenological Research Survey Research
Theoretical Perspective	(Crotty, 1998) Philosophical stance informing methodology providing a context for the process	Critical Inquiry Feminism Interpretivism Positivism/Post-positivism Postmodernism
Epistemology	(Crotty, 1998) Theory of knowledge embedded in the theoretical perspective.	Constructionism Objectivism Subjectivism

Krippendorff's Linguistic Classes

Term	**Definition**	**Example(s)**
Attributions	(Krippendorff, 2013, p. 78) Unobservable or indirect attributes existing in the language and context.	The tone of how the author describes quality of research. How is quality of research "treated"?
Social Relationships	What kind of connections are the authors building with quality of research?	How do authors articulate relationships of their own work to previous literature that is considered quality of research?
Public Behaviors	Did the authors discuss or exemplify their own behaviors of quality of research?	How do the authors articulate that their study is producing quality of research?
Institutional Realities	The connection of quality of research to the institution - namely music education.	How do the authors discuss the role their article has in producing quality of research in music education?

Phase Two Categories

Term	**Definition**	**Example(s)**
Constructive	Where discussion and justification was given to previous research to show why the current article is quality of research. Focus on research components instead of research findings.	Creswell said mixed methods is appropriate for answering similar research questions to mine, so I therefore used mixed methods.
Contributive	Where justifications were given to the current article being quality of research and how it can therefore be used as an example for future research	My research answered my type of particular research question and can therefore be used as a basis for future research.

APPENDIX C

COMPONENT DISTRIBUTION

Component and Response	Totals from each component	%
Methods	**280**	
Statistical Analysis	72	25.7%
Questionnaire	45	16.1%
Observation	39	13.9%
Document Analysis	25	8.9%
Interview	25	8.9%
Case Study	19	6.8%
Sampling/Measurement	10	3.6%
Theme Identification	8	2.9%
Narrative	6	2.1%
Content Analysis	5	1.8%
Focus Group	5	1.8%
Comparative Analysis	4	1.4%
Interpretative Methods	2	0.7%
Institutional History[a]	2	0.7%
Adapted Conjoint Analysis[a]	1	0.4%
Behavioral Analysis[a]	1	0.4%
Bibliometric Analysis[a]	1	0.4%
Cognitive Mapping	1	0.4%
Data Reduction	1	0.4%
Meta-Analysis[a]	1	0.4%
Reflective Analysis[a]	1	0.4%
Statistical Analysis	**113**	
ANOVA	34	30.1%
MANOVA	16	14.2%
Correlation[a]	14	12.4%

Component and Response	Totals from each component	%
Chi-Square	13	11.5%
Regression[a]	12	10.6%
CFA	5	4.4%
EFA[a]	3	2.7%
Independent t-Test[a]	3	2.7%
Spearman[a]	3	2.7%
Cochran[a]	1	0.9%
Factor Analysis[a]	1	0.9%
HLM	1	0.9%
Mann-Whitney[a]	1	0.9%
Path Analysis[a]	1	0.9%
PCA[a]	1	0.9%
Trend Analysis[a]	1	0.9%
Wilcoxon Signed Rank[a]	1	0.9%
Methodology	**141**	
Phenomenological Research	51	36.2%
Experimental Research	45	31.9%
Survey Research	27	19.1%
Ethnography	5	3.5%
Discourse Analysis	2	1.4%
Grounded Theory	2	1.4%
Heuristic Inquiry	2	1.4%
Construct Reliability Research[a]	1	0.7%
Explanatory Sequential Design[a]	1	0.7%
Feminist Research[a]	1	0.7%
Interest Theory[a]	1	0.7%
Participative Inquiry[a]	1	0.7%

Component and Response	Totals from each component	%
Transgender Ethnography[a]	1	0.7%
Theoretical Framework	**136**	
Positivism/Post-positivism	75	55.1%
Interpretivisim	37	27.2%
Historical	8	5.9%
Critical Inquiry	4	2.9%
Postmodernism	4	2.9%
Culturally Responsive Teaching	1	0.7%
Feminism	1	0.7%
Human Determinism[a]	1	0.7%
Idealism[a]	1	0.7%
Omnivorism[a]	1	0.7%
Pragmatism[a]	1	0.7%
Social Constructionism[a]	1	0.7%
Transnationalism[a]	1	0.7%
Epistemology	**130**	
Objectivism	79	60.8%
Constructionism	40	30.8%
Constructivism	5	3.8%
Subjectivism	5	3.8%
Social Constructivism[a]	1	0.8%

[a]Denotes responses from “other.”

