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Facilitating optimal change : a meta-analysis of change theories and models

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**FACILITATING OPTIMAL CHANGE:
A META-ANALYSIS OF CHANGE THEORIES AND MODELS**

A Thesis

Presented to

The Department of Recreation and Hospitality Management

San Jose State University

In Partial Fulfillment

of the Requirements for the Degree

Masters of Science

by

Janis G. Holley

August 2002

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ABSTRACT

FACILITATING OPTIMAL CHANGE: A META-ANALYSIS OF CHANGE THEORIES AND MODELS

By Janis G. Holley

This study identified themes of behavior change theory and used these to create a model of change for the field of therapeutic recreation. A search of over 20 data bases from several disciplines revealed 150 primary research articles for a qualitative meta-analysis. Themes identified and used to create a model of optimal change for the field of therapeutic recreation included: (1) belief system and self-efficacy, (2) motivation and desire, (3) knowledge and skills, (4) a plan, (5) setbacks, (6) progress, (7) social or environmental support, and (8) perceived freedom, control, or power. Implications for future research are discussed.

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I would to thank my committee chair, Maureen Glancy, as well as my committee members Joseph Merighi and Suzy Ross for their guidance, assistance, and support in helping me complete this thesis. A special mention to Gonzaga da Gama for his support and assistance as well. I appreciate all the time each of you has given to meet with me and share your knowledge and expertise. Thank you for challenging my ideas and helping me believe that when obstacles arise in life and progress seems slow with perseverance to your plan anything is possible. I feel very fortunate to have had the opportunity to learn from each of you as professors. Because of you I have experienced an incredible learning environment that has offered me the freedom to grow and develop in many directions. Your continuous enthusiasm in the classroom inspired and motivated me to ask the questions that have lead to this research project. If not for you, I would never have developed these theoretical concepts, or even considered dedicating my life to future research. Finally, I would like to thank family, friends, and colleagues who have also encouraged me throughout my endeavors. Without such a cooperative team of support in my life, this thesis would not have been possible.

DEDICATION

I would like to dedicate this thesis to all the professionals in the practice of therapeutic recreation who have inspired me to learn, grow, and develop a passion for therapeutic recreation. A special thanks to all those who have presented their research and ideas for creating the foundation upon which this thesis is built. In 1997, Charles Sylvester wrote:

Nearly all models are founded on unexpressed assumptions and values, presenting diverse implications and potent consequences depending on the context in which they are applied. It is paramount, therefore, to step back and challenge our models, protecting against the creation of monoliths. This requires an attitude of critical wonder and the educated ability to ask why? (p. 9)

The ideas presented in this thesis came about because all of you encouraged me to ask "Why?" and more importantly to ask "Why not?"

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CHAPTER I

Introduction

This thesis has been prepared for professionals who help others through the process of change. Although the information here was specifically created for therapeutic recreation specialists, this information may be of value to others from various helping professions. This chapter introduces and defines change theories and concepts and gives a brief overview of the history of change theory. In addition, the chapter discusses whether change is beneficial and why change theory can help professionals in therapeutic recreation. Finally, the rationale and statement of the problem for this meta-study is presented.

Identifying Themes and Defining Change

Over the years, the term *change* has taken on many different meanings. To change is to alter oneself, to become different in some particular way, or to transform (Guralnik, 1984). Change may alter our behavior; help us overcome a self-defeating behavior; change our views, attitudes, and beliefs about ourselves or others; or resolve a personal or interpersonal problem (Kanfer & Goldstein, 1991). In addition, change can increase our knowledge of skills, resources, support, and abilities. However, these are not the only factors that have been identified in the process of change.

Several other concepts for creating positive change experiences have been discussed in the literature. Change usually involves creating a plan of action (Phillips & Johnson, 1991; Prochaska & DiCemente, 1984). Finding ways to overcome barriers, setbacks, and relapses experienced in our process of change is also essential to successful change (Phillips & Johnson, 1991; Schumaker et al., 1998). Social support or social interaction theories (Heaney & Israel, 1997) can help inspire change. This concept is especially evidenced by social learning theories (Bandura, 1976). Motivation, will, and desire can give us the drive we need to make change (Glanz et al., 1997; Phillips & Johnson, 1991; Salzman, 1976). Occasionally, even when we have no desire to change, our environment, family, friends, or life experiences such as losses, suffering, or historical events affect us and change us forever (Burton, 1974a, 1974b). Finally, several researchers have also commented about how freedom, choice, and locus of control are essential to the process of change (Biddle & Nigg, 2000; Burton, 1974b; Ellis, 1974; Heaney & Israel; Salzman).

An Historical Perspective of Change Theories

Interest in change theories began about 1898 with Thorndike's theories about learning. Thorndike's theories rapidly inspired a series of advancements in stimulus-response theories, classical conditioning, and

operant learning by psychologists such as Watson, Skinner, and Hull (Glanz, Lewis, & Rimer, 1997). Early research on change by these theorists and cognitive theorists such as Lewin, Dembo, Festinger, Sears, and Bandura used only one or two concepts to explain change altering behavior (Bandura, 1976; Glanz et al., 1997). Perhaps only one or two factors were examined because without access to computers and statistical analysis software, research of this nature calculated manually would have consumed a great deal of time. By the 1960's and 1970's, value expectancy theories, such as the Health Belief Model by Rosenstock and Hochbaum (1997), evolved, as a two-concept model that combined desire with belief. By 1980, the Theory of Reasoned Action emerged, incorporating the concepts of attitudes and normative beliefs (Ajzen & Fishbein, 1980). Many of these theories and models still exist and their principles are widely used in research today.

In contrast to the simpler models, after 1980 several theories and models incorporated three or more factors of change. Some of the researchers suggested that change be anticipated and happen progressively as with the Transtheoretical Stages of Change Model (Prochaska & DiClemente, 1984) that incorporated five concepts. Others proposed that the process of change was cyclical, dynamic, and unique to each individual (Phillips & Johnson, 1991). Phillips and Johnson

combined six key concepts in their change model. With the increasing number of models of change, theorists began developing integrated models, combining Bandura's self-efficacy theories with two or more change variables (e.g., Schumaker et al., 1998).

Is Change Beneficial?

Some experts (Phillips & Johnson, 1991; Russell, 1983) have declared that change may be positive, negative, or neutral. Indeed, some changes that involve loss and grief may have a harmful affect to one's overall wellness. However, purposeful change used in therapeutic recreation aims to enrich health and well-being and increase levels of personal happiness, self-actualization, and life satisfaction (Kanfer & Goldstein, 1991). Thus, successful change helps increase a person's quality of life.

What Is Theory and Why Do We Need It?

To Glanz and Rimer (1997), a theory is "a set of interrelated concepts, definitions, and propositions that present a systematic view of events or situations by specifying relations in order to explain and predict the events or situations" (p. 21). Over the past 50 years, it appears that there have been numerous disciplines in the health and behavioral sciences that have created theories of change to improve happiness and achieve higher qualities of life for clients. Among the

theories are conceptual models for losing weight (Fitzgibbon & Kirschenbaum, 1992; Philips & Johnson, 1991), terminating substance abuse (Lamimer & Marlatt, 1992), changing behaviors of people with psychological and behavior problems (Brewlin, 1996), and theories about how people cope and adapt to illness or disabilities (Hansen & Laub, 1994; Mink, 1970). Interestingly enough, there are even theories about creating positive change in the face of crisis, danger, threats, or opportunity as the Chinese character suggests (see Figure 1). It is clear that several factors in the process of change can be identified in the literature; however, no one has created a cumulative list and attempted to combine components across disciplines into one theory or model.

Figure 1. The Chinese Symbol for Change

To support exploration of change theories, Wooley, Butler, and Wampler (2000) stated that research comparing one model or therapy intervention method to another fails to demonstrate the differences between models and to increase knowledge about what is working and

why. Furthermore, change may occur due to factors outside the models; there has been no agreement as to which subject, treatment, or methodological factor may be creating or inhibiting successful change (Durlak, Furhrman, & Lampman, 1991; Wooley et al., 2000). Completing a meta-analysis of theoretical concepts associated with change may help answer these questions and create a foundation for further research and investigation.

Rationale

The Rise in the Population of People with Disabilities

An estimated 52 million people, or 20% of the population in America, live with a disability¹ (United States Census Bureau, 2000c). Between 2010 and 2030, as the Baby Boom generation becomes the Grandparent Boom, the population aged 65-84 will increase 80% and the population aged 85 and older will increase 48% (Hobbs & Damon, 1999).

¹People 15 years old and over were identified as having a disability if they met any of the following criteria: used a wheelchair or were a long-term user of a cane, crutches, or walker; had difficulty performing one or more functional activities (seeing, hearing, speaking, lifting, carrying, using stairs, or walking); had difficulty with one or more activities of daily living (getting around the inside of the home, getting in or out of bed or a chair, bathing, dressing, eating, or toileting); had difficulty with one or more instrumental activities of daily living (going outside the home, keeping track of money and bills, preparing meals, doing light housekeeping, taking prescription medication in the right amount at the right time, and using the telephone); had one or more specified conditions (a learning disability, mental retardation or other developmental disability, Alzheimer's disease, or some type of mental or emotional condition); were limited in their ability to do housework; were 16-67 years old and limited in their ability to work at a job or business; were receiving federal benefits based on inability to work (United States Census Bureau, 2000c)

Meanwhile, the proportion of people with disabilities is anticipated to grow from approximately 11% for those under 40, to 49% at age 65, and to 73% at age 80 (United States Census Bureau, 2000c). With this predicted gerontological explosion, the population of people with disabilities in America will rise to 100 million by 2050 or 25% of the projected population (United States Census Bureau, 2000b, 2000c).

Challenges for Increasing Quality Assurance in Therapeutic Recreation

To meet the demand of the rising number of people with disabilities, therapeutic recreation specialists will need to develop high quality services with less time and money. In 2000, Medicare and disability insurance benefits for Americans with disabilities cost taxpayers \$291,307,467,000 (United States Census Bureau, 2001a). To reduce expenditure changes in health care, cuts in benefits and shorter hospitalizations are increasing at an alarming rate (Ross & Ashton-Shaeffer, 2001; US Department of Labor, 2002). Similarly, funding for people living in residential treatment centers, prisons, long-term care, group homes, and other care-facilities is expected to decline (Louisiana Department of Health and Hospitals, 2002; Poutry, Smith, & Larkin, 2001) despite the growing need for services. Furthermore, the number of therapeutic recreation specialists will decrease significantly over the next 10 to 20 years when the first wave of therapeutic recreation professionals

retire, including university professors who educate new therapeutic recreation specialists (Anderson, Ashton-Shaeffer, & Autry, 2000). To illustrate this point, in 1989-1999 Riley and Heyne (1999) noted that only 41 newly graduating Ph.D. students were available to fill the 111 advertised positions in recreation, and only a few of these had specialized in recreation therapy. The 160 programs of study that currently offer recreation therapy is projected to decrease if recruitment of professors declines. It appears that although the needs for therapeutic recreation will increase (US Department of Labor, 2002), professionals will have to meet the needs of the growing population with fewer resources and education opportunities and less funding and treatment time.

The Role of Establishing New Theories and Models

One way to help meet this demand is to develop and test theories of change that help achieve results more efficiently. Although other health and social science disciplines have created over 200 models of change to describe and interpret behavior patterns (Glanz, Lewis, & Rimer, 1997; Hubble, Duncan, & Miller, 2000; Schumaker, Schron, Ockene, & McBee, 1998), no one has developed behavior change models or theories specific to the practice of therapeutic recreation. Therapeutic recreation models such as the Leisure Ability Model (Peterson & Gunn, 1984; Stumbo & Peterson 1998) and the Health Protection/Health

Promotion Model by Austin (1991) have only begun to define the field of therapeutic recreation and what it is that therapeutic recreation specialists do. Knowing what we want to achieve as a profession is only the beginning; we also need to establish theories of how we can best facilitate positive and lasting changes in the health and lifestyle behaviors of our unique client populations.

Some professionals have begun to research the effects of specific facilitation techniques and modalities on individual disability populations (e.g., Broach & Dattilo, 2001; Witman, 1996). Perhaps it is time to question whether a specific intervention method is really the key factor to creating successful change or whether an underlying theory is responsible for creating successful change. For example, if participants have poor belief systems or attitudes, they may never reach their full potential for lasting change or optimal health no matter how many modalities and intervention techniques are used in the treatment plan. When theories of change have been established, perhaps almost any modality or intervention could be used to achieve success. Thus, theory may help explain why certain clients seem to benefit from some facilitation techniques even though others who receive the same treatment do not as so many studies conclude (Phillips & Johnson, 1991; Wooley et al., 2000). Therefore, research to test and support change

theory is critical to achieving higher potentials for lasting change in clients.

