Recovery-Oriented Dance Movement Therapy: A Controlled Trial in Mental Health Rehabilitation

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RECOVERY-ORIENTED DANCE MOVEMENT THERAPY: A CONTROLLED TRIAL IN MENTAL HEALTH REHABILITATION

A DISSERTATION
(submitted by)

TALIA BENDEL-ROZOW

In partial fulfillment of the requirements for the degree of Doctor of Philosophy

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Graduate School of Arts & Social Sciences
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Approvals

In the judgment of the following signatories, this Dissertation meets the academic standards that have been established for the Doctor of Philosophy degree.

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Final approval and acceptance of this dissertation is contingent upon the candidate’s submission of the final copy of the dissertation to the Graduate School of Arts and Social Sciences.

I hereby certify that I have read this dissertation prepared under my direction and recommend that it be accepted as fulfilling the dissertation requirement.

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I hereby accept the recommendation of the Dissertation Committee and its Chairperson.

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ABSTRACT

This dissertation evaluated the appropriateness of using a recovery-oriented dance movement therapy (RODMT) intervention for people who were experiencing severe mental illness. Dance movement therapy (DMT) has been used for decades to support people with psychological and psychiatric symptoms but, before this research, has not been studied in context of the recovery approach to mental health rehabilitation. The theoretical assumption of this study was that movement-based experiential activities could be used as the primary agent to demonstrate and convey specific recovery concepts among participants. The researcher developed a protocol for 13 sessions of group intervention that merged DMT with Illness Management and Recovery Program principles and methods addressing social support, goal development, and stress management.

A controlled trial was conducted to compare participants who received RODMT with others who received the typical Illness Management and Recovery program. Of 98 participants who started the interventions, 52 completed them. All were receiving community mental health rehabilitation services in Israel; 80% had a schizophrenia diagnosis; 75% were men; and the mean age was 48 years.

Standardized measures assessing recovery were completed pre- and post-intervention. Knowledge questionnaires were administered throughout the study, and five RODMT participants were interviewed before and after the intervention. Although RODMT group participants were significantly older than control group participants, findings showed no between-group differences in measures of recovery outcome.

Thematic analysis of interviews revealed three categories: definition of recovery and personal goals, hindrances to recovery, and experiences from RODMT group, from which the
themes of coping with frustration, gaps between wanting and doing, interest and enjoyment from experiential activities, awareness and application, group support, and mind–body connection emerged. The group was experienced as enjoyable, supportive, and engaging for the interviewed RODMT participants. They indicated that the group contributed to their awareness and taught them applicable strategies to cope with stress. When adapted to the recovery approach, DMT may have a promising effect on participants’ recovery processes.
CHAPTER 1

Introduction

This research introduces the potential for using dance movement therapy (DMT) to further the recovery processes of people who are experiencing severe mental illness (SMI). The goal of the study was to examine whether a recovery-oriented DMT intervention developed by the researcher was applicable to practice within the recovery framework in mental health rehabilitation. In this study, groups who received the adapted DMT intervention were compared with groups who received a recovery psychoeducational intervention. Both quantitative and qualitative data were collected and analyzed, and the results are discussed with respect to the literature. The amalgamation between the disciplines of DMT and mental health rehabilitation is discussed, as are considerations for DMT implementation in the mental health recovery context.

Background

Severe mental illness includes mood, anxiety, and psychosis-related disorders that cause changes in thinking, emotions, and behaviors of the person coping with the illness. Psychiatric symptoms such as psychotic episodes, anxiety, and depression affect the person’s social, vocational, and daily functioning (American Psychiatric Association [APA], 2017). Severe mental illness is distinguished from other mental illness by prolonged and serious disruptions in psychological functioning, such as interpersonal difficulties, self-care, and ability to work (Kessler et al., 2001; Ruggeri et al., 2000). The prevalence of SMI for adults age 18 years and older is estimated at a range of approximately 4% to 7% (and growing) of the population in the United States, including schizophrenia (1%), bipolar disorder (up to 9%), and major depressive disorder (estimated at 6.7%; Brown & Wolf, 2018; National Alliance on Mental Illness [NAMI], 2020; National Institute of Mental Health [NIMH], 2017). The World Health Organization
([WHO], 2019) estimated the prevalence of people with schizophrenia worldwide to be 20 million people. This population is marginalized by stigma and, therefore, measures should be and are taken to find adequate support and coping mechanisms for those coping with SMI (Deegan, 1988; Ramon, 2018; WHO, 2019).

Recovery addresses the mental health consumer’s individualized process toward fulfilment and well-being (Anthony, 1993; Deegan, 1988; Markowitz, 2005). It is based on the recognition that people experiencing mental illness can successfully overcome their challenges and live productive lives (Farkas & Anthony, 2001; Onken et al., 2007). Recovery also is described as a multidimensional and holistic approach to mental health rehabilitation. It informs the fields of psychology, psychiatry, and sociology by addressing all aspects of the person’s life, including physical, emotional, mental, spiritual, vocational, and social (Deegan, 2007; Markowitz, 2005; Onken et al., 2007). Mental health recovery has not been singularly defined because it represents a broad spectrum of personal definitions and multiple aspects in the processes of people coping with SMI. The existing definitions, components, and relevant recovery interventions are elaborated in the Literature Review (Chapter 2).

**Dance Movement Therapy**

Dance movement therapy is a form of psychotherapy that uses action-oriented activities such as movement and creative experiential activities (American Dance Therapy Association [ADTA], 2020; Koch & Fischman, 2011). Dance movement therapy has been used and researched with a wide range of populations across the lifespan (Cruz, 2006). It combines the therapist’s specific training and knowledge of movement and the body with traditional psychotherapy methods, which are applied according to clients’ needs (i.e., age, diagnosis, treatment goals). The therapeutic process includes transitioning between visual, kinesthetic, and
verbal modalities, and the therapeutic relationship is built by increasing body awareness and engagement in movement activities (ADTA, 2020). The DMT interventions focus on the consumer’s unique nonverbal movement expressions, including postures, gestures, and intentional movements, as communication. Body movement can be used to address the nonverbal and emotional components of mental illness (Punkanen et al., 2014; Röhricht & Priebe, 2006). Specific research related to DMT and mental health is discussed in the Literature Review (Chapter 2).

**Problem Statement**

The personal, complex, and enduring process of recovery has many facets. It involves active engagement of the person experiencing mental illness, as well as multiple supportive systems. The aim of recovery-oriented services, interventions, and research is to provide effective resources for people in the process of managing their mental illnesses and in leading personally meaningful lives (Lloyd et al., 2008). However, recovery-based interventions are challenged in addressing the entire scope of recovery, and empirical research regarding the application of recovery in peoples’ daily lives, mental health systems, and services is still lacking (Drake & Whitley, 2014).

In Israel, where this study took place, it is estimated that only roughly 40% to 60% of people who are eligible for mental health rehabilitation services (i.e., recognized as having SMI) use them (State of Israel Ministry of Health, 2019). In the United States, around 65% of people with SMI receive treatment, but it is unclear what percentage uses recovery-oriented services (NAMI, 2020; NIMH, 2017). The dropout rates for different psychotherapeutic and psychoeducational interventions worldwide are reportedly high (Fernandez et al., 2015; Schaub et al., 2016). Valid and evidence-based recovery principles may not reach people coping with
SMI; thus, those people may not obtain or practice the self-management techniques that could help improve their quality of life. The focus of this study is on the potential of DMT to increase participants’ capacity to learn and practice recovery-support skills.

Although different psychoeducational interventions address many aspects of recovery, the people involved in the interventions seem to have difficulty activating and utilizing the knowledge they gain about their illness or effective strategies to cope with it (Bowie & Harvey, 2006). The literature has not sufficiently discussed the adaptability of existing interventions to heterogeneous groups (Lal, 2010). Additionally, one symptom of mental illness is a lack of motivation for treatment (Mulder et al., 2014), which must be addressed when implementing recovery interventions. Further, the extant research as yet has not linked recovery components, such as psychological well-being, hope, and spirituality, directly to recovery outcomes (Lehman, 2006; Morin & Franck, 2017).

**Rationale for the Current Study**

Some questions that led to this research were: What kind of intervention could help increase participants’ motivation, persistence, and integration of recovery principles? How could recovery content be made more appealing to participants? What methods would be useful for participants with varying cognitive abilities—that is, to help them to understand and implement recovery principles into their lives? The hypothesis that guided this study was that a recovery-oriented DMT (RODMT) group would produce better recovery outcomes (measured in this study as general recovery and personal engagement) for participants than would the control group receiving traditional interventions. Engaging people mentally and physically through specific body-based activities related to recovery topics is hypothesized to yield higher engagement and
support participants’ recovery. Another hypothesis was that the RODMT participants would exhibit better attendance rates than would the control group.

The DMT techniques applied in RODMT were hoped to foster participants’ learning and motivation to internalize recovery themes, as well as to provide a supportive group in which participants could process their personal recovery emotionally. Dance movement therapy encourages creativity, awareness of self and others, communication, hope, coping-skills development, and self-determination, which are all pertinent recovery objectives (Melsom & Comins, 2016). Although these features have not been studied in the context of mental health recovery, both DMT and the recovery paradigms aim to nurture participants’ well-being and ability to lead fulfilling, meaningful lives. Used with a recovery-oriented focus, DMT might be a useful intervention to complement the psychoeducational recovery interventions already in use.

The RODMT was designed specifically for individuals with a range of cognitive, communication, and functioning abilities for whom existing interventions might not fit or for whom those interventions’ content (generally delivered through conversation and workbooks) is not comprehensible. The RODMT emphasized expressive and experiential-movement activities that foster embodiment of coping strategies such as stress-reduction techniques.

Another purpose of this dissertation was to bridge the fields of DMT and mental health rehabilitation by creating a shared language and fostering interdisciplinary work. Acolin (2016) noted, “DMT theory has not translated many of its core concepts into terms that can be understood by other fields” (p. 313). This researcher hopes this dissertation can clarify some DMT terms, principles, and concepts so that DMT will be received better in recovery work. To the best of the researcher’s knowledge, this is the first study that brings together DMT and the
recovery paradigm for people experiencing SMI. Increasing the body of research can affect application of policies and interventions across mental health systems worldwide.

**Research Paradigms and Assumptions**

This study’s framework was drawn from the fields of creative arts therapies, pedagogy, neurology, and current mental health paradigms. Through body-movement expression, DMT allows focus on feeling states that can be integrated with cognitive and affective processes (Koch & Fischman, 2011; Migliore, 2017). The dance movement therapist helps participants become aware of the dialogue between their inner and outer experiences and gain personal meaning for their psychological processes. Group DMT also focuses on interactions among participants, which often is communicated through nonverbal expression and directly relates to participants’ well-being and social integration. This is important because mind–body techniques and arts-based activities generally are not included in traditional recovery psychoeducational interventions. Additionally, those interventions do not emphasize participants’ emotional processing, group dynamics, or facilitator-participant alliances (Cooper et al., 2016; McGuire et al., 2016; Moran et al., 2014).

A combination of different arts therapies modalities has been theorized to support the embodiment of personal experience and psychological transformation (Kossak, 2015; Lusebrink, 1992; Pashler et al., 2008). These modalities involve using symbolization through kinesthetic, visual, and auditory senses. Further, based on her experiences as a learner and a therapist, this researcher believed that engaging in creative and expressive activities would be more enjoyable, personalized, meaningful, and perhaps influence participants’ motivation to persist with the intervention.
Pilot Study

This research followed a pilot study conducted in Israel in 2017 (Bendel-Rozow, 2017) comparing two groups of individuals with SMI ($N = 19$) whose ages ranged from 25 to 65 years. Participants received five group sessions of either the Illness Management and Recovery (IMR) coping with stress module or RODMT techniques for stress management. Participants in both groups were asked throughout the program and in a closing session what they had obtained from the program. Findings showed no significant differences between the groups in the amount of stress-management knowledge they had gained. However, a thematic analysis (of the group interviews) revealed that more participants in the DMT group than in the IMR group experienced their group as meaningful and empowering. The pilot study concluded that DMT might be a useful instrument to enhance recovery processes among people coping with SMI.

Thus, in the current study, this researcher anticipated that the topics covered in the RODMT group might be better understood among participants who received body-based methods and creative expression than those who experienced more traditional methods.
CHAPTER 2

Literature Review

Recovery Approaches in Mental Health Rehabilitation

Since the 1960s, the approach to treating people with SMI has shifted from long-term hospital care that was isolating toward treatment in the community with psychiatric medication and psychotherapy, and ultimately helping them reintegrate into society and rehabilitate areas of their lives that challenge them (Anthony et al., 2003; Lehman et al., 2004). The U.S. Community Mental Health Act of 1963 was the first step toward dramatic changes in the field of mental health, which were enhanced further during the 1980s.

The concepts of psychiatric rehabilitation and recovery from mental illness emerged directly from people who experienced mental illness (Deegan, 1988) and from a process of deinstitutionalization (Corrigan & Ralph, 2005). Other factors that contributed to their development were economics (Field & Reed, 2016), realization that psychiatric medications target symptoms but do not improve cognitive impairments or other facets of well-being (Mishara & Goldberg, 2004), and advancements in psychiatric pharmacology.

The term, recovery, relates to the individual’s personal experience in coping with SMI (Deegan, 1988). Rehabilitation in mental health, or psychiatric rehabilitation, refers to the services provided to promote the individual’s recovery process and support different aspects of their life (Anthony, 2000). Rehabilitation services focus on outcomes. They are meant to help people achieve meaningful lives and accomplish their recovery goals (Farkas & Anthony, 2010). Grounded by egalitarian attitudes and values, the recovery model has been the most accepted approach to mental health rehabilitation and is studied worldwide. It has been implemented in policies, disability acts, and practice in several Western countries, including the United States,
Canada, Australia, New Zealand, Israel, the United Kingdom, and other European countries (Khoury, 2019; Lal, 2010; State of Israel Ministry of Health, 2000). Naturally, different countries apply different healthcare policies and offer different mental health services. However, a wide variety of services, models, and interventions established in psychiatric rehabilitation foster personal care, encourage social interaction, support vocational aspirations, and provide residential solutions (Farkas & Anthony, 2010; Lal, 2010; Lloyd et al., 2008). Integration of recovery in community-based practice occurs in the context of the person’s life. It requires understanding the complexity of community and relationships, as well as flexibility (Khoury, 2019). Because of the changing mental health policies, system complexities, social and self-stigma, and naturally slow societal evolvement, society has a long way to go to fully integrate people who are experiencing mental illness; however, it is progressing in that direction (Drake & Whitley, 2014; Ramon, 2018).

**Mental Health Recovery**

Recovery has many definitions and facets that are relevant to the current study and, therefore, it is explored in this literature review. As noted earlier, recovery refers to a personal process in which changes in personal beliefs, attitudes, and goals may occur among people coping with SMI (Anthony, 1993). Recovery involves finding a way to live a meaningful, fulfilling, and satisfying life despite the “limitations caused by the illness” (Anthony, 1993, p. 13; see also Farkas & Anthony, 2001). It holds the premises that mental illness can be managed and that each person—according to the individual’s needs and strengths—has the potential for growth and change (Anthony, 1993). Mueser et al. (2002) elaborated, “Recovery occurs when people with mental illness discover, or rediscover, their strengths and abilities for pursuing personal goals and develop a sense of identity that allows them to grow beyond their
mental illness” (p. 1272). Recovery is a phenomenon that occurs naturally over time; as with other medical conditions, proper treatment supports it (Corrigan & Ralph, 2005).

The recovery approach fundamentally derives from both a “person-centered” vision (Rogers, 1951) and sociological approaches. Markowitz (2005) summarized that, according to bio-psychosocial models, mental illness results from a combination of biological tendencies and social factors, such as relationships, personal trauma, and poverty, that cause stress and negatively affect individuals’ psychological states. Based on the understanding that many aspects influence human well-being and functioning abilities, the recovery approach encourages people who experience mental illness to seek support in all areas of life.

Deegan (1988) emphasized the role of the person’s “lived experience” in the process of recovery and added, “Recovery is an attitude, a stance, and a way of approaching the day’s challenges. It is a self-directed process of reclaiming meaning and purpose in life” (Deegan, 2005, p. 67). The recovery approach highlights the consumers’ active role in making decisions about treatment, setting and pursuing personal goals, and leading their own processes—also referred to as self-determination—as well as engaging in meaningful activities and participating in the general community. These principles promote empowerment and hope for recovery (Lloyd et al., 2008; Mueser et al., 2002; Stanhope et al., 2013). Andresen et al. (2006) suggested five psychological stages to the recovery process: the moratorium phase is characterized by a deep sense of despair or helplessness, followed by the stages of awareness, preparation, rebuilding identity and actively setting goals, and growth, in which resilience and a sense of fulfilment are achieved. Those authors stressed that although these stages are essentially developmental, due to the individual nature of recovery, the process is not linear; it occurs at the individual’s pace. For
instance, people who identify themselves as in a high stage of recovery still may experience relapse. However, the relapse does not indicate regression to a previous stage of recovery.

Recovery also is viewed as a multidimensional paradigm. Six recovery dimensions have been identified: clinical, personal or psychological, self-care, social, occupational, and environmental/contextual recovery (Lal, 2010; Lehman, 2006; Lloyd et al., 2008; Onken et al., 2007). More recently, the term *social recovery* has gained popularity. It is viewed as another dimension of recovery that stresses people’s role as “active citizens.” Social recovery speaks of “the journey of people experiencing mental ill health toward regaining social recognition and acceptance, in the form of their social identity and presence” (Ramon, 2018, p. 1). This concept takes the idea of inclusion one step forward into sharing responsibility for a healthy, accepting, and egalitarian society for all its members.

