Art Therapy and Evidence-Based Practice: An Exploration of Interactions

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Art Therapy and Evidence-Based Practice: An Exploration of Interactions

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Art Therapy and EBP

Signature Page

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Abstract

The purpose of this study is to examine the attitudes and beliefs of art therapists towards Evidence-Based Practices (EBP). EBP is a rising trend in healthcare that refers to the process of using empirically validated research to make clinical decisions that best meet the needs of each client (Patterson, Miller, Carnes & Wilson, 2004). The investigators used a mixed methods approach to the research topic. Part A consists of a survey distributed to graduates of the Department of Marital and Family Therapy (MFT) at Loyola Marymount University (LMU). In addition to answering questions, survey participants were asked to create an art response depicting their perspective on the relationship between art therapy and EBP. In the second phase (Part B), the researchers used an arts-based methodology to further explore the findings from Part A. Part B involved the creation of key idea cards pulled from the literature review and the findings, individual art responses by each investigator, and verbal and written analyses of the content and process. The idea that art therapists are already integrating EBP and art therapy in their practices emerged as the major finding of the research. This realization that clinicians are already at the intersection of EBP and art therapy was a contrast to the cautious divided attitudes that were discovered in the literature review. Further research could not only strengthen the evidence base of art therapy, but also illuminate how exactly therapists have managed to bridge the gap between EBP and art therapy.

**Keywords:** art therapy, Evidence-Based Practices (EBP), Empirically-Supported Treatments (ESTs), Marital and Family Therapy (MFT), mixed methods
Disclaimer

This paper does not reflect the views of Loyola Marymount University (LMU) nor the Department of Marital and Family Therapy (MFT). The anonymity of the survey participants was carefully protected.
Dedication

This paper is dedicated to all of the practicing and aspiring art therapists searching for their place in the mental health landscape.
Acknowledgments

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Introduction

The Study Topic

This study examines the attitudes and belief systems of art therapists using EBP, specifically within the community of Loyola Marymount University (LMU) Graduate Department of Marital and Family Therapy (MFT) and Art Therapy alumni. Due to the scarcity of art therapy literature, the authors focused the research on the attitudes and beliefs of art therapists intended as preliminary investigation to serve as a foundation for future research. The study explores LMU alumni art therapists’ knowledge and familiarity with EBP, their specific experiences using EBP, and issues of training and research. Research questions explored are:

- What are the experiences and attitudes of art therapists using (or not using) EBP?
- Where and how do art therapists integrate EBP into their practices?
- What factors are correlated with an art therapist’s attitudes and understanding of EBP?

Significance of Study

EBP is a rising trend in community mental health (Hagemoser, 2009; Jenson, 2005). Many art therapists working in mental health agencies are increasingly encountering EBP. Dixon and Schwarz (2014) argue the increased popularity of EBP has been propelled by the Community Mental Health Act and the Affordable Care Act and is “stimulated by the consumer driven recovery movement” (p.5). As graduate students of LMU’s MFT and Art Therapy Department, the authors of this study received very limited training in EBP and ESTs. Upon entering the field, the researchers may be faced with questions of how to incorporate EBP with art therapy. Some experienced members of the larger art therapy community report disdain and avoidance when confronted with EBP and managed care (Goodman, 1997; Tibbets, 1995).
Several authors cite these challenges as originating from the two different worldviews and epistemological frames of art therapy and EBP (Broderick 2011; Putland 2008; Raw, Lewis, Russell & Macnaughton 2011; Tibbets, 2013). The pressure and the challenge of how to practically integrate art therapy and EBP may lead to questioning, anxiety, and fear of job loss (Gilroy, 2006; Huet, Springham & Evans, 2014).

This exploratory research illuminates and compares the experiences of LMU alumni art therapists using EBP to the beliefs and attitudes of the larger field. There is currently a dearth of research on the topic and the authors of this study aim to contribute to the conversation and assist in the development of future research. This research provides opportunities to examine and reevaluate attitudes in the art therapy community that may further develop its professional identity and promote its ability to adapt to changing mental health care conditions.
Background of Study Topic

The subject of EBP has incited a vast amount of literature in the general mental health field, including a variety of controversies. Jenson (2005) begins by addressing the two main definitions of EBP, either as static or as a process. A large number of authors agree that the process definition of EBP contains three major components: research evidence, clinical expertise, and patient preferences (APA Presidential Task Force on Evidence-Based Practice, 2006; Aveyard & Sharp, 2009; Bliss-Holtz, 2007; Goodheart, Kazdin & Sternberg, 2006; Graybeal, 2006; Hagemoser, 2009; Dozois, Alden, Bourgon, Clark & Johnston 2014; Patterson et al., 2004; Spring, 2007). However, what constitutes research evidence is also the subject of debate (APA Presidential Task Force on Evidence-Based Practice, 2006; Bliss-Holtz, 2007; Chambless & Hollon, 1998; Hagemoser, 2009).

The precursor to EBP, the movement from an emphasis on clinical expertise to an emphasis on research, began at the start of the twentieth century (Spring, 2007). EBP also originated from the medical field simultaneously in the United States (US), the United Kingdom (UK), and Canada before moving into many other allied-health professions (Patterson et al., 2004; Spring, 2007). In 1995, the American Psychological Association (APA) established the Society of Clinical Psychology Task Force on Promotion and Dissemination of Psychological Procedures, effectively applying EBP to the mental health field (Dozois et al., 2014).

As EBP continues to rise, so does the number of controversies. Proponents for EBP argue that it helps integrate mental health care into the competitive US healthcare market, keeps clinicians accountable, promotes effective decision-making, and engages patients in their own treatment (APA Presidential Task Force on Evidence-Based Practice, 2006; Sackett, Rosenberg,
Gray, Haynes & Richardson, 1996). On the other side, opponents of EBP point to the confusion over definitions of terms, the diminishing of clinical expertise by placing it in the hands of the researcher instead of the clinician, and the confusion of what exactly constitutes research evidence (Freshwater & Rolfe, 2004; Hagemosher, 2009; Justice, 2008). Critics go on to decry the omission of the therapeutic relationship and other personal factors such as the client’s personality and living situation, which limits EBP’s applicability in the real world (Goodheart et al., 2006; Newness, 2002; Patterson et al., 2004). Overall, many authors view EBP as a passing trend that tips the delicate balance of science and art in psychotherapy firmly onto the science side (Furman, 2009; Hagemosher, 2009).

Despite its widespread coverage in general literature, EBP is barely addressed by the art therapy field. It is only recently that art therapists have begun to address the controversies, and much of the literature originates from the UK and Australia (Kapitan, 2012; Patterson, Borschmann, & Waller, 2013). An inconsistency of terms in the research reflects a lack of standardization that Reynolds, Nabors, and Quinlan (2000) also see in the field itself. The literature is further complicated by the issue of assessment, which appears to be undergoing a similar scrutiny as EBP. The controversies surrounding assessment and EBP seem to revolve around similar questions of art therapy as a science or an art (Betts, 2006). Perhaps as a result, several authors have attempted to bridge the gap (Crawford, Lee, & Bingham, 2014; Kapitan, 2014; Kaplan, 1998; Lusebrink, 2004; Rohricht, 2009; Steele, 2009).

Although literature on EBP is limited in the art therapy field, there are also many controversies regarding related topics such as research, evidence, and managed care. Several researchers also consider the feelings in the art therapy field that may be a response to the swift
rise of EBP, such as anxiety over job loss or the validation of their profession (Gilroy, 2006; Goodman, 1997; Tibbets, 1995). Art therapists also question the role of clinical expertise in the new EBP-driven system (Gilroy, 1995).

Music therapy appears to have a somewhat different attitude towards EBP. Conklyn and Bethoux (2013) state that music therapists appear to have embraced the responsibility placed on them by EBP to validate the importance of their field. However, music therapists still debate about the kind of research necessary to develop the field (Edwards, 2005; Leckey, 2011; Silverman, 2010a). Overall, it appears that music therapists seem to agree on the importance of integrating EBP into music therapy (Edwards, 2005; Silverman, 2010b).

There are a number of recommendations to promote research in the literature given for both researchers and clinicians. For researchers, these include more clarity in concepts, research aims, and designs, more long-term follow-up studies, and more randomized-controlled trials (RCT) among the major suggestions (Archer, Buxton & Sheffield, 2014; Beard, 2012; Caddy, Crawford & Page, 2012; Gilroy, 2006; Gilroy & Lee, 1995; Holmqvist & Persson, 2012; Maujean, Pepping & Kendall, 2014; Patterson, Crawford, Ainsworth & Waller, 2011; Patterson et al., 2013; Reynolds et al., 2000; Reynolds, 2012; Slayton, D’Archer & Kaplan, 2010; Stuckey & Nobel, 2010; Van Lith, Schofield, & Fenner, 2013; Wood, 2013; Wood, Molassiotis, & Payne, 2011). For clinicians, some authors implore them to take on the responsibility of research, while others called for adjustments to graduate education (Gantt, 1997; Gilroy, 2006; Kaplan, 1998).

While there are a number of controversies around EBP, many authors have also begun to address integration of EBP into the expressive arts therapies. Kern (2010) and Abrams (2010) both propose a new theoretical framework which incorporates EBP into music therapy. From the
broader field of arts in healthcare, Raw et al. (2011) also suggest a new interdisciplinary framework. Similarly, Putland (2008) and Matarasso (1997) believe there is a need for a common language between arts and health care perspectives in order to promote interdisciplinary integration. While some authors are beginning to address the topic of expressive arts therapies and EBP, more literature on this topic is clearly warranted. The following literature review explores the current findings and limitations of the general and expressive arts literature.
Literature Review

The first half of this literature review begins with general EBP literature. It first addresses definitions, followed by the history of EBP. Then follows a discussion of controversies, including the gap between science and art. The second half begins with an overview of the current state of art therapy literature. Next the review looks at specific controversies and attitudes within the field. In addition, due to the limited nature of the literature, contributions from other related fields are considered. The review ends with recommendations for future research and suggested theoretical frameworks to bridge the gap between science and art.

General Literature on EBP

A review of the literature on EBP using broad search terms such as Evidence-Based Practice, history, and mental health yielded a vast body of literature. Due to time limitations, the writers of this review were able to examine only a limited selection of the literature. The literature which the authors selected were for the most part papers not written as summaries of studies conducted, but papers written specifically about the subject of EBP. Special attention was given to literature which seemed to address the history and definition of EBP as well as literature which specifically addressed controversy surrounding EBP. Because much of the confusion surrounding EBP has to do with the definition itself, this review begins by addressing what the literature says about the definition.

Definitions. Jenson (2005) writes that there is a static definition of EBP and another definition that involves a process. While the static definition of EBP is present within the literature, for organizational purposes it is addressed in the Controversies section (p. 30) of this
review. In addition to Jenson, other authors also write about EBP as a process (APA Presidential Task Force on Evidence-Based Practice, 2006; Gambrill, 2007; Patterson, 2004). Much of the literature reviewed notes that there are three components in the EBP process: research evidence, clinical expertise, and patient preferences (APA Presidential Task Force on Evidence-Based Practice, 2006; Aveyard & Sharp, 2009; Bliss-Holtz, 2007; Dozois et al, 2014; Goodheart et al, 2006; Graybeal, 2006; Hagemoser, 2009; Patterson et al, 2004; Spring, 2007). The following section expands upon these three components.

**Research evidence.** Generally defining the research evidence component of EBP, Patterson et al. (2004) writes that EBP is a process in which the clinician uses data from existing research to answer clinical questions. Justice (2008) and Spring (2007) agree, writing that research is the gathering and integration of information from a variety of resources. The following section discusses what exactly qualifies as research evidence within EBP, defines the role of RCTs and ESTs within the research component of EBP, and reviews ways in which clinicians can access the body of research evidence.

**Qualifications for research evidence.** Peile (2004) helps to answer the question of what kinds of research are deemed as evidence: research that utilizes a questioning approach to practice which leads to experimentation, meticulous observation, enumeration and analysis and finally recording and cataloguing the evidence for systematic retrieval. Aveyard and Sharp (2009) write that empirical research is based on observation and/or experimentation. Gilroy (2006) writes that research should be based on an explicit hypothesis, be conducted by blind experimenters, use reliable and specific measures, use randomly allocated subjects, use a large sample size and statistically evaluate the information gathered.
Randomized-control trials. RCT fits the criteria for trustworthy research as described above by Aveyard and Sharp (2009), Gilroy (2006), and Peile (2004). A RCT has randomly assigned groups, is designed to determine the effectiveness of an intervention given to one or two of the groups and is considered to be in the top-tier of methods for gathering quality evidence (Aveyard & Sharp, 2009). Bliss-Holtz (2007) agrees that the RCT is considered to produce research that is at the top of this hierarchy of evidence. Joyce, Wolfaardt, Sribney & Aylwin (2006) and Sackett et al. (1996) concur, calling RCT evidence the “gold standard” for determining empirical support for a given treatment method (Sackett et al., p. 72). Sackett et al. add that the RCT "is so much more likely to inform us and so much less likely to mislead us… [when] judging whether a treatment does more good than harm" (p. 72).

It should be noted here that although RCTs are at the top of the research hierarchy, Sackett et al. (1996) writes that an evidence-based approach is not restricted to the evaluation of only this type of evidence. Rather, the evidence which best answers the clinical question should be sought. The APA Presidential Task Force on EBP (2006) agrees, stating that while the gathering of the best research evidence should include RCTs, it should not be limited to this type of research. Other types of research which the task force list as also deserving clinical attention include: clinical observation, qualitative research, systematic case studies, single-case experimental designs, public health and ethnographic research, process-outcome studies, studies of interventions in naturalistic settings and meta-analysis.

Empirically-Supported Treatments. Also playing a role within the research component of the EBP process are ESTs. Chambless and Hollon (1998) write that ESTs are clearly specified treatments shown to be effective through controlled research among a delineated population.
Lilienfeld, Ritschel, Lynn, Cautin and Latzman (2013) further define ESTs as established lists of specific therapeutic techniques. Hagemoser (2009) describes ESTs as a collection of tools and treatment manuals which a clinician can use. Chambless and Hollon (1998) write that these manuals may contain careful session-by-session outlines of interventions or may describe broad principles and phases of treatment with examples of interventions.

Chambless and Hollon (1998) go on to describe the measurements of an EST’s efficacy in a way that is reminiscent of the literature’s description of the broader research component of EBP, including an emphasis on RCTs, careful research control, replication by an independent research team, employment of sound methods and comparison with no treatment, other treatments, or a placebo.

Hagemoser (2009) writes that it could be argued that EBP means the use of EST manuals by clinicians who are sensitive to client uniqueness. Bliss-Holtz (2007) points out that proponents of EBP adopted criteria that not only include RCTs but also add the application of EST manuals to a study sample as prerequisites for being considered evidence-based. Chambless and Hollon (1998) support that idea, stating that research projects for which a treatment manual was not written and followed have limited utility in assessing treatment efficacy. These issues of whether or not ESTs constitute the research evidence component of EBP. Whether or not ESTs are necessary to claim an EBP is addressed further in the Controversies section (p. 30) of this literature review.

**Access to research evidence.** Wampold and Bahti (2004) call attention to meta-analysis of research data as a method critical to EBP, since it “synthesizes evidence in a way that can inform medicine and save lives and that is superior to simply looking at the results of individual
clinical trials" (p. 564). Because there is a vast and growing body of research in existence, meta-analysis may be difficult for the individual clinician. Peile (2004) writes that the process of recording and cataloguing the evidence for systematic retrieval are a key part of an evidence-based approach. One way for clinicians to gather research evidence is through the use of collaborative organizations which collate, review and disseminate up-to-date information about the current research (Gilroy, 2006). Gilroy (2006) names the Cochrane Collaboration, the NHS Center for Reviews and Dissemination and the National Institute for Clinical Excellence (a special health authority) as examples. With regard more specifically to clinician’s accessing research within the field of psychology, there are a growing number of resources. On their website, the American Psychological Association (APA) (2014) lists a number of suggested resources, including: the APA website, PsychINFO, and PsychARTICLES.

**Clinical expertise.** The second component of EBP is clinical expertise. Graybeal (2006) elaborates that this component is accumulated experience or practice wisdom. Drisko (2011) considers that the clinician’s expertise is vital to their role of integrating the research evidence with the client's preferences. Patterson et al. (2004) and Dozois et al. (2014) agree, emphasizing that it is the clinician’s job to make the best clinical decision about using research to meet the client’s needs. Gilroy (2006) points out that it is also the clinician’s job to understand the nature of the scientific inquiry and to recognize when research is trustworthy and when it is not. Similarly, Spring (2007) emphasizes the clinician’s role of acquiring and then evaluating the research evidence.