Benefits of Change Theory to the TR Profession

Change theory can benefit therapeutic recreation practice in many ways. First, strong theoretical foundations can assist professionals in creating more effective treatment plans and, as a result, greatly increase the potential for client success. Second, theory can help unite recreation therapists with a common strategy or set of guiding principles for treatment. Third, recreation therapists can earn more respect and credibility from interdisciplinary team members if they have theories of change substantiated through research to support their interventions. Fourth, theories can help professionals create assessment tools to measure and collect data for future research. Charting client outcomes with these measurement tools can create knowledge to defend and support the profession and help make treatment services more client-effective and cost-effective. Fifth, theory that explains how successful change is created can provide a consistent framework for assessment, planning, interventions, and evaluation methods. Sixth, theories can help practitioners determine where to set priorities and focus treatment efforts in order to create the most desirable outcomes, in turn, promoting quality assurance. Finally, the use of change theory within the

therapeutic recreation process can increase each client's potential to achieve a higher quality of life.

This study reviewed the existing literature of change models and theories from a variety of health and social science disciplines, using a qualitative meta-analysis to discover key themes and reveal the factors that make successful change possible. These themes were used to create a parsimonious and integrated model of change to guide professionals through the therapeutic recreation process.

CHAPTER 2

Review of the Literature

This chapter begins by helping the reader understand and define what therapeutic recreation is and how the definitions imply a process of purposeful change. It also provides an historical overview of therapeutic recreation to illustrate the longtime use of recreation and games as a medium for helping people change. A summary of six current models of practice used in therapeutic recreation describes common characteristics in the therapeutic recreation process across models. The discussion draws attention to the lack of change-concepts in these models, despite the aims described in the definitions that imply change. Finally, this chapter reviews the recent literature from the practice of therapeutic recreation to point out that very little research, if any, has been conducted to examine the process of change and establish theories of change for therapeutic recreation.

What is Therapeutic Recreation?

Professionals in the field still struggle to define therapeutic recreation. The definition is evolving through the efforts of scholars and practitioners whose work advances concepts and processes and through consensus of professionals aligned with two national organizations.

American Therapeutic Recreation Association

According to the American Therapeutic Recreation Association (ATRA, 1998), therapeutic recreation is:

the provision of treatment services and the provision of recreation services to persons with illness or disabling conditions. The primary purpose of treatment services, which are often referred to as recreation therapy, is to restore, remediate, or rehabilitate in order to improve functioning and independence as well as reduce or eliminate the effects of illness or disability. The primary purpose of recreation services is to provide recreation resources and opportunities in order to improve health and well-being. Therapeutic recreation is provided by professionals who are trained and certified, registered or licensed to provide therapeutic recreation. (§ 1)

National Therapeutic Recreation Society

The other national professional association in the United States, the National Therapeutic Recreation Society (NTRS), approved redefinition of therapeutic recreation on October 14, 2000 as follows:

Therapeutic recreation uses treatment, education, and recreation services to help people with illnesses, disabilities, and other conditions to develop and use their leisure in ways that enhance their health, functional ability, independence, and quality of life. (§ 1)

Both ATRA and NTRS statements describe a similar population, goal, and purpose.

The Views of Scholars and Practitioners

To further our understanding, noted scholars and practitioners in our field contribute to the evolving meaning of therapeutic recreation through academic publications and research. For example Carter, Van Andel, and Robb (1995) defined therapeutic recreation as:

Therapeutic recreation refers to the specialized application of recreation and experiential activities or interventions that assist in maintaining or improving the health status, functional capacities, and ultimately the quality of life of persons with special needs. (p. 10)

Definitions of Therapeutic Recreation Imply Change

Each of these perspectives of therapeutic recreation describes some form of functional intervention to improve health, wellness, well-being, or quality of life and to reduce or eliminate illness or disability. Thus, the definition of therapeutic recreation implies a process of change from lower level of health to optimal health or a higher quality of life, but none of the definitions to date directly mention this process of change. However, recent literature is beginning to acknowledge this underlying process of change. For example, the role of the therapeutic recreation specialist, according to Stumbo and Peterson (2000), is to use "a carefully selected and appropriately implemented facilitation technique that is used to bring about some special behavioral change or improvement in clients" (p. 32). Thus, broadly speaking, therapeutic

recreation is intended to assist people in making self-satisfying changes in their functional and leisure abilities.

Historical Overview of Therapeutic Recreation

Throughout history the therapeutic recreation process has helped people change. Each era helped people improve their health and well-being, using a variety of methods based on the philosophies and historic influences at the time.

The Early Beginnings

According to Tolan (2001), the use of therapeutic recreation dates back to prehistoric civilizations in 5000 to 700BCE where records show religious customs, massage, music, dancing, and walking in gardens. Greek and Roman times from 700BCE until about 400CE continued treating the whole person, meaning the body, mind, and spirit. Practices included visits to scenic gardens and temples, mineral springs, bathing pools, gymnasiums, exercise grounds, and libraries (Carter, Van Andel, & Robb, 1995). In addition, activity-based treatments by doctors such as Galen encouraged music, poetry, relaxation, and recreation (Avedon, 1974). However, between 400 and 1700CE the sacred influences came into effect and people with disabilities or mental illness were isolated in institutions and most therapeutic recreation practices halted (Carter et al., 1995; Tolan, 2001).

The Rebirth of Therapeutic Recreation

Awareness of the needs of people with disabilities resurfaced in the 1700's and 1800's and care facilities emerged once again. In the mid-1800's, nurse Florence Nightingale began promoting therapeutic practices in hospitals after observing and documenting the benefits patients received through pet visitations, music therapy, needlework, and writing (James, 1997). Around 1890, Joseph Lee (1911) introduced his playground philosophy to help enhance and develop character in youth-at-risk. Playground programs and skilled leadership to deliver therapeutic recreation practices emerged to ensure participant enrichment rather than harm (Knapp & Hartsoe, 1979). By World War I, Nightingale's philosophies helped inspire recreation therapy in hospitals, and, in the 1920's, the Red Cross Society donated funding to establish 52 convalescent homes to deliver therapeutic recreation opportunities to veterans in hospitals (James, 1998). Later on, park and recreation organizations began to provide services for people with disabilities (Tolan, 2001). Recreation therapy expanded into mental health systems in 1918 and correctional centers about 1932 (Boyd, 1935). By World War II, doctors such as Colonel William Menniger, appointed to consult to the Neuropsychiatric Division of the Medical Corps, began advocacy efforts to

educate physicians to prescribe recreation therapy programs for psychiatric patients (Schuyler, 1944).

Professional Associations

The groundwork for a professional association in therapeutic recreation began around the 1960's (Carter et al., 1995). By 1966, the National Parks and Recreation Association created a new branch called the National Therapeutic Recreation Society. A significant amount of initial research began to support the efficacy of the practice, and by the 1970's, textbooks and formal training programs for therapeutic recreation arose. The first recreation therapy conference was held in Chicago in 1972 (Carter et al., 1995). In 1987, the American Therapeutic Recreation Association (ATRA) emerged to help promote recreation therapy as a legitimate health care service and establish closer relations with the external regulating agencies such as the Joint Commission of Health Care Organizations (JCHCO) and the Commission on Accreditation of Rehabilitation Facilities (CARF) (Carter et al., 1995). This happened because the parent NTRS organization, under the umbrella of the National Recreation and Parks association (NRPA), had little interest in advocating for health-care issues in clinical settings (James, 1998); the NRPA's main focus was to promote recreation and leisure in community settings. These professional associations have

created standards of practice and codes of ethics to guide professionals, and recently they have initiated some collaborative agreements to find ways to work together in cooperation. In 1981, the National Council for Therapeutic Recreation Certification (NCTRC) oversaw certification for all recreation therapy professionals, and by 1990 it established the first national written exam for the Certified Therapeutic Recreation Specialist (CTRS). A few states, such as California and Texas, have created additional certification standards as well.

In summary, the practice of recreation therapy has roots reaching back to prehistoric times. There is rich philosophy and support for the benefits of recreation therapy. Throughout history the use of games and recreation has been demonstrated to help people change. However, there has been very little theory development based on research to explain why games and other recreation experiences help people through the process of change. Now that our professional associations and certification agencies have been established, we need to continue to create models and theories of practice, including models and theories of how people change. Models and theories about recreation, leisure, and play have been well documented in our field, but nothing to date has been presented to delineate how these can purposefully be used to help people through the process of change. If facilitating change through the use of

recreation interventions is the goal of therapeutic recreation, the profession must strive to incorporate the fundamentals of change theory with the current recreation, leisure, and play theories.

Furthermore, "the clinical environment is not currently receptive to leisure-related outcomes" (Mobily, 1999, p. 188); in America today, funding for health care is awarded based on evidence of functional change in the patient or client. An overwhelming majority of approximately 70-90% of recreation therapists work in clinical health care settings. In 2000, for example, 40% worked in nursing and personal care homes and 30% in hospitals (U.S. Department of Labor, 2002). The remaining therapists worked in residential facilities, mental health centers, adult care centers, correctional centers, community centers, and substance abuse centers. Perhaps it is time to begin creating theory and developing a practice model to guide and measure functional change. Without theory to support what the profession does, and a health care system that demands evidence and proof, it is likely that future budget cuts in health care will continue to significantly affect recreation therapy (U.S. Labor Department, 2002).

Theory and Practice Models in Therapeutic Recreation

Despite the fact that therapeutic recreation has been around for many years, models of practice have only begun to develop over the past

20 years or so. According to Sylvester, Ellis, and Voelkl (2001), five main practice models currently guide professionals in the therapeutic recreation process: the Leisure Ability Model (Peterson & Gunn, 1984; Stumbo & Peterson, 1998), the Health Protection/Health Promotion Model (Austin, 1991; 1998), Therapeutic Recreation Service Delivery and Outcome Models (Carter, Van Andel, & Robb, 1995; Van Andel, 1998), Self-Determination and Enjoyment Enhancement Model (Dattilo, & Kleiber, 1993; Dattilo, Kleiber, & William, 1998), and the Optimizing Lifelong Health through Therapeutic Recreation Model (Wilhite, Keller, & Caldwell, 1999). A sixth model worth mentioning, according to Mobily (1999), is the Aristotelian Good Life Model (Widmer & Ellis, 1998). Each of these models has unique components and distinctions and will be described briefly below. A detailed summary of each of these models is beyond the scope of this chapter. For a more thorough understanding, please refer to the cited references provided.

The Leisure Ability Model

The Leisure Ability Model addresses leisure (Peterson & Gunn, 1984; Peterson & Stumbo, 2000; Stumbo & Peterson, 1998). It assumes that leisure is a basic right of all individuals, that people experience barriers and constraints to their leisure, and that the recreation therapist will facilitate clients toward independence in leisure

functioning. This model implies a process of change from a treatment or functional intervention phase, to the leisure education phase, to independent recreation participation.

The Health Protection/Health Promotion Model

In contrast to the leisure independence thrust of the Leisure Ability Model, Austin's (1991,1998) Health Protection/Health Promotion Model focuses on improving, equalizing, or stabilizing health and wellness. This model works well given that the majority of recreation specialists work in health care settings, and leisure experiences are not the focus of health care; at present, the medical model focuses solely on health care treatment. Again, a process of change is implied as the client moves from poor health to optimal health.

The TR Delivery Service Delivery Model and TR Outcome Model

The TR Delivery Service Delivery Model and TR Outcome Model promote quality of life, meaning satisfaction, contentment, joy, self-determination, well-being, and mastery in all functional domains (Carter, et al., 1995; Van Andel, 1998). Again, a process of change from minimal to optimal wellness and functioning is implied. The models include components such as diagnosis and needs assessment, treatment and rehabilitation, education, and health promotion. Thus, both Carter

et al.'s (1995) and Van Andel's (1998) models are oriented to service delivery rather than service content.

The Self-Determination and Enjoyment Model

The Self-Determination and Enjoyment Model (Dattilo & Kleiber, 1993; Dattilo et al., 1998) supports the concepts of self-determination and enjoyment. It presents the concepts of intrinsic motivation and manageable levels of challenge. This model helps professionals treat clients using a variety of treatment interventions, thus suggesting a focus on the quality of personal experience. Similar to the previous models, Dattilo et al. imply a change from a low level of functioning to a high level of functioning and enjoyment.

The Optimizing Lifelong Health through Therapeutic Recreation Model

The Optimizing Lifelong Health through Therapeutic Recreation Model (Wilhite et al., 1999), which promotes leisure education, resources, and opportunities is intended to help each individual with a disability enhance their health through each stage of human development. This model sees therapeutic recreation as a personal development opportunity and indicates that the specialist can help clients influence their leisure functioning through therapeutic recreation interventions. Change from a low participation level in recreation and leisure experience to a higher

level of recreation participation implies that one has improved and enhanced health.