Within those recovery dimensions, critical components of recovery—such as hope, self-direction, individualization, empowerment, psychological well-being, and spirituality—have been identified (Anthony, 1993; Corrigan & Ralph, 2005; Rodgers et al., 2007). Further core elements were added, including awareness, purpose and meaning, healing, power, and integration (Onken et al., 2007). In recent years, the literature has given more emphasis to participants’ autonomy, sense of agency, shared decision-making, and choice (Drake & Whitley, 2014).

**Research in Recovery and Psychiatric Rehabilitation**

Research on the recovery approach is continually discussed, published, and applied in different fields, such as psychiatry, psychology, occupational therapy, social work, and nursing (Lal, 2010; NAMI, 2020). Recovery research, together with recovery practice, began development once treatment moved away from long-term hospitalization to treatment in the
Researchers aspired to attain better understanding of the needs of people coping with mental illness in order to improve the services they receive (Deegan, 2007; Farkas & Anthony, 2001). Thus, the wide scope of recovery research touches upon its various dimensions. These research areas include medication management (Deegan, 2007), supported housing services (Mueser et al., 2002), supported employment and education (Roe et al., 2007), peer support (Salzer et al., 2010), stigma (Mannarini & Rossi, 2018), support for families (Lloyd et al., 2008), and recovery implementation in mental health systems (Khoury, 2019). Empirical studies primarily have focused on different aspects of well-being, recovery interventions, illness management, and support systems for successful inclusion in the community (Roberts et al., 2014; Simon et al., 2017; Vreeland et al., 2006; Waldemar et al., 2016).

Qualitative measures generally capture personal recovery journeys, whereas quantitative instruments measure the efficacy of supports and services provided. Mixed-methods studies are appropriate for research in recovery because they consider both the participants’ subjective experiences and the objective outcomes (Rodgers et al., 2007). Limitations in many studies presented in this paper were small sample sizes in quantitative studies and difficulty isolating dependent variables from other influences on participant well-being.

**Recovery Outcomes and Measurements**

An axiom in recovery research is that personal experiences of people living with mental illness must be considered; that is, research should focus on what participants describe as crucial for them in their processes (Anthony et al., 2003). Anthony (2000, 2001) and, more recently, Drake and Whitley (2014), pointed out the complexity of measuring recovery outcomes because they are individualized and influenced by various factors. Many recovery components are subjective and therefore difficult to quantify. However, quantitative measures are available for
most, for example, self-efficacy, personal strengths, self-determination, support systems, adjustment to disability, medication efficacy, personal growth, empowerment, and life experience (Anthony, 2001; Lal, 2010). Other recovery outcomes that are easier to quantify might be clinical and psychological outcomes, such as symptom management and people’s satisfaction with different areas of their lives. Those outcomes, which can be measured with direct metrics such as number of hospitalizations or absence of symptoms, assess the respondents’ ability to adapt to life in the community (Rodgers et al., 2007; Salyers et al., 2007).

Additionally, measurements are used to assess “recovery-related factors,” which are “actions and events that tend to be correlated with consumers’ recovery, even though the consumers may not necessarily associate them with their own personal journey” (Luszczakoski et al., 2014, p. 897). Subjective measurements that capture participants’ perceptions on symptom management, hope and confidence, activation and engagement, readiness for change, pursuit of goals, and reliance on self or others have been developed (Corrigan et al., 2004; Luszczakoski et al., 2014; Salyers et al., 2007). For example, some surveys include questions about participation and involvement in employment, studies, leisure activities, substance use or abuse, relapse, and treatment compliance (Campbell-Orde et al., 2005; Luszczakoski et al., 2014).

### Challenges in Recovery Framework and Research

Over the last four decades, recovery has been discussed and critiqued in the literature in multiple contexts. Critiques have addressed a range of issues such as the broadness of the term recovery and approaches within it (Lal, 2010; Lloyd et al., 2008), diversity of the population in recovery (Farkas & Anthony, 2001; Field & Reed, 2016), poorly implemented recovery-oriented practice (Drake & Whitley, 2014; Slade et al., 2014), focus on outcome over process, challenges
defining and measuring recovery outcomes, and the subjectivity of consumers’ experiences (Lusczakoski et al., 2014).

**Ambiguity**

The term *recovery* remains vague; it is interchangeably presented as a framework, concept, approach, model, vision, and paradigm (Lal, 2010; Price-Robertson et al., 2017). The definitions of recovery continuously evolve because it relates to a wide population and consists of many layers (Anthony et al., 2003; Substance Abuse and Mental Health Administration, 2017). Corrigan and Ralph (2005) pointed out the definitional confusion surrounding recovery—sometimes it is defined as a mental health treatment outcome and, other times, as a process. These definitions vary depending upon whether consumers, care providers, or pharmaceutical companies are using the terminology. Whereas mental health consumers tend to define recovery as a process of leading a meaningful life, the medical definition focuses on symptom reduction and functional capacity in daily life tasks (Morin & Franck, 2017).

In the mental health rehabilitation literature, the population receiving mental health services is interchangeably referred to as “patients,” “clients,” “consumers,” “service users,” and, more recently, “people experiencing mental illness.” Although the use of differing terms and definitions for the population in recovery may seem confusing, the exchangeable terminology is congruent with the rehabilitation focus on the *person* rather than the *diagnosis* (Farkas & Anthony, 2010).

**Diversity**

The definition of the population in need of psychiatric rehabilitation has broadened as well. Psychiatric rehabilitation consumers include “people with . . . diagnosed psychiatric experiences that limit their capacity to perform certain tasks and functions (e.g., interacting with
family and friends, interviewing for a job) and their ability to perform in certain roles (e.g., worker, student)” (Farkas & Anthony, 2001, pp. 120–121). This inclusion is particularly weighty in recovery research because it involves a widely heterogeneous study population.

Although recovery research participants share the burden of having an SMI, their diagnoses vary (including schizophrenia-spectrum disorders and mood disorders), and the participants are in different stages of the recovery process (Corrigan & Ralph, 2005; Hasson-Ohayon et al., 2007; Olkin & Taliaferro, 2006; Salyers et al., 2007). Other aspects of heterogeneity within the population in recovery are cultural diversity and individual differences among study participants, such as gender, age, nationality, and religion, which directly affect their recovery processes. In his critical review of recovery research, Lal (2010) cited several examples of studies that stressed the limited knowledge about the role of cultural values, sociopolitical influences, and diversity-related issues in recovery and in mental health treatment in general. Thus, the recovery research is often generic and nonspecific because it implies that recovery interventions are applicable to all subpopulations, to consumers who have different functioning abilities, and to people who are in different phases of recovery. Additionally, research focused on early intervention (e.g., after first episode or at early stages of psychiatric symptom appearance) among children and adolescents has begun to gain evidential support only in recent years (Simon et al., 2017).

Another argument related to diversity (Price-Robertson et al., 2017) is that the recovery approach may focus primarily on individualism and not emphasize enough the interpersonal and perhaps most complex aspects of consumers’ lives. The culturally sensitive and collaborative relational recovery approach stresses the importance of participants’ relationships and interactions in all systems, including family, peers, professionals, and associates. According to
Price-Robertson et al. (2017), this approach entails all core components of recovery, such as hope and empowerment, and makes room for individualized lived experience. This broader outlook and other newer recovery perspectives have yet to be researched.

Finally, although research on recovery is widespread, there is still need for evidence-based practice studies to establish adequate-outcome recovery norms, identify the contribution of recovery components to outcomes, and develop interventions that can capture different aspects of recovery (Price-Robertson et al., 2017; Slade, 2010).

**Evidence-Based Practices in Psychiatric Rehabilitation**

The development of rehabilitation services, practices, and recommendations for supporting people experiencing SMI has been based on empirical research that considers both consumers’ voices directly and the insights of practitioners across an array of professions. Although recovery is fundamentally an individualized framework—and generalization is handled with caution—people experiencing mental illness share common cognitive, social, and functional skills deficits (APA, 2017) that challenge their successful integration into society. In addition, the choice of focus, topic, and skills that recovery-oriented practices need to address also have been based on empirical understandings of the hindrances that mental illness causes in different areas of life.

People with schizophrenia experience overall cognitive impairment and reduced performance compared with people who do not have schizophrenia (Dickinson et al., 2008; Gold & Dickenson, 2013; Hill et al., 2009; Schaefer et al., 2013). Cognitive deficit in schizophrenia is thought to be generalized across the broad range of cognitive functions. That is, cognitive impairments seen in schizophrenia may be attributed to overall difficulty integrating the different cognitive functions, resulting in lower abilities in complex tasks than people without
Researchers have identified a broad range of cognitive abilities that schizophrenia and schizoaffective disorder affected, including attention, working memory, verbal fluency, learning ability, and executive functions (Bilder et al., 2000; Bowie & Harvey, 2006; Caspi et al., 2003; Fioravanti et al., 2012; M. F. Green et al., 2000; Van Snellenberg et al., 2016). Cognitive deficits in schizophrenia are associated with neural dysfunction of specific areas in the brain (Garrison et al., 2017; Van Snellenberg et al., 2016), as well as dysfunction of the dopamine neurotransmitter (Abi-Dargham et al., 2002) and dopamine abnormalities directly linked to poor working memory function (Cools & D’Esposito, 2011; Van Snellenberg et al., 2016).

Cognitive impairments affect people’s ability to arrange, encode, and apply information to different life situations (Bowie & Harvey, 2006; M. F. Green et al., 2000). This knowledge, combined with evidence-based practice research, has led to the development of several psychosocial and psychoeducational interventions for supporting people with SMI that are consistent with the recovery approach and values (Slade et al., 2014).

**Overview of Recovery-Oriented Interventions**

Various evidence-based, recovery-oriented practices in different life areas have been established and implemented in psychiatric rehabilitation settings around the world. They aim to foster the emotional and social aspects of well-being, enhance consumers’ recovery processes, foster successful inclusion in the community, and improve rehabilitation services (Farkas & Anthony, 2010; Morin & Franck, 2017; Roe et al., 2007). Psychiatric rehabilitation interventions include support, skills development (i.e., vocational, social, and functional skills), supported employment, and recovery-oriented interventions that combine psychological approaches such as cognitive-behavioral therapy (CBT) and social skills, coping skills, and illness management.
training (Farkas & Anthony, 2010; Morin & Franck, 2017; Slade et al., 2014; Turner et al., 2018).

No single intervention covers all recovery dimensions (personal, clinical, social, and functional recovery) or can address all recovery components (Lehman, 2006; Lloyd et al., 2008). This literature review focuses on recovery-oriented interventions because they are most relevant to the present study. However, the scope of recovery-oriented practices and interventions is much wider; it was not possible to include them all in this paper.

**Psychological and Psychoeducational Interventions: Foundations of Current Recovery and Rehabilitation Practices**

Current recovery-oriented interventions are based on the psychological interventions of cognitive remediation, CBT, and psychoeducation. Those methods are strongest when combined with rehabilitation approaches such as social skills training (Turner et al., 2018) or supported employment. Cognitive remediation interventions aim to improve daily functioning skills by training clients to use targeted cognitive skills, such as attention, memory, and reasoning (McGurk et al., 2007). The CBT interventions target the clients’ ability to cope with symptoms of psychosis and distress. They increase clients’ awareness of the relationships among their thoughts, feelings, and behaviors and teach practical coping skills (Mueser et al., 2002).

Psychoeducation refers to structured and didactic interventions, often delivered in a form of a course, that provide participants with resources and information about mental illness and treatment (Xia et al., 2011). Different psychoeducational interventions are offered for mental health consumers than for their families but entail similar content and structure (Morin & Franck, 2017).
Morin and Franck’s (2017) systematic review surveyed 80 studies to assess the efficacy of cognitive remediation, CBT, and psychoeducation programs for people with schizophrenia. Based on several meta-analyses, the researchers found that cognitive remediation had a significant impact on cognitive performance, with medium effect size (ES) ranging between 0.41 and 0.45 and small ES on psychological functioning, including negative symptom, social, and work ability (ES = 0.28–0.36). There were discrepancies in the literature. For instance, some studies found cognitive remediation to be more effective for older participants with chronic conditions compared to young participants with early psychosis, whereas other studies showed the opposite.

Results for CBT programs were mostly consistent across more than 40 studies in Morin and Franck’s (2017) systematic review of rehabilitation interventions to promote recovery in schizophrenia. They found cognitive therapy to be the most effective tool for positive and negative symptom reduction (average ES = 0.40) in the short and long terms. Examination of CBT-based social-skills training programs (23 trails) revealed efficacy in social functioning (ES = 0.39–0.52), behavioral skills (ES = 0.77), and participant satisfaction. Some studies presented positive effects on reducing symptoms and relapse (M. M. Kurtz & Mueser, 2008; Turner et al., 2018); others did not (Pfammatter et al., 2006). Based on the research, it is recommended to offer 16 or more CBT sessions to gain full efficacy. Psychoeducational programs showed significant decreases in relapse and rehospitalization and increases in knowledge gain and, to some extent, functioning level. However, effects of different measures were inconsistent among studies. The inference regarding psychoeducation for schizophrenia was that its content needs to be adapted to its participants’ recovery stages.
Morin and Franck (2017) concluded that the three techniques—cognitive remediation, CBT, and psychoeducational—are complementary because they support different effects. Therefore, the combined use of these techniques is the best trajectory for improvement of functional outcomes in schizophrenia. Adaptations and feasibility of techniques and combination of methods should be considered for each program based on each participant’s issues and stage of illness.

Using a recovery-oriented lens, Mueser et al. (2002) reviewed 40 randomized controlled studies that focused on illness management. A wide range of illness management strategies, including coping strategies, relapse prevention, stress management, problem-solving, and goal-setting, were used in different programs. Gaining knowledge was found to be central to consumers’ ability to make informed decisions, engage in their own treatment, and become change agents for themselves. Although those findings remained inconclusive due to different treatments, durations, and measures in the reviewed studies, Mueser et al. concluded that developing illness-management skills is essential for consumers’ recovery.

Psychological interventions were reported to help with symptom reduction and coping with aspects of the illness itself (McGurk et al., 2007; Morin & Franck, 2017; Mueser et al., 2002, 2008). However, it was recognized in the literature that gaining knowledge about the illness alone is not enough to help individuals learn better illness-management skills or engage in the recovery process. Additionally, older forms of psychological and psychoeducational interventions in themselves were found to be inconsistent with some core recovery values, such as engaging consumers in their choice of personal goals and treatment (Farkas & Anthony, 2010; Hasson-Ohayon et al., 2007). Thus, to implement these interventions successfully, facilitators should address the recovery values and emphasize participants’ engagement.
Recovery-Oriented Interventions

Some commonly used and studied recovery-oriented programs are the Illness Management and Recovery (IMR) program, the Wellness Recovery Action Plan, Social Cognition Interaction Training, Narrative Enhancement and Cognitive Therapy for self-stigma, assessing and developing readiness for rehabilitation, and self-advocacy interventions. These interventions are based on self-help workbooks and administered through primarily verbal discussion (Onken et al., 2007; Roe et al., 2007). They include motivational interviewing (Miller & Rollnick, 1991) and cognitive behavioral techniques (Mueser et al., 2002).

With specific respect to skills training compared to support groups, Schaub et al. (2016) conducted a randomized controlled trial (RCT) to assess whether an illness-management group program delivered to 196 participants with schizophrenia during hospitalization had a long-term effect. Participants were assigned to 12 sessions of either a cognitive-oriented program, which included education and coping strategies, or a supportive therapy group, which did not. The groups were compared for psychosocial functioning, symptoms, knowledge about their illness, and rehospitalization. Data were collected in the hospital before and immediately after the program, as well as 1 year and 2 years later in the community.

Results indicated a significant main effect of time, showing improvements from the post-treatment assessment to the 1- and 2-year follow-up assessments that favored the cognitive-oriented program group in most outcomes, including the Brief Psychiatric Rating expanded scale, $F(2, 321) = 10.96, p < .001$, but not its depression or knowledge about their illness scales. No differences between groups were found for rehospitalization rates. Based on that study’s results, Schaub et al. (2016) advocated for early intervention and showed that cognitive-oriented coping programs for people experiencing SMI have long-term effects.
Illness Management and Recovery is the most comprehensive program that is both congruent with the recovery paradigm (McGuire et al., 2016) and effective in assisting participants to gain knowledge about their illness and develop and pursue personal goals (Hasson-Ohayon et al., 2007; McGuire et al., 2014). The IMR has been implemented and extensively researched in different countries around the world, including the United States, Sweden, Japan, and Israel (Saylers et al., 2014). It serves as a basis for the current study.

The IMR is a curriculum-based, standardized psychological program to teach people with SMI to identify and “pursue personally meaningful goals” (Gingerich & Mueser, 2005, p. 204). Administered in either individual or group settings for the duration of approximately 1 year, it covers 11 topic areas of recovery and incorporates empirically supported strategies: psychoeducation, cognitive-behavioral methods for medication management, relapse prevention planning, social skills training, and coping skills training for symptom management (McGuire et al., 2016; Mueser et al., 2006; Salyers et al., 2014). The IMR’s leading assumption is that, by setting and pursuing personal goals, participants increase their motivation to learn and apply the skills and strategies taught in the IMR, which may lead to concrete changes in their lives. Additionally, by learning how to manage their psychiatric symptoms, participants are thought to gain a sense of control and become more coherent regarding their notion of recovery (Gingerich & Mueser, 2005).