The APA Presidential Task Force on Evidence-Based Practice (2006) also considers the decision-making role of the clinician. The task force states that also central to clinical expertise
is the practitioner’s interpersonal skill in the therapeutic relationship. This includes an ability to encode and decode verbal and nonverbal responses, create realistic but positive expectations, and respond empathically to the patient's explicit and implicit experiences and concerns. Dozois et al. (2014) describe the clinician’s role as service delivery in a conscientious, explicit, and judicious way.

Sackett, Straus, Richardson, Rosenberg and Haynes (2000) incorporate the clinician’s expertise into five recommended steps for clinicians using EBP. First, the clinician creates a question that applies to their need for information. Second, the clinician tracks down the best empirical evidence to answer the question. Third, the validity, impact, and applicability of the research is evaluated. Fourth, the clinician combines research with their own knowledge and the client's unique situation. Fifth, after implementing treatment, the clinician evaluates the effectiveness and efficiency of the intervention. These five steps mirror the five A’s which were developed by Guyatt and the researchers at McMaster University during the formation of Evidence-Based Medicine (EBM). The five steps are: ask, or formulate a question; acquire, or search for answers within the research evidence; appraise, or evaluate the evidence; apply the results and assess the outcome (Spring, 2007).

**Patient preferences.** The third component of EBP is patient preferences. Patient preferences include patient values, characteristics, and circumstances (Graybeal, 2006; Spring, 2007). Dozois et al. (2014) also include their client’s cultural background and treatment preferences. Graybeal (2013) goes even further, considering the patient’s experiences and values as an integral part of the research evidence.
History. Now that the current definition of EBP has been outlined, it is important to understand the historical context. EBP originated from the field of medicine and has subsequently spread into a number of allied-health professions, such as physical therapy, nursing, occupational therapy and the mental health field (Patterson et al., 2004). Gilroy (2006) points out that when considering the history of EBP, it is also important to note that it represents a paradigm shift from a “traditional paradigm” with an emphasis on clinical expertise to a new “evidence-based paradigm” with an emphasis on research (p. 9). Although this section does not provide a full historical overview into what is now called EBP, it notes a number of important historical milestones which helped to shape the current state of the practice including precursors to EBP, the rise of EBP within the medical field and the entrance of EBP into the field of psychology, including recent developments.

Precursors to EBP. Spring (2007) writes that the movement towards interventions based in scientific research and rigorous clinical training started in the US with medical successes at the beginning of the twentieth century. Groups such as the American Medical Association began to advocate for quality control of the medical school admissions and the standardization of curriculum based on science and rigorous clinical training. Spring continues to say that the US has maintained a vigorous campaign to deliver the best healthcare practices in a standard and consistent manner throughout the twentieth and twenty-first centuries.

Spring (2007) attributes another important milestone to Abraham Flexner. He was appointed by the The Carnegie Foundation to survey 155 schools of medicine over a period of 18 months to assess the standardization of healthcare. His recommendation, which was published in 1910, stated that all except 31 educational institutions should be closed. Jenson (2005) writes of
another pioneer: Jane Addams. In 1911 she expressed similar sentiments about standardization, stating that systematic data collection and information processing were crucial aspects of effective individual-level interventions and community practice strategies.

Another noteworthy historical milestone concerns Eysenck who in 1952 published a review on the effects of adult psychotherapy using scientific analysis. He asserted that psychotherapy practices at the time were no more effective than the passage of time itself (Ollendick, 2014). Eysenck came to these conclusions using meta-analysis based on controlled studies, stating that in order to evaluate the effectiveness of any form of therapy, data from a control group of non-treated patients would be required in order to compare the effects of therapy with the spontaneous remission rate. Ollendick (2014) points out that this work was an anomaly for its time because Eysenck used empirically validated data to conclude that there was no proof that psychotherapy facilitated the recovery of patients.

The rise of EBP in the medical field. The EBP movement involves three simultaneous interwoven histories that occurred in different locations: the US, the UK, and Canada (Spring, 2007). The movement began taking shape in the 1970s and 1980s in the field of medicine and epidemiology (Gilroy, 2006). Gilroy (2006) states that the contemporary understanding of EBM began with a text by a British epidemiologist named Archie Cochrane, published in 1972. Cochrane commented on what he felt was a worrying variation in practice and outcomes in medicine and the lack of empirical evidence to support many treatments offered by the National Health Service in the UK (Gilroy, 2006). He laid out his argument in his 1972 book entitled, *Effectiveness and Efficiency: Random Reflections on Health Services*. This work led to the formation of an international voluntary organization previously mentioned named the
Cochrane Collaboration. This organization is dedicated to conducting systematic reviews of RCTs (Spring, 2007).

The actual use of the phrase EBM began in the 1980s and is attributed to Gordon Guyatt of McMaster University in Hamilton, Ontario (Gorman, 2007). This university’s Department of Clinical Epidemiology and Biostatistics first developed the principles of EBP (Patterson et al., 2004). The goals of the department were to develop systematic ways for finding, critically appraising, and integrating clinical research into clinical practices (Gilroy, 2006; Patterson et al., 2004). These early pioneers in EBM also wanted to develop systematic principles based on scientific methods that would help clinicians make their own research-based clinical decisions (Patterson et al., 2004). From this work, McMaster University established a five step EBM process that they called the five A's (Sackett et al., 2000; Spring, 2007), previously described in the Clinical Expertise section (p. 24). Additionally, this group's efforts yielded 25 articles published in the *Journal of the American Medical Association* between 1993 and 2000 that taught basic principles of EBP. Those articles were eventually compiled into two books: *Users' Guides: Manual for Evidence-Based Clinical Practice* and *Users' Guides: Essentials of Evidence-Based Clinical Practice*, both written by Gordon H. Guyatt and Drummond Rennie (Patterson et al., 2004).

Within the same timeframe McMaster University, the University of Virginia, and the medical programs in England also began offering workshops that taught basic principles of EBP (Patterson et al., 2004). In the 1990s as EBP became more common within the teaching institutions, policy makers such as the National Institutes of Health (NIH) launched a series of initiatives to distribute research-based treatments in the field (Patterson et al., 2004). The
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initiatives taught health care professionals how to implement research-based treatments properly and developed strategies to ensure proper implementation. This was intended to address the major challenges of improving healthcare quality and reducing healthcare costs (Bliss-Holtz, 2007).

**EBP in mental health.** Gilroy (2006) writes that the first discussions of the implementation of EBP in mental health involved change from a traditional paradigm (with emphasis on clinical expertise) to a new evidence-based paradigm. Paradigm in this context is described by Gilroy as a framework or model which encapsulates a set of the “theories, methods, standards and assumptions about what matters, what happens, what the problems are and how they should be addressed” (p. 9).

As early as 1995, EBP was being applied to the field of mental health with the APA’s Society of Clinical Psychology Task Force on Promotion and Dissemination of Psychological Procedures. This organization began the work of defining evidence-based, efficacious treatments in the field of psychology by publishing an initial report, which listed treatments considered to be efficacious according to a standard set of criteria (Dozois et al., 2014).

In 2002 the American Association for Marriage and Family Therapy (AAMFT) published the proceedings of the AAMFT Research Conference. Theses included major reviews of efficacious Marriage and Family Therapy (MFT) treatments for common presenting problems (Sprenkle, 2002). Four years later, The APA Presidential Task Force on Evidence-Based Practice (2006) published a report that provided a rationale for and expanded discussion of the EBP movement. The paper included a section which made suggestions for much needed research work in the EBP field. Some of the needs that the paper highlighted were: studying
practices of clinicians who obtain best outcomes, identifying expert skills practiced by clinicians, improving the reliability and validity of diagnoses and case formulations, determining which errors and biases widely studied in the literature are linked to poor treatment outcomes, developing normed measures for clinicians to quantify diagnostic judgments and therapeutic process, distinguishing expert treatment approaches specific to the field, and providing clinicians with real-time feedback and clinical support tools in order to adjust treatment accordingly (APA Presidential Task Force on Evidence-Based Practice, 2006).

In 2014, the Canadian Psychological Association Presidential Task Force on Evidence-Based Practice of Psychological Treatments published an article providing recommendations on the topic of EBP. These recommendations include the following: revise the Canadian Code of Ethics to include a statement that psychological practice is guided by empirical evidence and the use of evidence hierarchy, include training in evidence-based interventions as part of the accreditation standards for Doctoral and Internship programs, disseminate EBP methods through continuing education workshops, seminars and symposia, and engage graduate students in discussions about EBP (Dozois et al., 2014).

**Controversies.** As evidenced by its history, the EBP movement has experienced a swift rise to popularity. Lilienfeld et al. (2013) contend that survey data supports a prevalence of positive attitudes within the field of psychology towards EBP. However, EBP has also been at the center of a considerable amount of controversy. Perhaps representing the beginning of the controversies surrounding the topic, Guyatt’s early naming of EBM as being a more scientific practice outraged his colleagues by the implied insult to the value of their clinical expertise.
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(Gorman, 2007). As a way of addressing the controversies, the following section reviews the arguments for EBP followed by a review of the arguments against it.

**Arguments for EBP.** In their summary of EBP, the APA Presidential Task Force on EBP (2006) goes so far as to describe the goals of EBP as “laudable” (p. 273). Gambril (2007) claims that EBP is a philosophy that is compatible with professional codes of ethics. The positive qualities associated with the philosophy of EBP include: EBP as a way to integrate psychological treatments into the US healthcare market thereby offering more collaborative patient care, improvement of practitioner accountability, assistance in making the most effective decisions, and engagement of patients in the decision-making process. These positive qualities act as arguments for EBP and are further explored individually below.

**US healthcare market.** Sackett et al. (1996) describe the beginnings of the EBP movement as being driven by the mental health field’s need to be competitive in the US managed care marketplace. Entering into the US healthcare market means that mental health can be part of a more collaborative patient care. Spring (2007) sees the integration of EBP into mental health as an invaluable opportunity to build this transdisciplinary collaboration. Jenson (2005) agrees, describing EBP’s role in developing interventions while considering diverse clients and problems as a way of connecting science to social intervention.

**Accountability.** In an article reviewing the field of psychology’s resistance to EBP, Lilienfeld et al. (2013) question this resistance, considering it a prioritization of clinical intuition over systematic research. The article goes on to refute this reliance on intuition, saying that while it "can sometimes lead us to detect bona fide client change in psychotherapy, it can also lead to erroneous inferences of change" (Lilienfeld et al., 2013, p. 889). Gambril (2007) agrees,
asserting that the most effective and ethical care is provided by professionals who consider relevant research. Sackett et al. (1996) point out that without considering the best, most-current evidence, there is the risk of a practice becoming out of date to the detriment of the patient. EBP thus improves accountability since it calls for practitioners to consider the research. Graybeal (2014) points out that this regular acquisition of knowledge creates a process which is designed to continually update and potentially revise the clinician’s understanding of their work.

Spring (2007) and Gambrill (2007) raise the idea that the research-gathering clinician who continually utilizes EBP finds it to be a support for lifelong learning. Many authors agree that because of EBP’s emphasis on research, a practitioner’s commitment to EBP results in a career-long engagement with the best possible practices, supported by the best available research – forcing clinicians to extend beyond their own experience to make the best possible decisions (Dozois et al., 2014; Gambril, 2007; Spring, 2007; Sackett et al., 1996).

Effective clinical decisions. The APA Presidential Task Force on EBP (2006) states that the purpose of EBP "is to promote effective psychological practice and enhance public health by applying empirically supported principles" (p. 273). This level of accountability is thought to lead to more effective clinical decisions. At the same time, the task force acknowledges that there are many individualized considerations (race, culture, environment, chronic stressors, etc.) to be taken into account when making an informed treatment plan. Thus it can be surmised that clinical decisions always come with a degree of uncertainty. Rather than being discouraged by this assumption, Gambril (2007) defines EBP as the best possible way of working within the uncertainty. Wampold and Bahti (2004) set forth that EBP reflects the desire to base practice on the goal of optimizing patient outcomes through the translation of research evidence into
practice. Graybeal (2014) also points out that there is evidence that “confidence in one's approach can substantially increase its effectiveness" (p. 120). Thus, having research-backed EBP could increase a practitioner’s confidence, thereby also increasing the likelihood that the determined treatment will be effective.

Patient engagement. As previously noted in the Definitions section (p. 20), engaging patients in the decision-making process is considered a critical component of EBP. The APA Presidential Task Force on Evidence-Based Practice (2006) asserts that the patient’s values and preferences are a central component of EBP. "Patients can have strong preferences...and these preferences are influenced by both their cultural context and individual factors" (APA Presidential Task Force on Evidence-Based Practice, 2006). Spring (2007) writes that allowing patients to participate in the decision-making process can result in more patient engagement, self-management and interest in their own wellness.

Arguments against EBP. Since its conception EBP has been the target of varied and plentiful skepticism. Lilienfeld et al. (2013) describe a growing gap between scientist and practitioner that they attribute to EBP proponents’ neglect of the root causes of reservations within the field. The following section reviews some of the major criticisms of the EBP movement, including problems with definitions, neglect of the treatment relationship, the contention that EBP is not real-world applicable, the question of EBP’s long-term viability and EBP’s tendency to promote science at the cost of art.

Problems with definitions. There are several problems in definition when it comes to EBP. First there is confusion between EBP and EST. Despite the process definition covered in the Definitions section (p. 20) there is also a static definition which continues to persist. Spring
(2007) writes that in the public health field and some areas of medicine, EBP is generally understood to mean practice guidelines which are often specific to a given problem or disorder. These guidelines are provided by federal agencies or professional organizations. Gambrill (2007) also notes a view of EBP consisting of practice guidelines and treatment manuals. This general understanding of EBP conflicts with the process definition of EBP previously covered. This general understanding is the static definition that Justice (2008) alludes to when he writes that within this static definition of EBP, a clinician uses a tool or material that has strong scientific support. The confusion is generated in that the general definition of EBP as described by Spring (2007), Gambrill (2007) and Justice (2008) actually sounds like the definition of EST outlined earlier. Hagemoser (2009) also mentions the controversy, writing that there has been a widespread failure to understand the differences between EBP and EST.

In 2006 the APA Presidential Task Force on EBP shed some light on the confusion surround EBP and its relationship to EST, noting that ESTs focus on the treatment, asking whether it works for a certain problem under specific circumstances, while EBP focuses on the patient, asking what research evidence will assist the clinician in achieving the best outcome. ESTs are treatments that have been shown to be effective in RCTs, while EBP is a range of clinical activities which include assessment, case formulation and the treatment relationship. Hagemoser (2009) concurs, defining ESTs as the tools professionals use, and defining EBP as what the professional does. Dozois et al. (2014) also agree, noting that the two are not synonymous, and Spring (2007) clarifies that ESTs are merely one component of EBP.

In addition to the confusion surrounding the difference between EBP and ESTs, there is also confusion surrounding the definition of the clinical expertise component of EBP. Goodheart
et al. (2006) call attention to this omission in definition, challenging that “it merits further research to identify the conditions that increase expertise and to identify the skill constellations of clinicians who obtain good outcomes in the community” (p. 55). Indeed, psychology educational programs do not seem to have a collective understanding of what it takes to develop clinical expertise in their graduates. Hunsley (2007) claims that most graduate students in the field of psychology receive very limited training in evidence-based treatment methods.

Another contention with EBP’s clinical expertise component is that within EBP the expertise is actually in the hands of the researcher, not the practicing clinicians. Freshwater and Rolfe (2004) believe that by placing such a great focus on research, EBP diminishes the expertise of the practitioner. Hagemoser (2009) corroborates this statement, noting that the behavior of the practitioner is now being both prescribed and constrained by the researcher. Newness (2002) bemoans this loss of value in the clinician’s expertise. He suggests a clinician’s experiences are invaluable in their clinical practice and are a part of the evidence from which the practitioner draws to make decisions.