The Aristotelian Good Life Model

Finally, the Aristotelian Good Life Model (Widmer & Ellis, 1998) promotes the concepts of a good leisure versus a bad leisure lifestyle by including an ethical or moral element to the service models. This model's mission is to create happiness and a higher quality of life for the client. At the same time, it suggests that the recreation therapist should help empower the client to overcome constraints and increase freedom and responsibility. Like all other models, this model also implies a process of change, but here it is from a baseline level of happiness to a higher level of happiness, or quality of life. Having the good or virtuous life, thus, relates to continuous improvement in using or achieving one's highest potential.

Interrelationships Among Models

Common characteristics in the models include improving health and functional abilities in all wellness domains (e.g., cognitive, psychological, physical, spiritual, social, cultural, and even leisure). There is a sense of moving from initial dependence on a recreation therapist to independence and optimal levels of independent leisure participation without a therapist. However, much debate about the goal

of independence still exists given that professionals must be culturally sensitive. Not all individuals want to be independent; some want to be interdependent or selectively dependent. Most models allow for the use of a variety of recreation therapy interventions, modalities, and prescribed activities to create a specific outcome. There are strong themes of choice and freedom to make one's own decisions based on self-awareness and ability to communicate these preferences. This couples with the concept of intrinsic motivation where an individual finds satisfaction from within rather than through external factors. There are concepts of enjoyment and happiness in the models, along with Csikszentmihalyi's (1977, 1990) optimal experience or flow.² Each of these models contributes to our profession and helps increase our understanding of the therapeutic recreation process and promotes high quality service.

The Absence of Change Theory in Therapeutic Recreation Models

Although some of the factors in the process of change, such as intrinsic motivation (Dattilo et al., 1998), freedom (Widmer & Ellis, 1998),

²When in the flow state "players" shift into a common mode of experience when they become absorbed in their activity. The mode is characterized by a narrowing of the focus of awareness, so that irrelevant perceptions and thoughts are filtered out; by loss of self consciousness; by a responsiveness to clear goals and unambiguous feedback; and by a sense of control over the environment...it is this common flow experience that people adduce as the main reason for performing in the activity (Csikszentmihalyi, 1977, p. 72)

and leisure education (Peterson & Stumbo, 2000; Stumbo & Peterson, 1998), are currently present in our models, a comprehensive list of the factors needed to make change possible have not been included. At present, change theory is an important missing component in the therapeutic recreation process. A model describing both the factors that tend to increase and decrease one's ability to reach desired change outcomes would be a great asset to professionals in our field. Furthermore, there is consensus that our field needs tools to assess and document functional change and client progress, and these are dependent on theory (Caldwell, 2001; Ellis, 1993). Change theory could help guide professionals to create tools that assess and document functional changes. Integrating and combining change theory with the existing practice models and theories may produce an even greater effect (Caldwell, 2001). Change theories can complement the existing models and increase our understanding of the process of therapeutic recreation.

Current Research

A review of current therapeutic recreation research from journals, professional issues books, and conference abstracts (e.g., the National Recreation and Park Association Congress and Leisure Research Symposium, and the Canadian Congress on Leisure Research) over the past few years revealed research trends in age groups, disability

populations, modalities, and theoretical frameworks. A very limited interest in the creation of theory and practice models appears despite the growing professional interest and need. The review of the past few years of therapeutic recreation research also demonstrates the limited number of theories existing in our field and the infrequent use of theoretical frameworks in professional research.

Age Groups

Over the past few years research in therapeutic recreation has focused on a variety of age groups (e.g., Broach & Dattilo, 2001; Kleiber & Smith, 2000; McKenny & Dattilo, 2001; McTavish & Schleien, 2000). Although all age groups have been represented in the literature, the most prominent age group studied was youth (e.g., Autry, 2001; Groff & Kleiber, 2001; McKenny & Dattilo, 2001). After youth, the next most commonly researched age group was older adults (e.g., Bedini & Phoenix, 1999; Jacobson & Wilhite, 1999; Voelkl & St. Pierre, 2001). However, no research discussed if the process of change might differ for people at various ages or human development stages.

Modalities

A wide variety of modalities have been researched such as horseback riding (e.g., Jenkins, Keller, & Farias-Tomaszewski, 2001), gardening (e.g., Constant, Ashton-Shaeffer, & Pennington-Gray, 2000),

and cross-country skiing (e.g., Fergeson & Jones, 2001). The most visible modalities in the literature included outdoor adventure therapies (e.g., Autry, 2001; Ewert, McCormick, & Voight, 2001; Herbert, 2000), aquatic therapy (Broach & Dattilo, 2001; Mobily & Verberg, 2001), and sports (Groff & Kleiber, 2001; McKenney & Dattilo, 2001). Some articles listed general activities for people with cognitive disabilities such as dementia (Kolanowski & Litaker, 2001; Voelkl & St. Pierre, 2001), or autism (Bockstael & Mahon, 2002; Loy & Dattilo, 2000). No articles included any theoretical discussion on how these modalities help people through the process of change. Research was performed to see the effect of a specific modality to help people with disabilities change, but few incorporated theoretical frameworks to help explain why.

Disability Groups

The most frequent disability group studied was youth-at-risk (e.g., Autry, 2001; Baker, 2001; McKenney & Dattilo, 2001; Wells & Widmer, 2001) which is not surprising due to current trends and interest in the youth population. The second most apparent disability group was people with cognitive impairments such as dementia, developmental disabilities including autism, and other intellectual disabilities or aging disorders (e.g., Bockstael & Mahon, 2002; Devine & Schneider, 2001; MacTavish & Schleien, 2000; Pedler & Hutchinson, 2002; Voelkl & St. Pierre, 2001).

Other disabilities mentioned in the recent literature included terminal illness such as cancer or AIDS (e.g., Caroleo, 2001; Frelke, 2000; Kibler & Smith, 2000), fibromyalgia (e.g., Loucks-Atkinson, 2002; Mobily & Verburg, 2001), homelessness (e.g., Wolf-Klizing, 2002; Wolf-Klizing & Barnett-Morris, 2001), endocrine disorders (e.g., Demers & Finklestien, 2001), multiple sclerosis (e.g., Broach & Dattilo, 2001), personality disorders (e.g., Witman & Preskenis, 1996), and spinal cord injuries (e.g., Hutchinson & Kleiber, 2000). No change theories have explained how people in any of these disability groups navigate through the process of change given the uniqueness of their disability area.

Theories and Model Development

There has been continued interest in discussing and creating models and theories of practice for the field of therapeutic recreation (e.g., Caldwell, 2001; Mobily, 1999; Ross & Ashton-Schaeffer, 2001). Many have agreed (Ellis, 1993; Dattilo et al., 1998) that "more forthright efforts in theory development and the application of theory to the practice models is needed" (Mobily, 1999, p. 190). However, progress in this area has been slow. Most of the articles that appeared discussed and critiqued the six practice models mentioned earlier. The remainder of the articles discussed the need for the creation of more theories for therapeutic recreation and provided suggestions, ideas, and

encouragement as “food for thought” for the future directions of our profession. To date, no discussion has been put forth to introduce or promote the exploration of theories or concepts in the process of change.

Conceptual or Theoretical Frameworks

Some of the research studies over the past few years have begun to include theoretical frameworks such as symbolic interactionism (e.g., Bedini & Guinan, 1996), ecological perspective (e.g., Jacobson & Wilhite, 1999), transition theory (e.g., Martin, 1996), or self-efficacy theories (e.g., Fergeson & Jones, 2001); however, the use of theoretical frameworks in therapeutic recreation research has been marginal (Ellis, 1993). Between 1986 and 1990, only about 26% of research studies in therapeutic recreation used conceptual frameworks (Bedini & Wu, 1994). A more recent study between 1994 and 1999 showed that approximately 40% of the articles in therapeutic recreation journals presented some kind of conceptual or theoretical base (Bedini, 2001). The trend is growing as researchers become more aware of the importance of theoretical frameworks for developing interventions as well as service accountability. Few theories have been established in therapeutic recreation (Ellis, 1993), because choosing a conceptual framework for research studies has been a challenge. Most theoretical frameworks that have been chosen are borrowed from other disciplines such as psychology. With

the development of more theories and conceptual models such as one on the process of change, options for research will increase. As a result, more researchers may choose to include theoretical frameworks in future therapeutic recreation research. Even though six conceptual models have already been put forth, very little research has been done to test these theories. Why professionals have not chosen to test these theoretical concepts is unclear. Because therapeutic recreation seems to focus on creating purposeful change rather than entertaining patients with recreation experiences, researchers may find a theoretical framework on change more useful and applicable to therapeutic recreation research questions than previous conceptual models.

Lack of Efficacy Research

There have been few studies presented in the literature demonstrating the efficacy of therapeutic recreation services over the past ten years despite the need for the practice of therapeutic recreation to prove itself to health care service (Bedini, 2001). Threats and cutbacks to our profession constantly remind us that, without a more advanced body of knowledge, the practice of therapeutic recreation may not survive in the health care setting (Bedini, 2001). Employment for therapeutic recreation specialists in hospitals and nursing homes is expected to decline as employers emphasize cost containment (US Labor

Department, 2002). Change theory has the potential to greatly assist researchers in measuring the efficacy of the profession and its treatment services to help justify and maintain our presence in the hospitals and other health care facilities (Caldwell, 2001).

Conclusion

Although the practice of therapeutic recreation implies purposeful change, few research articles focused on the process of change. The gap in therapeutic recreation literature on this process of change is huge. Researchers appear to be discussing and agreeing about the need for theories, but instead of trying to create some initial theories, such as a theory on the process of change, the research focus continues to head in other directions. For example, there is much discussion in the literature about the topics of student curriculum, education, accreditation, mentoring, internship, and continuing education. Other topics of interest include research methods, ethics, inclusion, assessment tools to measure outcomes, family and caregiver needs, cross-cultural perspectives, and other issues based on trends such as technology.

Although these interest areas are worth studying, they are luring away the interests of the limited number of researchers in our profession who might otherwise be developing a solid foundation of theories and concepts upon which to guide the practice. We need theories to support

and justify the practice and what it has to offer before it becomes extinct. It would be a great accomplishment if the first wave of professionals in our practice could integrate the knowledge and expertise they have gained throughout their careers and develop some initial theories to pass on to the next generation before they retire, including theories on change for therapeutic recreation. Similarly, the next generation of professionals must also take an active role in creating theories of practice, incorporating concepts of the process of change, and other theories as well. Perhaps a shift to focus on creating a solid backbone and framework for professional practice and research is where we should focus our energies. Furthermore, once professionals establish theoretical frameworks to study therapeutic recreation, our research findings in these other interest areas will be of higher quality and more valuable. In 1993, Ellis wrote:

In the absence of theory, people's efforts lack focus and direction and such research, despite its enormous complexity, seems woefully shallow. Theory development is a critical need facing leisure and therapeutic recreation investigators at the present time. (p. 51)

It is now ten years later, and we are still in the same situation. Surprisingly enough, almost twenty years ago professionals were publishing discussions about this very issue and still very little has been done. For example Mobily (1984) wrote:

Repeatedly I have been confronted with little or no framework to guide my research efforts. Where are our theories? Where is literature to guide hypotheses? How do I know what to expect or predict? In short where is our body of knowledge? (p. 1)

According to Mobily (1984), we have been acquiring a variety of knowledge to help us know what happens but have not developed theory to explain the phenomenon so we can understand why.

How many more decades will our profession continue to ignore this evident need for theory? Where will we be in the decades to come if no one chooses to begin to develop theory? Will our profession exist at all? This study was designed to address this apparent need for knowledge about theory and to conduct preliminary research. This research is intended to provide some groundwork and begin to help the profession lay a foundation to establish a theory on change for the practice of therapeutic recreation.

CHAPTER 3

The Study Methodology

This chapter describes the research design and the procedures used to conduct the study of theories of change, using a meta-analysis approach. Over the past century, articles in the literature have discussed the process of behavior change with diverse population groups based on research using a variety of methods. Reviewing several conceptual models and research articles about theories of change seemed like an appropriate method for this investigation. By using a qualitative meta-analysis methodology, the researcher could examine the process of change and answer the research question. The following sections provide information on the nature of meta-analysis and meta-theory, data acquisition and analysis, and means for assuring the validity of the study.

What is a Meta-Analysis?

A meta-analysis method enables a researcher to review several articles and synthesize the findings discovered by previous researchers. Meta-analysis studies critically examine multiple accounts of a phenomenon. Researchers using this method collect a variety of research articles from the literature that describe a phenomenon and then integrate the ideas. In this case, the researcher gathered several

primary research articles that described the process of change. An analysis of the similarities and differences of the findings described in the literature was then performed. In conclusion, meta-analysis is the analysis of past research (Paterson, Thorne, Canam, & Jillings, 2001).

Both quantitative and qualitative approaches to meta-analysis exist. In the 1970's and 1980's, quantitative meta-analytical approaches emerged to compare and summarize statistical findings from a variety of surveys, correlations studies, and experiments (Glass & Smith, 1977, 1981; Hedges & Olkin, 1985). In a quantitative meta-analysis, computations of means, standard deviations, and more complex statistics help interpret vast amounts of data to answer a wide range of questions.