In their research, McGuire et al. (2016) defined and examined the critical elements of the IMR. The elements the experts considered most impactful on outcomes were recovery orientation, motivational enhancement, relapse prevention, goal-setting and follow-up, teaching coping skills, using cognitive-behavioral methods, and therapeutic relationships. The authors
concluded that there is a cumulative effect to implementing numerous elements of the IMR to foster the program’s outcomes. Hasson-Ohayon et al. (2007) examined the efficacy of the IMR program’s group format in 13 rehabilitation services in Israel (N = 210). Participants with a range of psychiatric diagnoses were randomly assigned either to an IMR group that met weekly for approximately 8 months (n = 119) or to a control group (n = 91) that did not receive the IMR. To provide data for assessing their knowledge about mental illness, coping efficacy, and social support before and after the program, clients completed the IMR Scale (IMRS), Coping Efficacy Scale, and the Multidimensional Scale of Perceived Social Support, which, according to those authors, have moderate-to-high reliability and validity. Additionally, case managers completed the IMRS clinicians’ version for each participant before and after the program.

Clients who received the IMR demonstrated significant improvement toward personal goals, $F(1, 148) = 7.07, p < .01$, and in knowledge about their illness, $F(1, 146) = 15.30, p < .001$. The time by interaction effect for clients’ total score was statistically significant, $F(1, 111) = 6.87, p < .05$, indicating the ongoing group setting is important for participants to comprehend the recovery process (Hasson-Ohayon et al., 2007). Nevertheless, improvement in coping was significant over time both in the IMR group and in the control group. Although potentially biased, the clinicians also reported significant improvement in the overall illness-management and recovery outcome of participants who attended the IMR program. Finally, a somewhat surprising outcome of Hasson-Ohayon et al.’s (2007) study was that no change in social support was found in either group. Additionally, the researchers expressed the need for clinicians to be flexible in their methods during the sessions.
Two other RCTs using the IMR in supportive housing settings in New York (Levitt et al., 2009) and in outpatient rehabilitation centers in Sweden (Färdig, Lewander, Melin et al., 2011) confirmed the IMR as effective for their respective study populations. However, Jensen et al.’s (2019) RCT in Denmark revealed no significant differences in global assessment between the IMR and treatment-as-usual groups from various community-based mental health centers ($N = 198$). A study that compared the IMR with another psychoeducational group resulted in participants’ improvement in several recovery components in both groups, with no significant differences between them (Salyers et al., 2014).

Limitations of the IMR that appeared in the Salyers et al. (2014) study were participant dropout and low attendance rates. Additionally, IMR teaching methods and other “non-specific therapeutic factors” (p. 5) that may influence the treatment have not been studied yet but should be compared with an active control group. Finally, although central recovery components such as hope, empowerment, self-esteem, self-efficacy, spirituality, and social support were integrated into the IMR, studies did not demonstrate empirically that they were enhanced (Hasson-Ohayon et al., 2007, 2008; Lal, 2010; McGuire et al., 2016).

*Further Considerations for Recovery-Oriented Group Work*

**Motivation, Engagement, and Dropout**

Perhaps the greatest challenges both mental health professionals and people in recovery face are motivation and engagement in the personal recovery process (Farkas & Anthony, 2010; Morin & Franck, 2017; Mulder et al., 2014). One indicator of participants’ lack of engagement is the dropout rates that have been recorded across recovery and psychosocial interventions (Fernandez et al., 2015; Najavits, 2015; Salyers et al., 2014; Villeneuve et al., 2010). The
literature lacks empirically based practices to enhance motivation and engagement in recovery interventions and to address the barriers often ingrained in the illnesses themselves.

Delivery Methods

Studies and reviews of recovery-oriented interventions did not discuss thoroughly the adaptability of the interventions to participants with varying cognitive or communication abilities. Many psychosocial interventions require the abilities to read, write, and follow a workbook, which may challenge some participants and result in their disengagement or dropout. Cognitive deficits, such as in attention or memory, or other illness-related factors, such as restlessness, often hinder participants’ ability to endure hour-long verbal sessions or integrate group content. Thus, important recovery content may not be easily accessible to all participants.

In their research, McGuire et al. (2016) found that only 33% of IMR experts strongly agreed that fidelity to the IMR curriculum was impactful. This finding leads to considering how adapting the manual might improve treatment effectiveness. A workbook format in any psychoeducational intervention may not be engaging on its own; rather, it leans on the facilitators’ skills to engage group participants, transfer the information comprehensibly, and form therapeutic alliances. In any type of group, the facilitator’s ability to deepen the conversation and concentrate on group dynamics and issues is beyond following a manual or protocol. Notably, dance movement therapists receive master-level training to accommodate such focus and adaptations as an integral part of DMT. It seems reasonable to consider that facilitators with less training and skill might be more likely to apply the workbook verbatim and unintentionally neglect the therapeutic components of group work.
Common Factors for Group Work

Messer and Wampold (2002) argued that many measurements used in the research on group work do not consider specific “ingredients” that may have crucial effects on treatment success. They wrote that these ingredients, such as the client–therapist relationship, the client’s belief in the treatment rationale, the therapist’s or researcher’s belief in the treatment’s efficacy, and the way in which the treatment is delivered based on the therapist’s skill and personality, also contribute to the treatment’s efficacy. Barber (2009) claimed that although therapeutic alliance is a key component of therapy, the direct influence of alliance on the outcome is unclear. Additionally, the role of technique on the therapy outcome is tied primarily to the therapists’ competence in delivering it; the therapist’s flexibility allows for unintended positive consequences to emerge.

Type of Intervention

Based on results of several meta-analyses that compared active psychotherapy treatments in general, Messer and Wampold (2002) reported no significant differences among therapies. Treatments with specific protocols and that are supported by theory and research, such as CBT, were found to be no more effective than treatments that were not associated with a specific theoretical framework, such as supportive counseling. This finding contradicted the reasonable expectation that treatments that follow manuals and are meant to ensure delivery of essential therapeutic components would be more effective than those that do not follow specific protocols. Further, evidence from different meta-analyses (Messer & Wampold, 2002) indicated that the use of manuals did not increase the psychotherapy benefits.

Despite compelling research findings regarding specific components in recovery-oriented programs, there is still room for further research focused on other recovery principles, such as
hope, social support, social interaction, empowerment, spirituality, self-expression and creativity, and meaningful activity. Moreover, additional research on curriculum adjustments, delivery methods, engagement of diverse group participants, and other elements that may induce well-being and positive recovery outcomes seems pertinent (Messer & Wampold, 2002; Salyers et al., 2007). Thus far, no existing recovery-oriented program incorporates mind–body techniques or any form of creative activities to enhance the participants’ recovery process and learning.

Creative Arts Therapies and Dance Movement Therapy

_Creative arts therapies_ (CAT), also referred to as _expressive arts therapies_, are forms of psychotherapy that support people’s emotional, cognitive, physical, and social needs through engagement in creative arts processes. The CAT include DMT, visual arts, writing, music, and drama (International Expressive Arts Therapy Association, 2014; National Coalition of Creative Arts Therapies Associations, n.d.). In practice, CAT offer clients one or more creative modalities in individual or group settings that can be provided to different populations. They derive from a wide range of philosophies and theories, including person-centered approaches, psychodynamic theories, critical and feminist theories, sociocultural approaches, embodied theories, and aesthetic paradigms (Brooke, 2006; Koch, 2017; Sajnani, 2012).

Historically, the arts have been used as tools to reduce human suffering and increase health because artistic creation is thought to awaken spiritual, emotional, and social yearnings (Evans, 2007; Knill et al., 2005). McNiff (2014) added that engagement in artistic creation may contribute to personal and psychological transformation. The CAT have intuitively addressed mind–body connection, self-expression through creativity, and the role of witnessing in the therapeutic process (Johnson, 1999; Knill et al., 2005; Kossak, 2015; McNiff, 2014).
The practice of CAT has gained evidential support across different populations (Murphy, 2013; Van Lith et al., 2013). Several studies using arts therapies in psychiatric rehabilitation settings had promising results regarding their efficacy in supporting aspects of the recovery process (Allan et al., 2015; Grocke et al., 2009; McCaffrey et al., 2011; Moran & Alon, 2011). Additionally, England’s National Collaborating Centre for Mental Health ([NCCMH], 2014) recommended using arts therapies in a comprehensive guideline for treatment and management of psychosis and schizophrenia, based on studies that showed the effectiveness of arts therapies in reducing negative symptoms among outpatient and inpatient populations. The NCCMH reported finding “consistent evidence to indicate a medium effect size regardless of the modality used within the intervention (that is, music, body-orientated or art)” (p. 219).

Dance Movement Therapy

Theoretically, dancing satisfies people’s needs for sensual stimulation in self-soothing, connecting with the inner self, and communicating with others (Chaiklin & Schmais, 1993). Furthermore, dance encourages play, creativity, and relating to others, which may lead to a sense of belonging and pleasure (Halprin, 2003). Engaging in creative processes, such as dancing or making art, is hypothesized to stimulate the nervous system and allow psychological changes to occur (Acolin, 2016; Hass-Cohen, 2008). The value of movement in health and treatment has been studied, and the importance of mind–body connections is becoming more accepted in different disciplines (Acolin, 2016; Blanc, 2019; Bräuninger, 2014; Cruz, 2016; Koch et al., 2019; Röhricht et al., 2014).

Dance movement therapy is a graduate-level profession developed in the United States since the early 1940s. It specifically uses movement and dance to help integrate all aspects of the client’s psychological needs, as well as to foster communication, self-expression, and functional
adaptation (ADTA, 2020). Additional aims of the DMT process are to help participants find meaning, advance personal goals, and gain a sense of control over their lives by participating in movement-based expressive activities (Bullington et al., 2005; Havsteen-Franklin et al., 2017; Van Lith et al., 2013). The clinical bases of DMT are interconnectivity between mind and body, connections between the person and the environment, and interpersonal connections (Goodill, 2005; Koch & Fischman, 2011; Vasičáková Očenášová, 2016). The practice leans on movement-based paradigms and different psychotherapeutic approaches, as well as growing knowledge in the field of neurology.

In the DMT session, the therapist offers participants an opportunity to explore themes and personal experiences through freestyle movement and action-oriented activities, such as mirroring someone else’s movement or creating a movement sequence that corresponds with a theme being explored. Each movement activity has a rationale and specific aims. The therapist chooses and adapts appropriate DMT methods, techniques, and activities according to the client’s needs. The therapeutic process involves transitioning through movement and other sensory materials, which then are integrated and verbally processed to assist clients in gaining awareness and integration of their feelings, thoughts, and actions (Nemetz, 1995). As Evans (2007) described, “The creative process is composed of moments and abilities that solve the problem of translating inner thoughts and feelings into an external medium, that is, of articulating meaning” (p. 93). Transitioning between different modalities is thought to encourage “mental flexibility” (p. 100) and increase coherence and resonance. Resonance, or embodied experience, is achieved by exploring themes that emerge from the creative process from different angles (Gillies et al., 2005; Kossak, 2015).
Embodiment is a core concept in CAT and particularly in DMT. Embodiment refers to the process of obtaining and embedding knowledge from sensorimotor experiences. Embodiment theories propose a connection between emotions and bodily expression. The body is perceived as a central part of cognition that contains and processes ever-changing emotions, perceptions, and behaviors (Koch & Fischman, 2011; Migliore, 2017). With the discovery of mirror neurons (a set of neurons activated in the brain by observing an action or an expression, similar to when a direct action is performed) in the 1990s, it was hypothesized that the basis for people’s empathic ability and capacity to have diverse intersubjective experiences is built structurally into the brain (Gallese & Ferri, 2015; Goldman & de Vignemont, 2009). Neuroscience research has linked mirror neurons to cognitive and social development, including attachment, empathy, attunement, emotional recognition, and morality (Gallese et al., 2007; Rizzolatti et al., 2001). Gallese and Ferri (2015) claimed that by mimicking others’ motor actions, people can both understand one another better and learn behaviors from others. Further, Goldman and de Vignemont (2009) asserted that body representations, such as facial mimicry or movement mirroring, play a central role in social cognition—they serve as part of the cognitive process of interpreting social situations. However, the authors also acknowledged that these understandings are still in the early stages of research.

Interestingly, one of the most basic techniques used in DMT is movement reflection, in which the dance movement therapist mirrors the participants’ movement or elements of it. Berrol (2006) suggested that mirroring in DMT generates connectivity between the therapist and the client, which then can foster embodiment and a better understanding of self and other. Further, the use of mirroring in DMT offers the client an opportunity for self-expression and reconnection with the outer world. McGarry and Russo (2011) also wrote about mirroring in DMT but
differentiated this technique from nontherapeutic mimicry. They claimed the motor simulation that occurs when using the mirroring technique in DMT engages the mirror neuron system and thus can be used intentionally to foster empathy among clients. McGarry and Russo explained, “To understand another’s emotional movements, we activate the neural areas associated with creation of these movements, which in turn affects the limbic system, enhancing our sensations of the emotions associated with these movements” (pp. 182–183). The outcome of this process is a better understanding of other people by feeling their emotions or intentions.

*Neurodiversity* and *neuroplasticity* are newer terms that refer to the neurological diversity among people and the brain’s ability to change over time in response to repeated experiences (Voss et al., 2017). The concept of the brain’s plasticity highlights the importance of learning through experience for mind–body integration, adaptation to change, and function. Hence, practicing flexibility through movement activities such as improvisation or shifting between different movements may enhance self-perception, awareness, and problem-solving abilities and contribute to self-efficacy and functioning (Weidenhorfer & Koch, 2017; Yaniv, 2018). However, the empirical body of knowledge is not yet strong enough to support these ideas about the relationship between mind and body functions.

Embodiment approaches and therapies are increasingly applied to support pharmaceutical treatment for people coping with SMI to reduce negative symptoms and increase well-being (Martin, Pohlmann et al., 2016). Koch (2017) offered an *embodied aesthetics framework* for CAT that focuses on the combination of active artistic expression and receptive sensual experience. She identified five factors unique to CAT practice: (a) *hedonism*, the enjoyment from creativity and play that may contribute to flexibility and therapeutic relationship; (b) *aesthetics*, authenticity and appreciation for the beauty in the creation, which speaks of self-efficacy and
empowerment to be true to oneself; (c) nonverbal meaning-making, using metaphor and symbolism for self-expression beyond words, which helps participants feel seen and offers more ways for communication to serve cognitive, interpersonal, and affective purposes; (d) inactive transitional support, the artistic expression serving as a safe and controlled tool for holding participants’ transitions and therapeutic transformations; and (e) generativity, which speaks to productivity, self-efficacy, and function.

**Core Principles of the Dance Movement Therapy Group Work**

In 1942, DMT pioneer Marian Chace began working at St. Elizabeth’s Hospital in Washington, DC. There, she developed treatment methods for groups through movement and dance based on careful observations and direct communication with patients (Levy, 2005). Chace used participants’ individual “spontaneous movement expressions” (p. 4), as well as group rhythms and specific movement elements, to communicate with patients and attain group and individual goals (Cruz, 2001). Trained dance movement therapists still use Chace’s group therapy techniques to work with people coping with mental illness. Chace embedded the core DMT principle *empathic reflection*, in which the therapist responds to participants’ movement expressions by sensitively reflecting them back to the group in a supportive and empathic way (Sandel, 1993). Simultaneously, dance movement therapists tune in to and become aware of their own sensations and reaction to participants’ nonverbal expressions. This process, called *kinesthetic empathy*, aids therapists to better understand the participants’ perspective or feelings and to establish the therapeutic relationship (Cardillo, 2018; Dosamantes-Beaudry, 2007). These unique DMT techniques are especially valuable when participants do not express themselves through words; in group work, the techniques are useful to increase participants’ sense of belonging and validation (Blanc, 2019).
The DMT group setting offers participants opportunities to learn from each other’s experiences, as well as gain reflections and immediate feedback for their actions from the group (Denhardt & Denhardt, 2006). Movement activities in the DMT session encourage collaboration among participants and challenge them to explore alternatives for resolution instead of repeating old patterns. Experiential learning (D. A. Kolb, 1984) and transformative learning (Mezirow, 1991) are central concepts practiced in DMT group work.

Experiential learning is a reflective process of learning through experiencing that occurs through learners’ active engagement and interactions with their environment (A. Y. Kolb & Kolb, 2005). Transformative learning expands on the experiential learning theory. Some core elements of transformative learning are individual experience, critical reflection, and group work and dialogue (Mezirow & Taylor, 2009; Taylor & Cranton, 2012). Transformative learning adds dimensions, including cognitive, emotional, physical, social, and spiritual processing of an experience, to the learning process. Transformation and change result from the relationship among all learning dimensions and not necessarily in an educational setting (Dirkx, 2001; Papastamatis & Panitsides, 2014). Therefore, enacted expression—that is, combining action (movement), affect, and cognition—which is the essence of DMT, is crucial for learning and integrating knowledge (Koch & Fuchs, 2011; Röhricht et al., 2014).