This leads to the last criticism with the definition of EBP: the ambiguity of what exactly constitutes reliable research evidence. Justice (2008) claims that "there are no commonly accepted parameters...that stipulate what type, quality, and amount of evidence is needed for a treatment to be empirically validated" (p. 324). Gambrill (2007) points out that proponents of and objectors to EBP have different views of evidence. Proponents prefer RCTs as the best form of evidence while critics think this is too narrow a view of evidence. For example, Newness (2002), a critic of EBP, sees a clinician’s lived experience as a form of evidence.
Drisko (2011) aligns with the critics, accusing the EBP movement of sidelining useful research that predates the movement, simply because the research did not necessarily fit into the RCT model. Gilroy (2007) agrees that this lack of respect for other types of useful research has resulted in a situation in which RCTs are privileged above all other methods. For example, Joyce et al. (2006) wonder why evidence demonstrating multiple approaches of psychotherapy as superior to absence of treatment has not lead to psychotherapy’s acceptance as an EST in its own right.

Opponents also contest that privileging RCTs may result in valid treatments, which may not yet have a lot of support from research, disappearing. The APA Presidential Task Force on Evidence-Based Practice (2006) admits that this is an issue, warning: “It is important not to assume that interventions that have not yet been studied in controlled trials are ineffective. Specific interventions that have not been subjected to systematic empirical testing for specific problems cannot be assumed to be either effective or ineffective; they are simply untested to date” (p. 273). Drisko (2011) agrees, noting that just because evidence supports specific treatments, it does not mean that there is no reason to consider other treatments with more limited research backing.

Chambless and Hollon (1998) find that there are, in fact, many weaknesses in RCTs themselves. These weaknesses include: lack of proper longitudinal assessment to measure a treatment’s effectiveness over time, omissions in analysis and interpretation (such as not considering factors like treatment refusal or dropout), poor research implementation, lack of measures for the quality of implementation, and skewed results due to special researcher training to which the average therapist does not have access. Joyce et al. (2006) agree with this last
point, calling attention to the complexities involved in studying the implementation of therapies. They posit that a treatment that exhibited greater effectiveness than an alternative could be explained in part by implementation by more experienced clinicians.

The narrow definition of research held by EBP can also result in patients being forced to choose from only ESTs, whether or not the practitioner and patient agree that this is the best treatment choice. Joyce et al. (2006) calls attention to this issue, noting that insurance industry funding is often only provided for psychotherapy models which have the EST label: “The implication is that the clinical use of therapies that have not been subjected to RCT study is detrimental to the patient and cannot be supported. This assumption is a mistake in logic: Absence of evidence (that is, few or no RCT studies) is not evidence of absence (that is, lack of effectiveness)” (p. 802).

Another critique of RCT research is that it is often inextricably linked to its funding. Newness (2002) warns that funding for research tends to be questionable –often linked to drug companies or other sources which have a vested interest. This can result in research bias. Gambrill (2007) links bias to poor quality of research, noting that there is also suspicion of publication bias toward positive findings. Newness (2002) also posits that all research is inherently personally biased.

All of these objections over the definition of research evidence leads critics to a more encompassing definition. Graybeal (2014) posits that "something as subtle as a client's facial expression may in the end prove to be the most powerful piece of evidence available…The art of practicing with evidence is ultimately embedded in the capacity to balance the various sources and forms of evidence” (p. 188). Newness (2002) agrees, wondering why lived experience and
the arts are no longer considered valid evidence. Hunsley (2007) claims that EBP’s intention is actually to include other forms of research evidence, contending that EBP implies that the full range of relevant research, beyond treatment outcome studies, psychometric evaluations and assessments, should be considered and used.

Omission of the therapeutic relationship. The APA presidential Task Force on Evidence-Based Practice (2006) claims that it considers the therapeutic relationship to be central, emphasizing the clinician’s interpersonal skill, therapeutic relationship, communication ability and empathy. However, Goodheart et al. (2006) deduce that the greatest omission in EBP concerns the treatment relationship. Hagemoser (2009) agrees, claiming that understanding the complexities of the therapeutic relationship may be more important than knowledge derived from RCTs. In yet another agreement, Joyce et al. (2006) calls the individual clinician’s creativity and responsiveness to their patients a major factor, which the tendency to overvalue research can downplay. Graybeal (2014) writes that while treatment techniques can sometimes be standardized, an individual clinician’s mood, personality, energy, empathy and intellect cannot.

Ilardi ahd Craighead (1994) discuss how the evidence for the impact of the therapeutic relationship itself should qualify psychotherapy as an EST in its own right. They cite a large body of empirical literature which demonstrates the impact of nonspecific therapeutic factors (e.g., therapist warmth, therapeutic alliance) on treatment outcomes. Other researchers confirm the evidentiary support for the importance of the therapeutic relationship (Goodheart et al., 2006; Hagemoser, 2009; Joyce et al., 2006; Newness, 2002). Wampold and Bhati (2004) write that ignoring the impact of the clinician is a legacy of RCTs which has been perpetuated in ESTs as well as by the EBP movement as a whole.
Real world application. Goodheart et al. (2006) write: “The language of treatment manuals gives only a narrow and tightly structured view of the human condition. It is like looking at a landscape with a flashlight. The flashlight illuminates the dark, but it does not show the entire field” (p. 42). Dozois et al. (2014) agree, pointing to widespread concerns that RCT findings are not generalized and therefore provide limited applicability within actual clinical practice.

The APA Presidential Task Force on Evidence-Based Practice (2006) admits that emphasizing specific treatments may leave out common factors that account for much variance in outcomes across disorders. However, it also claims that the process of EBP is intended to involve consideration of individualized patient idiosyncrasies. Chambless and Hollon (1998) note that there is some research being done surrounding personal factors -specifically about the relationship between a client’s personal characteristics and treatment outcomes, but there continues to be a need for more research about these factors. Goodheart et al. (2006) write that these factors include the client personality, motivation, and curiosity. Joyce et al. (2006) claim that ESTs are limited when it comes to identifying the personal factors connected to the mechanism of change. Hagemoser (2009) calls this omission the most pervasive error within ESTs, since it results in a failure to determine why treatments work. Newness (2002) corroborates, noting that EBP may address mental issues but does not adequately address other life problems such as relationship - and problems in living are often a part of the etiology of mental illness.

There are various other reasons that critics believe EBP is not real-world applicable. Patterson et al. (2004) call attention to the idea that RCTs are not reproducible in part because
practitioners are unlikely to change their long-established patterns. Beyond a preference for the familiar, additional training is also cumbersome for practitioners. Chambless and Hollon (1998) point out that mastering many ESTs can be overwhelming and tedious, leading to widespread disillusion with them. Hagemoser (2009) writes that manuals may even be resented by clinicians because they impose an intellectual orthodoxy and behavioral constraints. Even if the research purports to be highly effective, treatment manuals and training lead to few clinicians actually being competent in ESTs. Even when the practitioner is willing and trained, a patient’s noncompliance may still render the treatment ineffective.

There is even more to the issue than practitioner difficulty with training and patient noncompliance. Joyce et al. (2006) point out the tendency for RCTs to only apply to homogenous patient samples defined by DSM categories, hypothesizing that this focus ignores many other systems for classifying mental health symptoms which could be just as important - such as a patient’s vulnerabilities, quality of life and relapse probability. In addition the article points out that many people with the same diagnosis may have different etiologies for said diagnosis and thus may require different treatments.

The APA Presidential Task Force on Evidence-Based Practice (2006) acknowledges that there is an issue “of how best to approach the treatment of patients whose characteristics (e.g., gender, gender identity, ethnicity, race, social class…) and problems (e.g., comorbidity) may differ from those of samples studied in research” (p. 279). Spring (2007) confirms that few treatments with high evidence of efficacy have proven that efficacy across wide demographic and cultural groups, particularly for underserved populations. Although there are some RCTs which have sampled fully clinical populations, much of the literature also posits that the problem
of dual-diagnosis has not been adequately considered (Chambless & Hollon, 1998; Goodheart et al., 2006). Chambless and Hollon (1998) also call attention to this problem, noting that treatments that have been proved effective may only be effective with specific populations.

**EBP as a trend.** In his article Hagemoser (2009) questions the causes for EBP’s swift rise to popularity. He wonders if the field of psychology essentially jumped onto a “bandwagon” without a more critical review of the movement (p. 601). Goodheart et al. (2006) call EBP a “movement,” a “social and cultural phenomenon,” and a “public idea,” explaining that a public idea focuses attention on one portion of a complicated problem, looking for solutions (p. 15). Goodheart et al. (2006) goes on to explain that although solutions found may be valuable, the usefulness of a public idea lies in satisfying the public through the creation of an appearance of wise public policy. The reality is that, since only a portion of a complicated problem has been addressed, the security that the public feels may in fact be a false security.

Jenson (2005) records that EBP has received considerable attention from policymakers and funding sources. Spring (2007) writes that policy decision such as support for certain clinical treatments or public health practices are being based, increasingly, upon systematic reviews of research evidence. These policy judgments in turn often affect whether insurance will then cover a specific type of treatment (Spring, 2007). It could be inferred that this attention from authorities could cause practitioners, in efforts to appear compliant as well as to receive payment for their services, to jump on the wagon regardless of their own personal beliefs about EBP. The APA Presidential Task Force on EBP (2006) acknowledges that EBP has affected the dissemination of funding, noting that this is not always beneficial to the patient. The APA Presidential Task Force on EBP (2006) recognizes that there is a risk that guidelines may be used
inappropriately by the commercial health care industry to impose specific treatments and restrict patient access. Perhaps connected to EBP being implemented as a policy, Justice (2008) wonders if the EBP label is also being used as a way to sell products like EST manuals, noting that having the label on the cover may result in higher sales. Hagemoser (2009) further notes that the message which is often projected is that the EST manual contains more expertise than the practitioner.

Science vs. art. Patterson et al. (2004) posit that because EBP considers respect for science, the therapist, and the clients to be critical components, it may be a way to connect the divide between the science and art of therapy. Still, contentions on this subject remain. Joyce et al. (2006) consider the practice of psychotherapy to be a balance of science and art. Graybeal (2014) agrees that within psychotherapy, evidence and science can be inadequate, noting that there are other types of knowledge that are integral to clinical practice. Allen (2008) also concludes that scientific knowledge is important but not sufficient for the best psychotherapy practice, which involves much art in its application.

Thus, the problem with EBP, Furman (2009) writes, is that it favors the scientific perspective. He argues that science, which is measurable, comes with its own set of values and within that framework, other sets of values which may not be measurable may be lost (i.e., client empowerment and autonomy). Newness (2002) agrees, claiming that science pretends to avoid value-judgments when in reality it does not. Graybeal (2013) also concludes that there is a risk to losing the art of psychotherapy “when what we ‘see’ is defined and organized around the holy trinity of assessment, diagnosis, and intervention” (p. 117).
Newness (2002) focuses on this subject, writing that “psychology has too wholeheartedly allied itself with the natural sciences and should look to the realms of personal experience, literature, and the arts” (p. 121). He goes on to argue that “much of what passes for psychological science, couched in the languages of diagnosis, psychobabble, and neurochemistry, has no meaning for most people…Literature…probably better describes the essential moral endeavor in which we are all involved, that of attempting to live a meaningful life” (p. 123). As for value-judgments, Newness believes that they cannot be avoided: “I believe…that we are continually striving to influence our patients on the basis of values such as prudence, honesty, fairness, tolerance, loyalty, and compassion. Not the least, we practice the Socratic value of knowing oneself” (p. 167). Closely connected to the science versus art debate is the field of art therapy as it interacts with the EBP movement. The following section addresses EBP more specifically as it is represented in the art therapy literature.

Art Therapy Literature on EBP

A review of EBP within the discipline of art therapy revealed a limited body of literature. The search terms of art therapy, evidence-based practice, evidence, and outcome on ERIC, PsychINFO, Academic Search Complete, and MEDLINE databases did not offer an abundance of relevant literature. Many articles retrieved were tagged inappropriately. Due to the confusion of search terms, in this literature review the term art therapy is used to refer to visual art therapy, and expressive arts therapies to refer to music therapy, dance and movement therapy, and writing therapy. Some items written by psychiatrists or other mental health professionals who were not registered art therapists are also labeled as art therapy. The few articles that do exist lack cohesion, and the research methodologies did not appear to build upon previous work. Raw et al
(2011) noted that their review processes highlighted the disarray of the literature. Accordingly, the search for this literature review was expanded into adjacent disciplines of expressive arts therapies. The authors also included contributions from the broader field of arts in healthcare in order to complete a systemic and in-depth investigation. The arts in healthcare is a broad term that describes active and passive art practices. Examples of active art practices include writing workshops, classes, and the expressive arts therapies, while passive practices refer to experiencing concerts, architecture and artwork displays in a healthcare setting (Argyle & Bolton, 2005; Dileo & Bradt, 2009).

This portion of the review was originally intended to cover the intersection of literature on art therapy and EBP. Due to the limited body of research that surfaced, the authors chose to include other relevant subjects. This section first reviews the state of the current literature, including concerns regarding the gap between art and science that appear to be at the root of the controversy surrounding EBP in the field of art therapy. Next, controversies in the field of art therapy and contributions from other related fields are addressed. In conclusion, the authors list the recommendations for the future as stated in current literature.

**State of the current literature.** This section examines the current body of literature regarding art therapy and EBP. A thorough search did not reveal any art therapy research regarding ESTs. The term EBP is scarcely used in the literature at all. However, more recent articles have begun to address the controversy (Kapitan, 2012; Patterson et al., 2011). A significant number of the articles cited in this literature review originated from Australia and the UK, where EBP is governed by the NICE (Patterson et al., 2011). NICE also “scopes and
synthesizes research evidence and makes treatment recommendations on the basis of estimates of clinical and cost effectiveness” (p. 70).

A broader search revealed inconsistency of terms used in the research to address the evidence base of art therapy. Search terms such as art, evidence, and therapy led to unrelated topics. This lack of standardization in the literature seems to reflect a lack of standardization in the field (Reynolds et al., 2000). There are a large number of research articles written to show the benefits of art therapy. However, the majority of these tend to be qualitative case studies, most often done with small populations (Caddy et al., 2012; Hanevik, Hestad, Lien, Teglbjaerg, & Danbolt, 2013; Holmqvist & Persson, 2012; Maujean et al., 2014; Reynolds, 2012; Stuckey & Nobel, 2010). Almost all of the research seems to point in the direction of art therapy as an effective method of treatment. However, Kapitan (2012) addresses common logical fallacies that appear in research, such as the positive results bias, in which only research that affirms the hypothesis is published, and the more extreme tactic of ad hominem, in which a person seeks to discredit the results of another study by attacking the original author. Thus, without more replicated and varied types of evidence, it may be wise to regard the current literature with a critical eye (Reynolds et al., 2000).

Assessment. One particular issue that complicates the conversation is assessment. Initial searches led to a fair amount of art therapy literature on assessment (Betts, 2006; Cruz & Feder, 2013; Gilroy, Tipple, & Brown, 2012). Art therapy assessments are used by art therapists for a variety of purposes: to determine client’s functioning, diagnosis, strengths, and needs, to determine treatment goals and plans, and to evaluate progress and outcomes (Betts, 2006; Gilroy et al., 2012). There are a number of frequently utilized art therapy assessments, such as the
House-Tree-Person Test, the Formal Elements of Art Therapy Scale, and the Person Picking an Apple from a Tree test (Betts, 2006). In recent years however, researchers have begun to question the efficacy and accuracy of these tools. Betts states that “[s]ome of the problems with art therapy assessment instruments…relate to lack of scientific rigor” (p. 427). Despite questionable research that does not support validity and reliability of the instruments, they remain in widespread use.

The controversy around assessment and the controversy around EBP seem to revolve around the same epistemological questions of evidence and how art fits into the picture. There are a number of similarities between the two issues, such as the polarization of opinions on the matter (Betts, 2006; Cruz & Feder, 2013; Gilroy et al., 2012). There seems to be yet another divide rooted in the question of art therapy as an art or science, although Cruz and Feder (2013) believe that these arguments only divide a field that needs both components (Betts, 2006). Gilroy et al. (2012) also address different tensions that relate to the variable aims of assessment. Another similarity with EBP appears in the research recommendations, such as establishing higher reliability, collecting data from a larger population, duplicating data collection and using better objective criteria and analysis procedures (Betts, 2006). Gilroy et al. (2012) link art therapy and assessment directly, stating that “The research-informed and diagnostically driven basis of EBP, coupled with diminishing resources and diagnostically determined treatment frameworks in mental health care, now requires art therapists to integrate a more diagnostic approach to assessment without losing…their empathic response to the individual” (p. 223). Similarly to the expressive arts therapy researchers on EBP, Cruz and Feder (2013) also propose
that it is the art therapist’s responsibility to embrace both art and science in order to advance the field.