Over the past ten to fifteen years, qualitative meta-analysis research methods were introduced and continue to grow in popularity (Paterson et al., 2001). This scientific research method originated in the social sciences in response to scholarly interest in synthesizing diverse theories into grand theories. Although sociologists, such as Furfey (1953), have been developing such an approach since the early 1950's, qualitative meta-studies that used a rigorous systematic approach to analyze a body of knowledge from several distinct perspectives did not emerge in the literature until around the late 1980's, early 1990's (Nobilt

& Hare, 1988; Ritzer, 1991; Zhao, 1991). This method is, thus, fairly new to the social sciences and still evolving.

Meta-theory. Meta-study research has become popular for theory development (Patterson et al., 2001). This purpose of meta-study is known as meta-theory. Meta-theory research refers to investigations of theoretical frameworks or theory that has arisen from research in a particular area of study (Neufeld, 1994). Because this meta-study of change investigated a variety of theories to create a parsimonious integrated theory it can also be referred to as a meta-theory.

Grounded theory approach. A grounded theory approach (Glaser & Strauss, 1967; Strauss & Corbin, 1990) can help the researcher generate and discover theory from a “plausible relation among concepts and sets of concepts” (Creswell, 1998). As mentioned earlier, the study of change theory aimed to summarize change theory and create a conceptual model of the process of change for the field of therapeutic recreation. Therefore, a grounded theory approach fits well with the purpose of this study.

Assumptions. According to Paterson et al. (2001), three underlying assumptions are found in a meta-study such as this. First, no singular objective reality will be found and that multiple coexisting, and even sometimes incongruous realities related to the phenomenon

will be found instead. In other words, there is no one way that the process of change occurs; change occurs in many ways even for the same individual and may be interpreted differently at any given point in time, and from various perspectives. Second, the researchers or the subjects create or construct their particular understandings of the phenomenon under study. Thus, the meta-researcher must interpret and construct findings based on these data. Third, constructions of the phenomenon under study are inevitably influenced by the social, cultural, and ideological contexts in which they occur. Furthermore, Kvale (1995) adds that constructions of phenomenon are inherently historical and therefore, even one's best understandings will always be subject to the changes that may occur over time and in different situations.

Study Design

Sample Definition

As more familiar research projects outline sampling methods to ensure a representative sample of people in a population, a meta-researcher must develop a plan to select a representative sample of articles for the study. The sample of articles was defined using an emergent knowledge process which involved reviewing seminal texts and articles (Cook et al., 1992; Paterson et al., 2001), trial and error data

base searches using key words appropriated from the benchmark articles (e.g., Camden-Anders, 1999; Cook et al., 1992; Paterson et al., 2001; Strangl & Berry, 2000; Wolf, 1986), and serendipitous discovery of illuminating texts. In this process, the primary goal was to identify the possible universe of articles available for sampling.

Criteria for Inclusion

After the search to locate 150 articles was completed, a list of predetermined criteria helped establish which research articles would be included in the study (see Table 1). Those articles that did not

Table 1

Inclusion Criteria for Articles used in the Meta-Study

1. The articles must present or test theories or theoretical constructs related to behavior change.
2. The articles must be representative of a variety of disciplines.
3. The articles must include representative samples of gender, age of subjects, disabilities, race, and views or perspectives of authors.

Table 1 (*Continued*).

4. The articles must be primary sources or original work.
 5. The articles must be in English
 6. The articles may be published, unpublished, or proceedings from conferences.
 7. The articles must study humans or be applicable to human behavioral change.
 8. Research articles must use scholarly research methods, while theoretical articles may simply discuss constructs and theoretical ideas, and preferably be referenced.
-

meet specific criteria were excluded. For example, exclusion occurred due to weak research design, no theoretical framework, or publication in a language other than English. Some articles were excluded because they could not be located through the San Jose University library system, link+, interlibrary loan services, or involved extensive fees.

Delimitations of the study. To ensure a rigorous investigation, the sample was set at the first 150 articles that appeared to meet criteria for inclusion. This number was deemed sufficient to elaborate the

theoretical perspectives associated with change yet controlling the possibility for acquiring too much data to analyze for one researcher.

Limitations of the Study

Meta-analysis methods involve decontextualizing the data. The researcher depended on the fact that the primary researcher for each article had described and clarified the content and findings in an articulate manner. The original data sets were not available for re-interpretation, and the meta-researcher could not ask the primary researcher questions about the findings in order to clarify what had been written in the report.

According to Patterson et al. (2001), ideally it would have been better to form a team of researchers to analyze and code the data. In this study, only one researcher read, interpreted, and coded all of the articles. If a team of researchers had read and coded the articles and then deliberated any discrepancies, the results could be considered more credible and trustworthy. Therefore, the findings in this study may have yielded a lower truth value or higher rate of bias than if the research involved multiple reviewers.

Due to time limitations needed to code and deliberate over any discrepancies in the findings this was not an option for a graduate-level thesis project. In addition, it would have been cost prohibitive to

photocopy all of these articles for three or more coders. For these reasons, only one researcher coded the data.

Additional articles beyond the initial 150 limit may have provided further information and enlightenment about the process of change. In addition, research described in other languages with other cultural perspectives would also have enriched the study.

The researcher may have overlooked some important findings or possibly misinterpreted others; however, the nature of the study was exploratory. Since this preliminary study revealed more about the phenomenon of change, scholars may want to follow up with a more rigorous analysis. At the same time, having only one person code all the articles increased the consistency of the coding and reduced issues with inconsistent inter-rater reliability.

Selecting Articles for Review

To locate the purposive sample of research articles, computer searches of 20 health and social science databases (see Appendix A) were conducted, using combinations of key words such as “change” or “behavior modification” and “theory” or “model.” In some meta-analysis studies, database searches result in lists of numerous articles, and the researcher must select a few of the articles from the large number that are identified. In this study, the opposite result was the case. Database

searches using the specified words yielded from two to eight usable files with each search despite use of all different word combination possibilities. Each abstract was read to determine if the article actually included research on change behavior, models, or theories.

Occasionally the database search brought up other articles that obviously did not relate to the focus of this study, so the researcher eliminated them. If abstracts of the articles appeared to be somewhat related to the study question, the researcher located the articles and briefly reviewed the contents to see if they appeared to meet the criteria and would contribute to the study. A few articles were found to be inappropriate and were thus excluded.

In addition, reference lists were reviewed for additional relevant articles similar to a snowball sampling technique. Colleagues and professionals with expertise in change theory were consulted to identify any key studies that had been missed. Occasionally, a reference citation led to a book or journal on the theme of change with relevant articles or chapters that were chosen for inclusion. Finally, a library search at San Jose State University located books on change theory to include classical theoretical information about change that may not have been listed in databases because many databases only included articles published after 1980. Sometimes the researcher came across a

relevant article serendipitously when searching for another article. Thus, some articles that appeared relevant were randomly chosen in this manner for inclusion in the study as well. In particular, this happened a few times when a journal had published several articles related to the theme topic of change.

The Review Process

Articles were analyzed and coded at intervals in order to provide information about novelty or redundancy. The intent was to reach saturation of possible concepts, that is, the point when redundancy occurred (Creswell, 1988; Paterson, et al., 2001). Articles with research objectives or other organizing formats that would result in redundancy were, at that point, no longer selected for further study.

Pilot study. A pilot study of an initial twelve textbooks and journal articles in the spring of 2001 found redundancy in eight thematic categories involved in the process of change: (1) motivation and desire; (2) belief systems; (3) knowledge and skills; (4) a plan; (5) setbacks; (6) progress; (7) social and environmental support; and (8) perceived freedom, control, and power. The researcher used the eight categories which resulted from the pilot study as a preliminary foundation to identify and group data in the subsequent meta study. This process in grounded theory research is called open coding (Strauss & Corbin,

1990). After the pilot study had been conducted, a more extensive review of articles was needed to gather support and determine if there were any additional themes emerging from the literature. Hence, this meta-analysis was designed.

Primary research appraisal tool. As a result of the pilot study a primary research appraisal tool (Paterson et al., 2001) (see Appendix B) was designed to organize and record qualitative data, specifically terms and phrases that emerged into the pilot theme categories such as belief, motivation, and social support, along with any additional key themes that emerged from the data. In addition, the appraisal tool was used to record a variety of data that described the sample of articles chosen for inclusion. Quantitative information such as the year of publication, country of publication, age, gender, or ethnicity of the study subjects was recorded, if applicable, on the primary research appraisal tool to help describe the diverse sample of articles.

Procedures and data collection techniques. Each journal article or text chapter was coded and results were summarized and recorded with the primary research appraisal tool. The quantitative data collected from the appraisal tool were analyzed with SPSS (Statistical Package for the Social Sciences, Version, 11.0). Themes were highlighted using color codes and flagged. The color-coded data were analyzed using

constant comparison methods (Glaser & Strauss, 1967; Strauss, 1987) until the key themes emerged. Finally, the data from the e-mail survey were analyzed with the Likert scale analysis procedure in SPSS.

The eight initial categories from the pilot study mentioned earlier were used for a “start list” (Miles & Huberman, 1984) for open-coding. However these categories were not content specific, but rather general domains so the researcher could remain more open minded and objective (Loftland, 1971). In other words, the boundaries of the categories were dynamic and loose enough to allow the researcher flexibility to expand, shrink, split, combine, or create new categories throughout the data analysis process. The category codes were also “astringent” (Miles & Huberman, 1984) meaning that they drew extensive amounts of data together into in one group to create a more inclusive and meaningful concept of the whole. This greatly assisted the researcher with the goal of parsimonious theory development.

Within each category, several properties were also identified to help “dimensionalize” the data, meaning to array the data along a dimension from one polar position to another, and show the extreme range in the continuum of the category (Creswell, 1998). Furthermore, the linguistic units, meaning indicator words from the text that made up each property were also identified and recorded.

Identifying themes. The emerging themes or categories that describe what makes change possible were discovered as the study evolved in a zigzag process, using constant comparison methods of data analysis (Strauss, 1987), and going back and forth between the data collected through rich descriptions in the articles, and the pilot themes (Creswell, 1998). For example, one article may have referred to motivation, another to desire, yet others focused on attitude, will, or drive. After reading a number of studies and definitions, the researcher interpreted the emerging themes that evolved by grouping several properties from the article descriptions together. Each theme or category was, thus, rigorously interpreted and, through this process, defined. In summary, the change concepts emerged through these higher-level thematic groupings.

Similarly, researchers such as Miles and Huberman (1984) use a descriptive coding method to classify, interpret, infer, and explain the data. In the pilot study, for example, the researcher began to classify the data into descriptive thematic groupings. During the meta-analysis the researcher went a step further to interpret and infer the data and rich descriptions found in the sample of articles.

When the coding of the themes were complete, the researcher reorganized the data by grouping similar linguistic units together to

create and define properties, a process called axial coding (Creswell, 1998; Estabrooks, Field, & Morse, 1994; Paterson et al., 2001). Thus, several properties were identified within each of the theme categories.

Consistency and Confirmability

Science is not based merely on faith or opinions. It is important to develop interpretations and conclusions in a logical pattern throughout the research process. A systematic scientific method allows others to follow the decision trail of the researcher. The meta-study researcher must therefore clearly identify and explain objective decisions and procedures, as well as decisions and findings reached. Authority in science can be attained when publicly ascertainable evidence and support emerges (Lastrucci, 1963).

Experts were invited on a voluntary basis to complete the e-mail survey. These people helped to verify, confirm, or disconfirm findings to increase trustworthiness of the study. After the themes were identified, the researcher increased content validity by sharing the findings with several experts in the field of therapeutic recreation. Individuals with expertise on change theory were identified using purposive snowball sampling at a national conference in Denver in October, 2001. These experts were invited to complete a 14-question email survey based on a 5-point Likert scale to see how strongly they agreed with the themes of

change that emerged in the data analysis (see Appendix C). One open-ended question allowed experts to note comments, thoughts, or themes they feel may have been missed.

Expert panel review. Experts for the review panel included professors from universities as well as practitioners working in the field of therapeutic recreation. Approximately 30 experts were invited to fill out the survey. These experts were chosen based on their knowledge, experience, or expertise as a professional.

The researcher tried to maintain as neutral, ethical, and bias-free a mental attitude as possible (Glancy, 1990) toward all aspects of each publication. Procedures for selecting and including articles were outlined at the start of the study and were adhered to throughout as recommended by Paterson et al. (2001). Source records were maintained. When possible and appropriate, several theoretical views and perspectives were included along with research from diverse population groups. All findings were reported whether they had evidence supporting or rejecting the themes that emerged from the data.

Summary

Based on the procedures outlined in this chapter, the three assumptions, and a variety of literature of qualitative and meta-analytical research methods, the researcher identified and developed

guidelines for the meta-analysis of change theories. A solid foundation was created to analyze and interpret several articles on change using a scientific approach.