APPENDIX D

INVESTIGATED ARTICLES

An "" denotes the article was included in Phase Two of the study*

* Abramo, J. M. (2011). Gender differences of popular music production in secondary schools. *Journal of Research in Music Education, 59*(1), 21-43. doi: 10.1177/0022429410396095

Abril, C. R., & Bannerman, J. K. (2015). Perceived factors impacting school music programs: The teacher's perspective. *Journal of Research in Music Education, 62*(4), 344-361. doi: 10.1177/0022429414554430

Alexander, M. L., & Henry, M. L. (2012). The development of a string sight-reading pitch skill hierarchy. *Journal of Research in Music Education, 60*(2), 201-216. doi: 10.1177/0022429412446375

Bartolome, S. J. (2013). "It's like a whole bunch of me!": The perceived values and benefits of the Seattle Girls' Choir experience. *Journal of Research in Music Education, 60*(4), 395-418. doi: 10.1177/0022429412464054

* Bell-Robertson, C. G. (2014). "Staying on our feet": Novice music teachers' sharing of emotions and experiences within an online community. *Journal of Research in Music Education, 61*(4), 431-451. doi: 10.1177/0022429413508410

Bergee, M. J. (2015). A theoretical structure of high school concert band performance. *Journal of Research in Music Education, 63*(2), 145-161. doi: 10.1177/0022429415585959

Bond, V. L. (2015). Sounds to share: The state of music education in three Reggio Emilia-inspired North American preschools. *Journal of Research in Music Education, 62*(4), 462-484. doi: 10.1177/0022429414555017

Boucher, H. & Ryan, C. A. (2011). Performance stress and the very young musician. *Journal of Research in Music Education, 58*(4), 329-345. doi: 10.1177/0022429410386965

Brandler, B. J., Peynircioglu, Z. F. (2015). A comparison of the efficacy of individual and collaborative music learning in ensemble rehearsals. *Journal of Research in Music Education, 63*(3), 281-297. doi: 10.1177/0022429415597885

Brenner, B., & Strand, K. (2013). A case study of teaching musical expression to young performers. *Journal of Research in Music Education, 61*(1), 80-96. doi: 10.1177/0022429412474826

Brittin, R. V. (2014). Young listeners' music style preferences: Patterns related to cultural identification and language use. *Journal of Research in Music Education, 61*(4), 415-430. doi: 10.1177/0022429413509108

Broomhead, P., Skidmore, J. B., Eggett, D. L., & Mills, M. M. (2012). The effects of a positive mindset trigger word pre-performance routine on the expressive performance of junior high age singers. *Journal of Research in Music Education, 60*(1), 62-80. doi: 10.1177/0022429411435363

* Buonviri, N. O. (2015). Effects of a preparatory singing pattern on melodic dictation success. *Journal of Research in Music Education, 63*(1), 102-113. doi: 10.1177/0022429415570754

Byo, J. L., Schlegel, A. L., & Clark, N. A. (2011). Effects of stimulus octave and timbre on the tuning accuracy of secondary school instrumentalists. *Journal of Research in Music Education, 58*(4), 316-328. doi: 10.1177/0022429410386230

* Carter, B. A. (2013). "Nothing better or worse than being black, gay, and in the band": A qualitative examination of gay undergraduates participating in historically black college or university marching bands. *Journal of Research in Music Education, 61*(1), 26-43. doi: 10.1177/0022429412474470

Cash, C. D., Allen, S. E., Simmons, A. L., & Duke, R. A. (2014). Effects of model performances on music skill acquisition and overnight memory consolidation. *Journal of Research in Music Education, 62*(1), 89-99. doi: 10.1177/0022429413520409

Ciorba, C. R., & Russell, B. E. (2014). A proposed model of jazz theory knowledge acquisition. *Journal of Research in Music Education, 62*(3), 291-301. doi: 10.1177/0022429414542979