**Bridging the Gap.** Perhaps as a response to Cruz and Feder’s (2013) call to integrate art and science, some literature has emerged that attempts to bridge the gap between the two. Some authors focus their attentions at the intersection of physical and psychological illnesses and interventions (Crawford et al., 2014; Röhricht, 2009). Although treatment for chronic pain generally consists of medical interventions, Crawford et al. (2014) chooses instead to review studies that used sensory art therapies (music therapy, journaling/storytelling, art therapy, dance therapy, aroma therapy, acoustic stimulation, color therapy, and play therapy) to treat pain. They introduce chronic pain as a symptom that may be rooted in both physical and psychological basis. In recent years, complementary and integrative medicine that incorporates both medication and non-medical interventions such as the sensory art therapies have become commonplace for the treatment of chronic pain. Despite the history of treatment being mainly physiological, Crawford et al. contend that there is a shift towards patient-centered therapy that addresses the whole well-being of the patient, including mind, body, and spirit. Röhricht (2009) seems to take the opposite approach to connect the physical to the psychological. He details the many body-oriented psychotherapies and their efficacy in treating mental illnesses. Both Röhricht and Crawford et al. (2014) call for more academic research in order to solidify the links between these emerging therapies and the conditions they can treat.

In the art therapy literature, many articles seem to embrace the rise of neurobiological research (Kapitan, 2014; Kaplan, 1998; Lusebrink, 2004; Steele, 2009). Kaplan attests to past neuroscientific discoveries that legitimized mental illnesses and the need for effective treatments.
Kapitan (2014) and Steele (2009) both address the effect that neuroscience has had on the treatment of trauma. The revelation that trauma does not only affect cognitive functioning but also sensory and implicit processes has led to a shift in treatment methods that now includes art therapy. Lusebrink (2004) maps out the major brain areas involved in art therapy to provide a knowledge base of neurobiology that future art therapists can use to further expand the field.

Similarly, from the music therapy perspective, de l’Etoile and Lagasse (2013) argue that neurobiological research concerning human responses to music have validated their profession and transformed their field. Since neuroscience and music therapy are both committed to treating disorders of the brain, de l’Etoile and Lagasse thus advocate for further collaboration between the two fields.

Kaplan (1998) further expands on her viewpoints on science and art. She points out multiple similarities between the two, such as the necessity of creativity and the desire for meaning. She even goes on to argue that the gap between subjective and objective perspectives can be connected by viewing the two concepts on a continuum, rather than a dichotomy. Kaplan concludes that wedding science and art to practice scientific art therapy can lead to a stronger art therapy foundation, an expanded art therapy knowledge base, and a more responsible art therapy practice. Springham, Dunne, Noyse, and Swearingen (2012) on the other hand emphasize the importance of clinical guidelines, and state that they published their article with hopes of stimulating further discussion on the subject. They believe: “Clinical guidelines are an important part of evidence-based practice. They operationalize research for practice and they define practice for research” (p.130). On a related note, Hass-Cohen, Findlay, Carr, and Vanderlan (2014) illustrate the benefits of a neuroscience-based art therapy protocol for trauma through a
case study. Art therapy protocols “are designed to support safety, coherency, increase relational security, remembrance, improve social connection, and long-term resiliency” (p.76). However, despite these examples of art therapy bridging the gap between science and art, there still remain controversies that prevent the integration of art therapy and EBP.

**Controversies in art therapy.** The field of art therapy is comparable to the general literature in the area of controversies. This section reviews the differing attitudes in art therapy not only towards EBP, but also the related subjects of research, evidence, managed care, and clinical experience.

**Research and evidence in art therapy.** A full discussion of art therapy research methodologies is outside the scope of this paper. However, because research is the mechanism used to validate and promote art therapy within the framework of EBP, its role is examined here. This section first reviews art therapists' general attitudes towards research, and then moves into questions regarding what constitutes evidence.

**Attitudes towards research.** Huet et al. (2014) report that in the late 1990s in the UK, state regulations implemented EBP that obligated art therapists to become researchers, despite a lack of adequate training to do so. Tibbets (1995) agrees that many art therapists are unequipped and uninterested in conducting research. Gantt (1997) claims many veterans in the community hold the opinion that art therapy research is reductionist and unnecessary because they believe they simply know that art therapy works. Tibbets (2013) argues that further challenges arise out of lack of funding and institutional support. Gilroy (2006) instead asserts that it might first be necessary to clearly define the profession in order to determine significant areas of needed research and evidence.
When research becomes a requirement, the motivation of engaging in research shifts from asking questions to providing answers, which links EBP with fear of losing a job (Huet et al., 2014). Art therapists become fearful of losing their jobs when forced to justify their work. Tibbets (1995) argues that the lack of support for art therapy research, as evidenced by funding, results in a weaker empirical evidence base, which may cause art therapists to not be regarded as professional by their counterparts. As one of the proponents for research, Julliard (2013) argues that art therapists need to conduct more outcome-oriented research as well as communicate with scientific language in order to be seen as members of the healthcare field. Huet et al. (2014) similarly note the field of art therapy is resistant to research due to clinician's internal skepticism, a culture of fear, and perception that art therapy is inherently arduous to research. Kelly (2010) suggests that many art therapists enter the field as a second career and thus may lack the “energy, motivation, and commitment towards research” (p. 258).

Early pioneers of the field may have shaped these attitudes towards research. Schaverien (1995) argues that influential figures in art therapy described research as "an intrusion into the esoteric essence" of the practice or a "potential theft of something precious; rather like researching love or a religious experience" (p. 25). Similarly, Tibbets (1995) states that within the belief that art is inherently therapeutic comes the notion that long-term research is unnecessary and irrelevant. Several researchers are attempting to overcome the culture of resistance in art therapy through the formation of online databases for scientific art therapy research based in Germany and England (Elbing, Schulze, Zillmann, Raak & Ostermann 2009; Huet et al., 2014).
Issues of evidence. Similar to the general literature, art therapists have also struggled with defining and integrating evidence into their practices. Over the past five years the concept of research evidence has required more and more academic rigor (Clift, Camic, Chapman, Clayton, Daykin, Eades, et al., 2009; White, 2009). Raw et al. (2011) note the current obsession with developing an evidence base. Furthermore, Matarasso (1997) claims there are two false assumptions in the search for evidencing the value of the arts in healthcare. The first is that there is evidence to be found at all. The second assumption is that once evidence is found, it will radically change arts in healthcare funding.

Raw et al. (2011) attribute the challenges of developing an evidence base in art therapy to confusion between clinical and non-clinical approaches, as well as the difficulty of evaluating social factors that affect health. The complexity of human social interactions that includes trust and experience are essential to art therapy and cannot be accounted for by the EBP golden standard of RCTs (Gilroy, 2006). Many authors question the use of a biomedical model to evaluate arts in healthcare that value quantitative data and a scientific approach (Dileo & Bradt, 2009; Hamilton, Hinks & Petticrew, 2003; Stuckey & Nobel, 2010). Putland (2008) states that the disagreement over what constitutes valid evidence may subjugate the value of the art. Tibbets (1995) agrees that many art therapists view empirical evidence as a hassle, which then sustains the notion of the art therapist as a second-class mental health clinician. Gilroy (2006) asserts that art therapy has a growing evidence base, just not the kind that fits within the paradigm of EBP.

EBP and managed care. This section reviews the attitudes and belief systems of art therapists and other healthcare professionals working with the arts regarding EBP. Due to the
limited nature of art therapy literature, the articles reviewed in this section are expanded to discussions of managed care, the larger system that drives EBP. The limited nature of the literature itself points to underlying systemic differences in the approaches and attitudes surrounding art therapy and EBP (Gilroy, 2006; Goodman, 1997; Raw et al., 2011; Tibbets, 1995). Art therapists’ attitudes range from labeling EBP as an oversimplification, to experiencing anxiety over integrating EBP, to feeling their professional identities threatened and vulnerable (Gilroy, 2006; Goodman, 1997; Tibbets, 1995).

Managed care can be defined as a process of “industrialization” that’s transformed mental health care into a “fee-for service practice” into a “for-profit system organized around business principles” such as accountability and efficiency (Crespi & Giuliano, 2000, p. 72). It has been said there are three types of mental health clinician perspectives on managed care: those who are against it; those who attempt to work with the system and create options; and a third who believe it is the preferable approach (Heron & Adlerstein, 1994). In the field of art therapy, some clinicians allied with the first category to challenge the necessity of evidence, research, and managed care within the profession (Gantt 1997; Goodman, 1997; Tibbets, 1995). Both Tibbets (1995) and Goodman (1997) report feelings of avoidance regarding EBP and managed care, likening them to going to the dentist. Goodman equates navigating the managed care system to entering a foreign and hostile land inhabited by beasts. Goodman also acknowledges that while working within a managed care system can create feelings of helplessness. Tibbets (1995) and Goodman (1997) reveal that some art therapists simultaneously hold biases against the system while still attempting to work within managed care in order to survive.
Gilroy (2006) remarks that the discipline of art therapy is not empirically supported by the standards of EBP, and the pressure to scientifically validate the entire profession leads to more anxiety. Gantt (1997) agrees and states that the rise of managed care places the responsibility on the art therapist to provide the evidence of efficacy. Huet et al. (2014) add that using RCTs as the golden standard in EBP research is beyond the resources of most art therapists. Furthermore, it causes pressure when research is conflated with survival and thus creates a climate hostile to innovation. The rise in popularity of EBP can lead professions such as art therapy, where funding and availability of empirical research is limited, to places of vulnerability and inadequacy (Gilroy, 2006). Although some articles did urge further research in art therapy, an in-depth review of the literature revealed no art therapists who hold the third clinician perspective of embracing managed care. Clearly, art therapy cannot instantly manifest the research that EBP doctrine requires (Gilroy, 2006).

Additionally, education requirements for art therapists may influence their attitudes. Gantt (1996) argues the practice of art therapy contains a built-in bias against math-based models originating in training requirements. Other authors agree this bias is a result of the lack of science-based education requirements for art therapists (Gantt, 1996; Kaplan, 1998; Tibbets, 1995). Factors such as non-science based training, lack of resources, pressure to prove their professional work, and the threat of job loss may highlight a fundamental difference in research methodology between the field of art therapy and what is necessitated by EBP (Broderick, 2011; Raw et al., 2011; Van Lith et al., 2013).

Clinical expertise within EBP. Just as in the general literature, art therapists also address the issue of clinical judgment in EBP. Stuckey and Nobel (2010) argue that throughout history
and different cultures, creative expression made contributions to healing with the support of anecdotal and philosophical research, without discussions of specific outcomes and controlled studies. Gantt (1997) notes that the discipline of art therapy in the twentieth century has traditionally been supported by a tacit knowledge base and clinical experience due to its origins in psychoanalysis. As previously discussed, the emergence of EBP challenged research paradigms in psychotherapy and explicitly elevated the notion of evidence above expert opinion (Parry, 1997). Broderick (2011) states that EBM, an approach that generates income, can be seen in contrast to approaches where decision-making is based on clinical experience with patient pathology. Gilroy agrees and notes some researchers claim empirical evidence ignores the subjectivity of the clinician (Gilroy, 1996). In agreement, Schaverien (1995) believes that due to the influence of the scientific paradigm, art therapists often underestimate the legitimacy and power of their profession.

**Contributions from related fields.** Within the expressive arts therapies literature (music therapy, arts therapy, dance/movement therapy and writing therapy) the field of music therapy provides the most critical work on the topic of EBP. The literature of dance and movement therapy and writing therapy did not contribute a significant amount of related literature and will not be reviewed. There are also contributions from authors regarding arts in healthcare. Arts in healthcare is a broad and fragmented term used by different professionals in a variety of ways around the world (Clift et al., 2009; Putland, 2008; Raw et al., 2012). For the purpose of this review, the term arts in healthcare means the use of the arts to enhance general well-being, which includes the expressive arts therapies. Dileo and Bradt (2009) identify the challenges associated with the organization of the variety of practices encompassed by the arts in healthcare. They go
on to state that in order for the expressive arts therapies to become respected disciplines, they need clearer definitions, more standardization of language, and better categorization of the practices. Furthermore, White (2009) questions whether qualitative and social science based methods are the only ways to measure the efficacy of arts in healthcare.

**Music therapy.** This section compares developments in the field of music therapy and its attempts to integrate EBP. A comparison with the art therapy literature suggests the struggles of music therapists in many ways parallel those of the art therapists. However the tone of the literature indicates music therapy researchers, while maintaining critical thinking, also tend to be more optimistic and willing to engage in complex discussions about the challenges and benefits of embracing EBP (Conklyn & Bethoux, 2013; Edwards, 2005).

**Attitudes.** Gilroy (2006) and Conklyn and Bethoux (2013) both acknowledged the pressures caused by EBP, but they interpret the effects differently. While Gilroy (2006) believes that EBP can lead art therapists to places of vulnerability and anxiety, Conklyn and Bethoux (2013) state that music therapists recognize and accept the responsibility placed on the clinician to prove their professional relevance in a managed care system. Edwards (2005) communicates the complexities of the topic. He states:

Many hospitals are run successfully without qualified music therapists. It is, therefore, potentially far more threatening to have these principles applied to our field, since there is no statutory requirement for music therapy provision that protects our posts. It must be remembered that the EBM framework was developed in order to challenge and improve medical practice, not primarily to inform the work of administrators in determining service funding. This approach to the collation of evidence to support practice is not
based on immutable natural laws but rather it is humanly constructed. It is a potentially helpful framework that in the experience of the author is sometimes incorporated clumsily and ill advisedly to attempt to cut and rationalise services, rather than necessarily improve patient choice and care. (p. 297-298)

Although individual definitions may differ slightly, many music therapists developed thoughtful considerations towards EBP and adhere to their standards (Conklyn & Bethoux, 2013; Edwards, 2005). Nonetheless, Kern (2010) argues the profession must reach a consensus on the definition of EBP, different levels of EBP, and quality indicators for evaluating evidence.

One possible reason for the difference in attitudes between the two disciplines may be due to the governing organizations in each field. Since the late 1990s, the American Music Therapy Association (AMTA) has been developing a portfolio of research supporting the practice's effectiveness within state and federal requirements. AMTA’s goals include professional education, future research guidance, and adopting EBP protocol (American Music Therapy Association, 2014). In contrast, the American Art Therapy Association (AATA) has no official statement or plan to adopt, develop, or research the integration EBP and art therapy.

Research in music therapy. Edwards (2005) argues that the current status of music therapy research does not reflect a lack of evidence; rather it speaks to the developmental stage of the profession, the small number of researchers, and the wide range of populations served. Ledger and Edwards (2011) observe that music therapy researchers tend to avoid arts-based research in part due to a desire to ensure that their research is accepted within the dominant scientific traditions of healthcare. Even so, researchers indicate there is a need for more high quality RCTs and other quantitative studies in order to cultivate the empirical evidence base in
music therapy (Silverman, 2010a). Edwards (2005) challenges the appropriateness of using RCTs to measure the efficacy of music therapy because of the diverse characteristics of the source population, the necessity for music therapy to allow for customization of treatment, and the challenge of using outcome measures to capture respondents’ idiosyncratic voices. Edwards (2005) and Leckey (2011) also agree that there is a need for more high quality, rigorous research with clearly defined concepts of expressive arts and well-being that study the effectiveness of music therapy.

On the other hand, Ledger and Edwards (2011) argue in favor of the inclusion of arts-based research methods into the evidence base because it highlights the unique qualities of expressive art therapies such as subjectivity, strong emotions, and a voice for marginalized people. In agreement, Bradt, Burns, and Crewell (2013) believe that mixed methods hold the best promise for integrating multiple ways of knowing and evidence. The literature indicates the debate about research methodology and types of evidence is more lively and developed in music therapy than in art therapy.

*Integrating EBP into music therapy.* The music therapy literature indicates various ideas and strategies to advance the use of EBP in the field. Out of all the components of EBP (research, clinical expertise, and patient needs), research is the biggest challenge for clinicians (Conklyn & Bethoux, 2013). Similar to the field of art therapy, music therapy researchers also identify a gap between research and practice (Gilroy, 2006; Kern, 2010; Silverman, 2010b). Edwards (2005) states that while EBM has been criticized for lack of pluralism, music therapy research has responded to this controversy by exploring qualitative methods. Regardless of types
of evidence, Silverman (2010b) argues that it is vital to locate funding for research on how to implement EBP into music therapy.