CHAPTER 4

Findings

This chapter presents the findings from the meta-study of change theories. It provides brief descriptive information about the scope of articles collected for the meta-analysis. The study revealed 13 themes or categories involved in the process of change: (1) belief systems and self-efficacy, (2) motivation and desire, (3) knowledge and skills, (4) a plan of action, (5) setbacks, (6) progress, (7) social or environmental support, (8) perceived freedom, control, or choice, (9) personal demographics and diversity issues, (10) medications, drugs, or pharmacotherapy, (11) physiological, biological, or somatic, (12) affect, and (13) spiritual. In addition, the properties of each category are also described. Finally, it gives the results and comments from the survey of experts.

Descriptive Information about the Sample of Articles

A variety of descriptive information was collected with the primary research appraisal tool including type of publication, discipline of the publication's first author, country of origin, gender of the first author, date of publication, and method of study. Two thirds of the publications used in this study were journal articles (see Appendix D, Table D1). Articles used in this meta-study came mainly from psychology,

nutrition, exercise science, nursing, health-behavior, and medical disciplines (see Appendix D, Table D2). The overwhelming majority of articles (89%) were published in the United States; the remaining articles came from countries such as Spain, Thailand, and Canada. Almost two thirds of the articles were published by male authors (see Appendix D, Table D3). Most of the articles included in the study (86%) were published after 1991 (see Appendix D, Table D4). Descriptive or conceptual articles about change theory and models accounted for 95% of the sample; only about 5% of the sample comprised of treatment-control or treatment-treatment comparisons testing change theory or models. Of this 5%, a little over half the studies conducted on change involved quantitative methods (see Appendix D, Table D5).

Theoretical Frameworks

Of the articles in this study, 71% included one or more theoretical frameworks. Some 30% of these used Bandura's social learning, modeling, and self-efficacy theories. The Transtheoretical Stages of Change Model was also widely used in the literature (20%). Cognitive Behavioral theories were used in 15% of the articles. Also popular were the use of the Health Belief Model (11%) and Theory of Reasoned Action (11%). Another 9% of the articles used relapse or maintenance theories. The Theory of Planned Behavior was found in 4% of the articles. The

remaining 45% of the articles used a variety of other unique models or theories.

Subjects in the Studies

Of the studies that describe the subjects in the research sample, 80% used male and female samples, and 20% used samples of females only. No study reported using a sample of males only. As for age groups, 42% of the articles studied adults aged 21-61 years, 27% of the articles studied children under 12, and 23% studied teens aged 13-20. Only 8% studied older adults age 61 and over. The ethnicity of the subjects were seldom reported, but for those studies who gave ethnic breakdowns, 28% studied Caucasians, 23% African-American, 15% Asian Americans, 5% Latinos. The remaining were unknown because the studies mixed ethnic minority groups together in a category called other.

Types of Disabilities

About half of the articles in the study included samples of subjects with disabilities. Of the studies involving subjects with disabilities the largest number (24%) studied people with mental or cognitive disabilities, developmental disabilities, mental retardation, and autism. Another 20% were subjects with mental health disabilities such as depression, anxiety, agoraphobia, obsessive compulsive disorder,

panic disorder, post traumatic stress disorder, or grief and loss issues from divorce, suffering, or loss of employment. Approximately 15% of the subjects with disabilities had physical limitations such as spinal cord injuries, paralysis, cerebral palsy, multiple sclerosis, and lower limb impairments. Delinquent youth, youth-at-risk, youth with severe emotional, behavioral, or aggressive problems made up 10%. Another 10% included addictive behaviors such as smoking, drug and alcohol use, and gambling. Eating disorders such as bulimia, anorexia nervosa, and obesity were 7%. Some 4% involved terminal illness, HIV, or AIDS. The remaining 10% were comprised of cardiovascular disease, visual impairments or blindness, pregnancy, and aging related disorders.

Emerging Themes or Categories

Eight main theme categories, meaning themes that appeared in over 70% of the articles, and five other minor categories that received support from only 3-11% of the articles emerged from the data. Support for each of the main themes ranged from 71% for freedom, control, or choice, to 94% for the knowledge and skill category (see Table 2). Each category along with its properties has been briefly described. Linguistic units and interpretations inferred from the text were grouped together to form the several properties within each category.

Table 2

Support for Each Main Theme or Category
Among the Articles in the Meta-Analysis

Percentage of Support	Category
94%	Knowledge & skills
84%	A plan of action
82%	Ways to overcome setbacks
81%	Belief systems or self-efficacy
77%	Monitoring progress
76%	Motivation or desire
76%	Social or environmental support
71%	Freedom, control, or choice

Knowledge and Skills

This category had support from over 94% of the articles in the meta-study. It was evident that a person needed to have some idea of how to make the change and some skills to be able to take action and execute the change. The acquisition of a variety of knowledge and skills can often help a person change.

Properties. Cognitive learning and rational thinking can help people assess the risks and benefits of making the change. Some

studies indicate that knowledge about costs, consequences, and rewards were essential. Leisure education, and increasing knowledge about healthy lifestyle factors, resources, skills, and other abilities all help people change. Some studies suggest that processing, reflection, and transfers of learning help people change. This is a big part of the therapeutic recreation process. Social skills, anger and stress management, coping skills, and the ability to find and ask for help and support are important in the process of change. Knowledge can be gained through the media, social observation, and the modeling of others around us. Sometimes we need knowledge of how to create and follow a plan in order to take action.

A Plan of Action

Approximately 82% of the articles suggested that a plan and action enhanced one's potential for success in the process of change. Without a roadmap how does one know where they are going or if they ever get there? Among the articles in the meta-study, many different kinds of plans were discussed to help people change.

Properties. Several articles mentioned creating goals, strategies, outcomes, and methods. Some of the articles discussed having a focus, mission, vision, or final destination, along with some key performance indicators, protocols, or standards that must be met. Some people

found contracts, written or verbal commitments, and resolutions helpful. Several of the articles discussed ideas about organizing a plan or schedule, selecting the time, and indicating a frequency. To illustrate this, one might create a plan to swim at 5 pm, three times a week, for an hour in order to achieve weight loss or reduce stress. A plan and commitment to take action could help a person change.

Ways to Overcome Setbacks

About 82% of the articles indicated that developing ways to overcome setbacks was important to achieving long term successful change. Setbacks are an inevitable part of the process of change. The concept of setbacks incorporated several different components.

Properties. Some of the articles discussed slip, lapse, and relapse prevention, while others used terms such as obstacles, constraints, barriers, or fears. Modifications and troubleshooting also seemed to be necessary for the process of change. Other articles used concepts such as maintenance and retention. Being able to brainstorm options and solve problems when dealing with the stress of change appeared in many articles. Forms of coping strategies such as stress or risk management, locating sources for help and support when needed, and employing avoidance strategies appeared essential in the process of change.

Belief System or Self-Efficacy

Much support for the theme of belief system or self-efficacy exists in the literature; 81% of the articles indicated that this was an important factor in the process of change. Usually, the more one believes in their ability to change, the more successful they will be. Each article described the theme of belief in a variety of ways.

Properties. A popular concept in this category was self-efficacy, meaning that the person had the confidence and capability to make the change. The person needed to have a good image or judgement of themselves and their abilities. Many words appeared in the articles to describe this such as self-esteem, self-worth, self-concept, or self-trust. Another word that arose was spirit; a person with a positive spirit, or positive belief system would be better able to achieve success when attempting to change. Other articles used words such as faith, optimism, positive self-talk, and hope. In other words, the more positive a person's outlook, personal visualization, or guiding philosophy, the greater the potential for successful change. Similarly personal fantasies, dreams, cultural rituals or superstitions, and even the placebo effect appear to significantly affect our belief system.

In contrast, words such as fears, paranoia, anxieties, or should thinking indicated a negative belief in one's ability to change. Several

articles discuss the concepts of personal or societal norms, and how individuals tend to compare themselves to others or previous performances, and this affects a person's ability to change as well. Positive or negative past experience, along with any traumatic or triumphant personal history could also greatly affect a person's belief system.

Monitoring Progress

Support for employing techniques to monitor progress was an important factor mentioned in 77% of the articles in the meta-analysis. People appear to achieve higher rates of success in change endeavors when they have a way to monitor their progress.

Properties. Receiving feedback, praise, and compliments from oneself and others enhances the process of change. This can be achieved through self-monitoring techniques, a baseline data collection, or pre and post testing measures that show tangible changes. Rewards, incentives, token economies, reinforcements, attention, and escaping negative consequences all help people make changes. Ongoing assessment and evaluation throughout the process of change keeps a person informed and aware. Knowing where you are in relation to where you want to be is key as well as having an ability to analyze whether the present plan is taking you in the direction you want to go. Some studies

indicated check-ins by phone or e-mail, a counselor, or friend increased the rate of successful change. Forms of documenting, rating, or charting success, can thus increase one's potential to change.

Motivation and Desire

Over three quarters of the articles in the meta-study (76%) supported this theme. The articles indicated that a person needed to have motivation or a true desire to change.

Properties. Some of the articles used words like energy, drive, initiative, inertia, and incentive to change. Without an aspiration, dream, wish, or intention a person might not be as able to make a final decision and commit to making a change. The person had to have a willingness, the will, or the will-power to change. Many articles indicated that the person needed to have the right attitude. Sometimes this came from a burning emotion or sense of passion within the individual; other times it came from a feeling of personal enjoyment or enthusiasm. Thus, people were intrinsically motivated, meaning inspired internally. However, motivation was sometimes inspired through external rewards, benefits, or expectations that had some kind of perceived value or meaning for the individual as well. People also became motivated through negative consequences or threats. Fears and dissatisfaction also helped people increase their readiness or

commitment to change. Finally, historical or significant life experiences such as a death, a natural disaster, or an illness provided people with “re-orienting moments of enlightenment” (Hansen & Laub, 1994, p. 22) that gave them the impetus to change.

Social or Environmental Support

Support from other people and the environment around an individual can often make or break one’s ability to change. Of the articles in this meta-study, approximately 76% indicated that social support was a very important factor in the process of change.

Properties. Support from an individual’s society, culture, and environment helps people change. Those who feel nurtured tend to adapt and succeed in change easier than those who do not have support from others. This includes supportive relationships with family, friends, professionals on the interdisciplinary team, and even heroes, mentors, and idols. Similarly, adopting an open supportive relationship with yourself, can enhance change. Many studies show that support groups, hotlines, referral services and newsletters that offer support have greatly helped people through the process of change. Financial support, time, money and other resources can help people make change. Support from a neighborhood, community, school, work site, sporting team, or other leisure group assists people on their journeys through change. A few

articles mention that the support of perceived societal norms such as class, gender, or age can greatly influence one's ability to change.

Finally, validation, encouragement, and listening from someone greatly enhance change.

Perceived Freedom, Control, or Choice

This theme category received support from 71% of the articles in the meta-study. Freedom to choose to make the change, personal power, or control can greatly influence the process of change.

Properties. Choice of the method, treatment, or intervention appeared in several articles. When people exercise their right to choose with their own free will, the process of change is enhanced. People can benefit from deciding whether or not they want to change, and what level of participation they want to take or not take in the process of change. Being free to change one's mind or stop at any time may be essential for optimal change. Some articles discussed how personal freedom of expression promotes change. Similarly, many articles discussed ideas of autonomy and how the change process is enhanced when participation is voluntary and one has complete control over one's destiny. When people are controlled by others, an illness, fear, or pain it may be much more difficult to change. Freedom can depend upon one's perceived control over fate, destiny, or danger. Other articles discuss a

freedom of the mind or spirit. Finally, having few rules, restrictions, religious constraints, and minimal guilt can increase people's potential for change.

Other Minor Themes or Categories

Five other minor theme categories emerged from the data.

Support from the articles for these categories ranged from 3-11% (see Table 3).

Table 3	
Support for Each Minor Theme or Category Among the Articles in the Meta-Analysis	
Percentage of Support	Category
11%	Medications & drugs
10%	Affect
5%	Spiritual
5%	Physiological, biological, somatic
3%	Demographics & diversity issues

Medication, drugs, and pharmacotherapy. The most mentioned minor category was the need for drugs and medical treatments, or pharmacotherapy; 11% of the articles mentioned that this was a helpful factor in the process of change especially for people with

disabilities such as depression, multiple sclerosis, personality disorders, and terminal illness for example.

Affect. Approximately 10% of the articles suggested that affect was import for change. Thus, there was some support for the notion that one's mood-state, feelings, or range of emotions affect a person's ability to change. For example, positive or negative affect, such as stress, depression, or happiness can help a person change.