In DMT, transformative learning is achieved by the therapist creating engaging, embodied activities for participants, followed by a reflective personal and group processing of the experiences. In brief, the experiential activity raises sensations, feelings, and thoughts, which are brought to awareness through movement and artistic expression. The therapist highlights this awareness, encouraging clients to share their insights. Such verbal processing helps clients clarify the awareness for themselves, integrate the insight with the experience, and transfer the
insight into an action plan for daily life. Thus, insights that arise from the sessions are revisited in the group over time to reinforce their application, implications, and implementation in daily life. The chosen experiential activities enable this integration. However, empiric research regarding the contribution of the arts to transformative learnings is limited (Wallace, 2007).

**Dance Movement Therapy with Adults Coping with Severe Mental Illness**

Different controlled studies that varied in their populations, settings, and severity of mental illness examined the effects of DMT on psychological outcomes and will be discussed in the next section. However, a common thread among them indicated that DMT reduces anxiety, depression, and negative symptoms in schizophrenia; enhances interpersonal relationships; supports stress management; and fosters well-being and quality of life (Bräuninger, 2012b, 2014; Goodill, 2018; Koch et al., 2019; Martin, Pohlmann et al., 2016; NCCMH, 2014; Punkanen et al., 2014). These quality-of-life components that DMT addresses resonate well with recovery outcomes, such as adjustment to the disability, empowerment, and self-determination. Despite the increase in DMT research in recent years, there remains a need for more empirical studies in the field (Cruz, 2016; Cruz & Berrol, 2019; Goodill, 2018; Karkou & Meekums, 2017).

Two meta-analyses of DMT with people experiencing mental illness (not SMI) found ESs quite comparable to other interventions types for a range of symptoms (Cruz & Sabers, 1998; Koch et al., 2014). However, Cochrane reviews conducted on DMT in schizophrenia and depression have not yielded conclusive evidence of efficacy, possibly because too few studies met Cochrane criteria (Meekums et al., 2015; Ren & Xia, 2013).

One recent meta-analysis (Koch et al., 2019) included 41 controlled intervention studies that evaluated the effects of dance and movement on psychological outcomes ($N = 2,374$). Those studies were conducted between 2012 and 2018 in different countries and with different
populations. Of the 41 studies, 21 were of DMT interventions and 20 were of other types of
dance or movement interventions for health-related outcomes. Koch et al. made a point to choose
only studies that exhibited an acceptable degree of validity and reliability. Although the studies
varied in quality, all included a control group and measured common psychological variables
that were subanalyzed and clustered into the psychological outcome categories for the meta-
analysis. The psychological outcomes included several quality-of-life aspects, such as well-being
and self-efficacy, and clinical outcomes, such as anxiety, depression, residual symptoms,
interpersonal skills, and cognitive skills. The researchers calculated a standardized effect model
to estimate generalized intervention effects across studies.

Koch et al.’s (2019) results indicated an overall medium effect for DMT and other
movement interventions ($d = 0.60$). The subanalysis yielded medium-to-large effects in anxiety
($d = 0.47, p = .015$), depression ($d = 0.54, p < .001$), and psychological variables ($d = 0.88,
p = .009$) and a small effect in positive symptoms of psychosis ($d = 0.40, p = .05$), all of which
had high heterogeneity. Based on sensitivity analyses, Koch et al. found DMT to have more
consistent but smaller effects than other dance-based interventions for the variables assessed.
The ES differences were assumed to relate to the target populations’ heterogeneity. Of the 21
DMT studies, most were conducted in clinical settings with adult participants coping with a
range of severe disabilities, including SMI ($n = 6$), autism, and dementia, and thus not expected
to present with quick and major changes. Conversely, the dance studies ($n = 20$) were conducted
mostly in nonclinical settings with a larger variety of age ranges, cultures, and methods.

Among the DMT studies, the overall mean effect size was small but significant ($d = 0.35,
p < .001$) and homogeneous (Koch et al., 2019). Affect changes, including changes in anxiety
and depression, were the main outcome in the DMT studies, with a moderate and significant
effect size \((d = 0.51, p = .003)\). A small but significant effect size was noted in quality of life \((d = 0.32, p = .036)\) and cognitive skills \((d = 0.26, p = .011)\). Thus, Koch et al.’s meta-analysis provided evidence-based support for DMT as an effective intervention in several disorders and for symptoms including anxiety and depression. It highlighted the contribution of DMT to the well-being and quality of life of adults, shown by a decrease in symptoms and a positive effect on mood and affect.

**Dance Movement Therapy and Schizophrenia Research**

According to Gallese and Ferri’s (2014) findings, people with schizophrenia have a disturbance in the perception of the bodily self. That is, they experience a separation of body from emotions, which makes it more difficult for them to recognize their body sensations and match them to feelings or emotional states. This deficit impedes the person’s ability to relate to self and others, and thus negatively affects interpersonal relationships. These neurologically based findings suggest it might be beneficial to use movement-based practice to induce the mind–body connection in people coping with SMI.

Lee et al. (2015) examined how participation in a 12-week DMT group affected psychotic symptoms among inpatient participants coping with schizophrenia in a hospital in South Korea. Participants were randomly assigned either to a DMT group \((n = 18)\) or to an inactive control group \((n = 20)\). All participants received pharmacological treatment. Pre- and post-measurements administered were the State-Trait Anger Expression Inventory, Beck Depression Inventory (BDI), State-Trait Anxiety Inventory, and Positive and Negative Syndrome Scale.

Compared to the control group results, the DMT group exhibited significant decreases in anger, \(p < .05\); depression, \(p < .01\), and negative psychotic symptoms, \(p < .01\), and a significant
increase in anger control, \(p < .01\) (Lee et al., 2015). No significant changes in anxiety or improvement in positive symptoms were observed. The study concluded that DMT is an appropriate treatment to reduce negative affect, induce anger control, and improve negative symptoms among people coping with schizophrenia.

Röhricht and Priebe (2006) conducted an RCT that examined the effectiveness of body-oriented psychotherapy (BPT) on the negative symptoms of schizophrenia. Body-oriented psychotherapy shares common attributes with DMT; both methodologies use the practices of mind–body connection and embodied experiences. They also share common techniques, such as warm-up in a circle, grounding and body awareness techniques, mirroring, and creative movement, all of which were used in that study.

The assumption of Röhricht and Priebe’s (2006) study was that the negative symptoms of schizophrenia, emotional withdrawal, and motor retardation might be better addressed using nonverbal methods. Participants with schizophrenia who lived in the community were randomly assigned to a 20-session BPT group (\(n = 24\)) that met twice a week or to a control group (\(n = 21\)) that received group counseling instead. The Positive and Negative Syndrome Scale was administered at baseline, after treatment, and at a 4-month follow-up.

Significantly lower negative symptoms were noted for the BPT group, \(p = .031\); in blunted affect, \(p = .002\); and motor retardation, \(p = .035\). These results remained significant at the 4-month follow-up. Quality of life, satisfaction from treatment, therapeutic relationship, and other psychopathological symptom measurements also were assessed but no significant differences were found between the groups (Röhricht & Priebe, 2006).

Another important difference between the two groups was the attendance rates. The average number of sessions the BPT group attended was significantly higher (\(p < .001\)) than the
number of sessions the counseling group attended (Röhrich & Priebe, 2006). This finding could be attributed to the level of interest and engagement that a movement-oriented session offers or to a specific therapist rather than the psychotherapeutic methods used. Nonetheless, the point that participants more frequently may attend groups that offer movement and creative activity is worth further investigation and might be relevant to recovery-based practices.

More recently, Martin, Koch et al. (2016) examined the effect of a specific embodied intervention for participants with schizophrenia that revealed promising results as well. Röhrich and Papadopoulos developed the 20-session intervention in 2010 (as cited in Martin, Pohlmann et al., 2016). It combined DMT with BPT to address *disembodiment*, or “a disturbance of the embodied self” (p. 2), a feature of schizophrenia. Compared to the nonactive control group (n = 24), participants who received the embodied intervention (n = 44) showed significant reduction in negative symptoms between the pre- and post-intervention on the Scale for the Assessment of Negative Symptoms, \( t(66) = -2.37, p < .05 \). Significant differences also were recorded in the measure’s subcategories of blunted affect, \( t(66) = -2.22, p < .05 \); anhedonia, \( t(66) = -2.37, p < .05 \); and diminished attention, \( t(66) = -2.70, p < .01 \). Differences in the overall negative changes between groups were attributed to the intervention, \( F(1, 60.01) = 4.73, p = .03, r = 0.27 \).

However, another RCT (Priebe et al., 2016) found no clinical benefit to BPT on negative symptoms in schizophrenia. That study compared two active groups of participants with schizophrenia (N = 275) who received 20 sessions of either BPT or Pilates in a community-based mental health service in the United Kingdom. There was no significant difference between groups in negative symptoms of schizophrenia. In her search of the literature for this review, the researcher of the current study found Priebe et al.’s (2016) study to be the only one in which both the study group and the control group were active movement-based groups. Perhaps the positive
effect that DMT or BPT had on people coping with schizophrenia could be attributed to the engagement and activeness that body-oriented intervention offers.

**Dance Movement Therapy and Depression Research**

Depression is a major psychological state that is salient for people in recovery. It may appear as a primary or secondary diagnosis or as a negative symptom of other mental illnesses (APA, 2013). Studies have shown an association between depression and motor-control deficiencies, such as slumped posture, swaying movements, arm swing, and slow walk (Lemke et al., 2000; Michalak et al., 2009). Dance, physical activity, and CAT have been found to have a positive effect on reducing depression (Mala et al., 2012). Specific research on DMT’s effect on depression is still in progress.

In a systematic Cochrane review, Meekums et al. (2015) found no clinically significant effect of DMT on depression; only three studies met the Cochrane criteria. Although a positive effect was observed in the one study that examined adult outpatient participants, there was no reliable evidence for DMT’s effect on depression. Other measures reviewed were quality of life, self-esteem, and social functioning, none of which returned quality evidence.

However, Karkou et al. (2019) concluded in a recent systemic analysis that DMT intervention was effective for adults coping with mild-to-severe depression. The eight RCT studies that met the criteria for the review evaluated the effect of varied (12- to 20-session) DMT models on the severity of depression. All studies’ results showed decreased depression symptoms after the DMT intervention. A sensitivity analysis on the higher quality studies revealed a stronger impact of DMT on decreasing the depression level than with the treatment-as-usual groups (standard mean difference = -0.82). Two of these studies are detailed in the following paragraphs.
Punkanen et al. (2014) examined the effectiveness of a short-term group ($N = 17$) DMT intervention in reducing symptoms of depression. A further objective was to understand the relationship between depression and other outcome measures, such as anxiety and personality traits. Because 72% of participants had different degrees of anxiety in addition to the primary diagnosis of depression, the research addressed the dimension of secondary symptoms. Groups of five participants each received 20 DMT sessions with average participation of 17 sessions.

Five normed self-report outcome measures for depression, anxiety, relationship, and personality inventories—the BDI, Hospital Anxiety and Depression Scale, Ten-Item Personality Inventory, Toronto Alexithymia Scale, and Relationship Questionnaire—were administered to participants before and after the DMT group intervention.

Results showed a statistically significant decrease in depression symptoms after the DMT intervention, $t(17) = 10.40, p < .001$ (Punkanen et al., 2014). Additionally, decreases in anxiety and other secondary measures were statistically significant. Primary limitations of this study were that it did not have a control group and the researchers did not conduct a follow-up assessment to estimate the intervention’s lasting effects. Additionally, the study sample size was small, and it was not clear which DMT approach or techniques were used.

Another study offered a 12-session DMT group for outpatient adults with depression ($N = 33$) in Finland (Pylvanainen et al., 2015). The DMT sessions focused on general themes, including mindfulness skills and exploration of boundaries, emotions, and relations with the surroundings. Results indicated a significant difference ($p = .013$) in the Symptom Check List-90, which assesses a range of psychiatric symptoms such as anxiety, depression, and somatization. These results favored the DMT intervention over the control group, which included optional psychoeducational groups.
Dance Movement Therapy and Stress and Anxiety Research

Bräuninger (2012a) conducted an RCT in Germany among people who identified as “suffering from stress” to evaluate the efficacy of a 10-week DMT group on participants’ stress and stress management. Notably, exclusion criteria for participation in the study were any form of psychotherapeutic treatment within 12 months from the study’s commencement or a psychiatric diagnosis. Data on participants who started other therapies before the end of data collection were not included in the study. A total of 162 participants (ages 16–65 years) who suffered from stress were assigned randomly to either a DMT \((n = 97)\) or an inactive control group \((n = 65)\). The study used two standardized measures of stress: the Brief Symptom Inventory, which measures general strain and emotional, cognitive, and physical distress symptoms, and the Coping and Stress Questionnaire, which measures stress management and coping styles. Those measures were administered to all participants at baseline and 10 weeks and 6 months after the DMT group ended.

Short-term results indicated significant distress reduction among DMT participants over the control group, specifically in the BDI scales of anxiety \((p < .005)\), phobic anxiety \((p < .010)\), obsessive compulsiveness \((p < .050)\), depression \((p < .050)\), psychoticism \((p < .050)\), positive symptom distress \((p < .020)\), global severity \((p < .050)\), and negative strategies \((p < .005); Bräuninger, 2012a\). Long-term effects of DMT showed significantly sustained improvement in interpersonal sensitivity \((p < .050)\), depression \((p = .000)\), phobic anxiety \((p < .050)\), paranoid ideation \((p < .005)\), psychoticism \((p < .050)\), global severity \((p < .010)\), and negative strategies \((p < .050)\). The study demonstrated that DMT is an effective treatment to improve stress-management strategies and reduce stress. However, a study limitation was the exclusion of people with a psychiatric disorder. Further, the rationale for choosing a wide target population
was not discussed; study participation was open to any person who experienced stress, but the participants’ stress levels were not measured. Additionally, most participants were women (91%); thus, male representation was weak.

In conclusion, the research on DMT is promising but needs further development (Meekums, 2010), and the limited specific evidence that addressed the effectiveness of DMT with people experiencing mental illness was sometimes equivocal (Barton, 2011; Goodill, 2016). Whereas some studies empirically demonstrated the efficacy of DMT in promoting well-being and improving quality of life (e.g., Koch et al., 2014; Wiedenhofer & Koch, 2017), others failed to include samples large enough to show significant findings for DMT in treating depression (Mala et al., 2012) or improving quality of life for people coping with schizophrenia (Röhricht & Priebe, 2006).

Notably, research on DMT for people coping with SMI focused primarily on symptom reduction in specific diagnoses, which is only one aspect of recovery. Nonetheless, DMT has been recognized to benefit specific facets of well-being, such as reducing stress (Bräuninger, 2012a) and increasing self-esteem, self-efficacy (Wiedenhofer & Koch, 2017), spontaneity, and expression (Punkanen et al., 2014), which are all components of recovery. However, these DMT features were not researched in the context of mental health recovery. Thus, the connections between DMT and recovery need to be explored further. Moreover, group interventions in community-based psychiatric rehabilitation settings generally tend to be highly heterogeneous with participants of different sexes, ages, diagnoses, and backgrounds. Additionally, DMT addresses recovery aspects, such as creativity, self-expression, interconnectivity, communication, transformation, and self-determination, which are not embedded sufficiently in current recovery.
interventions. Thus, a wider perspective in DMT research and mental health recovery should be adopted.

**Dance Movement Therapy and Creative Arts Therapies in the Recovery Framework**

Melsom and Comins (2016), two dance movement therapists, wrote about a DMT recovery model that combined the Chacian process group approach in DMT with the evidence-based stage approach to recovery. They discussed how recovery elements such as hope, motivation, engagement, and resilience, which DMT supports, work for people coping with SMI. Such discussion about recovery-oriented work in the field of CAT is growing (Allan et al., 2015; Spandler et al., 2007)—as consumers’ hospitalization periods generally are shrinking to a minimum, creative arts therapists who work with the psychiatric population are moving instead into community-based mental health services.

To date, only a small number of DMT and other CAT intervention studies that took a recovery approach and were conducted in recovery-oriented settings have been published. Those studies showed that engagement in the arts can benefit the recovery process and improve different aspects of participants’ well-being (Barton, 2011; Papagiannaki & Shinebourne, 2016; Van Lith, 2015). However, this researcher found no single empirical study that specifically linked DMT with the recovery approach in mental health or examined the use of DMT to deliver recovery concepts and principles—that is, there was no specified DMT-recovery intervention. Therefore, the following review includes studies that examined the practice of other CAT within the recovery framework, with a focus on group interventions. Although DMT and other CAT differ in techniques, they hold similar group-therapy components and philosophical foundations (Johnson, 1999; Knill et al., 2005; Kossak, 2015).
Barton (2011) conducted a qualitative study evaluating a DMT-and-yoga therapy program for people in a U.S. rehabilitation center who were coping with SMI. The aim of the 20-week program was to assist participants in developing insight and lifestyle changes by using DMT, mindfulness, and yoga therapy techniques and group counseling. The focus of the structured movement experiences in the DMT-and-yoga therapy program was on awareness, stress reduction, coping skills, self-expression, and pro-social behavior. The eight participants who completed the program and the evaluation process were members of an outpatient, long-term-care rehabilitation services center where they also participated in group activities and socialization programs.