Looking to the future. Despite the many controversies, a number of authors also offer recommendations to integrate EBP and its many components with the expressive arts therapies. These recommendations range from suggestions for further research to whole new frameworks from which to consider the field.

Recommendations for future research.

For Researchers. While much of the current research is qualitative, the existing studies have many suggestions for how future research can expand the field. First, the lack of standardization in the literature is reflected in a lack of standardization in the research itself. Many articles recommend more clarity in concepts, research aims, and designs (Beard, 2012; Gilroy, 2006; Patterson et al., 2011; Patterson et al., 2013; Reynolds et al., 2000; Reynolds, 2012; Slayton et al., 2010; Stuckey & Nobel, 2010; Van Lith et al., 2013; Wood, 2013). Wood (2013) and Patterson et al. (2011; 2013) all point out the current lack of hypothetical clarity of what exactly is being tested. Similarly, Reynolds et al. (2000) believe that the lack of detailed reporting of art therapy methods casts doubt on the results of the current studies. Beard (2012) also finds of a lack of systematic analysis of data in her review of expressive arts therapies research with dementia. Stuckey and Nobel (2010) indicate that interventions and outcome variables should be standardized to facilitate better comparisons between studies.

However, there is some debate regarding the methodology. A large number of authors call for an increase in RCTs (Archer, et al., 2014; Gilroy & Lee, 1995; Maujean et al., 2014; Reynolds et al., 2000; Stuckey & Nobel, 2010). However, Patterson et al. (2011; 2013) bring up
the question of engagement. Having noted the low retention rate of participants across many studies, they find that a client’s willingness to engage was a major factor in determining the success of therapy (Patterson et al., 2011). If this is true, then Patterson et al. question whether RCTs are the best way to study art therapy. Van Lith et al. (2013) state that one of the challenges of increasing this type of research is that that many mental health clinicians see RCTs as distanced from the real world and remain unconvinced of the benefits. Others support a mixed methods approach instead (Coholic, Eys, & Loughheed, 2011; Van Lith et al., 2013; Holmqvist & Persson, 2012). Wood et al. (2011) is in favor of combining the two methods. Similarly, Caddy, Crawford, and Page (2012) agree that there needs to be more qualitative studies to support the quantitative studies.

The disagreement continues through the subject of analysis. Maujean et al. (2014), Reynolds (2012), and Van Lith et al. (2013) all suggest standardized clinical scales as the best approach to understanding the effects of art therapy. Conversely, Beard (2012) advocates for more studies utilizing quality-of-life variables that focus on a meaningful process over biomedical scales that seek to analyze the outcomes. Following their review of art therapy with cancer patients, Wood et al., (2011) also recommend more explorative studies of how the patients’ artwork reflects their process during their hospitalization. Kelly (2010) on the other hand argues that the outcomes and process are equally important in art therapy.

Almost universally agreed upon is the recommendation that need for more long-term follow-up studies (Archer et al., 2014; Caddy et al., 2012; Holmqvist & Persson, 2012; Maujean et al., 2014; Stuckey & Nobel, 2010; Van Lith et al., 2013; Wood et al., 2011). Much of the literature also agrees on the need for more research with specific populations and symptoms, as
well as in a variety of different settings (Beard, 2012; Caddy et al., 2012; Crawford, Killaspy, Kalaitzaki, Barrett, Patterson & Waller, 2010; Gantt, 1997; Reynolds et al., 2000; Wood et al., 2011; Van Lith et al., 2013). This would facilitate a better understanding of when, for whom, and for what presenting problems art therapy is most effective in treating. Several authors also call for larger sample sizes (Betts, 2006; Caddy et al., 2012; Gantt, 1997; Reynolds et al., 2000). Others focus less on the sample size and more on the high attrition rate previously mentioned (Archer et al., 2014; Coholic et al., 2011; Patterson et al. 2013; Reynolds, 2012; Van Lith et al., 2013). Reynolds (2012) contends that learning more about attrition processes may provide more information on the type of client that art therapy is most effective with. In their review of art therapy research with cancer patients, Archer et al. (2014) finds lower levels of attrition in studies with voluntary participants. This reiterates Patterson et al.’s (2011) earlier assertion that level of engagement is an important factor in the effectiveness of art therapy.

Another issue that received some attention is the question of collaborating with other disciplines. Crawford et al. (2010) and Kelly (2010) are all proponents of interdisciplinary research. Crawford et al. (2010) in particular recommend research on art therapy as adjunctive therapy. Conversely, there are a few articles arguing against collaboration as well (Reynolds et al., 2000; Slayton et al., 2010). They argue that mixing interventions makes it difficult to determine the actual efficacy of the art therapy interventions. Reynolds et al. (2000) instead advocate for cross-benefit studies in order to compare art therapy efficacy to other treatments. Gilroy (2006) simply cautions art therapists about interdisciplinary work and the careful considerations necessary in order to maintain art therapy values.
Several researchers mentioned more areas of concern. Leckey (2011) and Patterson et al. (2011) acknowledge the lack of funding for art therapy research. Leckey (2011) maintains that funding must be considered when assessing the quality of art therapy research, as it greatly impacts the quality of treatment provided in studies. On another note, Kimport (2012) asserts that while art therapy encompasses all of the visual arts, the majority of studies seem to focus solely on drawing. Springham et al. (2012) also discuss the lack of perspective from the consumers of art therapy as a significant limitation in the research. Kapitan (2010b) correspondingly concentrates on the power dynamics that exist between researcher, therapist, and client. She reasons that considering the power structure inherent in research will only provide a greater depth to how evidence in art therapy is collected and viewed. Talwar (2010) also asks readers to reflect on issues of culture and identity in future research. She deems cultural issues as vitally important to how knowledge is constructed in the field of art therapy, and believes self-reflexivity is a necessary part of quantitative and qualitative research.

For clinicians. The gap between researcher and consumer perspectives is apparent in the previous section. However, the perspective of the practicing clinician also needs to be addressed. This perspective is valuable in bridging the gap between research and current practices. Hanevik et al. (2013) weigh the benefits and costs of playing both the researcher and clinician roles in a study. On one hand, playing both roles may include higher incentives to over-report positive results. On the other hand, the dual relationship would also provide much more detailed information and may aid in developing trust with the clients. Gantt (1997) places the responsibilities of research on the clinicians themselves. She addresses art therapists directly, claiming that “the onus is on us to provide evidence of the worth and precise effectiveness of art
therapy” (p. 34). Correspondingly, Gilroy (2006) implores art therapists to “prioritise evidence-generating activities” (p. 36). This does not necessarily mean focusing entirely on outcomes, but well described and detailed case studies can also contribute to the knowledge base. The case studies can evolve into case series, which can in turn inform future RCTs. Gilroy also advises clinicians to think, act, and write politically in order to appeal to the policy makers who have an influence on the field.

Kaplan (1998) begins her recommendations at the earlier stage of undergraduate education. She recommends at least 15 semester hours of behavioral science, including research methodology. In graduate education, students would then take relevant scientific courses “such as medical aspects of treating mental illnesses, evolutionary psychology, the psychology of art, and anthropological studies of art” (p. 94). A higher emphasis on research methods can also be achieved by offering more opportunities for doctorate education. For currently practicing clinicians, she endorses staying up-to-date on research findings and adjusting their practice accordingly. It seems relevant to mention, written in 1998, Kaplan’s article does not incorporate any of the recent language surrounding the topic. This is yet another example of the lack of standardized language surrounding the issue and displays the difficulty in finding relevant research.

**Theoretical Frameworks.** This section explores the literature of art therapy, music therapy and the arts in healthcare that suggests theoretical frameworks, new strategies to assess evidence, and a common language between the arts and healthcare. Out of all of the literature reviewed here, only a small handful of authors address the challenge of bridging the fields of art
and science and attempt to contribute some clarity and organization. Raw et al. (2011) summarize its importance:

A conceptual framework can and should be developed which will place community arts and health practice in a clear, theoretically grounded paradigm, one that draws out its distinctiveness. It could be argued that, by failing to address the nature of the practice and its practitioners – those specialists and the approaches at the heart of the matter – the academic appraisal of arts and health is suffering from a hole in the heart. (p. 98)

Furthermore, Abrams (2010) argues that clinicians must bridge a rift that exists due to working in accordance to qualitative evidence and simultaneously prioritizing quantitative evidence. For Abrams, this is a "most disingenuous solution" regardless of the rationalizations provided (p. 375). Broom (2008) cautions: "The determination to base [illness] prevention on evidence thus may require the cultivation of a subtle blend of empirical rigor and humble agnosticism, a rare and difficult combination" (p. 6). Hamilton, Petticrew, Kaye, and Kidd (2003) state that “the arts may be more potent than anything that medicine has to offer” (p. 1433). Putland (2008) rebuts that although the argument has merit, it is difficult to illustrate academically.

*Frameworks from music therapy.* The optimistic attitudes and development of EBP in music therapy are mirrored in its theoretical constructs. Some researchers propose frameworks that outline recommendations for clinicians to integrate EBP and music therapy (Abrams, 2010; Edwards, 2005; Kern, 2010). Kern (2010) proposes a five-step EBP that utilizes a decision-making process that can be applied to music therapy with children with autism. Edwards (2005) recommends a similar five-phase model for clinicians to promote the use of evidence. Abrams
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(2010) proposes a four-part epistemological framework that changes the perspectives on evidence in order to help conceptualize EBP in music therapy. To advance the evidence base of music therapy, Abrams’ complex model outlines the interaction between four distinct ways of understanding evidence, which he names as subjective, objective, inter-subjective and inter-objective. While the profession of music therapy has made substantial advances, it is noteworthy that the literature reveals no official music therapy ESTs. The art therapy literature similarly does not contain any formal integration of EBP into clinical work.

Frameworks from the arts in healthcare. Raw et al. (2011) argue that scholars have become preoccupied with the quest to fill the evidence void and lost sight of the inquiry into the actual mechanisms of how health-based changes occur. Raw et al. suggest an interdisciplinary approach that utilizes the following thematic groupings as a conceptual framework: a "protected space where new things are possible, the value of modeling and legitimizing fun, playfulness and improvisation, and the common practice of building a specific culture within a project space" (p. 104). In epistemological terms, Raw et al. dispute the question of evidence and rather tackles the fundamental question of how change occurs. Clift et al. (2009) identify three structural frameworks in the arts in healthcare literature in the UK. Each model defines factors such as community, expressive arts therapies, hospital-based interventions, and so on in different combinations. While theses models are useful to categorize activities in the field, they do not contribute to an overall clarity or provide concepts that transfer outside the field of arts in healthcare (Raw et al., 2011).

Recommendations for and challenges of integration. The literature points to challenges of integrating art therapy and EBP to include financial and power dynamic factors. Gilroy
(2006) strongly recommends against "acceding to the prerogatives of orthodox EBP" and encourages researchers to challenge the "implicit hierarchies and beliefs that underpin EBP" (p. 2). Raw et al. (2011) recommend applying a healthy dose of critical thinking. Similarly, Abrams (2010) argues that music therapists can be persuaded by economics factors associated with certain ESTs that may compromise competency and lead to a betrayal of their ethical duties. Other researchers agree that the drive to produce evidence motivated by problem-fixing policies leads to problematic trends for arts in healthcare (Wreford, 2010). Wreford argues that gathering evidence and proof necessitates funding and therefore is interconnected with power dynamics.

Interdisciplinary issues and locating a common language. Stuckey and Nobel (2010) state that the key to bridging the gap between arts and healthcare is investigating the relationship between the two fields of inquiry. Putland (2008) and Matarasso (1997) identify a need for a common language between arts and healthcare perspectives to promote a vocabulary that communicates the interests of both disciplines. Abrams (2010) believes a new theoretical model, such as his described above, must be foraged before a common language can be created. Ultimately, Gilroy (2006) suggests that art therapists who attempt to integrate EBP hold multiple possibilities in mind, as they do in clinical practice, engage in the hard questions, and forage new conversations in this unfamiliar landscape.

Conclusion

The topic of EBP and its related subjects of research and managed care have incited a large amount of conversations in both the general field of mental health and the expressive arts therapies. Among other arguments, both fields wrestle with issues of definition, evidence, and the incorporation of clinical expertise. There is also the larger question of how to bridge the gap
between science and art in a field that seems to require both. The popularity of EBP in mental health has resulted in a struggle for expressive arts therapists to validate their field through RCTs and an increased evidence base. Despite the large number of controversies, several authors have put forth suggestions to advance the expressive arts therapies. Some focus on providing recommendations for researchers and clinicians to increase and improve research. Other authors tackle the broader issue of developing new theoretical frameworks that revise perspectives on evidence. It has become apparent that EBP is a major player that has changed and will continue to change the landscape of mental health. Thus, despite the many opponents of EBP, it is an issue that requires attention from the field of art therapy.
Research Approach (M)

The principle investigators used a mixed method approach in this research. As described by Creswell (2015), the mixed methods approach is specific to the social, behavioral, and health sciences. The researchers and advisors chose the mixed methods approach agreeing with Creswell that by integrating the quantitative, qualitative and arts-based approaches and drawing interpretations based on the combined strengths of both data sets, researchers were able to better understand the central research question. Both data sets in Part A were analyzed with the purpose of comparing the results in order to analyze similarities and/or differences. Data was looked at overall to come to some culminating findings.

The first component of the research utilized both quantitative and qualitative approaches in a survey. The survey helped to address the “what” questions about a particular group at one point in time rather than the “why” (Kapitan, 2010). In this case researchers were looking at "what" types of attitudes and beliefs were held by LMU alumni and the principle investigators regarding EBP and art therapy.

An arts-based investigation served as the second component of the research. Principal investigators chose an arts-based approach because they felt that visual processing and art making is an integral part of the clinical art therapist identity and thus plays an important role in all aspects of the art therapy profession, including research. All four researchers identify as artists in various capacities and consider the art process to be an important tool in deepening their understanding of the research material. Mcniff (2008) thought that art-based research is characterized by endless variation of style, interpretation and potential outcomes. Principle investigators were particularly interested in the potentials of art-based research and how an art
response could potentially yield a rich diversity of interpretable data which could draw parallels with the quantitative responses.
Methods

Introduction

This section provides a detailed description of the methods utilized in this research study. The first section defines terms used in the literature review relevant to EBP and the field of art therapy. The second section describes the mixed methods design of the study, which is organized into two main sections, Part A and Part B. Part A consists of the survey while Part B refers to the arts-based response process. Both Part A and Part B include three sub-sections that report sampling, the data gathering process and the analysis of the data. The findings section is the culmination of findings from both Part A and Part B. Figure 1 on the following page provides a visual representation of the entire research process.
Figure 1: Research design. This figure illustrates the design of this research project as a whole.
Definition of Terms

**Art therapy** - the American Art Therapy Association (2014) describes art therapy as the therapeutic use of art making, within a professional relationship between client and art therapist. Those who receive therapy have typically experienced illness, trauma or challenges in living and/or seek personal development. The process of art therapy entails creating art and reflecting on the art products and processes. Clients can increase awareness of self and cope with symptoms, stress and traumatic experiences, enhance cognitive abilities, and enjoy the life-affirming pleasures of making art.

**Art therapy assessments** - are tools used by art therapists for a variety of purposes including to determine client’s functioning, diagnosis, strengths, and needs, to determine treatment goals and plans, and to evaluate progress and outcomes (Betts, 2006; Gilroy et al., 2012). There are a number of established art therapy assessments such as the House--Tree--Person Test, the Formal Elements of Art Therapy Scale, and the Person Picking an Apple from a Tree (Betts, 2006).

**Arts in healthcare** - is the use of the arts to enhance general well-being, which includes the expressive arts therapies. (Dileo & Bradt, 2009). The term is more commonly used in the UK and Australia.

**Clinical expertise** - is the accumulated experience or practice wisdom of a clinician. (Graybeal, 2006). Clinical expertise is vital in the context of EBP to the clinician’s role of integrating the research evidence with the client's preferences (Drisko, 2011).

**Creative arts therapies** - also known as expressive arts therapies, includes music therapy, art therapy, dance/ movement therapy and writing therapy to foster growth and personal development (International Expressive Arts Therapy Association, 2012).
Empirically-Supported Treatments (ESTs) - ESTs are clearly specified treatments shown to be effective through controlled research among a delineated population (Chambless & Hollon, 1998). ESTs are additionally defined as established lists of specific therapeutic techniques (Lilienfeld et al., 2013).