Spiritual. Some 5% of the articles dare to mention that a spiritual component can enhance the process of change. There are many words that can be used to describe the properties of this category. Often people refer to a level of consciousness or consciousness raising with the spirit and soul deep within themselves. Some describe a feeling of centeredness, or mindfulness. Sometimes this might include intuitive, prayer, meditation, contemplation, psychic, or metaphysical powers. Others describe an awareness of a life force that is larger than the self, an interconnectedness with nature, a universal energy, and the space or molecules in the environment in which one lives. This deep form of positive thinking can heal the self and promote change or transcendence in oneself or others. Burton (1976) describes this important aspect of change which he named the S-Factor:

The S-Factor is the residual of all those factors that are instrumental in behavior change. It is scientifically non-

describable at this time, and is known principally by its effects. This does not, however, make it not so. The S-Factor is the non-organic aspect of the psyche, of its growth and change, and luck, fate, odds, and synchronicity are small parts of it. Meta-psychologically it is transcended communication, massive openness, Maslow's peaked peak experience, the point beyond love, the deepest form of introjection, and a cosmic feeling of unity, identity, and peace...The S-Factor is part of the collective unconscious in that it is the function of the unconscious to bind the organic and psychic into a single mode. In that flux, the instincts are temporarily suspended and the creative cathexis vastly magnified. This provides a glow, a luminosity, an ambiance, a set of feelings, an aura of hope, and transcendence which is "S". (p. 147)

Physiological, biological, or somatic. Only 5% of the articles supported this category. Physical, biological, and physiological, as well as somatic factors can affect an individual's ability to change depending on the goal. Thus, certain people may have more fitness or athletic potential than others depending on genetic predisposition, lifestyle, activity habits, or current level of health.

Personal Demographics and Diversity Issues. Just 3% of the articles commented that personal demographics and diversity issues might inhibit or assist a person in the process of change. For example, income level, gender, race, education level, area in which one lives, personality, appearance, ability, or disability could affect the ease at which one can achieve potential change.

Survey of the Expert Panel

The survey was e-mailed to researchers and practitioners in therapeutic recreation. Respondents were asked to evaluate the 13 theme categories to indicate how much they felt each factor was involved in the process of change for therapeutic recreation using a 5-point scale from not at all important (1) to extremely important (5). Ten people responded to the survey.

Descriptive Information

The sample of survey respondents included both professors (50%) and practitioners (50%) in recreation therapy. Thus, 50% worked in universities, 30% worked in hospitals or health-care agencies, and 20% worked in community settings. Also 50% had doctoral degrees, 30% had master's degrees, and 20% had undergraduate degrees. Years of experience in therapeutic recreation ranged from 1-30 years with a mean of 12.8 years. The gender of the respondents was mixed; 70% were female and 30% were male.

Survey Findings

The mean scores for each category show that the respondents felt all the categories were important, very important, or extremely important in the therapeutic recreation process. There was high consensus that the most important factors were motivation and desire,

followed by social and environmental support, and then belief systems. The respondent's mean scores in each category are summarized in Table 4. One open-ended question was left blank in the majority of cases and although the few comments that people described were of interest, they did not introduce any new themes.

Table 4

**Support for Each Theme or Category
Among the Expert Panelists**

Mean Score	Category
4.9	Motivation or desire
4.9	Social or environmental support
4.8	Belief system or self-efficacy
4.6	Monitoring progress
4.4	Perceived freedom, control, choice
4.2	Knowledge & skills
4.2	A plan of action
4.2	Ways to overcome setbacks
4.1	Affect
4.0	Spiritual

Table 4 (continued).

**Support for Each Theme or Category
Among the Expert Panelists**

Mean Score	Category
3.3	Physiological, biological, & somatic
3.2	Demographics & diversity issues
3.1	Medications & drugs

CHAPTER 5

Discussion and Conclusions

This chapter evaluates and interprets the findings reported in chapter four. To verify the rigor and value of the process, a discussion about the sample of articles included in the review as well as discoveries made during the sampling method, the gathering of data, and the formulation of categories is provided first. Next, comments about the results of the survey of experts are shared. A model of practice derived from the themes that emerged from this research study is presented, followed by a discussion of the implications, and areas for future development and modification. Final conclusions help the reader understand what has been learned in this meta-study.

Discussion of the Methodology

The Sampling Design

With few exceptions, the articles have provided a representative sample of genders, ages, disabilities, races, and research methods. None of the research studies included in this meta-analysis presented a male-only sample. Perhaps this is because the majority of articles were published after 1991 and in recent years it has become common practice for many researchers to include both genders. Many of the

studies that sampled both males and females had higher percentages of males than females.

Only 2% of the sample involved dissertations. It may have been more valuable to include a higher percentage of dissertations, since they synthesize a vast amount of data. Dissertations that involved extensive borrowing fees or those that had restrictions for borrowing through interlibrary loan could not be included. Therefore, costs and availability also limited articles included.

Diversity

Although the researcher attempted to include studies from abroad, an unexpected 89% of the articles came from the United States according to the country of origin of the first author or journal. Coding the articles with the country of the first author in retrospect may not be the best method. For example, if a study was performed by eight researchers from around the world and the first author happened to be American, this coding would not indicate the cultural diversity. If this study was replicated the researcher might devise a better coding method that could decipher the countries of origin. Also, if the research study took place in Africa, but the researcher was American, the article was coded American. A possible list of the countries the authors were from and the country or where the research was conducted might better

reflect the sample. Some of the countries of origin also depended on the journal. However, some researchers from other countries may have chosen to publish their studies in American journals when in fact these researchers were not American, nor was their research study conducted in America.

Still, the large percentage of data appeared to be American providing information that was more specific to American culture, philosophy, and lifestyle. Therapeutic recreation specialists serve people from diverse backgrounds. Information increasing our knowledge about diversity issues can help improve therapeutic service delivery and sensitivity to clients from various ethnic or cultural groups. A wide variety of disability populations were included in this meta-analysis. Since many therapeutic recreation specialists treat people with disabilities, it seemed reasonable to include a larger sample of articles involving people with disabilities than is found in the typical population.

Research Testing Models and Theories

It appeared that very few studies had been done to test many of the models and theories, or they were hard to locate. Some of the more popular models like the Transtheoretical Stages of Change Model appeared often in the literature. It was assumed that including more articles that focused on the Transtheoretical Model would not have

provided any novel information or new categories. It might have been helpful to include more research testing theoretical models; however, it appeared that testing models or even using theoretical frameworks about the process of change in research studies has begun recently over the past decade or two.

Discussion of the Findings

The intent of the study was to validate the eight categories of change and then also find evidence for new emerging themes. The literature provided a great deal of support for the eight major themes or categories and brought preliminary evidence of five minor categories. Although the minor themes did not receive as much support, this may be indicative of the concepts that have not yet been explored through research.

Discovery During the Data Gathering

Minor themes. The researcher had done a preliminary review of the literature and eight pilot themes were determined to create a start list. Because the minor themes were not included in the start list, and the properties of these categories were still emerging, the researcher was limited in her ability to identify, infer, or interpret the linguistic units of the text. If re-read, some of the articles may have included properties of these categories. For example, the linguistic unit "affect" was initially

included in the category of belief. However, after reading many articles there appeared to be sufficient support in the literature to warrant creating a separate category for affect. The researcher then went back through the previous articles and removed affect from the belief category. Given the time limitation of this research project it was not possible to continue to go back and review all the articles again for the other minor categories that emerged. Thus, a more extensive follow-up study may reveal more support for these minor categories. Theory takes time to develop and more time is needed to go back and forth between the data and solidify the minor categories proposed here in this initial exploratory investigation. This illustrates the zigzag process of grounded theory development.

Search words. The choice of search words were anticipated to limit the findings. However, what was unanticipated was that some of the minor theme categories might be major theme categories if they had more theoretical frameworks included in their research studies. Using the word "theory" might have restricted inclusion of studies from new disciplines that have not yet formed theories and theoretical frameworks (e.g., spirituality or recreation therapy). Instead of change some disciplines like recreation therapy might use other terminology like "treatment outcomes." Similarly, spirituality research may have used

terminology like "enlightenment" or "transformation" and thus been missed. Support from the literature for other minor themes may never be identified if only the keywords "change" and "theory" are used.

Future researchers attempting to replicate this study may want to include a few other words such as "transformation" as mentioned above to draw upon a larger more encompassing sample. It may, however, be necessary to search for support in the literature using the linguistic units of the minor categories, combined with "change" in order to find the support they deserve. Continued investigation and analysis is needed to determine if there is evidence to support these minor categories; they may, in fact, be justified as a major category. This research method is still under development. In the future, perhaps more comprehensive and creative ways to collect samples of articles for meta-studies will be developed. Researchers performing meta-analysis must choose their keywords carefully.

Discovery in the Development of Themes or Categories

The intent of the research was to develop parsimonious theory. Some of the categories may be too broad and need to be divided into two areas in the future. For example, it has been suggested that the category of knowledge should be separated from skills or renamed. However, knowledge may very well indicate what one knows cognitively,

while skills indicates what one can do, or the ability to take action or perform. Many of the models used in the meta-analysis used the terminology "knowledge" and "skills," and some combined both. Perhaps this suggestion is only the preference of a few people. Also, professionals practicing therapeutic recreation widely accept a skill component as part of the leisure education process. Leisure education is one way therapeutic recreation specialists foster knowledge and skills with clients. This is a preliminary investigation and over time these categories may need to be readdressed and possibly separated and renamed.

Alternatively, some categories may need to be combined. For example, the minor theme of affect may later be considered one of the properties of the belief system. However, with more support from the literature affect may very well warrant a category of its own. Also, there are some properties that appear to overlap. For example, the belief category and the spiritual category both have properties involving spirituality. All of the categories are interrelated and thus have some overlapping properties.

Discussion of the Survey

The sample of ten experts who responded to the questionnaire was representative of therapeutic recreation professionals in the practice. However, only ten respondents is too few in a sample to assume generalizability. It is interesting to note that ten of the 13 themes were evaluated as being "very important" to "extremely important" in the process of change in the practice of therapeutic recreation. The remaining three categories (e.g., physiological, biological, and somatic; demographic and diversity issues; and medication and drugs) were also evaluated as "important." None of the themes were evaluated as "not very important" and "not at all important." This indicates that all 13 categories identified in this study were relevant and applicable in the field. A follow-up survey to a larger population of therapeutic recreation professionals that more clearly articulates the categories and their properties is warranted.

Theory and Model Development

The following section describes how the findings presented in this meta-analysis were used to create a theory of change. The next few paragraphs define what theory is and then explain how this theory was created.

What is Theory?

It is important to define and understand what theory is.

According to Kerlinger (1986), a theory is:

a set of interrelated constructs (concepts), definitions, and propositions that present a systematic view of phenomena by specifying relations among variables, with the purpose of explaining and predicting phenomenon. (p. 9)

Some theories explain behaviors and suggest ways to achieve behavioral change (Glanz et al., 1997). Theories can also use models or "symbolic representations of what is conceived to be reality," (Zimbardo, Ebbensen, & Maslach, 1997, p. 53).

Constructs

The meta-analysis of change theories presented 13 categories, eight of which appeared to have sufficient support in the literature. It is, thus, possible that humans change in certain predictable ways. Therefore, these eight categories can also be referred to as concepts, meaning the "building blocks", "primary elements," or "the major components of a theory" (Glanz et al., 1997, p. 23). According to the literature reviewed in this meta-analysis, these eight concepts are the major concepts that comprise the phenomenon of change. When concepts have been developed and then adopted for use in a particular theory such as the theory of optimal change presented here they are

called “constructs” (Glanz et. al., 1997, p. 24). Thus, the eight categories will now be referred to as the constructs of change.

Creating a Visual Model

In order to communicate the ideas, concepts, and possibilities of these eight constructs of change in the context of the therapeutic recreation practice the creation of a visual model seemed warranted. The model needed to combine these constructs of change theory not only with health, recreation, and leisure philosophies, but also with aspects of previous therapeutic recreation practice models. Thus, a multidimensional model was proposed to help professionals clarify outcomes and directions for the field of therapeutic recreation.

According to Voelkl, Carruthers, & Hawkins (1997), practice models need to be based on “philosophical and theoretical foundations that guide the selection and development of values, beliefs, and principles of practice” (p. 210). Other professionals such as Ross and Ashton-Shaeffer (2001) also agree that practice models “should be built on philosophy and theory, provide framework for the delivery of therapeutic recreation services” (p. 160), and also be congruent with public policies set forth by governing bodies such as government, accreditation agencies, and health care organizations. Thus, the researcher carefully considered the philosophies, values, beliefs, and

principles of therapeutic recreation as well as diversity sensitivity (Dieser & Peregoy, 1999) to create this model.

In addition, a good practice model as described in the therapeutic recreation literature would “be influenced by the past, reflect current realities, and provide a progressive, dynamic direction for the future” (Voelkl et al., 1997, p. 212). In this thesis, the researcher reviewed the history of therapeutic recreation, and studied therapeutic recreation practice models of the past to understand past and current perspectives. In addition, the researcher attended conferences to learn about the current realities of practitioners in therapeutic recreation. With the integration of this knowledge, a preliminary attempt to create a theory and model of practice that would provide a progressive, dynamic direction for the future was made.