Data were collected through surveys, in-depth interviews, and clinical observations that Barton (2011) recorded after each session. The surveys, which Barton developed, included four closed- and open-ended questions and were distributed every 4 weeks. Participants could respond in written, verbal, or other expressive ways, such as drawing. The surveys focused on understanding participants’ perceptions of the group experience and applications to daily social processes. Barton interviewed the eight participants using open-ended questions, seeking to evaluate how they used “movement-based coping skills” (p. 165) and whether the group experience contributed to their stress-management abilities and interpersonal skills in daily life. Additionally, that researcher interviewed four clinical counselors who participated in the program, using a different set of questions. Barton aimed to get a sense of how the counselors viewed the effects of the DMT-and-yoga program on participants compared to programs the facility offered to other groups.

A thematic data analysis revealed six themes, which Barton (2011) discussed in the study. All participants affirmed improved ability to relax and reported feeling empowered by this
new ability. All described incorporating some aspect of the techniques they had learned in the group into their daily lives. Most reported improvement in interpersonal relationships and some ability to identify emotional states, and even to use movement, mindfulness, or music to shift from one emotional state to another. Additionally, all participants concluded that the experiential learning through structured exercises and creative movement made the group enjoyable and successful, more so than the didactic psychosocial groups they were used to at the rehabilitation center. The interviewed clinicians observed participants using some skills they had learned in the DMT-and-yoga therapy in other groups or heard them talk about implementing them in other settings. Additionally, the clinical staff gave examples of participants’ behavioral shifts, which the staff attributed to participation in the DMT-and-yoga group. However, because the researcher was also the group facilitator, bias should be considered. That is, participants may have given some pleasing responses due to the positive relationship they formed with the researcher.

Nonetheless, Barton (2011) suggested that a movement-based group program may benefit people in recovery from SMI. As a movement-based program, the DMT-and-yoga therapy provided tools to improve participants’ well-being and social functioning in a way that other psychosocial programs do not offer. The experiential component seemed to have made a positive difference to the participants.

Van Lith et al. (2013) systematically reviewed 23 studies that applied arts-based interventions in community-based projects. All the reviewed studies focused on the contribution of arts-based practice to the recovery process among people with mental illness. All studies were reviewed for specific quality criteria upon which the research team agreed and established. Results revealed that participants’ engagement in art had a positive influence on psychological and personal components of recovery. Nineteen of the 23 studies noted psychological recovery
as the key outcome through improved self-esteem, self-discovery, empowerment, self-expression, rebuilding of identity, self-validation, motivation, sense of purpose, and focus and cognition. However, not all studies examined all these constructs, and vagueness in defining some variables appeared. Although engagement in arts was reported to have increased motivation, it was unclear how the researchers determined this. In addition, the self-esteem concept was unclearly described and measured differently across studies. Nonetheless, the opportunity to identify as artists seemed to have contributed to clients’ self-image because they could view themselves as something other than mentally ill people.

Arts-based programs that were offered in a group format and included the constructs of social identity and developing relationships have contributed to social recovery (Van Lith et al., 2013). Participants talked about the arts-based programs offering supportive environments and safe spaces in which they felt freedom, hope, peace, and inclusion. Van Lith et al. (2013) also concluded that because most participants already had experienced one or more forms of art-making prior to participating in these studies, the meaningful outcomes of art-based practice appeared to derive from ongoing engagement with art-making rather than a single art-based program.

Van Lith (2015) conducted multiple-case study research in which she interviewed 12 participants who had mental illness diagnoses and were engaged in some form of art therapy at their rehabilitation centers. The research focus regarded the participants’ art-making experience and its contribution to their recovery process. Each participant was interviewed three times, with 6 months between interviews. The interviews included participants’ completion of the Recovery Enhancing Environment Measure, which had demonstrated adequate internal
consistency reliability but had not been tested yet for validity (Ridgway, 2005). After completing
the measure, participants engaged in an open-ended conversation with the researcher.

An interpretive phenomenological analysis of the interviews illuminated four themes relating to art-making: connection to one’s inner self, increased sense of achievement, art as motivation for well-being, and transcendence through art to a safe space. Van Lith (2015) concluded, “Art making in this study was found to be an important coping tool in addition to being a mechanism for change” (p. 9), and that art-making fostered both intra- and inter-personal awareness among participants. Furthermore, the art-making process helped participants develop more flexible approaches to overcoming personal barriers.

However, Van Lith’s (2015) study provided no information about the art therapy programs in which the participants were involved, offered no details about participants’ previous art-making experiences, and did not demonstrate the scope of participants’ art-making or therapeutic processing of the art. Therefore, it remains unclear whether participants’ awareness of the effects of art on their personal change and other insights were gained by the art-making itself, by processing the artwork during art therapy sessions, or perhaps processing during the research interviews themselves. Additionally, that author used an interpretive analysis; thus, it is difficult to know how much of the author’s understandings derived directly from the participants versus interpretation derived from researcher bias.

Van Lith et al. (2013) summarized numerous limitations to existing arts-based research within rehabilitation: small sample sizes, difficulty recruiting participants in this field, too much leniency in case studies, use of short-term studies, inappropriate diagnostic tools, and unclear processes and techniques used in the studies that make them nearly impossible to replicate. Additionally, because participants usually received other treatment, it was not easy to conclude
that all benefits were directly achieved through the arts-based practice. Nonetheless, Van Lith (2015) and Van Lith et al. (2013) established a valuable link between art therapy and recovery. Participants described how meaningful art was for them and how art-making and discussing the artwork contributed to their personal recovery processes. Furthermore, accumulative research in the field of CAT (Allan et al., 2015; Barton, 2011; McCaffrey et al., 2011; Moran & Alon, 2011; Röhrich & Priebe, 2006; Spandler et al., 2007) foresaw a promising potential for the use of arts therapies in promoting different aspects of well-being and, therefore, for supporting the recovery process.

Allan et al. (2015) assessed the effectiveness of an art therapy in the community (ATIC) program for people transitioning from a hospital setting to living in the community in the United Kingdom. The ATIC program aimed to reduce participants’ distress, increase their social inclusion, and improve their well-being. Forty participants with psychosis related illnesses (n = 25) or depression/anxiety disorders (n = 15) attended the program. However, only 13 participants completed all outcome measures, posing a considerable limitation for the study. Additionally, there was no mention of a control group. Thus, the results should be considered with discretion.

In Allan et al.’s (2015) study, participants were administered two standardized self-reported outcome measures pre- and post-program—the Clinical Outcomes in Routine Evaluation and the Warwick-Edinburgh Mental Well-Being Scale—to assess their mental well-being and functioning. A social inclusion measure also was administered pre- and post-program to evaluate participants’ social acceptance and isolation. Additionally, participants engaged in individual semistructured interviews at the end of their process at ATIC so that researchers could
obtain information regarding the participants’ experiences in the program. A focus group of five other ATIC participants who did not complete the outcome measures was conducted, as well.

Parametric analysis of the quantitative measures indicated a reduced level of psychological distress at the end of the program and an increase in levels of mental well-being ($p < .05; \text{Allan et al., 2015}$). Paired $t$-tests of the CORE measure scores revealed reduced levels of psychological distress between the beginning ($M = 22.61, SD = 6.28$) and end ($M = 18.31, SD = 8.50$), $t(12) = 2.39, p = .034$ of the ATIC program. The Warwick-Edinburgh Mental Well-Being Scale scores indicated an increase in participants’ levels of mental well-being between the program’s beginning ($M = 31.38, SD = 8.85$) and end ($M = 38.62, SD = 10.19$), $t(12) = -2.90, p = .013$. The social isolation measure showed no significant difference in pre–post program scores. Similar results supporting the ATIC’s contribution to the participants’ recovery process were revealed from a thematic analysis of the interviews and focus-group discussions. The data showed that art therapy in a group format contributed to the recovery process.

Moran and Alon (2011) examined the effect of a 10-week playback theater course with adults coping with SMI, such as schizophrenia, PTSD, and major depression. The study was structured through the lens of the recovery model. Participants ($N = 18$) were administered pre–post self-report scales and asked for a written evaluation narrative at the end of the course. The results showed that participants gained personal and interpersonal benefits from the program. Components that participants valued were feeling part of the group, spontaneity, an opportunity for self-expression, movement warmup, relaxation, and a deep sigh of relief.

Although Moran and Alon’s (2011) study introduced an arts-based intervention that could enhance the recovery process for people with mental illness, it had two clear limitations: the sample group was small, and there was a high attrition rate (only half of the 18 original
participants attended more than two-thirds of the meetings). In addition, the participants were volunteers who received academic credit for attending the intervention as part of an integrative program at a university. That incentive raised the question of the students’ motivation to attend and complete the research questionnaires.

The influence of music therapy on social anxiety and quality of life was examined with people enduring SMI in Australia (Grocke et al., 2009). Ten weekly sessions administered at several community centers included singing, songwriting, and improvisation with music instruments. Data were collected from 17 of 29 participants, of which almost half ($n = 8$) had been diagnosed with schizophrenia. A mixed-method design was applied to assess improvement in quality of life and reduction in social anxiety.

In Grocke et al.’s (2009) research, qualitative measures included thematic analysis of songs participants wrote over the course of the study, which revealed that they were especially occupied with difficulty in managing their illness and developing coping skills. Participants also said that working in a group setting was enjoyable. The researchers obtained data about social interaction, quality of life, symptom severity, and anxiety by administering and statistically analyzing three standardized scales before and after the program. Total scores for both symptom severity and social interactions scales showed no statistically significant change as a result of the music therapy program.

However, significant differences ($p < 0.05$) were noted in $t$-test results for five items on the quality-of-life inventory, indicating improvement in general quality of life, satisfaction with general health, social support, and leisure activities and decrease in physical pain (Grocke et al., 2009). The only significant result observed in the social-anxiety scale was difficulty in making eye contact ($t = 3.83$, $p = .001$). However, in that study, the music therapy treatment was not
compared with any other treatment or control group. Therefore, results could be attributed to other factors, such as time constraints or therapeutic rapport rather than music therapy itself. Although the study was conducted in a community setting, the term recovery was not addressed (Grocke et al., 2009). On the other hand, McCaffrey et al. (2011) discussed the role of music therapy in mental health recovery. They concluded, “The recovery philosophy of care mirrors some of the core principles of music therapy, including the importance of the therapeutic relationship and the possibilities for change and growth within this” (p. 185).

As part of a national survey in the United Kingdom, Spandler et al. (2007) assessed the contribution of arts projects to recovery in mental health. Through qualitative measures, they evaluated the relationship between participation in art-based projects and recovery features that are challenging to measure, such as developing a sense of purpose or hope, creating meaning, rebuilding identities, and evolving coping skills. The researchers chose six arts projects administered in the United Kingdom. Each had different aims, populations, methods, and duration, but all were offered to people with a range of mental health needs in community settings.

Spandler et al. (2007) conducted in-depth interviews with 34 participants about the different arts-based projects and then applied thematic analysis to the responses. From the interviews, the researchers learned that most participants gained a sense of meaning and purpose from their engagement in the arts. Participants gave examples of how this engagement inspired and motivated them to become more engaged in other areas of their lives, take part in more activities in their leisure time, or develop other interests. Some participants described how engagement in the arts helped them develop coping strategies, such as relaxation, shifting focus,
and self-expression. In addition, some interviewees indicated that arts participation contributed to rebuilding their personal identities and feelings of self-worth.

Although the use of direct “recovery talk” (Spandler et al., 2007, p. 797) was not evident among all interviewees, some directly linked their participation in arts to their recovery process. Notably, one common theme participants mentioned was the importance of the arts projects having a mental health focus as opposed to art lessons offered in the general community. This preference was probably due to the sense of safety and belonging they felt in a mental health setting. Although Spandler et al. (2007) emphasized the various benefits that could be gained by art-making and creative expression, they acknowledged that not everyone would find it meaningful. Based on their findings, they suggested that arts and creativity be considered as potential contributors to mental health recovery.

**Conclusions**

The evidence base in the field of rehabilitation in mental health has led to the development of several interventions to teach people to manage their illness better and improve the quality of their lives. However, some of those interventions may be limited in their capacity to address some aspects of recovery, which is a complex and multidimensional process (Farkas & Anthony, 2010; Lal, 2010; Onken et al., 2007). As of this writing, all recovery interventions that are considered evidence-based practice and widely used in rehabilitation settings are based primarily on workbooks and verbal discussion in group or individual work. Those interventions have been found to be consistent with the recovery approach and important instruments to enhance various aspects of illness management. Nonetheless, they lack evidential support for fostering creativity, social interaction, social inclusion, spirituality, and other central recovery concepts. No existing intervention offers participants sufficient pathways for, or practice of,
symptom reduction or stress management, rather, they teach about them. These recovery interventions do not incorporate mind–body techniques or any form of creative activity to enhance the recovery process.

Neither have CAT been well integrated into rehabilitation services, although their value for those with mental health issues has been recognized (Allan et al., 2015; Grocke et al., 2009; Moran & Alon, 2011; Van Lith, 2015). However, only a handful of arts-based research studies in mental health rehabilitation examined relationships between CAT and recovery (Havsteen-Franklin et al., 2017; Van Lith et al., 2013), and specific amalgamations between DMT and the recovery approach have not appeared yet in research. Further research is needed to understand better which recovery components best contribute to personally defined positive outcomes and to assess the most efficient delivery methods for participants’ comprehension of the recovery principles.
CHAPTER 3

Methods

This researcher, a qualified dance movement therapist and supervisor and certified IMR facilitator with over 10 years experience in group facilitation using both methodologies, developed RODMT, a DMT intervention that is recovery oriented. The RODMT was examined in this study by comparing it to a standard recovery program. Specifically, adult participants experiencing SMI took part in 13-week groups at different psychiatric rehabilitation sites in Israel. Some groups were given part of the IMR program and some were given the new RODMT program that corresponded to the same IMR topics. Before and after the interventions, consenting participants completed standardized self-assessment recovery surveys that included demographic information. Those surveys were used to compare the two interventions. Participants’ knowledge gain was tested during the intervention and compared between groups. Additionally, some RODMT participants were interviewed before and after the intervention to capture their experiences from the group.

This study used mixed methods to explore both the participants’ subjective experiences and the objective outcomes (Rodgers et al., 2007). A guiding axiom that led to designing this mixed-methods study was that research in the field of recovery must focus on what consumers describe as crucial for them in their process (Anthony et al., 2003).

Mixed-methods research designs, which combine qualitative and quantitative methods, have the aim to engage participants in the research process to reduce the gaps between theory and practice and to gain participants’ community empowerment. They can provide a more accurate and holistic understanding of a research topic (Ponterotto et al., 2013).
The rationale for using an active, versus a treatment-as-usual, control group was to strengthen the design (Hollon, 2006) to ensure methodological rigor and specificity because new interventions should be evaluated against the best available treatments in the field (Castro, 2007; Kinser & Robins, 2013).

**Design**

This quasi-experimental study compared nine active intervention groups—five RODMT and four IMR control groups—in different community-based psychiatric rehabilitation programs throughout Israel. The study was authorized by the Israeli Ministry of Health Psychiatric Rehabilitation Department (Appendix A), the Lesley University Internal Review Board (Appendix B), and each rehabilitation agency in which the groups were conducted. All groups received a total of 13 one-hour weekly sessions between October 2018 and March 2019. The content delivered to all groups was the same—recovery and illness management—but the delivery methods differed between groups.

All participants provided informed consent to complete measures and be part of the group (Appendix C). Participants completed a self-report demographic information survey before the intervention and two standardized self-assessment surveys before and after the 13 sessions. In addition, before and after each topic in the intervention, participants completed knowledge questionnaires specific to the topic content. Staff at the rehabilitation sites assessed participants’ recovery state before and after the 13 sessions. A subset of RODMT participants were interviewed before and after their participation in the program.

**Group Design and Content**

This study offered adult participants with SMI who were living in Israel a 13-session group intervention for recovery and illness management. The sessions in all groups (five
RODMT and four IMR) specifically focused on three topics from the IMR workbook: social support development, goal development, and stress management.