Evidence-Based Medicine (EBM) - is the practice of processing of integrating individual clinical expertise in physical medicine with the best available clinical evidence from systematic research (Sackett et al., 1996). EBM replaces anecdotal case descriptions and utilizes experimentation, meticulous observation, enumeration, analysis, and recording and cataloguing of evidence (Peile, 2004).

Evidence-Based Practice (EBP) - refers to the process of using empirically validated mental health research to make clinical decisions that best meet the needs of each client (Patterson et al., 2004). There are three components which are a part of the EBP process: research evidence, clinical expertise, and patient preferences (APA Presidential Task Force on Evidence-Based Practice, 2006; Aveyard & Sharp, 2009; Bliss-Holtz, 2007; Goodheart et al., 2006; Graybeal, 2006; Hagemoser, 2009; Dozois et al., 2014; Patterson et al., 2004; Spring, 2007).

Hierarchy of evidence - is a grading system in EBP that assesses the quality of evidence (Aveyard & Sharp, 2009). Experimental studies and RCTs are ranked as Level 1, indicating the highest and most effective evidence (Oxford Centre for Evidence based Medicine, 2009). Pre-to post- observational studies that lack random assignment of patients to research or control conditions are Level 2 quality in the EBP evidence hierarchy. Level 2 studies are considered good but not ideal because they cannot conclusively demonstrate that the treatment alone caused the changes observed. Case-based studies have less capacity to demonstrate cause-effect
relationships and are labeled Level 3 and Level 4 of the hierarchy of evidence, with practice
wisdom at the lowest Level 5 (Drisko, 2011).

**Managed care** - is a process of industrialization that has transformed mental health care from a
“fee-for service practice into a for-profit system organized around business principles” such as
accountability and efficiency (Crespi & Giuliano, 2000, p. 2002).

**Mixed methods research** - is a research approach in social, behavioral, and health sciences that
integrates multiple research approaches and the strengths from their data sets to better answer
and understand the research question (Creswell, 2015).

**Qualitative research** - is a research process where the investigator poses general questions and
collects data in the form of text, audio recordings, or video recordings. The researcher collects
data through observation of participants or directly asking them open-ended questions using tools
such as interviews, focus group protocols, or questionnaires (Creswell, 2015).

**Quantitative Research** - poses specific questions or hypotheses, measures variables to facilitate
the finding of answers, uses statistical analysis to obtain information in order to answer the
questions/hypotheses, and makes an interpretation of the results (Creswell, 2015). It usually
involves counting and the use of measurement (Aveyard & Sharp, 2009).

**Research evidence** - is data from existing research that is recorded and catalogued for systematic
retrieval and is used by clinicians to answer clinical questions (Patterson et al., 2004; Peile,
2004).

**Randomized-controlled trial (RCT)** - is a type of research study with randomly assigned groups
and is designed to determine the effectiveness of an intervention given to one or two of the
groups. The RCT is considered to be at the top of this hierarchy of evidence (Bliss-Holtz, 2007).
Joyce et al. (2006) and Sackett et al. (1996) call the RCT the gold standard for determining empirical support for a given treatment method.

Sensory art therapies - include music therapy, journaling/storytelling, art therapy, dance therapy, aroma therapy, acoustic stimulation, color therapy, and play therapy to treat pain and mental illness (Crawford et al., 2014).

Treatment manuals - are often used as part of a collection of tools for ESTs (Hagemoser, 2009) and may contain careful session-by-session outlines of interventions or may describe broad principles and phases of treatment with examples of interventions (Chambless & Hollon, 1998).

**Design of Study**

**Part A: Survey.** The first portion of the research consisted of the survey; constructing, disseminating, gathering and analyzing relevant data as it pertained to the survey. The researchers constructed the survey using the online survey software Qualtrics. They included questions referring to the research questions, supplemented by questions pertaining to demographics and clinical and educational background. The research design was sent to LMU’s internal review board and approved (see Appendix A, pg. 127). A pilot version of the survey was sent to six graduate students in the MFT Department at LMU in November of 2014. Principal investigators requested comments and feedback from participants in an attempt to create a valid questionnaire and to “uncover any hidden assumptions, biases, or lack of clarity that can throw off participant responses” (Kapitan, 2010a, p. 69). Once initial feedback was received from pilot survey participants, the survey was edited and launched. See Appendix B (pg. 128) for a copy of the survey.
**Sampling.** The subjects of the survey were graduates of LMU’s MFT Graduate program. The survey was sent out to all alumni who possessed a working email and were part of the alumni mailing list maintained by the department. To participate, subjects were asked to fill out the eight sections of the survey online. The final section of the survey provided an option for participants to create an art response using either an online drawing interface or to upload an image. Those participants who successfully completed at least the first seven sections of the survey online were included in the sample dataset.

All participants were informed that information gathered from the research process would remain anonymous but would be analyzed and published in a research paper. Intentions of the research and issues of confidentiality were addressed with the participants along with a consent agreement.

**Gathering of data.** Both quantitative and qualitative data were collected from the survey through Qualtrics. Quantitative data was gathered from sections one through seven consisting of multiple choice, drop-down menus, check-boxes, and scaled questions. Qualitative data was gathered from submitted art responses in section eight. Artwork was created using web-based application A Web Whiteboard or scanned and submitted. Art responses were printed and coded for recurring formal elements and content. Once data was collected from both research approaches, the data was analyzed.

**Analysis of data.** For the analysis of data, researchers separated into two pairs. One pair used the Qualtrics analytic features to identify emergent trends and patterns evident in the quantitative portion of the survey responses. Regarding the art-based qualitative data, the other pair of researchers analyzed the art by coding the pieces and searching for recurrent visual
themes and trends that helped to answer the research questions. The data from the artwork was analyzed amongst the group as well as against the participants who did not complete the eighth section. Once both data sets were organized and analyzed separately, a concluding analysis integrated the two approaches. This work drew interpretations from both quantitative and qualitative data sets to better understand the participants’ attitudes and beliefs toward EBP and art therapy.

**Part B: Arts-based Exploration.** The second portion of the research took an arts-based approach. First, each researcher created ten cards consisting of key terms, phrases, and ideas pulled from part A. The cards were discussed and organized, and then the researchers created an individual art response to the discussion. These art responses were further explored by the group and given one statement to summarize the main idea of each piece. Each researcher was also asked to write an analysis of their own artwork. The researchers met a week later and integrated the main ideas from the artwork into one concluding video.

Prior to beginning the process of Part B, the principal investigators planned on bringing in idea cards, having a brief art warmup, and then creating a group piece as the data. However, the investigators chose to follow a more organic process that emerged rather than staying rigid to the plan. At the conclusion of part B, the investigators agreed that the idea cards were the data, the individual artwork and subsequent discussion served as the analysis of data, and a group video process presented the findings.

**Sampling.** In the second stage of the research process, the four principal investigators served as the sample population. This portion of the research concentrated on investigating each of the researcher’s culminating thoughts and feelings around EBP and art therapy. Although the
investigators were initially interested in sending the survey to other MFT and art therapy programs, due to time and resource constraints they agreed to limit Part B to the investigators themselves. After compiling the literature and analyzing the data from the survey, investigators noticed a discrepancy between the attitudes presented in the literature and the attitudes gleaned from the survey. Thus, the researchers were interested in exploring this discrepancy through the lens of their own experience throughout the research process.

**Gathering of data.** The researchers each brought in 10 idea cards. The idea cards consisted of key terms and ideas that researchers deemed significant from both the literature review and the survey data. The cards were then placed all together and clustered by similar and relevant concepts following a discussion amongst the researchers. Throughout the discussion, the researchers uncovered various themes and relationships among the cards.

**Analysis of data.**

*Art response and analysis.* Each researcher created an individual art piece in response to the conversational analysis of idea cards. 15 minutes was allotted for the construction of the artworks with an open choice of materials. The researchers verbally processed the individual artworks as a part of the analysis process. The researchers first put the artwork together and began with an open discussion of observations of formal elements and emergent and recurring themes. Then each researcher described their individual process and art piece and the other investigators asked questions as it related to the artmaking process. Then based on the discussion, the researchers pulled relevant idea cards to place next to the correlating artwork. Through the process of connecting idea cards to individual artworks, the researchers organically
composed a succinct statement for each artwork that served as a summarizing synthesis between important research findings and the visual processing of the artworks.

*Written analysis of artworks.* Researchers were additionally asked to write a short statement that described their experience during the art process. This statement is included in the analysis of data section below photographs of each art work.
Results

First, both the quantitative and qualitative data from the survey (Part A) will be presented and analyzed. Then, the findings are discussed, especially in relation to how they informed and shaped the methodology for the second part of the study (Part B). Next, the data from Part B will be presented and analyzed. The Results section (p. 79) concludes with the final findings from Part B.

Part A: Survey

Presentation of Data. This section begins with the presentation of the data collected from the first seven parts of survey only, followed by a presentation of the data collected from the art responses.

Quantitative survey data. Out of 55 individuals who began the the survey and 47 individuals completed it. In other words, eight individuals started the survey but did not submit their responses due to a desire not to participate or technical problems with the online format of the survey. Reflective of the field of art therapy as a whole, all but two of the respondents were female. The majority of respondents graduated within the last 12 years (73%) and majority were born in the 1960s-1980s (75%). The respondents have worked in a broad variety of mental health settings with the highest percentages in outpatient centers (79%), community mental health clinics (72%), and schools (64%). More respondents were LMFT’s (57%) than were ATR-BC’s (31%). Although there was a wide variety of orientations, the majority identified with psychodynamic/object relations (53%).

Many of the respondents (57%) indicated that they did not encounter EBP during their graduate studies and also did not feel familiar with it upon graduation. However, after
graduation most respondents (70%) indicated receiving post graduate training in at least one EST. The vast majority of respondents (91%) state they have a moderate to clear understanding of EBP. Fewer, but still a majority (74%), felt that they have moderate to clear understanding of EST. This confidence in understanding was reflected by both those who had and those who had not used EBP in their clinical practice. The minority (9% and 26%, respectively) who had little or no understanding also indicated little or no training and experience with EBP and EST. It should be noted that this question asked participants to scale their perception of their own understanding and did not ask them to explain a precise definition of EBP or ESTs. All respondents felt that art therapy and EBP can be integrated, although respondents varied on their beliefs about the difficulty of integration. About half (48%) indicated that training on integrating EBP and art therapy would benefit them greatly while fewer (36%) indicated that it would help them somewhat. The majority of respondents incorporated art therapy frequently into their practice, averaging a use of art therapy in around 72% of their sessions. In comparison, they used EBP less, averaging a use of EBP in 44% of their sessions. On the topic of scientifically validating art therapy, 97% of respondents felt that art therapy can or can sometimes be validated through scientific evidence. While the vast majority believed it is possible, a smaller majority (76%) indicated that more research is needed to support the efficacy of art therapy.

**Qualitative art data.** This section contains the data collected from the art response portion of the survey. Participants were asked to create artwork in response to the prompt, “Create an art response that depicts your understanding of the relationship between EBP and art therapy.” There were 16 visual art responses collected and one art response was described in the comments section due to technical error. Only the visual art responses were analyzed. Artwork
was coded with a variety of tags that address elements, format, and content (See Table 1). Initially there were a large number of tags including use of space, shapes, and image orientation. However, due to lack of significant variance among responses, these tags were taken out. The artwork is displayed with their corresponding codes in Table 2. The most common tags were “tension”, “integration”, “digital”, “abstract”, and “rigid.”

Of the 16 responses collected, 13 pieces were created on the provided web-based application while three pieces were scanned and uploaded. In terms of formal elements, 10 pieces contained abstract elements, while five responses used recognizable symbols and schemas. Four pieces depicted a representational system to show the relationship between EBP and art therapy. A large number of responses incorporated elements of integration (7), and tension (14). Another important term is “2 entities,” which was labeled in 56% of the drawings.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Tags used to code artwork.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formal Elements</strong></td>
<td><strong>Color</strong></td>
</tr>
<tr>
<td>Line Quality _ organic</td>
<td>b&amp;w</td>
</tr>
<tr>
<td>_ rigid</td>
<td>few colors</td>
</tr>
<tr>
<td></td>
<td>multicolor</td>
</tr>
<tr>
<td>Format</td>
<td>Digital or Scanned</td>
</tr>
<tr>
<td>Text/Graphic _ labels</td>
<td>digital</td>
</tr>
<tr>
<td>_ text only</td>
<td>scanned</td>
</tr>
<tr>
<td>_ graphic only</td>
<td></td>
</tr>
<tr>
<td>_ text and graphic</td>
<td></td>
</tr>
</tbody>
</table>
## Table 2

*Artwork and corresponding codes*

<table>
<thead>
<tr>
<th>Themes</th>
<th>Abstract/Representational</th>
<th>Types of imagery</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 entities</td>
<td>abstract</td>
<td>symbols</td>
</tr>
<tr>
<td>tension</td>
<td>representational</td>
<td>systems</td>
</tr>
<tr>
<td>integration</td>
<td></td>
<td>figures</td>
</tr>
</tbody>
</table>

**IMAGE A**
- organic
- rigid
- few colors
- repetition
- graphic only
- digital
- two entities
- abstract
- integration
- tension

**IMAGE B**
- few colors
- labels
- digital
- two entities
- tension
- integration
- representational
- symbols
- system
<table>
<thead>
<tr>
<th>IMAGE C</th>
<th>IMAGE D</th>
<th>IMAGE E</th>
</tr>
</thead>
</table>
| ● organic  
● rigid  
● few colors  
● repetition  
● sequential  
● graphic only  
● digital  
● two entities  
● tension  
● integration  
● abstract  
● symbols | ● rigid  
● multicolor  
● text and graphic  
● scanned  
● tension  
● representational  
● figures | ● organic  
● multicolor  
● graphic only  
● digital  
● two entities  
● tension  
● integration  
● abstract |
<table>
<thead>
<tr>
<th>IMAGE F</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>● organic</td>
<td></td>
</tr>
<tr>
<td>● rigid</td>
<td></td>
</tr>
<tr>
<td>● multicolor</td>
<td></td>
</tr>
<tr>
<td>● labels</td>
<td></td>
</tr>
<tr>
<td>● text and graphic</td>
<td></td>
</tr>
<tr>
<td>● digital</td>
<td></td>
</tr>
<tr>
<td>● two entities</td>
<td></td>
</tr>
<tr>
<td>● tension</td>
<td></td>
</tr>
<tr>
<td>● abstract</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IMAGE G</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>● organic</td>
<td></td>
</tr>
<tr>
<td>● rigid</td>
<td></td>
</tr>
<tr>
<td>● few colors</td>
<td></td>
</tr>
<tr>
<td>● sequential</td>
<td></td>
</tr>
<tr>
<td>● graphic only</td>
<td></td>
</tr>
<tr>
<td>● digital</td>
<td></td>
</tr>
<tr>
<td>● two entities</td>
<td></td>
</tr>
<tr>
<td>● tension</td>
<td></td>
</tr>
<tr>
<td>● representational</td>
<td></td>
</tr>
<tr>
<td>● symbols</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IMAGE H</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>● organic</td>
<td></td>
</tr>
<tr>
<td>● rigid</td>
<td></td>
</tr>
<tr>
<td>● repetition</td>
<td></td>
</tr>
<tr>
<td>● few colors</td>
<td></td>
</tr>
<tr>
<td>● horizontal</td>
<td></td>
</tr>
<tr>
<td>● graphic only</td>
<td></td>
</tr>
<tr>
<td>● digital</td>
<td></td>
</tr>
<tr>
<td>● two entities</td>
<td></td>
</tr>
<tr>
<td>● abstract</td>
<td></td>
</tr>
<tr>
<td>IMAGE I</td>
<td>IMAGE J</td>
</tr>
<tr>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>● organic</td>
<td>● organic</td>
</tr>
<tr>
<td>● rigid</td>
<td>● rigid</td>
</tr>
<tr>
<td>● few colors</td>
<td>● few colors</td>
</tr>
<tr>
<td>● sequential</td>
<td>● graphic only</td>
</tr>
<tr>
<td>● text and graphic</td>
<td>● digital</td>
</tr>
<tr>
<td>● digital</td>
<td>● tension</td>
</tr>
<tr>
<td>● abstract</td>
<td>● abstract</td>
</tr>
<tr>
<td>● system</td>
<td>● structured</td>
</tr>
<tr>
<td>IMAGE L</td>
<td>IMAGE M</td>
</tr>
<tr>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td><img src="image1.png" alt="Image L" /></td>
<td><img src="image2.png" alt="Image M" /></td>
</tr>
</tbody>
</table>
| - organic  
- multicolor  
- graphic only  
- scanned  
- tension  
- integration  
- abstract | - organic  
- rigid  
- multicolor  
- labels  
- digital  
- two entities  
- abstract  
- symbols  
- system | - rigid  
- multicolor  
- labels  
- digital  
- tension  
- integration  
- representational  
- systems |
Analysis of data. This section looks first at the analysis of data pulled from the survey. It goes on to discuss the analysis of data culled from the art responses.