The Proposed Theory of Optimal Change

The Theory of Optimal Change suggests that human change involves eight distinct and interrelated constructs: (1) belief system and self-efficacy, (2) motivation and desire, (3) knowledge and skills, (4) a plan, (5) setbacks, (6) progress, (7) social or environmental support, and (8) perceived freedom, control, or power. The theory also suggests that the process of change is neither cyclical or linear. Instead a person

Figure 2. Model of Optimal Change

continually fluctuates up and down within seven zones of change in each of the eight construct areas (see Figure 2).

According to the literature in the meta-analysis, change can be perceived as positive, meaning heading toward one's goal; negative, meaning heading in the opposite direction from one's goal; or neutral, meaning a state that neither leads one toward or away from a goal. There is a neutral "roller coaster" zone where a person is attempting to make a change but is not yet making any sustained progress. Three zones head in a negative direction toward the deterioration zone, and three zones head in a positive direction toward the optimal change or

growth zone. Each of the three zones symbolizes a time frame. There is an initial frame of three days to two months, a short-term change zone of two to six months, and finally a long-term change zone of six months to several years. These time frames have been estimated based on literature from relapse and maintenance theories, but a more thorough investigation of research is needed to justify these time frames and may be adapted accordingly in the future.

In addition, the model makes use of the breadth a traditional continuum offers. The continuum indicates that when one is in the neutral zone they are at a neutral point on a continuum between health and poor health or illness. If one moves toward the deterioration zone and achieves negative or unhealthy counterproductive change they approach a state of poor health, sickness, or illness. When one moves in a positive direction toward the optimal change and growth zone they approach a state of optimal health and wellness. Given the changes occurring internally and externally in daily living, a person may continuously fluctuate in any of the eight construct areas.

Assessment Possibilities

Neither the researcher nor anyone else has created an assessment tool to measure a person's score in each of the construct areas as this was beyond the scope of the study. The creation of formal, valid, and

reliable assessment tools is, however, encouraged and critical for the future.

Assessment tools can be created using the linguistic units found in this initial research. This meta-study collected linguistic units to develop each construct. These same words from the text of the articles can be used to describe the properties and language of each construct in both positive and negative quadrants. Therefore, these linguistic units can define positive characteristics of what each construct is as well as the negative characteristics of what it is not. However, it will take further research and more time to develop a valid and reliable tool to assess a person in each construct area.

In the interim, until formalized tools have been developed, therapists could begin to use this model by assessing clients through naturalistic observations, structured interviews, or questionnaires. The therapeutic recreation specialist could use the information for the assessment to estimate: (1) where a client might be in each construct area on the wellness continuum, and (2) the direction that the client is headed. With heightened awareness of the vocabulary of each construct area, the therapeutic recreation specialist can learn to make observations by listening to the verbal and non-verbal language of each client.

This kind of assessment would be beneficial for a number of reasons. It is based on the theory and research findings of this meta-study and each of the eight constructs have strong support from the literature. Extremely detailed, comprehensive understandings or definitions of each construct can be determined based on the linguistic units. In addition, the assessment would spark curiosity in the user. It is likely that the client would want to know their strengths and weaknesses, or their personal ranking for each construct area. Clients may develop an interest in monitoring progress over time as well. This could help them identify options for growth and why they have not been as successful in making their change.

Figure 3. Profile of Constructs

The therapeutic recreation specialist can use this model to document and chart client progress, clinical, legal, or informative documentation (see Figure 3). Documentation for each client can help the therapist track client progress and fluctuations in each construct area for a specific goal. Additionally, the therapist can learn what the client sees as their strong and weak constructs. Knowledge about the client's personal perceptions of what constructs of change they are lacking can help a professional set strategies and create more effective treatment plans to specifically address personal needs. Comparisons could also be made between therapist and client observations, and discrepancies discussed as a treatment intervention itself.

With careful observations over time the therapist might begin to identify similar trends among clients with different disabilities and use this information to create protocols for treatment. For example, the typical profile of strengths and weaknesses among constructs (see Figure 3) of someone with an eating disorder or substance abuse issue may be different from the typical profile of a person with a spinal cord injury. Through monitoring progress with this model therapists may soon learn which facilitation techniques are creating the most effective outcomes as well.

Recent textbooks have begun to identify and clarify the assumptions, purpose, outcomes, and a definition of therapeutic recreation based on each model of practice and its theory (i.e., Sylvester, Voelkl, & Ellis, 2001, p. 104). To be consistent with other literature in the practice the researcher has outlined these components for the reader as well.

Assumptions of the Model

The model has several assumptions. First, positive change enhances health and well-being, and negative change promotes sickness or deterioration. Thus, neutral change promotes maintenance or it could even be argued “stagnation.” The longer and more positive a person’s self-determined score in each of the eight categories that enhance change, the more likely the person will achieve positive and lasting change. Second, the model assumes that people are always changing and adapting to personal and environmental changes throughout the life span in each of the eight construct areas. Third, therapeutic recreation services facilitate purposeful change and growth toward a higher level of health, wellness, or quality of life. Fourth, purposeful change or growth is unique to each individual. What is positive and optimal for one person, may not be the same for any other individual. Optimal change and growth depend on a variety of

components such as cultural and diversity factors, socioeconomic status, the stage of human development, level of ability or disability, and other diversity issues. Therefore, optimal change or growth must be defined by each individual. Fifth, the eight constructs are assumed universal to all humans until further research investigations can prove otherwise. This is assumed because the constructs do not address how the change occurs, or what the changes are, rather what is necessary according to the literature for human change to occur. For example, there may be differences between geographical areas, ethnic groups, disability populations, genders, and other diversity groupings.

The Purpose of the Model

The main purpose of the model is to portray a visual image of the constructs of change in a context of an optimal wellness continuum, similar to what was presented by Austin (1998). The goal of the model is to guide the delivery of service as well as serve as a possible means of client assessment and monitoring. Thus, the model "guides the outcomes to which the professional strives, and everything that is done in practice to achieve those outcomes" (Voelkl et. al., 1997, 210). In this model the outcomes are optimal change and personal growth or more specifically overall quality of life through increased health, level of

wellness, level of life satisfaction, level of happiness, ability to enjoy oneself through leisure, or ability to self-actualize.

Therapeutic Recreation Redefined

This meta-study revealed constructs of change and henceforth the researcher proposed that change theory be incorporated into the therapeutic recreation process. Thus, the definition of therapeutic recreation must be redefined. In light of the theoretical foundations upon which the model is based the researcher will attempt to redefine therapeutic recreation incorporating change theory.

The purpose of therapeutic recreation is to facilitate positive change in people with disabilities, injuries, illness, and other conditions, using a variety of leisure, recreation, and play interventions in order to maintain or improve one's overall quality of life. Change outcomes may be functional, developmental, or even existential in one or more of the wellness domains (e.g., physical, social, cognitive, emotional, spiritual, cultural, environmental, or leisure). Change outcomes may also be in one or more of the eight constructs of change (e.g., belief, motivation, knowledge, plan, setbacks, progress, support, and freedom). Quality of life may be achieved through improved levels of health, wellness, life satisfaction, or happiness, as well as the ability to enjoy oneself through leisure, or to self-actualize. Leisure, recreation, and play interventions

may include for example games, expressive arts, social interaction, and experiential learning situations where either a planned, purposeful, and measurable outcome or transfer of learning is expected to occur.

Change can thus be delivered through a variety of modalities, facilitation techniques, and processing methods, or through participation and self-discovery.

Applications of the Model to the Therapeutic Recreation Process

The model is a flexible tool that can help guide the therapeutic recreation process. It can be utilized for client assessment, treatment planning, program implementation, and evaluation. Upon assessment a specific area of need may be determined that could then be viewed within the context of this model of optimal change. For example, within the context of motivation, a client may be in the neutral "roller coaster" zone where neither positive or negative changes are occurring. Or perhaps they have made some positive changes toward their goal or negative changes away from their goal. Within this framework client strengths and weaknesses can be more easily identified and then addressed through treatment. The literature in this meta-study, suggests that identifying and targeting the weaker constructs may be critical to the process of change. Continuous assessment is important in therapeutic recreation. Doing so is highlighted here, because the

constructs are interconnected and the person may fluctuate up and down between the zones in positive or negative directions for any given construct. The progress is thus monitored not only through each completed outcome of a specific goal (e.g., naming five sources of social support), but also on a continuum of wellness to see the impact of each goal in relation to overall wellness in each construct area. The function of the therapist would be to provide personalized treatment toward the growth zone where the client would have the most potential for successful change toward his or her goal.

It is possible if all variables were equal, and each client was given the same treatment intervention, some clients would achieve their goals and some would not. The reason for this is not always clear. This model can begin to help the professional better understand why one client may be having more success than another.

For example, a client may actually have a lot of knowledge and a plan, but the professional may not know this and decide to implement a goal to increase knowledge to help a person change. Thus, the therapeutic recreation specialist may choose to give leisure education to a patient who actually already had a lot of knowledge. However, the reason the change may not have occurred might be because the client had a low sense of self-efficacy, or negative support from family

members. By focusing on an exercise that builds self-concept or positive support networks instead of knowledge, the person may be able to reach their change goals more effectively. In fact, implementing leisure education may be contraindicating. Doing so may increase the client's knowledge and act as a reminder of all the things they do not feel capable of doing. This could also reduce the client's belief system and slow the process of change. Therefore, completing an assessment of the client in each construct area might be essential in the overall success of recreation therapy interventions and could even improve the efficacy of our practice. Therefore, careful planning and observation utilizing this model may make a tremendous difference in client success and even the efficacy of our practice. However, more research is needed to test this theory.

Many of the constructs have properties that overlap and interrelate with each other. If a client is affected in one area, it can greatly affect one or more of the others. This is beneficial to the practice and potentially to the expediency of achieving goals. When treatment is focused upon one of the constructs of change it is plausible that other constructs will be positively affected thereby increasing the degree or timeliness of the change. For example, if a patient increases his or her beliefs, the construct of motivation might be positively affected.

Continuous assessment is needed to keep abreast of where each client is with each goal in their process of change.

It is also important to use the model for each change goal. For example, one might have different ratings for self-efficacy depending on whether the goal was perceived to be easy or hard. For example, a person can have a tremendous sense of self-efficacy to dance in front of an audience, but not to sing. The therapist must not assume that a high sense of self-efficacy in most activities or a fairly high concept of self-worth transfers to all goals that a person may pursue. Thus, people's ratings will fluctuate within each construct depending on the goal.

Benefits of the Model of Optimal Change

The model has many benefits besides being a very practical guide to each stage of the therapeutic recreation process including: assessment, planning, implementation, and evaluation. The model can help measure change, provide multiple treatment options, as well as be applied to various settings. In addition, it has language benefits and can help personalize client treatment.

Measuring change. As mentioned earlier, it increases awareness of the constructs of change, and it helps the therapist monitor the client's status in relation to them. The model can help professionals

begin to quantify and track measurable change. A model such as this could be used as a foundation for research, advocacy, and further development of our profession.

Adaptable to various settings. The model can be applied to a variety of settings such as health care, the community, or a care home because the therapeutic recreation specialist can work with a model that transcends the scope of the medical profession. It is helpful for professionals to have a model that can be applied in clinical as well as community or school settings. This may help bridge the gap between recreation therapists who practice in clinical and community settings.

Adaptable language. The language in the model is adaptable and utilizes lay terminology. There are options for outcomes at the top of the model such as health, wellness, or quality of life. This is done in order to maximize specificity to the user. For example, if the practitioner worked in a hospital the term health might be used. A model that provides the flexibility to use the appropriate language of the reimbursing, accrediting, or governing bodies (e.g., The Commission of Accreditation of Rehabilitation Facilities, the Health Care Financing Administration, the Joint Commission of Accreditation of Health Organizations, or the Department of Health and Human Services) is also essential. Thus, the language referring to optimal health and wellness

can be interchanged depending on the setting, culture, age group, or development level. In addition, this helps increase the possibility that the client can understand it, and become actively involved in the change process. Using personally meaningful terminology to each client can increase motivation to buy into the change.

Multiple treatment options. The model is very flexible in that it offers a multitude of treatment options based on the constructs identified in this meta-study and their properties. As with most therapeutic recreation practices, a few key constructs can be identified for focused treatment while the treatment is couched in a full framework of change. A wide variety of interventions and modalities can be used to facilitate change in each construct area; doing so, enhances the potential for personalized treatment services.

Personalized treatment services. Similarly, the outcomes can be adapted to the environment, culture, and individual's goals and help provide a more person-centered approach. The model promotes self-efficacy through the construct of freedom, control, and choice. The model also allows for diversity sensitivity. The model can be adapted to help clients achieve independence or interdependence by taking into consideration the client's values and needs. For example, clients from

ethnic groups who value a supportive family, can be accommodated by focusing treatment on the social and environmental support category.