Conway, C. M. (2012). Ten years later: Teachers reflect on "perceptions of beginning teachers, their mentors, and administrators regarding preservice music teacher preparation." *Journal of Research in Music Education, 60*(3), 324-338. doi: 10.1177/0022429412453601

Costa-Giomi, E., & Ilari, B. (2014). Infants' preferential attention to sung and spoken stimuli. *Journal of Research in Music Education, 62*(2), 188-194. doi: 10.1177/0022429414530564

Dansereau, D. R. (2015). Young children's interactions with sound-producing objects. *Journal of Research in Music Education, 63*(1), 28-46. doi: 10.1177/0022429415574001

Daugherty, J. F., & Brunkan, M. C. (2013). Monkey see, monkey do? The effect of nonverbal conductor lip rounding on visual and acoustic measures of singers' lip postures. *Journal of Research in Music Education, 60*(4), 345-362. doi: 10.1177/0022429412464039

Daugherty, J. F., Manternach, J. N., & Price, K. K. (2011). Student voice use and vocal health during an all-state chorus event. *Journal of Research in Music Education, 58*(4), 346-367. doi: 10.1177/0022429410387145

Devroop, K. (2012). The occupational aspirations and expectations of college students majoring in jazz studies. *Journal of Research in Music Education, 59*(4), 393-405. doi: 10.1177/0022429411424464

Diaz, F. M., & Silveira, J. M. (2014). Music and affective phenomena: A 20-year content and bibliometric analysis of research in three eminent journals. *Journal of Research in Music Education, 62*(1), 66-77. doi: 10.1177/0022429413519269

Duke, R. A., Cash, C. D., & Allen, S. E. (2011). Focus of attention affects performance of motor skills in music. *Journal of Research in Music Education, 59*(1), 44-55. doi: 10.1177/0022429410396093

Elpus, K, & Abril, C. R. (2011). High school music ensemble students in the United States: A demographic profile. *Journal of Research in Music Education, 59*(2), 128-145. doi: 10.1177/0022429411405207

Elpus, K. (2013). Is it the music or is it selection bias? A nationwide analysis of music and non-music students' SAT scores. *Journal of Research in Music Education, 61*(2), 175-194. doi: 10.1177/0022429413485601

Elpus, K. (2014). Evaluating the effect of No Child Left Behind on U. S. music course enrollments. *Journal of Research in Music Education, 62*(3), 215-233. doi: 10.1177/0022429414530759

Elpus, K. (2015). Music teacher licensure candidates in the United States: A demographic profile and analysis of licensure examination scores. *Journal of Research in Music Education, 63*(3), 314-335. doi: 10.1177/0022429415602470

Fisher, R. A. (2014). The impacts of the voice change, grade level, and experience on the singing self-efficacy of emerging adolescent males. *Journal of Research in Music Education, 62*(3), 277-290. doi: 10.1177/0022429414544748

Fitzpatrick, K. (2011). A mixed methods portrait of urban instrumental music teaching. *Journal of Research in Music Education, 59*(3), 229-256. doi: 10.1177/0022429411414912

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Fredrickson, W. E., Geringer, J. M., & Pope, D. A. (2013). Attitudes of string teachers and performers toward preparation for and teaching of private lessons. *Journal of Research in Music Education, 61*(2), 217-232. doi: 10.1177/0022429413485245

Garrett, M. L. (2013). An examination of critical thinking skills in high school choral rehearsals. *Journal of Research in Music Education, 61*(3), 303-317. doi: 10.1177/0022429413497219

Gavin, R. B. (2012). An exploration of potential factors affecting student withdrawal from an undergraduate music education program. *Journal of Research in Music Education, 60*(3), 310-323. doi: 10.1177/0022429412454662

Geringer, J. M., & Sasanfar, J. K. (2013). Listener perception of expressivity in collaborative performances containing expressive and unexpressive playing by the pianist. *Journal of Research in Music Education, 61*(2), 160-174. doi: 10.1177/0022429413485246

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Gruenhagen, L. M., & Whitcomb, R. (2014Improvisational practices in elementary general music classrooms. *Journal of Research in Music Education, 61*(4), 379-395. doi: 10.1177/0022429413508586