Quantitative survey data.

Age and experience with EBP. Based on the amount of training and frequency of EBP use in their practice, survey respondents born during or before 1976 were less experienced and familiar with EBP while younger respondents born during or after 1977 had a higher level of experience and familiarity. Overall, the experience and familiarity levels with EBP increased as age decreased. However the age groups were not uniform, with some older respondents who
were very experienced and some younger respondents who had little experience. Recent graduation status may have affected the level of experience with EBP due to limited clinical experience in the field.

Figure 2. Age and experience with EBP. This figure illustrates the relationship between the survey respondents’ age and their experience with EBP.

Graduation date and experience with EBP. Over half of respondents had no experience or training in EBP during their training. The survey responses seemed to indicate that EBP was first introduced into LMU’s MFT coursework about six years ago. The data showed a correlation between more recent graduation dates and EBP training from an agency. However, over half of the respondents across graduation dates reported receiving training in EBP in post graduation either in an agency or independently. See Figure 3 below for a visual representation.
of types of experience that survey respondents had with EBP both during and post graduate training.

Figure 3. Experiences with EBP. This figure reflects the survey respondents’ experiences with EBP both during their graduate training and after their graduate training.
Undergraduate education and beliefs about scientific evidence. The majority of survey respondents reported either an arts background (visual arts, performing, music, dance and drama) (40%) or a psychology background (31%). The survey asked respondents the question *Can art therapy be validated through scientific evidence?* The multiple choice options provided were: *can, can sometimes, can rarely, and can not*. It should be noted that no respondents replied *can not* and only one respondent chose *can rarely*. In the chart below, *can* responses are interpreted as confident, *can sometimes* as neutral, and *can rarely* as cautious. Confidence about validating art therapy with scientific evidence was the highest among those with an arts background. Respondents who came from a psychology background were more cautious overall, but split; half were more confident and half were neutral. Table 3 below separates responses based on educational background.

<table>
<thead>
<tr>
<th>Table 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate education and beliefs about scientific evidence.</td>
</tr>
<tr>
<td><strong>Art</strong> (visual art, music, drama, dance)</td>
</tr>
<tr>
<td>10- Confident</td>
</tr>
<tr>
<td>5- Neutral</td>
</tr>
<tr>
<td>1- Cautious</td>
</tr>
<tr>
<td><strong>Education</strong></td>
</tr>
<tr>
<td>2- Neutral</td>
</tr>
<tr>
<td><strong>Journalism/ Communication</strong></td>
</tr>
<tr>
<td>2- Confident</td>
</tr>
<tr>
<td>1- Neutral</td>
</tr>
<tr>
<td><strong>Literature/ Writing/ Languages</strong></td>
</tr>
<tr>
<td>1- Confident</td>
</tr>
</tbody>
</table>
EBP and EST training and attitudes about bridging the art-science gap. Practitioners who have never been trained in EBP or an EST appeared confident that art therapy can be validated with scientific evidence and that art therapy can be integrated with EBP. The attitudes of practitioners who have been trained in EBP or an EST were also confident overall but slightly more cautious about art therapy being validated through scientific evidence. Those who are trained are slightly more confident about integrating art therapy and EBP than those who are untrained. Using percentages, the below Figures 4 and 5 illustrate the responses of untrained and trained respondents.

![Survey results for question: “Art therapy ______________ be validated through scientific evidence.” in relation to respondents’ training in EBP.](image-url)
Respondents who had used EBP in their practice indicated overall confidence about scientifically validating art therapy, but were more cautious than those respondents who had not used EBP in their practice. Both those who had used EBP in their practice and those who had not were confident about integrating art therapy and EBP, but those who had used EBP were more confident than those who had not. Using percentages, the below Figures 6 and 7 illustrate this.
Figure 6. Results for question: “Art therapy ________ be validated through scientific evidence.” in relation to respondents’ experience with EBP.

Figure 7. Results to question: “EBP and art therapy ____________ in clinical practice.” in relation to experience with EBP.
Work environment and EBP training. Respondents who were trained in ESTs at an agency were more likely to have worked at mental health community clinics or in the community (home visits). They were also slightly more likely to have worked in outpatient settings. Respondents who had received no training were more likely to have worked in a residential setting. Respondents who received training in settings other than an agency were more likely to have worked in private practice, although only slightly more likely than those who had received no training. These same respondents were also more likely to have worked at day treatment facilities for older adults. Using percentages, the below Figure 8 illustrates this interplay between training and work settings.

![Figure 8. Relationships between survey respondents’ work environment and EBP training.](image-url)
Qualitative art data. In analyzing the visual data, the principal investigators were interested in discovering salient trends and patterns by comparing coded terms derived from visual analysis of artwork to the full sample of survey responses. The following connections were investigated:

Choice of digital or scanned artwork. Out of the 16 art responses submitted, three were coded with the term “scanned,” as principles investigators interpreted the artwork as being hand drawn or painted and then scanned and submitted. Of the three participants coded with the term “scanned” (responses D, L, and P), birth dates were 1971, 1986 and 1977 respectively, averaging roughly the age of 36. There appeared to be no correlation between the age of the respondent and the means through which they submitted the artwork. They received their graduate degrees from Loyola Marymount University in 2007, 2012, and 2014 respectively. Compared to the average year of graduation (2004) in the general statistics, the participants who scanned their artwork graduated more recently from the program.

Color use and line quality. When analyzing color, three terms were used to code the drawings. The terms were “black and white,” “few colors,” and “multi-color.” “Few colors” indicated the artwork used three or less colors. “Multi-color” designated the use of four or more colors.

When representing EBP, seven of the drawings used only the color black to represent EBP (evident in drawings A, D, F, I, J, M, and P). In drawings F and M there was a contrast in the use of color between EBP (represented by black) and art therapy (represented by use of multi-color forms). Both respondents felt EBP could be incorporated into art therapy with careful considerations.
“Tension.” The coded term “tension” was given to artwork that contained elements in opposition. For example, elements in opposition included two colors, forms and/or linework of a jagged line quality that visually resisted other parts of the artwork. This word was coded in 14 out of 16 of the drawings. The majority of art responses (85%) that were coded with tension had also indicated training in ESTs. In comparison, 72% of all art respondents and 70% of general survey respondents had received training in ESTs. When asked to scale how often respondents incorporate EBP into their work, respondents coded with “tension” results averaged to 4.57 out of 10 sessions. Art respondents in general averaged 4.28 out of 10, while the overall average was 4.36 out of 10.

The high prevalence of coded term “tension” seemed to indicate the complicated relationship between EBP and art therapy. This was also reflected in the question about whether respondents feel that art therapy and EBP can successfully be integrated. Answer 1 (can) indicated that it was easy to integrate, while answer 5 (can never) stated the two could never be integrated, with scaled responses in between. 68% of art respondents answered that art therapy and EBP can be integrated with some careful considerations (answer 2), compared to 62% in the general data. Compared to the general population of respondents (2.04 out of 5 scale), those who completed the art response scored slightly lower at 1.94 out of 5. This lower average showed a slight indication towards integration. The high prevalence of the coded term “tension” seemed to reflect the sentiment that EBP and art therapy are distinctively different disciplines that require some careful consideration when bring together.

“Integration.” The coded term “integration” indicated elements placed in some sort of relationship to each other, often with overlapping elements. This term was tagged in seven of the
16 drawings. Of the seven respondents with artworks coded with the word “integration,” three studied fine art as undergraduates, two studied sociology and anthropology, one studied literature and writing, and 1 studied psychology. Also within these same seven respondents, three answered that art therapy can be validated through scientific research (43%), three responded that art therapy can sometimes be validated (43%), and one respondent did not answer the question. The art respondents coded with “integration” seemed to reflect the general data, where 45% answered that art therapy can be validated and 52% answered “can sometimes.”

Statistically, the seven respondents whose art works were coded as representing “integration” were shown to have a higher scaled rating (4.57 out of 5) in understanding EBP versus the general average of 4.27 of 5. Compared to 70% of general respondents, 72% of “integration” coded respondents were trained in EBP. However, respondents coded with “integration” were less likely (3.42 out of 5) to use EBP in session compared to both general art respondents (4.31 out of 5) and overall survey respondents (4.36 out of 5). These “integration” respondents also had an average of 1.71 in the scaled question regarding the ease of integration between EBP and art therapy. This response is slightly more confident about integration than the response of all the art respondents (1.94), and even more skewed in comparison to the general statistics (2.04).

Findings. This section identifies the notable, preliminary findings from the both the quantitative survey data and qualitative art data.

Quantitative survey data. A preliminary finding from the survey results was the survey respondents’ confident attitude that the gap between science and art can be bridged, as evidenced by their responses to the questions: “Art therapy ________ be validated through scientific
evidence.” and “EBP and art therapy ____________ in clinical practice.” At the same time, the majority of respondents (79%) expressed their beliefs that art therapy research “needs great improvement” or “could be improved” to increase the evidence-base for art therapy.

**Qualitative Art Data.** During the visual analysis process, there were certain coded terms that brought up salient themes while investigating the general beliefs and attitudes around art therapy and EBP. It seems significant that in 56% of the art pieces, respondents created a dichotomous drawing. By rendering two separate elements the drawings show that EBP and art therapy are perceived as autonomous worlds. Similarly, in seven of the 16 drawing responses, respondents used only the color black to represent EBP. This contrasts greatly with the representations of art therapy as consisting of multi-colors.

The high prevalence of the coded term “tension” and “integration” seemed to visually express the complicated relationship between EBP and art therapy. These respondents were on par with general statistics of being trained in EBP. However, the same respondents were also significantly less likely to use EBP in sessions. At the same time, the “integration” respondents remained more confident regarding the integration of EBP and art therapy.

**Part B: Arts-Based Exploration**

**Presentation of data.** This section presents the data obtained from the researchers’ individual responses to the survey and the literature. The process of gathering the data was detailed in the Methods section (p. 69) above. In arts-based research the process is integral to understanding the data and the researchers recommend the reader be familiar with the Methods section before continuing. The data resulted in some ambiguity with regard to which elements represent the data set, the analysis, and the findings. Part of the reason for the ambiguity was that
art processes were used in two different ways: as an analysis tool and as a representation of the findings. The process was organic and only afterwards did the researchers establish which elements were acting as data, analysis and findings. For the purpose of this paper, the researchers ultimately decided that the data consists of “ideas” cards.

As planned, the researchers each brought 10 “idea” cards. Each researcher interpreted “ideas” differently. The grammatical format included phrases, single words, quotations, and small paragraphs. The ideas were pulled from both the literature and the survey data and findings. The preliminary themes that emerged from this process were epistemological concerns, bridging the art-science gap, knowledge/understanding of EBP, tension, confidence versus caution, integration, and scientific validation of art therapy. After the artwork was created, one of the researchers created a new “idea” card with the word “intersections” to describe his artwork (Figure 11). The concept of intersections did not appear before this point in the research.
**Analysis of Data.** This section overviews both the art process and the conversational analysis that followed. The following four artworks (Figures 10, 11, 12, 13) are individual 15 minute responses from each of the researchers. This point in the research marks a shift from a general to a personal exploration of the topic. As a reflection of this shift, the researchers will describe their process and intentions in a first person narrative.

**Artwork Analysis.** For the purpose of this analysis and the best review of the artwork and statement created, each artwork and individual description of the process will be arranged on its own page.
I chose to represent the governing bodies of art therapy and EBP as personified rock shapes. On the left is EBP and on the right is art therapy. The scale of the rocks and was used to show power dynamics that contribute generate anxiety and fear of art therapists towards EBP as described in the art therapy literature. During the process, I wanted another piece of paper to make the work larger and thought I took the same red and it was actually reddish-orange. This accident was kept in the final work because it seemed to highlight the polarization and challenges in integrating art therapy and EBP. I chose to expose tape to highlight process and transition.

Figure 10. Chauney Peck’s artwork and artist statement.
I used a limited selection of materials: a black pen, a white size piece of paper, plastic transparency, a glue gun, and metal wire. I worked on a small scale due to time limitations. A black line was drawn connecting to the wire and leading off the page to represent the idea of a continuum with no set beginning or ending. I was interested in exploring the space of "overlap," the space between the two distinctive entities representing EBP and art therapy. The space where the two sections overlapped was represented in the central cross-hatched section. As I worked the word "intersection" emerged.

Figure 11. Michael Bauer’s artwork and artist statement.
I chose a large piece of paper and created a gap down the middle to represent EBP on the left and art therapy on the right. I chose strips of yarn laid-out more rigidly to represent EBP and more organically to represent art therapy. I intended to portray what the gap between EBP and art therapy looks like at this moment in history and what it might look like to begin to bridge this gap. The paper was folded to add depth to the gap, creating a chasm to be crossed by either entity. The piece suggests movement; a movement towards and an attempt to deal with the gap.

Figure 12. Aubrey Studebaker’s artwork and artist statement.
I focused on the experience of the researchers themselves while making the piece. Transparency paper was chosen to illustrate the different layers of the research process. The piece was completed on a large scale to represent the enormity of the research study. For the most part, the art process was organic and unplanned. However, I had intended to express the chaos and frustration associated with the literature review in the bottom layer. The top layer was intended to emphasize the meaningful findings from the research as well as the interconnectedness of the different points.

Figure 13. Naomi Yu’s artwork and artist statement.
Conversational Analysis. The researchers verbally processed the individual artworks as a part of the analysis. The analysis arose organically and included a discussion that correlated with the “ideas” cards matched to the individual artworks. This process led to the creation of a caption sentence for each of the four artworks that summarized the researcher’s ideas and intentions about that piece. Below are the four artworks documented with their related “idea” card pairings and their caption sentences.

How do we carefully bridge the gap considering the culture of resistance and fear and challenges of power dynamics (ie: organizing bodies, processes of legitimization)?

Figure 14. Chauney Peck’s artwork with related idea cards and summarizing statement.
Clinicians are in the intersection of EBP and art therapy and they are integrating the two. Perhaps this illustrates why there is a discrepancy between the survey data from this research and the literature.

Figure 15. Michael Bauer’s artwork with related idea cards and summarizing statement.
What are the attitudes towards bridging the gap between art therapy and EBP? The literature reveals a culture of fear and skepticism but the survey in this research showed positive attitudes, cautious and confidence attitudes, and a need for more research.

Figure 16. Aubrey Studebaker’s artwork with related idea cards and summarizing statement.
Clinicians’ experience, understanding, and attitudes lead to how they behave at the intersection of EBP and art therapy.

Figure 17. Naomi Yu’s artwork with related idea cards and summarizing statement.
Findings. In keeping with the mixed methods approach, the researchers found that when the information was put together in new ways, new findings emerged. The word “intersections” was newly created as an “idea” card during the analysis process. It differs from the previously existing “idea” card with the coded term “integration,” which was pulled from the analysis of the art responses from the survey. The researchers hypothesize that “integration” represents a struggle to put two things together (bridging a gap), while “intersections” represents a place where two things interact with each other in an adaptive way. Thus, the new finding gained from this second phase is that there are already intersections occurring between art therapy and EBP. Perhaps, the gap is already being bridged and there is no real gap being experienced or perceived by the clinicians surveyed in the study.

The researchers illustrated these findings in a culminating video art project. Formal elements, shapes, and concepts culled from each of the individual artworks were integrated into the concept for the final piece. This included the concepts of bridging the gap between EBP and art therapy, the integration of two separate elements, and intersections. The video used movement as a way to represent the possible transformation of understanding about how EBP and art therapy interact. This transformation moves from viewing the two elements as separated by an unbridgeable epistemological gap to viewing them as already intersecting in practice.

The researchers worked together to make a short animation using sculptural materials. Each of the four researchers created an element of the sculpture, working as a team to create movement for the animation. The video was created by photographing the sculptural materials and combining the images using the video editing software iMovie. Music created by one of the investigators was added to the video afterwards. A link to the video can be found here.
Additionally, the above QR code can be scanned to access the video on a handheld electronic device.