Summary

The study presents findings based upon literature from the meta-analysis that can be used to create a model that has both merit and worth. Theoretical underpinnings are strong, but this introductory model needs further development and testing as well as clarification of terms and concepts. Because this meta-study is preliminary, more research is needed to test these constructs and the model. This practice model provides a good foundation and start to including the basic constructs of the process of change into the therapeutic recreation process. The model may also apply and be of value to other professions involved in helping people change. However, further synthesis and investigation is needed to refine this model for future use.

Suggestions for Future Research

This preliminary research study has created numerous options for further research. It would be beneficial to replicate this study using a greater number of articles for the analysis, with a team of coders to increase the reliability of the findings and discuss the properties and results. A future study might include more articles from abroad and more dissertations than were able to be located for this study. More

research is needed to determine if any additional categories exist or if there is indeed more support for the minor categories that emerged from the data. Investigations into literature from alternative subcultures of health care such as somatic based therapy, energy medicine, or complementary and alternative medicine may help us find more support for some of the minor categories that may not have emerged.

Researchers could also conduct studies to see if there were differences between how each gender, ethnic group, or disability population negotiates the process of change. If there was indeed a difference protocols and guidelines could be created to increase the effectiveness of the treatment.

The linguistic units of the text descriptions could be researched in further detail and used to create assessment tools to measure each construct or minor category. The model itself could be tested using multiple-factors to discover if there is any difference with single factor approaches and which combinations work best for different populations. Studies might also explore the difference between personalized interventions and group interventions. Each modality or treatment intervention could be researched to learn how effective it was at enhancing change or growth in each construct. Finally, research is

needed to determine if some change constructs are typically lower or higher on the wellness continuum for different diagnoses or conditions.

Conclusions and Implications

What Was Learned From This Study?

The identification of the 13 categories involved in the process of change allows professionals to better understand the phenomenon of change and the role of change in the therapeutic recreation process. New knowledge from this research can help professionals develop future theories and models that include the constructs that comprise the process of change. Utilizing this information in the practice can help therapeutic recreation specialists build unity, respect, and credibility. Measurement tools can be created to collect data to support the efficacy of the profession. Strategies, protocols, and guiding principles for treatment can be developed for use in all practice settings to improve quality assurance and quality of service. More importantly, therapists can help facilitate patient and client growth and increase the potential for achieving a higher quality of life.

What Are the Implications for Therapeutic Recreation?

The study illuminated numerous implications for the therapeutic recreation profession. The knowledge gained from this meta-analysis will affect methods of practice for recreation therapists, methods of

research for scholars, and methods of teaching for professors in therapeutic recreation. Furthermore, the model for optimal change can provide a “foundation for research, public policy, and the further development of our profession” as Ross and Ashton-Shaeffer (2001) have indicated is needed. In addition, this research has led to the expansion of current theory and practice models for the field of therapeutic recreation. The marriage of theories of change, leisure, health, and therapeutic recreation practices into a single model of service delivery presents a myriad of exciting possibilities. Finally, this model gives recreation therapists an even greater power to affect purposeful change in people’s lives.

This thesis presents one of the few models in the field based on underlying theoretical premises and concepts. According to Voelkl et al. (1997), “without these, the ensuing practice parameters have no grounding and professional practice becomes a mere willy-nilly collection of actions without discernable intention” (p. 210). The findings of this meta-study on change help the practice of therapeutic recreation take one step closer to becoming self-efficacious. At no point in history has the self-efficacy of therapeutic recreation been more critical than it is today, given this era of cost-effective health care reform. Professionals will continue to face the challenges of justifying

the practice and increasing accountability and quality of service.

Because of this research study, the field of therapeutic recreation has one more model to help meet this demand. In order to survive, therapeutic recreation specialists need more theories and models based on research, such as those created by this research on change.

What are the Implications Beyond Therapeutic Recreation?

Implications for this model also reach beyond the field of therapeutic recreation to all other helping professions, the field of recreation, and to other fields such as marketing where knowledge about the elements of behavior change is beneficial. This meta-study increased our understandings of the body of research on change in the helping professions, as well as the body of knowledge in the practice of therapeutic recreation. The meta-study helped to generate a parsimonious theory of optimal change based on cross-disciplinary research findings, thus the excitement can also extend to a multitude of other helping professions. This model is possibly the first to articulate an alternative overarching perspective about the phenomenon of change and to provide a language of practice that spans across several disciplines, ethnic groups, age groups, and other diversity groups. Furthermore, it is anticipated that this language can also withstand

time, as it is not based on the buzzwords of the decade, but theory and the linguistic units derived from this meta-study.

What Does This Mean?

To conclude, this research study has succeeded in creating the preliminary foundations of a good practice model (Voelkl et al.'s, 1997): one that has been influenced by the past, one that reflects current realities, and one that provides a progressive, dynamic direction for the future. However, much research is still needed to develop and transform the ideas presented in this thesis. This kind of work will take commitment from many therapeutic recreation professionals, the support of the practice, and the collaboration of professional associations who use recreation modalities to provide therapy to clients (e.g., drama therapy, music therapy, dance movement therapy, adventure therapy, and other forms of recreation therapy). Together we can build credibility and respect not only for our individual practice areas, but through unification as a field of recreation toward one common goal: the creation of optimal change and growth in individuals and society through recreation, leisure, and play. Furthermore, we can unite with other human service professions whose missions are to create quality of life through functional, developmental, or existential change.

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Appendix A

List of Electronic Data Bases Used to Search for Articles on Theories of Change

**Age Line
Biological Abstracts
Core Nursing Journals
Education Full Text
Eric
Expanded Academic Index
General Science Full Text
Grove Encyclopedia of Life Science
Health and Psychological Instruments
Infotrac Web
Journals @ Ovid Full Text
Lexus/Nexus Academic Universe
Library Literature and Information Science Full Text
OmniFile Full Text Mega Edition
PsycINFO
Pub Med
Social Sciences Full Text
SportDiscus
Wilson OmniFile Full Text Mega Edition**

Appendix B

Primary Research Appraisal Tool

Citation

Code #

Accept ☐ / Reject ☐

Form of Publication ☐ Journal article ☐ Book/chapter ☐ Dissertation/Thesis ☐ Other – ☐ Unpublished manuscript ☐ Professional conference	Subjects in Study Total # _____ Age ☐ 0-12 ☐ 13-20 ☐ 21-60 ☐ 61+ over Gender: M / F / Coed Ethnicity _____	Year Published ☐ 1960 & Before ☐ 1961-1970 ☐ 1971-1980 ☐ 1981-1990 ☐ 1991 & After	Research Design a b c d e f g h i j k ☐ Strong 5-11/11 ☐ Weak 0-4/11 ☐ Not applicable
Discipline by 1st author's, credentials, or journal ☐ medical ☐ health promotion ☐ health behavior ☐ nutrition & exercise ☐ counseling/psychology ☐ psychiatry ☐ sociology ☐ education ☐ nursing ☐ physical therapy ☐ occupational therapy ☐ speech therapy ☐ recreation therapy ☐ disability ☐ marketing/business ☐ other	Study Population ☐ Typical population (no disability/condition) ☐ Disability pop/condition ☐ mental / cognitive ☐ physical ☐ social ☐ other conditions, syndromes/terminal illness' ☐ other	Type of Article ☐ Descriptive conceptual article about change theory or model ☐ Treatment-Control Comparison Testing change theory or models ☐ Treatment-Treatment comparison Testing change theory or models	
	Type of Study ☐ Quantitative ☐ Qualitative ☐ both	Country of Origin ☐ US ☐ International (Outside US) ☐ Cross-cultural (2+ countries)	
	Design/Genre/Perspective	Gender of 1st Author ☐ male ☐ female ☐ unknown	
	Number of References		
Theoretical Framework			

Themes that emerged

- ☐ Belief/Self-efficacy
- ☐ Desire/Motivation
- ☐ Knowledge
- ☐ Plan
- ☐ Setbacks
- ☐ Progress
- ☐ Social Support
- ☐ Freedom/Choice
- Others?

Major Findings/Message/Key Points

Appendix C

E-mail Survey for the Expert Panel

Please evaluate these 13 categories using the following 5-point scale described below.

- 1- Not at all important
- 2- Not very important
- 3- Important
- 4- Very Important
- 5- Extremely Important

How strongly do you agree that each of these factors is involved in the process of change in therapeutic recreation?

1. Belief System or Self Efficacy
(self-worth, self-esteem, self-concept, spirit, personal confidence or capability, faith, optimism, positive thinking, hope)

Answer: _____ (Please rate from 1-5 using the scale above)

2. Motivation or Desire
(will, drive, enthusiasm, expectation, rewards, value, dreams, intentions, initiative, energy, enjoyment, attitude, commitment, sense of readiness)

Answer: _____ (Please rate from 1-5 using the scale above)

3. Knowledge and Skills
(cognition, assertiveness, anger management, coping, resources, leisure education, processing, reflection, transfers of learning, rational thinking, consequences, risks, how to find and ask for help, social observation, modeling, media, how to create a plan)

Answer: _____ (Please rate from 1-5 using the scale above)

4. A Plan for Action
(Goals, strategies, outcomes, methods, key performance indicators, protocols, standards, contracts, commitments, resolutions, schedule, timing, options, interventions, focus, mission, vision.)

Answer: _____ (Please rate from 1-5 using the scale above)

5. Ways to Overcome Setbacks

(Relapse prevention, obstacles, modifications, troubleshooting, maintenance, retention, sources of help, avoidance strategies, risk management, stress reduction, coping methods, help seeking, problem solving)

Answer: _____ (Please rate from 1-5 using the scale above)

6. Monitoring Progress

(Attention, mindfulness, feedback, reinforcement or punishment, self-monitoring, baseline data, pre/post tests to measure tangible changes, check-ins by phone or email, achievement, charting, documentation)

Answer: _____ (Please rate from 1-5 using the scale above)

7. Social or Environmental Support

(Social, cultural, environmental support; relationships with family, friends, self, professionals, heroes, and groups; hotlines, referrals or newsletters; resources, time, money; schools, worksites, places of worship, communities; perceived norms, i.e., class gender, age; validation, encouragement, listening)

Answer: _____ (Please rate from 1-5 using the scale above)

8. Perceived Freedom, Control, and Choice

(Choice of treatment, ability to change mind or stop if necessary, autonomy, self-controlled behavior, self-expression, freedom of body, mind, and spirit, few rules, few constraints, minimal guilt, health, wellness, internal locus of control)

Answer: _____ (Please rate from 1-5 using the scale above)

9. Personal Demographics and Diversity Issues

(i.e., income level, gender, race, education level, area one lives, personality, body type, abilities and disabilities, stereotypes)

Answer: _____ (Please rate from 1-5 using the scale above)

10. Medications and Drugs/Pharmacotherapy

(use of drugs, medication, and medical treatments depending on the disability. i.e., depression, personality disorders, terminal illness, etc.)

Answer: _____ (Please rate from 1-5 using the scale above)

11. Physiological/Biological/Somatic

(Individual physiology, biology, and somatics vary i.e., Fitness potential, activity habits, lifestyle, genetic predispositions, health. These may help make change more possible for some people than others.)

Answer: _____ (Please rate from 1-5 using the scale above)

12. Affect

(Mood states, feelings, range of emotions, i.e., level of depression or stress, etc.)

Answer: _____ (Please rate from 1-5 using the scale above)

13. Spiritual

(Centeredness, consciousness, mindfulness, interconnectedness with nature, universal energy, power of prayer or positive thinking)

Answer: _____ (Please rate from 1-5 using the scale above)

14. Can you think of any additional factors that you feel are also important in the process of change not presented here?

Will you please share some brief descriptive information...

Name?

Current Title?

Place of employment?

May I use your name in my thesis to acknowledge you for participating in this study?

May I quote any of your comments in my findings?

How many years experience do you have in recreation therapy?

Gender?

Level of Education?

Thank you very much for your time!

Appendix D

Tables of Data Describing the Sample of Articles Used in the Meta-Study

Table D1

Type of Publications

Percentage	Publication Type
64%	Journal Articles
34%	Books and Book Chapters
2%	Dissertations and Theses

Table D2

Discipline of Article based on First Author or Journal

Percentage	Discipline
36%	Counseling, psychiatry, and psychology
21%	Nutrition, exercise, and sport sciences
17%	Health promotion and nursing
9%	Medical
11%	Others

Table D3**Gender of First Author**

Percentage	Gender
58%	Male
40%	Female
2%	Gender unknown

Table D4**Year of Publication**

Percentage	Year
86%	1991 and After
5%	1981-1990
7%	1971-1980
2%	1961-1970
1%	1960 and Before

Table D5**Research Method used in Articles**

Percentage	Research Method
54%	Quantitative
23%	Qualitative
23%	Mixed Methods