For the purpose of group comparison, all groups followed the same structure but used either DMT or IMR methods to deliver the content (Table 1): first, an introduction session, then five sessions about developing social support, followed by two sessions on developing personal goals and five more sessions on coping with stress. The choice to spend five sessions on the topics of social support and stress management was based on the suggested length for these topics in the IMR (Gingerich & Mueser, 2011). Additional considerations for limiting the research to 13 sessions were the challenges of perseverance and motivation within this population (Mulder et al., 2014) and the lack of evidence to support superiority of long- over short-term psychotherapeutic treatment (Knekt et al., 2016; Laaksonen et al., 2013). Lastly, these limits allowed a more controlled trial among the groups (spread in different sites) with different facilitators.
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<td>Recovery definition</td>
<td>Developing social support</td>
<td>Personal goals</td>
<td>Coping with stress</td>
<td></td>
</tr>
<tr>
<td>Recover definition</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>Develop term <em>supportive relationship</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2–6</td>
<td></td>
<td>Explore strategies to develop and strengthen relationships</td>
<td>Identify personal goals</td>
<td>Increase awareness of stress causes, signs, and management strategies</td>
<td></td>
</tr>
<tr>
<td>7–8</td>
<td></td>
<td>Learn strategies to develop and strengthen relationships</td>
<td>Experiential group process of breaking a goal into smaller, attainable objectives</td>
<td>Movement warmup; include repetition of stress-reduction exercises</td>
<td></td>
</tr>
<tr>
<td>9–13</td>
<td></td>
<td>Practice communication techniques</td>
<td>Movement closure</td>
<td>Identify and practice varied stress-management and relaxation techniques: breathing, stress-release movement (e.g., body tapping, brushing, shaking off, jumping, using voice)</td>
<td></td>
</tr>
<tr>
<td>Introduction session (identical in both groups):</td>
<td></td>
<td></td>
<td></td>
<td>Process group experiences and session closure in movement</td>
<td></td>
</tr>
<tr>
<td>Acquaintances—game with ball</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Develop group contract and environment—discussition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creative process to draw personal meaning for recovery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow IMR workbook, Module 4, develop social support, make new connections, pleasant conversations, sharing, exposure, understanding others; practice role-playing</td>
<td></td>
<td>Facilitators are suggested to use IMR workbook Module 1, <em>goal development</em> section, as basis for two sessions on personal goals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge inquiry on developing social support (begin Session 2 and end Session 6)</td>
<td></td>
<td></td>
<td>Knowledge inquiry on coping with stress (begin Session 9 and end Session 13)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Session:</td>
<td></td>
<td></td>
<td>Post-Session 13:</td>
<td></td>
<td></td>
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<tr>
<td>Consent forms</td>
<td></td>
<td></td>
<td>IMRS-client</td>
<td></td>
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<tr>
<td>Demographic data</td>
<td></td>
<td></td>
<td>IMRS-clinician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMRS-client</td>
<td></td>
<td></td>
<td>PAM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAM</td>
<td></td>
<td></td>
<td>5 RODMT participant interviews</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The introduction session was identical in all groups. It focused on introductions among group members and the facilitator, creating group cohesion, defining recovery, and identifying initial personal goals. The rationale for beginning by developing social support was to strengthen relationships within the group and to foster participants’ self-efficacy, motivation, and engagement before delving into more personal recovery challenges. The topic of stress management was left to the end because participants require some acclimatization to DMT language and use of movement-based techniques practiced during the initial sessions. For example, activities associating sensations, feelings, and thoughts; using imagery and symbolic movement expressions; and feeling comfortable moving to music in front of others can be practiced in initial sessions. Additionally, the topic of stress management can be personal or emotionally provoking for some participants. Thus, reaching a level of safety and intimacy in the initial sessions would allow participants to expose authentic stress-related issues in later sessions.

**Recovery-Oriented Dance Movement Therapy Groups**

Grounded in DMT methods, the RODMT sessions incorporated movement-based experiential activities with the aim to explore participants’ personal experiences, enhance their self-expression, encourage self-reflection, increase awareness and attentiveness to self and peers, develop and learn from group dynamics, gain knowledge regarding recovery topics covered in the intervention, and practice different coping skills. Because the RODMT was based on the recovery framework, it integrated recovery principles and language. No handouts were provided. Instead, facilitators were encouraged to emphasize relationships between participants’ personal experiences in the sessions and their everyday lives. The researcher created this film to explain and visually depict the approach to the RODMT sessions: https://youtu.be/QinlH8XV3vg
After introductions, five sessions focused on developing social support to encourage interpersonal interaction. Experiential activities were chosen for this section with the aim to develop group trust, form a supportive group dynamic, and explore the theme of building and using social support. Specific activities were geared to increasing awareness of self and others, defining supportive relationships, reflecting on participants’ personal goals in the area of social support, gaining knowledge about how and where to meet people, exploring ways to introduce themselves in a new environment, and practicing social interaction using appropriate eye contact, movement gestures, language, and touch (Table 1; see also Appendix D for example session protocols).

One example of the many activities in this context is The Cocktail Party. Participants stand in a circle and, at their own initiation, two people meet at the center. Those two in the center then are asked to respond to a surprise question, such as, “Tell your partner about a hobby of yours or share a childhood dream.” In this activity, the facilitator encourages initiation (take a risk by going to the center and facing a surprise) and brings participants’ attention to how they put themselves forward in a social situation. Facilitators state their observations, for example, suggesting, “Make sure you make eye contact with the person you are meeting; pay attention to your posture (try to show confidence by being upright); and notice gestures such as facial expression (smile).” This is an opportunity to discuss in the group and practice in movement, “How would I want to present myself in a social environment?”

The facilitator then brings participants’ attention to how they responded to the question asked. Were they clear and understood? Did their affect match what they were saying? Did they engage in a conversation or just give a one-word answer? This task requires the participants’ spontaneity, engagement, awareness, and adaptation. In this activity, the rest of the group also
has an active and important role. They practice observation skills, attunement, and peer support (hold a safe and nonjudgmental space for whoever is in the center). They may learn from their peers (because they may be next in the center), and the facilitator encourages them to state their observations and provide helpful suggestions to others. An experienced facilitator would take the opportunity to work on group dynamics by facilitating and modeling how to provide feedback and suggestions to one another in the group.

The two sessions on developing personal goals focused on defining and prioritizing the goals and learning a strategy to break a goal into smaller, attainable tasks. Techniques used in this section included movement with imagery work to help participants shift from having a general dream or aspiration to a defined goal in one area, such as finding a job or advancing to independent housing.

The aim of the five coping with stress sessions was to help participants understand through their bodily experiences how stress feels to them and affects them, as well as to identify and practice coping skills that might serve them in stressful situations. The engaging movement activities corresponded to the themes of increasing awareness of personal stressors (such as a job interview or being late for a meeting) and personal stress signs (such as restlessness or headaches), identifying and practicing stress-reduction techniques, and formulating personal strategies to cope in stressful situations. An example activity is doing stress-release movements in a circle with music. This activity was repeated every session with the aim to internalize the technique. The type of movements offered in the group developed from week to week. They included jumping, kicking, shaking off movements, “brushing the stress off the body,” using sound to express stress release, and more. Guided imagery, breathing techniques, and positive-thinking exercises were practiced, as well.
Recovery-Oriented Dance Movement Therapy Facilitator Recruitment and Training

Five DMT facilitators were recruited for this study; each facilitated a different group. Recruitment was through an open invitation on Facebook to dance movement therapists in Israel and to third-year DMT students from two colleges via email at one college and a workshop presentation at the other. Criteria for facilitating the RODMT were completion of academic requirements for a Master’s degree in DMT or the equivalent in a certificate program (i.e., they needed to have completed internship hours), minimum 2 years DMT field training experience, and experience in group facilitation (not necessarily DMT). The researcher conducted telephone interviews with interested facilitators. Further details about the terms and requirements for participation were sent to suitable facilitators in writing, followed by personal meetings and several telephone conversations (see Appendix E for RODMT facilitator consent form). The RODMT facilitators were not paid to take part in the research; rather, they received RODMT training prior to commencing the groups, as well as individual weekly supervision with the researcher for the study duration.

The RODMT training was a 20-hour course delivered by the researcher to the facilitators. Specifically designed for the facilitators in this study, the training included a review on SMI and the recovery model and an in-depth exploration of the RODMT intervention. In the training course, the researcher demonstrated to the trainees all group session protocols to ensure they understood the context and rationale of each intervention activity. Group protocol follow-ups were conducted weekly during the individual supervision meetings. Before each intervention session, the researcher and facilitator reviewed the upcoming session protocol to clarify it and adapt the language or activities to the level of the group. In this way, the researcher also
confirmed that all facilitators accurately followed the RODMT and ensured consistency across all five study groups.

**Illness Management and Recovery Groups**

Participants in each of the four control (IMR) groups received 13 sessions, including the introduction session with content equivalent to and in the same order as the RODMT groups. The IMR groups followed the *developing social support* and *coping with stress* sections of the IMR (third edition) workbook (Gingerich & Mueser, 2011). For the two goal-development sessions, facilitators were not required to adhere to the IMR workbook protocol because that topic is part of a larger IMR module; rather, they took ideas from it. The IMR is delivered typically through group discussion, reading, writing activities, and some practice of stress-management and role-play techniques (see Appendix F for examples from an IMR session protocol). However, facilitators may use other methods as long as those methods are congruent with the IMR content. In this study, IMR facilitators were instructed to deliver the sessions as they would usually and were not asked to document the methods they used.

**Illness Management and Recovery Facilitator Recruitment and Training**

The IMR group facilitators were recruited from within organizations that agreed to take part in the study. One organization’s administrator recruited three certified IMR facilitators (certification requires completing an Israeli Ministry of Health approved IMR facilitation course) who were interested in starting IMR groups within the programs where they worked; an administrator at a different organization recruited the fourth facilitator.

The latest (third) edition of the IMR workbook had not been translated yet into Hebrew or introduced in Israel. Therefore, for the purposes of this study, the researcher translated its *developing social support* module from English to Hebrew with the permission of author,
Kim Mueser. This module had changed significantly from the second edition; therefore, it seemed important to translate it. The *coping with stress* module did not have major changes between editions. Therefore, the researcher highlighted the differences to the facilitators rather than translate the entire module. The researcher also translated the knowledge questionnaires that had been added to each IMR module in the latest edition. Those questionnaires were used in both the IMR and RODMT group protocols.

Prior to beginning the groups, the researcher met with each IMR facilitator individually to review the study’s procedures, group design, introduction session protocol, newly translated *developing social support* module, and adaptations to the *coping with stress* module. Throughout the study, the researcher was in contact with each IMR facilitator at least weekly to follow up on the groups and the facilitators’ consistency with the research design.

**Settings**

In Israel, people diagnosed with SMI are generally eligible to receive free mental health rehabilitation services from the state. The Israeli Ministry of Health refers them to services based on their individual needs. All groups in this study were hosted by established nonprofit organizations that provided mental health rehabilitation services to people with SMI.

Because most rehabilitation programs in Israel are limited in size, it was not possible to randomize participants to IMR or RODMT groups within any single program. In collaboration with the different organizations, nine programs were chosen to host a group. The four IMR groups were provided at the locations where the IMR facilitators worked, as part of their program’s service. On the other hand, the five RODMT groups were offered to programs geographically accessible to the RODMT facilitators (who did not work for the programs).
Hence, the choice of whether a program received RODMT or IMR as their intervention was decided based on logistical considerations.

Groups were facilitated in different types of rehabilitation services and settings (Table 2). Four groups were provided in residential programs, two in vocational programs, and three in leisure or social club programs. In some programs, members were accustomed to participating in groups together. Vocational and semi-independent residential programs usually did not have groups, but members might interact with each other during work or break time. One RODMT group was formed with eight people who met each other and the facilitator for the first time in the first session. In contrast, one IMR group was facilitated by a residential counselor who had known some residents for over 10 years. In that group, people lived together in the same house and thus knew each other well.
<table>
<thead>
<tr>
<th>Group/session</th>
<th>Program</th>
<th>Service description: Participants</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMR 1</td>
<td>Semi-independent residential</td>
<td>Lived in apartments the agency owned; they met weekly with a social worker and a residential counselor</td>
<td>Petach-Tikva</td>
</tr>
<tr>
<td>IMR 2</td>
<td>Semi-independent residential</td>
<td>Lived in apartments the agency owned; they met weekly with a social worker and a residential counselor</td>
<td>Haifa</td>
</tr>
<tr>
<td>IMR 3</td>
<td>Halfway house</td>
<td>Lived in a shared house with staff available 24 hr/day</td>
<td>Haifa</td>
</tr>
<tr>
<td>IMR 4</td>
<td>Social club</td>
<td>Received leisure activities at the club two or three afternoons each week</td>
<td>Ashdod</td>
</tr>
<tr>
<td>RODMT 5</td>
<td>Vocational day-treatment</td>
<td>Received leisure and self-help groups five days/week; geared toward older participants who could not or did not want to work</td>
<td>Hedera</td>
</tr>
<tr>
<td>RODMT 6</td>
<td>Community-based social-leisure</td>
<td>Integrated in leisure activities offered at the local community center; rehabilitation specialist coordinators catered to consumers individually</td>
<td>Herzliya</td>
</tr>
<tr>
<td>RODMT 7</td>
<td>Agency’s semi-independent residential program and halfway house residents</td>
<td>Lived in apartments in the community or in a building the agency owned; received social worker and residential counselor aid according to their needs</td>
<td>Ramat-Gan</td>
</tr>
<tr>
<td>RODMT 8</td>
<td>Social club</td>
<td>Received leisure activities at the club two or three afternoons a week</td>
<td>Lod</td>
</tr>
<tr>
<td>RODMT 9</td>
<td>Sheltered vocational</td>
<td>Worked in an open-space environment doing simple jobs five days a week; geared toward participants who could or did not want to work in the general community</td>
<td>Ashdod</td>
</tr>
</tbody>
</table>

Note. IMR = Illness Management and Recovery program; RODMT = Recovery-Oriented Dance Movement Therapy intervention.
Participants

Inclusion criteria for this study were to be an adult diagnosed with SMI and receiving psychiatric rehabilitation services approved by the Israeli Ministry of Health. All participants lived in the community, and there were no exclusion criteria for diagnosis or physical ability. Participants were recruited through the programs in which they were already enrolled. Consenting participants at each site were offered the type of group (RODMT or IMR) available at their program, which had been assigned according to logistic considerations.

Prior to recruiting participants, the researcher briefly described the study to the staff at each site, after which they (staff) reached out to program members (potential participants) to attend an introductory meeting with the researcher. Members interested in meeting the researcher to hear about the project signed a consent form to do so. This written consent was a requirement of the Israeli Ministry of Health, separate from the consent form to participate in the study. The researcher conducted an hour-long meeting with potential participants in a group setting. At that meeting, the researcher introduced herself, the study, the type of group (RODMT or IMR), and the topics that would be covered in the group. Participation was presented as a voluntary bonus group offered as an additional part of the program’s services. The researcher made clear that participation in the group was voluntary. No compensation was given for participation.

Only members interested in joining the group stayed after the meeting to read and sign the consent form to participate in the study (Appendix C). The researcher read the consent form aloud, discussed it to aid participants in understanding prior to signing, and stressed that participation was voluntary and confidential. In most groups, the facilitator arrived at the end of the meeting to introduce herself to the group.
Participants in this study were coping with varying SMI diagnoses and receiving mental health services in community-based settings. A total of 125 people showed interest in participating in the study and signed consent forms. Of them, 98 participants started the intervention, completed the initial measures, and attended at least one session in their assigned group—either RODMT \((n = 57)\) or IMR \((n = 41)\).

Participants who yielded data for analysis met both of the following conditions: They completed both pre- and post-intervention measures \((n = 64)\) and attended at least half of the program sessions \((n = 52)\). The rationale for the second criterion was that low and scattered attendance would not result in participants’ learning; having a survey result without attending the program would be meaningless. Thus, 52 participants (29 in RODMT groups and 23 in IMR groups) were included in the data analysis. More detail on attendance and dropout is given in the Results chapter. The mean age of participants was 48 years, most (75%) participants were men, and approximately 80% were experiencing schizophrenia.

**Measures**

To examine the research question about potential contributions of the RODMT to participants’ recovery, differences between the RODMT and the IMR interventions were studied and compared. The variables assessed in this study were participants’ knowledge gain about developing social support and coping with stress, participants’ self-reports of their recovery before and after the intervention, and RODMT participants’ insights from the intervention. Outcomes measurements, discussed in detail in the following sections, were from two perspectives: (a) the participants’ perceptions and (b) the clinicians’ perceptions.
Demographic Information

The self-reported demographic surveys (Appendix G) aimed to map similarities and differences between participants in both interventions to assess the appropriateness of the RODMT intervention to mental health rehabilitation. In addition to basic demographic characteristics such as age, primary occupation, and diagnosis, additional parameters that could influence participants’ engagement in the program were considered: participants’ level of comfort with reading and writing in Hebrew and self-estimated level of attention.

Illness Management and Recovery Scale

The IMRS is a 15-item measure that uses a Likert-scale matrix to assess illness management and progress toward recovery. The IMRS items align with the IMR program sections and include questions about knowledge, symptom management, use of coping strategies, and social support (Mueser et al., 2005). There are two versions of the IMRS, one for participants and another for practitioners.

The purpose of using both client and clinician measures is to assess the interventions’ effectiveness (Hasson-Ohayon et al., 2008). The 15 items of the clinician IMRS are identical to those of the client scale. By reviewing the results together, clinicians and clients support the recovery principles of collaboration and self-determination. Compatibility or differences between the clinicians’ and the clients’ perceptions on their illness management abilities and recovery may be used to further clients’ progress (Sklar et al., 2012).

Both IMRS versions have been found to have satisfactory reliability and meet some validity criteria (Burgess et al., 2010; Hasson-Ohayon et al., 2008). The internal consistency (Cronbach’s alpha) of the client version ranged from .73 to .83 in one study (Fardig, Lewander, Fredriksson, & Melin, 2011) and equaled .82 in another reference (Sklar et al., 2012). The IMRS
was translated to Hebrew, for which internal consistencies were tested and found to be high ($\alpha = .91$; Hasson-Ohayon et al., 2007). In the current study, the IMRS Hebrew versions were used for both participants and clinicians (see Appendix H for English version).

**Patient Activation Measure**

The short version of the Patient Activation Measure (PAM) has 13 items that assess confidence for self-management, knowledge, behaviors, and skills among patients with chronic health issues. The PAM helps participants and their care providers identify the participants’ stage of self-activation related to self-maintaining healthcare on a four-level scale (from being disengaged, through action, to maintenance; Hibbard & Gilburt, 2014). This knowledge may be useful in tailoring interventions. In the current study, it was used to assess whether activation increased between the start and end points of the RODMT versus the IMR interventions. This measure had been tested among participants with mental health challenges and found to be reliable and valid (C. A. Green et al., 2010; Hibbard et al., 2005; Moljord et al., 2015). The PAM was translated into and validated in Hebrew (Magnezi & Glasser, 2014). The researcher was licensed to use the PAM for this study (see Appendix I for PAM license and survey).