Figure 18. Video process still.
Meanings

This section concentrates on the specific findings of this research project as it relates to the literature review and the overall field of art therapy.

The main findings from the quantitative data in Part A revealed a confident attitude towards integration of art therapy and EBP as well as a need for improvement in the art therapy research. This was also supported by the findings from the quantitative art responses, which depicted a complicated relationship between EBP and art therapy, as seen through the prevalence of the coded terms “tension” and “integration”. The complicated relationship between science and art is well documented in the art therapy literature. The majority of authors appear to be skeptical of validating art therapy with empirical research (Gantt, 1997; Huet et al., 2014; Kelly, 2010; Tibbets, 1997). In the art therapy literature, EBP was barely discussed at all. In related fields, such as managed care or arts in healthcare, those who touch on the topic note the attitudes of avoidance and anxiety. At the same time, other art therapists also call for more and better research as discussed in the Recommendations for Future Research section of the literature review (p. 58). As such, while the findings from Part A supported the claim of a complicated relationship between art and science and the need for more research from the literature, the confident attitudes towards integration found in the survey were a direct contrast from the majority of voices in the literature.

The arts-based exploration in Part B yielded the new idea card “intersections” as a main finding. The researchers ascertained that despite approaching the research study from the perspective of bridging the gap between art and science, which was gained from the literature review, the data revealed that clinicians are already at the intersection of art and science. With
this shift in perspective, from integration to intersections, then the confident attitudes discovered in Part A are no longer such a surprise. If clinicians are already using EBP and art therapy together in innovative ways, then it stands to be that they would naturally be more confident in their ability to do so. This finding lends credence to the few voices in the art therapy literature that advocated for bridging the gap between science and art (Crawford et al., 2014; Kapitan, 2014; Kaplan, 1998; Lusebrink, 2004; Rohricht, 2009; Steele, 2009).

There are many unanswered questions about the reason behind the discrepancy between the literature and the survey respondents that merit further research. Questions about graduate trainings and the effects of exposure to EBP are raised. One possible explanation for this discrepancy could be the additional MFT training that is unique to LMU. This additional training may better assist alumni from the program in working in the mental health field. The limited art therapy literature that reports pessimistic attitudes may reflect the authors’ challenges with professional identity issues and finding support in a larger mental health world. Another possibility may be that art therapists have an inherent but undocumented creative/adaptive nature that helps them reconcile some of the contradictions when working with EBP and incorporating art therapy. These questions among many others continue to be raised.
Conclusion

To conclude this paper and project, this section first summarizes the study’s limitations followed by some generalized meanings. Next, the researchers have each written a reflection on their experience of the group research process, including thoughts on using a mixed methods approach as well as thoughts about what this project has meant to the researchers as clinicians. Last, some recommendations for future research are suggested.

Study Limitations

The limitations of this study include first the limited body of art therapy literature available on the subject of EBP as well as the limited capacity of the researchers to peruse the full body of literature within the general EBP realm. With regard to Part A of the research (the survey), the population surveyed was limited to graduates of Loyola Marymount University's Marital and Family Therapy Program which includes specialized training in clinical art therapy. Thus, it is unknown what the results of this study would be across a broader range of practicing art therapists from different programs, perspectives, and geographic locations. The perspectives of the art therapy field as a whole cannot be assumed to have been represented within the survey results. In addition, the information garnered from the survey art response was only from a portion of those who responded to the multiple choice part of the survey. This makes the data gained from the art response incomplete.

Generalized Meanings

The literature review illuminated the epistemological debate between arts-based understandings (art therapy) and science-based understandings (EBP). The literature reflected some polarization, leading to the idea that there is an art-science gap to be bridged between art
therapy and EBP. However, research Part A (the survey) revealed clinical attitudes that were far more confident and less polarized than the attitudes reflected in the literature. This led to research Part B (the data and art analysis of that data) which revealed what the researchers consider to be the primary finding of this project: Intersections already exist between EBP and art therapy. In clinical practice, the gap between art and science is either already being bridged or perhaps does not exist to the magnitude that the literature would lead one to believe.

**Reflections on the Research Process**

Each researcher’s individual reflections are below.

**Researcher 1: Chauney Peck.** Overall, working in a group was a positive experience, which felt generative and supportive. I felt fortunate to work with a group of intelligent and organized peers. The group process felt spontaneous and fun, yet natural. Being new to research, I was relieved to share the responsibilities and use the group to reflect on and process the topic. The epistemological and philosophical debates concerning the differences between art-based and science-based ways of knowing felt challenging to grapple with at times. Epistemological concerns raised questions for me about identifying with the arts as the marginal group. Ultimately this challenge was how I became more motivated and engaged in the topic. Using mixed methods felt faithful to the disciplines of both art therapy and psychotherapy. Because mixed methods values both scientific and qualitative ways of knowing it reflected some of the epistemological controversies in literature about the topic. It also raised some challenges and ultimately learning opportunities in the process of how to utilize and write about art as a research method.
**Researcher 2: Michael Bauer.** I like working in groups and feel fortunate to be part of this one. I think this research process has been very important in that all four members have different strengths and skill sets, and by utilizing everyone's offerings the research is stronger and more thorough than just one individual's contribution. Another strength of this research is that it is modular and flexible. As a group we worked in different formations, whether it be as an individual, a dyad, as four, or even as six including the research advisers. These different voices surfaced in different ways depending on the specific portion of the research and who was approaching the work. Although it can be challenging to unify the voices in the writing, there is an important diversity of ideas culminated in this body of work. I also feel like this research is just a beginning that in a lot of ways can be further investigated and unpacked. EBP and its relationship to art therapy field is new territory. I feel fortunate to help bring further clarity and conversation to the extended art therapy community as EBP becomes more relevant in various mental health communities.

**Researcher 3: Aubrey Studebaker.** Working as a part of this research team was very rewarding. All team members were responsible, flexible and creative. My experience was that we worked well together, creating a smooth work flow. But beyond the teamwork element, I learned a lot about the subject of EBP in this process. There seems to be a broad misunderstanding and unwarranted fear about EBP. The literature conveyed that this fear is especially rampant within the field of art therapy. As I learned more about what EBP actually is, I found the knowledge to be empowering and, as a clinician, I now view EBP as a useful tool rather than as something intimidating. It is beautiful the way that this mixed-methods research (quantitative and qualitative) process emerged as a reflection of two different clinical tools (EBP
and art therapy) working parallel; not against but with and alongside one another. It was a remarkable experience being a part of a research process that used art-making as an analysis tool and as a way to represent findings. Coupled with the more quantitative components, this packs a powerful punch. It is validating to see a way of knowing -that goes beyond the dryness of numbers and cross-tabulations to convey meaning- in action.

**Researcher 4: Naomi Yu.** I feel like the group process was extremely helpful in terms of dividing and conquering the work. Although working in a group comes with its own challenges, like incorporating each person's writing styles into 1 cohesive narrative voice, overall it was a definite plus to have three other supports over the very long process. Having more minds tackling the same project contributed to the very organic research approach in which everybody brainstormed together and the method evolved out of that. Mixed methods was somewhat confusing but at the end it felt like what we did was very appropriate and reflective of the research question itself. Paralleling the integration between science and art in our own process made the issue seem that much more accessible and achievable, which mirrored our final finding. For myself as a clinician, it made me feel much more confident that EBP and art therapy can indeed be integrated with careful considerations.

**Future Research**

This experience using mixed-methods research leads to a call for continued mixed-methods research. This style of research values qualitative data at the same level as quantitative data and therefore could be a way for the field of art therapy to be further validated. This validation of art therapy through research was called-for both within the art therapy literature as well as by the survey respondents and the researchers themselves. If EBP continues to play a
large role in the world of mental health, it would also behoove researchers within the field of art therapy to develop protocol that can be validated over time and eventually manualized as respected EBPs in their own right.

The survey used in this study could also be distributed to other art therapy programs across the state or the nation, whether or not they also include a dual MFT degree. This could strengthen or contradict this study’s finding of clinicians already serving at the intersection of EBP and art therapy. As previously mentioned, further exploration of the practicing clinicians’ experience is suggested. Since the surveyed art therapists already seem to be integrating EBP and art therapy, how are they doing so? Which ESTs are most easily integrated with art therapy? Another possible research subject could be the reason behind the discrepancy between the attitudes in the literature review and the clinicians surveyed.
References


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Mr. Bauer, Mr. Peck, Ms. Studebaker and Ms. Yu,

Thank you for submitting your IRB application for your study titled *Art Therapists’ Attitudes Towards EBP*. All documents have been received and reviewed, and I am pleased to inform you that your study has been approved.

The effective date of your approval is November 12, 2014 – November 11, 2015. If you wish to continue your project beyond the effective period, you must submit a renewal application to the IRB prior to October 1, 2015. In addition, if there are any changes to your protocol, you are required to submit an addendum application.

For any further communication regarding your approved study, please reference your new protocol number: LMU IRB 2014 FA 49.

Best wishes for a successful research project.
Sincerely,

Julie Paterson

Julie Paterson  I  Sr. IRB Coordinator  I  Loyola Marymount University
Appendix B

Copy of Survey

EBP & Art Therapy Survey

Q1 Thank you for your participation. This survey includes about two dozen multiple choice and scaling questions and an art component that should together take about 10-15 minutes. This survey aims to examine beliefs systems and attitudes toward Evidence-based Practice within the art therapy community in California. If you have never practiced art therapy in California post graduation from LMU’s MFTH program, please do not take this survey.

Q2 Informed Consent and Participation in this study is voluntary. Participants have been selected based on graduation from the Marital and Family Therapy and Art Therapy program at LMU. Every effort will be made to protect confidentiality, including data collected and the artwork. Selected artwork may be reproduced with the results of the survey and all identifying marks will be removed. There are no anticipated risks associated with taking this survey. Benefits may include contributions to education and research that will promote the field of art therapy. There is an optional space at the bottom of this survey to add comments.

m  I read the above statement and agree to participate in the survey (1)

m  I do not wish to participate in the study (you will be redirected to the end of survey) (2)

Q3 Gender

m  Male (1)
Female (2)

Transgender (3)

Other (please specify) (4) ____________________

Q4 What year were you born?

1920 (1)

1921 (2)

1922 (3)

1923 (4)

1924 (5)

1925 (6)

1926 (7)

1927 (8)

1928 (9)

1929 (10)

1930 (11)

1931 (12)

1932 (13)

1933 (14)

1934 (15)

1935 (16)

1936 (17)
m 1937 (18)
m 1938 (19)
m 1939 (20)
m 1940 (21)
m 1941 (22)
m 1942 (23)
m 1943 (24)
m 1944 (25)
m 1945 (26)
m 1946 (27)
m 1947 (28)
m 1948 (29)
m 1949 (30)
m 1950 (31)
m 1951 (32)
m 1952 (33)
m 1953 (34)
m 1954 (35)
m 1955 (36)
m 1956 (37)
m 1957 (38)
m 1958 (39)
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m 1959 (40)
m 1960 (41)
m 1961 (42)
m 1962 (43)
m 1963 (44)
m 1964 (45)
m 1965 (46)
m 1966 (47)
m 1967 (48)
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m 1970 (51)
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m Click to write Choice 2 (82)

m Click to write Choice 3 (83)
Q5 Please select the race/ethnicity. Note: These categories are taken from the current LMU graduate admissions application.

- Latino/ Hispanic (1)
- American Indian/ Alaska Native (2)
- Asian (3)
- Native Hawaiian/ Pacific Islander (4)
- White (5)
- Other (please specify) (6) ____________________

Q6 Please select the area(s) of your undergraduate studies:

- Architecture (1)
- Art (Visual Art, Music, Drama, Dance) (2)
- Business (3)
- Computer science & Technology (4)
- Cultural & Ethnic Studies (5)
- Economics/ Political Science (6)
- Education (7)
- Environmental Science (8)
- History/ Geography (9)
- Journalism/ Media studies (10)
- Law/ Legal Systems (11)
Q7 What year did you receive your MFTH graduate degree from LMU?

m 1975 (1)
m 1976 (2)
m 1977 (3)
m 1978 (4)
m 1979 (5)
m 1980 (6)
m 1981 (7)
m 1982 (8)
m 1983 (9)
m 1984 (10)
m 1985 (11)
m 1986 (12)
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m 1988 (14)
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m 1999 (25)
m 2000 (26)
m 2001 (27)
m 2002 (28)
m 2003 (29)
m 2004 (30)
m 2005 (31)
m 2006 (32)
m 2007 (33)
Q8 Did you encounter EBP during your graduate experience at LMU? Please indicate:

- In my 1st practicum (1)
- In my 2nd practicum (2)
- in the coursework (3)
- None (4)
- Other (please indicate) (5) ________________

Q9 On a 1 to 7 scale how familiar were you with EBP upon graduation from LMU’s MFTH program? (0 is least familiar, 7 is most familiar)

- ______ Not (1)
- ______ 2 (2)

Q10 Are you licensed as a Marriage & Family Therapist (LMFT)?
Q11 Are you a Registered Art Therapist (ATR)?

m Yes (1)

m No (2)

Q12 Are you a Board-Certified Art Therapist (ATR-BC)?

m Yes (1)

m No (2)

Q13 Please check all the boxes for the types of settings that you have worked in California as an art therapist. Check all that apply.

q Medical Centers and Hospitals (1)

q Psychiatric Hospital (2)

q School (3)

q Private Practice (4)

q Residential (5)

q Outpatient (6)

q Day Treatment Programs for Older Adults (7)

q Community (home visits) (8)

q Mental Health Community Clinics (9)
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q Other (please specify) (10) ____________________

Q14 How would you describe your underlying theoretical orientation? Check all that apply.
q Solution Focused (1)
q Eclectic (2)
q Experiential (3)
q Gestalt (4)
q Humanistic (5)
q Narrative (6)
q Mindfulness/ Somatic (7)
q Multigenerational (8)
q Psychodynamic/ Object Relations (9)
q Structural (10)
q Other (please specify) (11) ____________________

Q15 How often do you incorporate art therapy into your practice? (0 is never, 10 indicates almost always)

_____ Never (1)

Q16 Have you ever been trained in an Evidence Based Practice or Empirically Supported Treatment?
m No (1)
Q17 Were your trainings within an agency?

m Yes (1)

m No (please indicate where you received training) (2) ____________________

m I have not received any trainings. (3)

Q18 Have you ever used an EBP in your practice?

m Yes (1)

m No (2)

Q19 How often do you use EBP in your practice? (0 is never, 10 indicates almost always)

_____ Click to write Choice 1 (1)

Q20 Disclaimer: We realize that the terms below are used in many different contexts and have multiple meanings in the field. For the purposes of this survey, Evidence-based Practice (EBP) will refer to the general concept while Empirically Supported- Treatment (EST) refers to the specific treatment modalities such as Seeking Safety and Trauma Focused Cognitive Behavioral Therapy (TF-CBT). Please answer from your own experiences.

Q21 Indicate if you agree or disagree with the following statements. (0 is strongly disagree, 5 is strongly agree)
_____ I have a clear understanding of what Evidence-Based Practice is. (1)
_____ I have a clear understanding of what an Empirically-Supported Treatment is. (3)
_____ I have a clear understanding of what the difference is between Evidence-Based Practice and Empirically-Supported Treatments. (4)

Q22 Choose the response from the drop-down menu that most closely matches your beliefs.

Q23 Art therapy _________ be validated through scientific evidence.

m  can (1)

m  can rarely (2)

m  can sometimes (3)

m  can never (4)

Q24 EBP and art therapy_________ in clinical practice.

m  are easy to integrate together (1)

m  can be integrated with some careful considerations (2)

m  may be integrated together with hard work (3)

m  are very challenging to integrate together (4)

m  can never be integrated together (5)

Q25 Trainings that help integrate EBP into my art therapy practice would _____________.

m  benefit me greatly (1)
Q26 I believe research on the efficacy of art therapy _________.

m is very extensive and strongly supports the field (1)

m is somewhat extensive and makes a good case (2)

m could be improved in order to provide a greater evidence base (3)

m needs great improvement in order to provide an evidence base (4)

m I don’t know enough to answer the question. (5)

Q27 Create an art response that depicts your understanding of the relationship between EBP and Art Therapy. Create artwork online by following this link: http://awwapp.com/draw.html

Save your image by clicking on the print button, save as PDF and upload using the button below.

Q28 Thank you very much for completing the survey. Please provide any comments below you have regarding this survey (optional).