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Hash, P. M. (2012). An analysis of the ratings and interrater reliability of high school band contests. *Journal of Research in Music Education, 60*(1), 81-100. doi: 10.1177/0022429411434932

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Hash, P. M. (2015). Music education at the New York Institution for the Blind, 1832-1863. *Journal of Research in Music Education, 62*(4), 362-388. doi: 10.1177/0022429414555983

Hash, P. M. (2016). The National School Orchestra Contests: 1929-1937. *Journal of Research in Music Education, 63*(4), 397-420. doi: 10.1177/0022429415618373

Haston, W., & Russell, J. A. (2012). Turning into teachers: Influences of authentic context learning experiences on occupational identity development of preservice music teachers. *Journal of Research in Music Education, 59*(4), 369-392. doi: 10.1177/0022429411414716

Henry, M. L. (2011). The effect of pitch and rhythm difficulty on vocal sight-reading performance. *Journal of Research in Music Education, 59*(1), 72-84. doi: 10.1177/0022429410397199

Hewitt, M. P. (2011). The impact of self-evaluation instruction on student self-evaluation, music performance, and self-evaluation accuracy. *Journal of Research in Music Education, 59*(1), 6-20. doi: 10.1177/0022429410391541

Hewitt, M. P. (2015). Self-efficacy, self-evaluation, and music performance of secondary-level band students. *Journal of Research in Music Education, 63*(3), 298-313. doi: 10.1177/0022429415595611

Hickey, M. (2015). Learning from the experts: A study of free-improvisation pedagogues in university settings. *Journal of Research in Music Education, 62*(4), 425-445. doi: 10.1177/0022429414556319

Hopkins, M. T. (2013). Teachers' practices and beliefs regarding teaching tuning in elementary and middle school group string classes. *Journal of Research in Music Education, 61*(1), 97-114. doi: 10.1177/0022429412473607

Hopkins, M. T. (2015). Collaborative composing in high school string chamber music ensembles. *Journal of Research in Music Education, 62*(4), 405-424. doi: 10.1177/0022429414555135

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Johnson, C. M., Madsen, C. K., & Geringer, J. M. (2012). A study of music students' tempo changes of a soloist's performance of Mozart's 1st horn concerto. *Journal of Research in Music Education, 60*(2), 217-231. doi: 10.1177/0022429412445486

Johnson, D. C. (2011). The effect of critical thinking instruction on verbal descriptions of music. *Journal of Research in Music Education, 59*(3), 257-272. doi: 10.1177/0022429411415860

* Jorgensen, E. R., & Ward-Steinman, P. M. (2015). Shifting paradigms in music education research (1953-1978): A theoretical and quantitative reassessment. *Journal of Research in Music Education, 63*(3), 261-280. doi: 10.1177/0022429415601690

Kang, S., & Yoo, H. (2016). Effects of a Westernized Korean folk music selection on students' music familiarity and preference for its traditional version. *Journal of Research in Music Education, 63*(4), 469-486. doi: 10.1177/0022429415620195

* Kelly-McHale, J. (2013). The influence of music teacher beliefs and practices on the expression of musical identity in an elementary general music classroom. *Journal of Research in Music Education, 61*(2), 195-216. doi: 10.1177/0022429413485439

Killian, J. N., Dye, K. G., & Wayman, J. B. (2013). Music student teachers: Pre-student teaching concerns and post-student teaching perceptions over a 5-year period. *Journal of Research in Music Education, 61*(1), 63-79. doi: 10.1177/0022429412474314

Koops, L. H. (2014). Songs from the car seat: Exploring the early childhood music-making place of the family vehicle. *Journal of Research in Music Education, 62*(1), 52-65. doi: 10.1177/0022429413520007

Kruse, A. J., Giebelhausen, R., Shouldice, H. N., & Ramsey, A. L. (2015). Male and female photographic representation in 50 years of *Music Educators Journal*. *Journal of Research in Music Education, 62*(4), 485-500. doi: 10.1177/0022429414555910

Lehmann, A. C. (2014). Using admission assessments to predict final grades in a college music program. *Journal of Research in Music Education, 62*(3), 245-258. doi: 10.1177/0022429414542654