**Knowledge Questionnaires**

The knowledge questionnaires chosen for this study are an integrated part of the IMR (third edition) intervention. They are presented as review questions to summarize each topic and, thus, specifically relate to the respective IMR modules. Each review questionnaire has 10 open- and closed-ended questions that usually are not used to assess or grade participants’ knowledge. However, in this study, they were used to evaluate differences in knowledge gain between participants who received RODMT and participants who received IMR, and only responses to the closed-ended questions were compared between groups.
Group facilitators administered the knowledge surveys (Appendix J), which were built into the session protocols that related to the topics *developing social support* and *coping with stress*. The surveys were administered at the first and last sessions of each topic to estimate participants’ learning. All facilitators were provided with oral and written guidance on how to administer the questionnaires.

**Clinician Surveys**

The clinicians, typically social workers or rehabilitation counselors who worked directly with the study participants, were requested to complete the clinician version of the IMRS for each participant in the study before and after the intervention. The researcher sent the surveys to clinicians by email or the WhatsApp using Google Forms. Participant privacy was ensured by using only first names on the clinician forms and no affiliation with any organization. Inadvertently, and only in the IMR groups, the facilitators happened to be also the direct clinicians of some participants, which put them in the position of a dual role of assessors of participant’s recovery progress and group facilitation.

**Recovery-Oriented Dance Movement Therapy Participant Interviews**

To answer the research question regarding potential contributions of the RODMT intervention to participants’ recovery, the researcher interviewed volunteer participants from the different RODMT groups pre- and post-intervention. Because RODMT was a novel intervention and participants’ experience was considered important information articulated in a research question, interviews with participants were conducted. The intent was to capture participants’ experiences of aspects of their own recovery process and of the intervention. During the pre-group meeting, the researcher asked each RODMT group (in which participants completed the initial surveys) for volunteers to meet for an interview before and after the intervention. Eleven
volunteers (five men and six woman), two or three from each group, participated in the first interview. The semistructured interviews (Appendix K) were conducted in Hebrew. Each interview lasted 30 to 45 min and was audio recorded.

Each volunteer met the researcher individually for a naturalistic-inquiry approach interview, which involved open-ended questions that delved into what participants experienced. The researcher was sensitive to maintaining both personal and interpersonal integrity during the interviews (Forinash, 2019). Participants were encouraged to express their thoughts and feelings authentically without fearing consequences. Additionally, the researcher made a point of rephrasing questions to ensure participants understood them and reflected participants’ answers to make sure what was recorded adhered to their intentions. The researcher stayed open to and recorded participants’ authentic responses to increase research objectivity and trustworthiness (Morrow, 2005).

The aims of the pre-intervention interviews were to establish researcher–participant rapport, synthesize participants’ definition of recovery, and identify participants’ personal goals. Follow-up interviews were conducted with the same participants after the last group session. However, only five of the initial 11 interviewees completed the intervention; the rest dropped out at early stages. Thus, only these five participants’ interviews were analyzed and included in this study. The follow-up interviews focused on the participants’ impressions and experiences from the group, what they remembered from the sessions, and how (if at all) the group related to their recovery goals. A total of 10 interviews (two per participant) were completed, transcribed, and analyzed.
Data Collection Procedures

The researcher collected initial data, IMRS (client and clinician), PAM, demographics, and interviews from consenting participants prior to the first session. Group facilitators collected knowledge surveys in Sessions 2, 6, 9, and 13. Final data IMRS (client and clinician), PAM, and interviews were collected from participants who attended the final session. Participants who dropped out at early stages of the intervention did not complete post-intervention data and were not included in the study’s results.

Data Analysis Procedures

Quantitative data for participants who completed the study were entered into spreadsheets and then analyzed using SPSS. Survey results were analyzed and compared between the RODMT and IMR groups using descriptive and inferential statistics to compare changes in scores between groups and to assess whether there was a difference in the interventions’ efficacies.

Qualitative data were transcribed and thematically analyzed based on a six-step model for thematic analysis (Braun & Clarke, 2006; Maguire & Delahunt, 2017). After analyzing each interview separately, the researcher created individual crafted profiles (Seidman, 2013) that included the analysis of the first and second interviews for each of the five participants. Personal themes were generated from the individual profiles. Following, a cross-theme table was created, producing categories and subcategories based on common and different themes across participants. The researcher consulted with a colleague who cross-referenced to ensure accuracy in the theme analysis and translated the interview analysis results from Hebrew to English. The relationship between the qualitative and quantitative components of this study are explored in Chapter 5, Discussion.
Peer Review

The researcher incorporated a peer-review process for the qualitative analysis. The peer reviewer was a doctoral-level dance movement therapist who had experience working with people with SMI and with qualitative research and who understood and read Hebrew (because the interview recordings and written transcripts were in Hebrew). The peer reviewer read six transcripts of interviewees in this study and identified themes for comparison with the researcher’s coding. After incorporating the peer reviewer’s insights into the individual analyses, the reviewer provided feedback on the cross-theme analysis for the purpose of triangulation.

Researcher Considerations

The researcher developed the RODMT based on 15 years of practice as a dance movement therapist in mental health. Her bias for the DMT approach derives from her personal and professional experience, education, and beliefs. She was sensitive to power differentials and her potential influence on participants both in the interviews and in the measures because she assisted some participants by reading IMRS or PAM items to them when they could not read the instruments by themselves. She was mindful to avoid leading questions, to remove her clinician’s “hat” in the interview process, and to minimize as much as possible that participants would try to please her with the responses to the items she read by affirming authenticity in their replies.
CHAPTER 4

Results

Results of the quantitative and qualitative data that were collected before, during, and after the 13-week interventions are presented in this chapter. The quantitative results included a comparison of standardized measures between the RODMT and IMR groups to assess changes in participants’ perceptions of their recovery after participation in a recovery group. The qualitative results present analysis of participants’ interviews about their views on recovery and their experiences in the RODMT group.

Analysis of Quantitative Measures

Of the 125 participants who consented to participate in the study, 98 began attending their assigned intervention groups, and 52 (53%) finished the study by attending at least seven sessions and completing the pre- and post-intervention measures. Of those 52 participants, 29 were in the RODMT group and 23 in the IMR group. The 46 participants who did not complete the study (28 of 57 from RODMT and 18 of 41 from IMR groups) included those who did not meet the attendance criteria (i.e., at least seven sessions) or had missing data. The noncompletion rate was 49% in the RODMT and 44% in the IMR group. Reasons for not completing were mostly unknown. Among those with known dropout reasons, three people (6%) were hospitalized, one (2%) found a job, and two (4%) dropped out for personal reasons. Participants who did not meet attendance criteria completed, on average, 3.5 RODMT sessions and 3.7 IMR sessions. Because there were no differences in dropout or attendance rates between groups, it is assumed that dropout and attendance had to do with the settings in which groups were conducted or with participant characteristics.
Table 3 summarizes relevant sociodemographic and clinical characteristics of the study participants included in the statistical analyses. The study largely (75%) consisted of male participants who were equally represented in both groups. Most participants were middle aged (M = 48.02 years, SD = 13.01) and had a long history of mental illness (average duration of 24 years). The majority had been diagnosed with schizophrenia. The remainder of the participants had depression- or anxiety-related primary diagnoses. Groups were comparable in education, \( \chi^2(1) = 1.705, p = .192 \); self-reported comfort with written language, \( \chi^2(2) = 2.817, p = .245 \); and level of attention, \( \chi^2(2) = 0.158, p = .924 \). In total, 63% of participants had not attained a high school diploma, 71% reported having difficulty reading and writing Hebrew, and 46% identified difficulties maintaining attention.

The only significant difference in demographic variables was in age. The mean age of the RODMT group participants was significantly higher—approximately 10 years older (\( p = .004 \))—than IMR group participants. This difference might be attributed to the settings in which the RODMT took place. That is, three programs, which included 17 of 29 participants, were geared toward older people—two vocational rehabilitation settings and one social club. Residential and social programs are generally mixed in age, but young people tend to choose programs aimed for peers closer to their own age.
Table 3. *Participants’ Sociodemographic and Clinical Characteristics*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>RODMT&lt;sup&gt;a&lt;/sup&gt; (n = 29)</th>
<th>IMR&lt;sup&gt;b&lt;/sup&gt; (n = 23)</th>
<th>Total (N = 52)</th>
<th>Between-group comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Female</td>
<td>24%</td>
<td>26%</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>76%</td>
<td>74%</td>
<td>75%</td>
<td></td>
</tr>
<tr>
<td>Age in years &lt;i&gt;M (SD)&lt;/i&gt;</td>
<td>52.48 (13.25)</td>
<td>42.39 (10.46)</td>
<td>48.02 (13.01)</td>
<td></td>
</tr>
<tr>
<td>Psychiatric diagnosis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schizophrenia / schizoaffective</td>
<td>79%</td>
<td>83%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression (unipolar and bipolar)</td>
<td>3%</td>
<td>4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxiety disorder</td>
<td>3%</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personality disorder</td>
<td>3%</td>
<td>9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other/unspecified</td>
<td>10%</td>
<td>4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years of diagnosed mental illness &lt;i&gt;M (SD)&lt;/i&gt;</td>
<td>26.8 (14.1)</td>
<td>20.4 (9.93)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obtained a high school diploma?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>69%</td>
<td>56.5%</td>
<td>66%</td>
<td>1.705</td>
</tr>
<tr>
<td>Yes</td>
<td>24%</td>
<td>43.5%</td>
<td>34%</td>
<td>.192</td>
</tr>
<tr>
<td>Unknown</td>
<td>7%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficulty reading and writing Hebrew (self-reported)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No difficulty</td>
<td>24%</td>
<td>9%</td>
<td>17%</td>
<td>X2 (1) =1.705</td>
</tr>
<tr>
<td>Some difficulty</td>
<td>14%</td>
<td>9%</td>
<td>12%</td>
<td>p = .245</td>
</tr>
<tr>
<td>Identified difficulty</td>
<td>62%</td>
<td>82%</td>
<td>71%</td>
<td></td>
</tr>
<tr>
<td>Difficulty in concentration / attention (self-reported)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No difficulty</td>
<td>10%</td>
<td>13.0%</td>
<td>12%</td>
<td>X2 (2) = 0.158</td>
</tr>
<tr>
<td>Some difficulty</td>
<td>42%</td>
<td>43.5%</td>
<td>42%</td>
<td>p = .924</td>
</tr>
<tr>
<td>Identified difficulty</td>
<td>48%</td>
<td>43.5%</td>
<td>46%</td>
<td></td>
</tr>
<tr>
<td>Primary occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocational rehabilitation</td>
<td>55%</td>
<td>4%</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>Work (employment)</td>
<td>31%</td>
<td>65%</td>
<td>46%</td>
<td></td>
</tr>
<tr>
<td>None/other</td>
<td>14%</td>
<td>31%</td>
<td>21%</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* <sup>a</sup>Recovery-Oriented Dance Movement Therapy intervention group; <sup>b</sup>Illness Management and Recovery intervention group.
Most (79%) participants identified as workers in some form of employment. The RODMT group participants worked mostly in mental health rehabilitation placements (55%), whereas the IMR participants worked mostly in the community (65%). However, it was difficult to determine the kind of work setting or number of weekly workhours in which participants engaged because many participants did not specify that information. The researcher noticed multiple discrepancies in participant responses. For example, some participants wrote “work” as their primary occupation but worked in the community only 3 hours per week; others considered their attendance at the rehabilitation program as work, although they were not paid. Nonetheless, more IMR group (31%) than RODMT group (14%) participants were not engaged in any occupational activity. These data were used only to indicate whether study participants had a structured day routine; they did not provide insight into participants’ satisfaction with their occupation or their occupational status.

**Outcome Measures**

Mean scores of the recovery (IMRS), self-activation (PAM), and knowledge measures pre- and post-intervention are shown in Table 4. The RODMT and IMR groups showed no significant difference in score changes for any self-report measure: IMRS client version, $t(48) = -0.660, p = .512$; PAM $t(49) = -1.442, p = .156$; knowledge in social support $t(32) = -0.132, p = .896$; or knowledge in coping with stress, $t(43) = -0.921, p = .362$.

The IMRS clinician version revealed a significant difference between the groups, $t(42) = -2.656, p = .011$. Staff who worked with the IMR group participants reported greater improvement in that group’s recovery than did staff who worked with the RODMT group participants.
Table 4. Group Mean Scores of Illness Management and Recovery Scale (IMRS), Patient Activation Measure (PAM), and Knowledge Pre- and Post-Intervention

<table>
<thead>
<tr>
<th>Measure</th>
<th>Pre-test M (SD)</th>
<th>Post-test M (SD)</th>
<th>Pre-test M (SD)</th>
<th>Post-test M (SD)</th>
<th>T-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMRS (client)</td>
<td>52.64 (13.11)</td>
<td>53.29 (6.62)</td>
<td>53.50 (6.75)</td>
<td>56.00 (8.14)</td>
<td>t(48) = -0.66, p = .51</td>
</tr>
<tr>
<td>IMRS (clinician)</td>
<td>56.00 (4.18)</td>
<td>54.87 (5.93)</td>
<td>51.73 (7.11)</td>
<td>55.71 (8.21)</td>
<td>t(42) = -2.66, p = .01</td>
</tr>
<tr>
<td>PAM</td>
<td>58.29 (19.08)</td>
<td>55.27 (16.99)</td>
<td>56.13 (13.60)</td>
<td>60.19 (15.09)</td>
<td>t(49) = -1.44, p = .15</td>
</tr>
<tr>
<td>Knowledge-soc</td>
<td>3.41 (1.17)</td>
<td>3.76 (1.34)</td>
<td>4.18 (1.01)</td>
<td>4.59 (0.16)</td>
<td>t(32) = -0.13, p = .89</td>
</tr>
<tr>
<td>Knowledge-coping with stress</td>
<td>3.17 (0.88)</td>
<td>3.09 (0.79)</td>
<td>3.23 (0.86)</td>
<td>3.36 (0.79)</td>
<td>t(43) = -0.92, p = .36</td>
</tr>
</tbody>
</table>

Note. N = 52.

aRODMT intervention group (n = 29). bIMR intervention group (n = 23). c n = 23 for RODMT; n = 22 for IMR.

**Analysis of Interviews**

Five participants who received RODMT sessions at different sites with different facilitators were interviewed before and after the intervention. This section presents summaries of the five participant profiles (using pseudonyms to protect their privacy) as of the time of the research, followed by the cross-interview analysis results. The focus of the interview analysis
was not on the participants’ psychological state but on their experiences of the RODMT intervention.

The five interviewees in this study were three men and two women who were coping with schizophrenia. They ranged in age from 49 to 57 years. Three had not graduated from high school. The programs the participants attended differed in character, goals, and use of groups. For instance, Ron attended a program that did not offer groups regularly, but he knew other participants. Shimon attended another program that also offered other groups. Meriam and Ira attended the same program, which offered many diverse groups for people who were not interested in or could not work, and Lia attended a group composed of people who did not know each other and were not accustomed to group work at the time of the study. Thus, each RODMT group setting differed, but all RODMT groups followed the same protocol.

Ron

Ron, a 54-year-old man, presented as eager to share his thoughts and aspirations in both interviews. At the time of the study, Ron lived in a residential program with many supports. He worked 3 hours per week as an instructor for art and exercise with elders, for which he was qualified. Ron defined recovery as “an optimal functioning in the community” and goal fulfilment. His goals were “to find a spouse” (nine references), increase his amount of work in his profession (12 references) in order to “have financial stability,” “live in the community” in his own apartment, lower his medication dosage, gain mental health balance (12 references), lose weight (10 references), and “my biggest goal is to study medicine . . . to reach a professor’s level.”

Although Ron stated he was “highly motivated,” he did not have a tangible plan for achieving his goals: “I don’t have concrete plans, need to work on it. First thing is losing weight. I don’t know yet how or what.” Ron identified financial distress as the biggest hinderance to his
recovery (eight references): “I can’t [improve nutrition]; I don’t have the budget.” He explained how fulfilling each of his goals depended on his ability to earn more money through a job that he could not seem to find. Ron also expressed dissatisfaction with himself: “I am not advancing enough; I’m not pushing myself enough. For example, I go to bed at 8 p.m. instead of going to the gym.”

Three months later, in the second interview, Ron repeated the same goals and themes (21 references), such as frustration with budget and longing for a spouse. However, he articulated more flexibility:

My uppermost goal is to study medicine, if I even get there. It sounds like a dream. . . . It requires a lot of money, and I don’t have the funding for it now. . . . It seems like I need to compromise, maybe work as a clerk in a hotel or something.

Those alternative options and compromises had not come up in the first interview.

Ron participated in 12 of 13 RODMT sessions. He shared:

The group was very interesting, experiential. . . . It was very enriching. . . . The opening [of the group] when everyone did their own movements was very nice. . . . Dance therapy is very liberating; I personally really enjoyed it.

Ron remembered and described accurately at least six activities from the groups, most from the last topic, *coping with stress*: “Everyone in the group had a sentence. Mine was, ‘It is worth trying and not giving up.’” He demonstrated the movement sequence he had attached to this sentence in the group, which was an example of mind–body connection.

