Letter of Intent: Relationship Between Art Therapy and Neuropsychological Changes

Brandy Brake

Supervisor: Paul Jerry

Campus Alberta Graduate Program in Counselling

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This letter of intent proposes a literature review to identify the relationship between art therapy and neuropsychological change.

Problem Statement

The proposed literature review will determine if art therapy has neuropsychological implications. Art therapy, also referred to as art therapeutic intervention in the field, is a human service profession that incorporates the art medium, images, and creative art process as well as client responses to the created artwork (Rubin, 1998 as cited in Guttman & Regev, 2004). Neuropsychological functioning is defined as the study of the relationship between brain function and feelings, thoughts, and behaviours (Kolb & Whishaw, 2000). The review will lead to building an understanding of how art therapy may impact neuropsychological functioning.

Rationale

Art therapy reflects the individual’s development, abilities, personality, interests, and conflicts (Rubin, 1998 as cited in Guttman & Regev, 2004). As a result, art therapeutic intervention is particularly useful in developing an understanding of individuals through a creative process. A long history precedes the idea that the creative process promotes positive change and growth in a manner that provides psychological benefits (Deaver, 2002; Guttman & Regev, 2004). Studies have revealed that the creative process leads to a conscious experience and neurological processing, as a result when people see colours, shapes, and objects the brain brings meaning and comprehension to the art (Solso, 2000; Zamierowski, 1980). Although the psychobiological link between creativity and neurological functioning is apparent (Rossi, 2002), there seems to be little research focused on the neurological basis of art therapy and the impact it has on neuropsychological change. Most of the art therapy literature has focused on identifying
theoretical concepts in order to establish art therapy as a useful therapeutic technique for therapists and counsellors (Reynolds, Nabors, & Quinian, 2000). Furthermore, 20 years of art therapy research has led to the development of qualitative and quantitative assessment and evaluation tools, many of which are based on one-session, one-activity procedures which only occasionally incorporate pretest treatments and seldom administer posttest treatments (St. John, 1992). Furthermore, a majority of the outcome results surrounding art therapy involve case studies. Although these studies are useful, they provide little clinical evidence regarding the types of changes resulting from art therapeutic intervention (Reynolds et al., 2000). Reynolds et al. (2000) report the need for reliable study designs to determine changes resulting from art therapeutic intervention.

**Conceptual Foundation**

Research in the areas of art, creativity, and psychotherapy has identified four distinct relationships relevant to art therapy and neuropsychology. In particular, the integration of neuropsychology and psychotherapy as it influences neurological changes and therapeutic outcomes have been established (Baylis, in press; Klonoff, 1997; Kolb & Whishaw, 2000; Laatsh & Stress, 2000; Lewis, 1992). It is apparent that psychotherapy techniques are considered therapeutic because they encourage the integration between the mental contents, such as dreams and visual imagery, of the right hemisphere and the verbal components of the left hemisphere (Lewis, 1992). In addition, psychotherapeutic intervention leads to changes in brain function as well as a reduction in symptoms related to neurological changes, including the ability to control emotional responses (Baylis, in press). The research demonstrates an interaction between biology and psychology in which psychotherapy influences neuropsychology and vice versa. Research has also investigated the neuroscience and hemispheric function of art and creativity (Katz, 1983,
In fact, studies have demonstrated that creative performance and art perception reflect upon brain activity in the left and right hemisphere and neurological functioning (Katz, 1983, 1986; Solso, 2000). Activity in the left hemisphere represents creative cognitive mechanisms and the right hemisphere activity represents creative performance and behaviours (Katz, 1983, 1986). Furthermore, there is an increase in blood flow in the brain within the right middle frontal area in the right hemisphere which is associated with manipulation of visual forms (Solso, 2000).