Lorah, J. A., Sanders, E. A., & Morrison, S. J. (2014). The relationship between English language learner status and music ensemble participation. *Journal of Research in Music Education, 62*(3), 234-244. doi: 10.1177/0022429414542301

MacIntyre, P. D., Potter, G. K., & Burns., J. N. (2012). The socio-educational model of music motivation. *Journal of Research in Music Education, 60*(2), 129-144. doi: 10.1177/0022429412444609

MacLellan, C. R. (2011). Differences in Myers-Briggs personality types among high school band, orchestra, and choir members. *Journal of Research in Music Education, 59*(1), 85-100. doi: 10.1177/0022429410395579

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Major, M. L. (2013). How they decide: A case study examining the decision-making process for keeping or cutting music in a K-12 public school district. *Journal of Research in Music Education, 61*(1), 5-25. doi: 10.1177/0022429412474313

Mantie, R. (2013). A comparison of "popular music pedagogy" discourses. *Journal of Research in Music Education, 61*(3), 334-352. doi: 10.1177/0022429413497235

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McKoy, C. L. (2013). Effects of selected demographic variables on music student teachers' self-reported cross-cultural competence. *Journal of Research in Music Education, 60*(4), 375-394. doi: 10.1177/0022429412463398

Mehr, S. A. (2014). Music in the home: New evidence for an intergenerational link. *Journal of Research in Music Education, 62*(1), 78-88. doi: 10.1177/0022429413520008

Menard, E. A. (2015). Music composition in the high school curriculum: A multiple case study. *Journal of Research in Music Education, 63*(1), 114-136. doi: 10.1177/0022429415574310

Miksza, P. (2012). The development of a measure of self-regulated practice behavior for beginning and intermediate instrumental music students. *Journal of Research in Music Education, 59*(4), 321-338. doi: 10.1177/0022429411414717

Miksza, P., & Berg, M. H. (2013). A longitudinal study of preservice music teacher development: Application and advancement of the Fuller and Bown teacher-concerns model. *Journal of Research in Music Education, 61*(1), 44-62. doi: 10.1177/0022429412473606

Miksza, P., & Gault, B. M. (2014). Classroom music experiences of U. S. elementary school children: An analysis of the Early Childhood Longitudinal Study of 1998-1999. *Journal of Research in Music Education, 62*(1), 4-17. doi: 10.1177/0022429413519822

Miksza, P., & Tan, L. (2015). Predicting collegiate wind players' practice efficiency, flow, and self-efficacy for self-regulation: An exploratory study of relationships between teachers' instruction and students' practicing. *Journal of Research in Music Education, 63*(2), 162-179. doi: 10.1177/0022429415583474

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Mishra, J. (2014). Factors related to sight-reading accuracy: A meta-analysis. *Journal of Research in Music Education, 61*(4), 452-465. doi: 10.1177/0022429413508585

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Morrison, S. J., Demorest, S. M., Campbell, P. S., Bartolome, S. J., & Roberts, J. C. (2013). Effect of intensive instruction on elementary students' memory for culturally unfamiliar music. *Journal of Research in Music Education, 60*(4), 363-374. doi: 10.1177/0022429412462581

Myers, B. D. (2012). The national solo and ensemble contest 1929-1937. *Journal of Research in Music Education, 60*(1), 43-61. doi: 10.1177/0022429411434460

Napoles, J., & MacLeod, R. B. (2013). The influences of teacher delivery and student progress on preservice teachers' perceptions of teaching effectiveness. *Journal of Research in Music Education, 61*(3), 249-261. doi: 10.1177/0022429413497234

Napoles, J., & Vazquez-Ramos, A. M. (2013). Perceptions of time spent in teacher talk: A comparison among self-estimates, peer estimates, and actual time. *Journal of Research in Music Education, 60*(4), 452-461. doi: 10.1177/0022429412463246

* Nichols, J. (2013). Rie's story, Ryan's journey: Music in the life of a transgender student. *Journal of Research in Music Education, 61*(3), 262-279. doi: 10.1177/0022429413498259

Nichols, J. (2016). Sharing the stage: Ethical dimensions of narrative inquiry in music education. *Journal of Research in Music Education, 63*(4), 439-454. doi: 10.1177/0022429415617745

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