Artwork plays a distinct role in art therapy. In particular art material, art expression, and the value of art are essential components of art therapy (Agell, Goodman, & Williams, 1995; Betensky, 1995; Deaver, 2002; Kramer & Schehr, 1983; Pifalo, 2002; Sadowski & Loesch, 1993; Schaverien, 1992). The art materials are used to elicit specific meanings, behaviours, and responses allowing art therapists to learn about the client and enhance the client’s personal understanding (Betensky, 1995; Kramer & Schehr, 1983). Furthermore, art therapy uses art expression allowing clients to express their innermost feelings and remove self-defeating problems which promotes healing (Agell et al., 1995; Deaver, 2002; Sadowski & Loesch, 1993). Art is a valuable component of art therapy as it enables the effective release of conscious and unconscious process enabling clients to confront life’s problems (Pifalo, 2002; Schaverien, 1992).

Finally, the therapeutic power of art therapy has been integrated with the knowledge of psychotherapy (Guttman & Regev, 2004; Hammond & Gantt, 1998; Schaverien, 1992). Art therapy finds itself adhering to well established forms of psychotherapy, such as psychoanalysis, Gestalt therapy, and phenomenological therapy, in order to facilitate communication among professions and establish an understanding of clients, colleagues, and society (Guttman & Regev,
In particular, art therapy has successfully incorporated the psychotherapeutic concepts of therapeutic relationship, transference, countertransference, and resistance in order to promote communication of conscious and unconscious material and facilitate the therapeutic process (Schaverien, 1992). This has tended to ground art therapy in a psychoanalytic theoretical framework. In contrast to accepted models of counselling theory, art therapy tends to assume that the art-making process is, in itself, the curative process, hence the development of the art therapy.

The research illustrates that art, creativity, and psychotherapy are related to art therapy as well as neuropsychology. In spite of the intuitive notion that art therapy should produce neuropsychological change, as would any cognitive/experiential activity, these relationships have not been systematically documented except for a few studies. What studies exist provide preliminary support for the notion that a measurable connection exists between art therapy and neuropsychology. However, the exact connection between art therapy and neuropsychology is unknown at this point. This literature review proposes to review existing literature on the potential connection between art therapeutic intervention and neuropsychological functioning.

Methodology

This project will consist of a literature review of the research on relationship between art therapeutic intervention and neuropsychological functioning. The literature review will provide an overall view of the topic based on previous research (Mertens, 1998). The search will include any and all evidence, for and against the connection between art therapy and neuropsychology. The identification of a domain of potential articles and books relevant to art therapy and neuropsychology will involve searching the electronic databases of PsycInfo, PsycLit, PsycARTICLES, MEDLINE, and Psychology and Behavioral Sciences Collection. All the
English literature pertaining to art therapy and neuropsychology up to and including 2006 will be reviewed. Literature will be selected using the following key words and phrases: “art therapy”, “art”, “creativity”, “neuropsychology”, “neuropsychological functioning”, “neuropsychological change”, and “neurological change”. This search will be augmented by searching Academic Elite database using the same terms. Finally, the reference sections of each article and book selected for the purpose of this review will be examined. The review will consider qualitative and quantitative as well as theoretical and empirical studies because it strives to analyze all research investigating art therapy and neuropsychological change. To be considered relevant to this review the articles and books will have to include one or more of the three inclusion criteria. The inclusion criteria require the literature to (1) address art therapy in relation to neuropsychology, (2) discuss the relationship between art, creativity, and art therapy, or (3) discuss the relationship between art/creativity and neuropsychology/neurology. Literature obtained from popular press or non-peer-reviewed articles will be excluded from the literature review. The final selection requires the author to read and independently evaluate each article and book to ensure adherence to the inclusion and exclusion criteria.

Potential Implications

Little research has been conducted in this area, thus addressing this question can further neuropsychology, art therapy, and the general realm of counselling psychology. This literature review expects to provide clinical support for relationship between art therapy and neuropsychological change. In addition, this review will lead to the advancement in knowledge in the areas of art therapy and neuropsychology. Based on this review, it is expected that creative base art therapy will improve neuropsychological functioning. The proposed review will identify specific neuropsychological change as a result of art therapeutic intervention, thus guiding
therapists and counsellors in the purposeful use of this method of therapy and positively impacting the therapeutic outcome. Furthermore, it will lend biological support for art therapy as a treatment modality, extending its theory base to include psychobiology constructs now common to research in counselling. This being said, the literature review will also consider research that contradicts the connection between art therapy and neuropsychological change and the effect these contradictions has on this area of research.
References