Additionally, Ron said that the biggest contribution he received from the group was awareness. The group “was experiential. . . . Perhaps it gave me more awareness . . . to notice the bodies mimics [expressions], . . . to express myself more in movement. It is related to awareness.” Ron gave an example of how he implemented a coping strategy in his daily life: “I am coping well.
. . . Sometimes I get a little stressed when I get to my classes [work], so I take a Clonex [medication] and it calms me down.”

Shimon

Shimon, a 49-year-old man, was talkative and outgoing in the interviews. He lived in an apartment in the community and had joined the social club, where he attended the RODMT group, two to three afternoons a week more than 10 years ago. He worked as a caregiver for an older adult 2 hours a week for the last 3 years but was unsatisfied with his job. Shimon expressed dissatisfaction and disappointment in his life (11 references):

I have two vectors in life—that I always want to do things, and I always have the vector that cancels it—worries [inhibitions]. . . . I struggle. . . . It’s like, there is nothing to do about it, these are my genes.

Shimon had clear and defined goals (five references): to get married, have a child, work (“not work for 6 months and leave, but for 20 years”), own a home, and “not experience another hospitalization until the day I die.” However, he did not seem proactive. For example, he stated that he wanted a serious relationship but had given up on dating several years ago. Another example was: “I am very frustrated here [at the social club], but there’s nothing to do about it.” Recovery for Shimon would be to achieve his goals and develop coping abilities he called “mental energy” (10 references). He said,

I would like my mental ability to be available during times of stress, . . . to have more energy to hold myself together. ‘Mental energy’ is aaa . . . to accept that there are a lot of bumps and accept them with a smile.

Mostly, Shimon discussed why he felt unable to fulfil his goals, including his doubts about his ability to achieve his goals (eight references), such as, “Whether I could pay a mortgage, . . . be
emotionally available for my child,” and social stigma (11 references), such as, “It took many,
many years to understand that my value in society is established by what I do [work]. . . . It is a
cold world; it’s hard to accept it.”

In the second interview, Shimon repeated obstacles to his recovery, such as general
hardship (“This is my life and of mentally hurt people”) and social stigma (“Society legally and
financially discriminates against me”). He also expressed his dissatisfaction with the social club
(nine references), for instance, “This club doesn’t fit my level in any way.” Nonetheless, over the
course of 3 months, Shimon said he “made significant progress” because he had started a new
job in which he felt valued and accepted. He added, however, “If I would be a better educated
person, I would not do this job.”

Shimon attended 10 of 13 RODMT sessions. He provided his impression of the group:
“At the beginning, I liked [the group]. It was interesting, but with time, it seemed somewhat
redundant.” He explained, “Schizophrenia is such a harsh and terrible illness that this [RODMT]
workshop will not solve it. But, it’s nice to have a new experience.” Shimon asked
(five references) for more practical knowledge about how to cope with schizophrenia by a
“psychiatrist . . . with whom I can have conversations on an academic level with all the
knowledge there is today in 2019.”

Shimon’s approach to the RODMT group changed after talking about his new job:
What I really liked was that she [the facilitator] put on familiar [music] hits, which
caused us to get up and dance. It gave me a lot of energy. And the questionnaires she
gave us throughout the sessions made me answer more sharply [accurately].

During the interview, Shimon demonstrated movements that he had shared in the group
but said, “I don’t give it too much significance.” However, he acknowledged that participating in
the RODMT group raised his awareness and self-reflectiveness regarding acceptance, which he had defined as a goal in the first interview: “To accept my illness better. . . . The group reflected to me that I have more happiness, more readiness to accept all that is happening to you, even with love, with a smile.”

Meriam

Meriam was a sociable 57-year-old woman. It was difficult to comprehend what she was saying during the interviews because of her awkward pronunciation, abrupt flow of speech, and associative talk. Meriam arrived at the rehabilitation program after the passing of her mother, for whom she had cared in recent years. The vocational rehabilitation program offered primarily leisure-style groups for people who had no desire or ability to work. The most prominent theme in Meriam’s interview was her family (25 references). She stated they were a major support in her life: “My brothers are at my side. . . . They visit me, . . . they listen to me.” Meriam was still in mourning for her mother. She shared memories of her (15 additional references) and said, “It is difficult for me; she is in my heart.” Meriam was concerned for her physical health (15 references): “I’m a little bit weak, . . . old; everything is broken,” and wished “to walk faster; not to be too tired.” Meriam discussed at length how she perceived herself in the past and present: “Maybe I am psycho? . . . I am a scaredy [cowardly] one. . . . Only I turned out like this. . . . Now that I am older, enough! Enough to be frightened and ashamed.”

Additionally, Meriam reported feeling accepted and supported by peers and staff at the program (eight references): “Nobody laughs at me here. They [peers, counselors, and group facilitators] are good,” and, “Here, it’s good. I am coping with my grief.” Regarding her recovery process, she said she wants “to recover and to heal [physically]. . . . It is [recovery] that I am talking when I’m with people and functioning better. . . . I want freedom.” Meriam did not
define goals other than maintaining her current situation: “To be healthy! To feel good. . . . What goals? I’m 57, . . . I’m not looking for a groom. I want to sit and smoke! Smoking cigarettes, smoking cigarettes is what I like.”

In the second interview, Meriam’s dialogue was even more associative than in the first. She went on tangents (nine times) and got distracted several times (“My shirt is dirty”). Meriam repeated her health issues (11 references) but, when asked about her mood and how she was coping with stress, she said, “I cope just fine with everything. . . . I don’t have anxiety; I don’t have stress. . . . Everything is all right, thank God.” Because of a bout with pneumonia, Meriam had missed the last three RODMT sessions, and the facilitator reported her “partial presence” in another session. Thus, her memory of the group was based on her participation a full month before the interview, and she often confused the RODMT group with other groups the program offered.

Meriam expressed liking the RODMT facilitator (six references, such as, “I love her. . . . She was cute”) and the group environment (“I felt good [in the group]”). Her memory of the group content was vague:

I forgot. . . . She [facilitator] used to teach. At the moment, I don’t remember. . . . I told her stories. . . . She asked me, so I answered . . . all kinds of questions. She put on the floor all kinds of things [unspecified].

However, Meriam expressed satisfaction in doing some embodied activities she remembered, such as drawing (five references), tossing a ball, using yarn, and doing movement. Her reflection on the drawing activities was, “I love to draw. . . . I feel comfortable—peaceful—and then I draw.”
In three references, Meriam demonstrated links between her bodily experience in group activities and conscious meanings. In one example, she said, “I remember that she [facilitator] threw us a ball and everyone said something, . . . things they like, songs. I said Zion Golan [demonstrated by singing his songs].” In another example, Meriam stated, “There was a yarn—like this [demonstrated] . . . and everyone needed to tell [something]. I said that my nephew has a bar mitzvah [big event].” The third example was, “Relaxation. She [facilitator] did like this [demonstrated an arms movement], I think; I don’t remember. Yes, deep breaths! Every time she came, she did exercises to be present, calm.”

**Ira**

Ira was a 49-year-old man who immigrated to Israel from Moldova at the age of 22 years. Although he stated he had language and memory challenges, in the interviews he came across clearly and seemed engaged and candid in his responses. Due to medical problems, he could not sustain a job. Therefore, since 2018, he has attended a vocational rehabilitation program that caters to people who have no desire or ability to work. Throughout the first interview, Ira elaborately described medical procedures and conditions he had in the past and has in the present (13 references). He shared that physical pain hinders his ability to function: “Standing hurts, I can’t walk much, sitting is a problem. . . . The pain causes me limitations.” Ira expressed frustration (13 references) in the context of his health issues and associated between his physical and mental health:

> When the body suffers, also the soul suffers. . . . I’m frustrated. . . . It takes up a lot of my energy, . . . it’s tiring me. . . . For a while now, I don’t have the will, desire, or strength. . . . I’m not feeling emotionally and physically ready.
Ira also specifically talked about feeling anxious (four references): “I have thoughts that something will happen to me, . . . anxiety, that I will not survive.”

Ira defined recovery as “the time that passes by until something might change” and “coping . . . to suffer less, . . . to be calmer, . . . that things will be better for me. . . . Quality of life.” He did not clearly define specific recovery goals but rather wishes to feel better:

Something needs to change . . . to be happier. . . . I need something that would interest me. . . . I would like to have the will to do things, that it will not be so difficult to do things, that I won’t be afraid to do things, . . . that my level of anxiety will go down.

Ira mentioned three strategies that helped him pull through: talking with professionals and peers (seven references), attending and participating in the program regularly, and watching television.

In the second interview, Ira spoke mostly about his frustration and anxiety (nine references) that his health issues provoked (five extensive references). He said he was dissatisfied with how he was coping with the situation and added that he felt anxiety and depression, . . . a restlessness, . . . the constant occupation with this all the time is unpleasant. It effects both the mind and the body. . . . I have enough. I want it to be over already.

Ira attended eight of 13 RODMT sessions. He was absent from the last three sessions due to medical appointments and therefore missed most coping with stress sessions, a topic that he identified in the interviews as a need. Ira described the RODMT group: “There was some music, some movement, and all kind of questions, I don’t exactly remember what.” He said he attended the group because staff asked him to go, and so he complied. Ira’s experience from the group was that:
It was like Rio-Abierto [another movement group the program offered] except there were questions in the middle. The rest was the same. . . [They asked in group], “How do you feel? Or how does this affect you?” . . . Nothing special. . . Whatever you like, you do; whatever you don’t, you don’t. It’s nice, not difficult. It’s not sport—simple movements and some music and that’s it. . . Maybe for someone else, it was more meaningful, I don’t know.

**Lia**

Lia was a 52-year-old woman who projected self-awareness and authenticity. Her expression was organized, and the conversations had a flow. Her goal was to occupy herself with meaningful activities (six references) and expand her social connections: “I need to do things for myself, . . . things that would fulfill me.” An additional goal was to lose weight. Recovery for Lia would be to achieve her goals (five references) and “to function better” (three references).

Lia discussed at length the gaps she felt (11 references) between what she wanted to see happen and what was happening in her life: “There is a gap between how I used to be and how I am today.” She added that, in the past, she “simply gave up” (four references) but her present approach has been “not to quit, not to quit. . . The part [point] of doing is most important” (six references). Lia contradicted sentences such as, “I’m not doing enough, not at all” with statements such as, “The abilities exist in me” (six references) and examples (14 references) of her proactiveness and successes.

The second interview had two primary focuses: one was Lia’s experiences and applications from the RODMT group; the other was Lia’s strained relationship with her daughter. Lia attended 10 of 13 RODMT sessions. She noted her effort and personal success in
attending the group, having come from far away with two busses every week. Lia’s experience from the group was that

it was pleasant. . . . I came to a group that doesn’t start asking questions, “What do you or don’t have [diagnosis]?” Everyone has something. . . . It makes it already more comfortable. . . . I especially enjoyed the topic of stress, . . . it resonated with me. . . . I felt that I belonged.

Lia described in detail many group activities (12 references) and was eloquent about her understanding of the purpose of some of them. An example was:

We created a [group] plot with thread and we needed to untangle it. . . . It’s like when you have a problem, it can be resolved. . . . It may take time or perhaps [resolve] differently than what I initially thought, but at the end, everything has a solution.

Lia acknowledged learning from the coping with stress topic and developing her awareness. She also articulated mind–body connections she had made:

I remember talking about a stress scale—how much stress we had before and after the group. We did exercises—breathing, dance, movement. . . . We talked about what bodily signs stress have; like, stress is here [demonstrated pressing her hand against her chest]. . . . We did like this [showed movements], like releasing it [stress] out of you.

Additionally, she described how she applied insights she gained from the group:

Every time I feel pressure in my chest and that I’m getting into a loop, I go out [leave]. . . . [In the past], it didn’t matter if I recognized [the situation] or not. . . . But now, I try my best to really get out of the situation. . . . It doesn’t always work, but there is some progress.
She repeated the strategy of stepping out of a stressful situation five times during the interview. Another strategy Lia became aware of through the RODMT group was positive thinking (five references). She said, “There were all kinds of things [activities] that taught me what to do and get a different perspective of things. . . . I took the sentence, ‘Think good and it will be good.’”

Lia shared that she developed a personal goal (“improving my social situation”), which she identified in the first interview. She made new connections and felt supported by the group, as well as strengthened her relationships with family members: “It [the group] encouraged me to contact people whom I didn’t see for a long time.”

Finally, she voiced her own and other group participants’ wishes for the group to continue: “If the group were to continue, I would make the effort and come. . . . We all [group members] wanted it to go on.”

**Cross-Interview Thematic Analysis**

Three categories were generated from the five profiles: definition of recovery and personal goals, hindrances to recovery, and experiences from the RODMT group. Two themes derived from definition of recovery and personal goals, two from hindrances to recovery, and four themes were produced from experiences from the RODMT group.

**Definition of Recovery and Personal Goals**

Two themes, which were a consensus among participants, emerged from the participants’ definition of recovery: improved functioning and goal achievement.

**Improved Functioning**

Improved functioning included functioning better in daily life, improving quality of life, feeling better, and developing social support (Meriam, Ira, Ron, and Lia). Additionally, three
participants (Shimon, Ira, and Ron) specified a need to develop coping abilities, such as stress management and coping with frustration, to function better.

**Goal Achievement**

Three participants (Lia, Ron, and Shimon) identified goal attainment as part of recovery. Personal goals varied. Ron, Shimon, and Lia articulated at least three goals in different areas of life. These definitions and desires are consistent with the multidimensional approach to recovery and other recovery literature (Anthony et al., 2003; L. F. Kurtz, 2015; Morin & Franck, 2017).

**Hindrances to Recovery**

All five participants expressed dissatisfaction with one or more aspects of their life, revealing two themes: *coping with frustration and dissatisfaction* and *gaps between wanting and doing*. Although their reactions to their current situations differed, each participant identified either internal inhibits such as passivity or low self-efficacy (Lia, Shimon, Ron, and Ira) or external obstacles such as social stigma (Shimon, Ron, and Meriam) to their recovery. In general, hope, motivation for change, and engagement were less apparent and less directly stated by participants.

**Coping with Frustration and Dissatisfaction**

This theme was manifested by participants’ expressions of negative feelings, such as frustration, disappointment, helplessness, anxiety, self-doubt, and anger. All five participants discussed at length the life circumstances they perceived as difficulties with which they were struggling to cope. The main issues were health problems (Ira, Meriam, and Ron), financial concerns (Ron and Shimon), stress (Lia, Ira, and Shimon), and longing for a significant relationship (Ron and Shimon). Although some of these circumstances were out of their control, the primary causes they put forth for frustration seemed to be unattained goals.
Except for Meriam, who was generally content with her life, the other participants explained, directly or indirectly, how not fulfilling their aspirations affected their emotional state, such as, “The reality of my life is not simple, finding a decent job is not simple, preserving it is not simple, maintaining a relationship for 20 years is not easy” (Shimon). Ron said that despite his attempts to interact with women, “nothing comes out of it. I despair. What can I do?” Ira stated, “I don’t know what influences what, the physical or the emotional. . . . I suffer.” The theme of coping with frustration and dissatisfaction took up considerable time and focus in the interviews, suggesting participants’ need for exploration, expression, and support around their frustrations.

**Identified Gaps Between Wanting and Doing**

All five interviewees discussed gaps between their past and present in different areas of life, especially around daily function, work, and leisure. An additional gap that participants (Lia, Shimon, Ron, and Ira) identified was between “what I want and what I do [in practice]” (Lia). The dialogues entailed ambivalence around self-efficacy and readiness for change and owning responsibility for recovery. Examples included, “I have high motivation, of course, and I am active all the time,” but, “I don’t have concrete plans” (Ron). Lia said, “It is not enough to know; [one also needs] to do.”

This gap related to awareness, acceptance, and personal engagement in the recovery process. For example, Shimon said, “My expectations from life are becoming more realistic. You [people in general] need to appreciate things you have [in life].” The process of acceptance and coming to terms with personal abilities and limitations occurs naturally in recovery (Corrigan & Ralph, 2005). Lia concluded, “There will always be a gap [between wanting and doing, but] understanding it and accepting it [helps recovery, and] the part of doing is very important.”
Experiences of Recovery-Oriented Dance Movement Therapy Group

The five participants voiced their experiences of the RODMT group in which they had participated. Words they most often used to describe the general impressions from the group were “pleasant,” “nice,” “enjoying,” and “good.” The use of these or similar words varied between one and eight references per participant, totaling 21 references among them. Four participants said the group was interesting or enriching or that they had learned from it (17 references total). Shimon had contradictory impressions of the group, finding it interesting, liberating, and good, but also boring and redundant toward the end. Only Ira was indifferent. He said the group was “nice” but “I did not especially like it.”

The interviews revealed four themes of shared experiences from the RODMT group: interest and enjoyment from experiential activities, awareness and application, group support, and embodiment and mind–body connection. The first three were identified and named by the participants, and the latter was expressed by participants indirectly and named by the researcher.

Interest and Enjoyment from Experiential Activities

Each participant referred to the group as being engaging by using active, descriptive words such as “experiential,” “releasing,” “liked doing,” and “positive experiences” (11 references total). Participants specifically referred to the experiential activities as interesting, enjoyable (Lia, Meriam, Ron, and Shimon), and refreshing (Ira, Lia, and Shimon). For example, Shimon said,

Dancing, clapping, or doing some new movements was more interesting for me than to sit and say, ‘Ah, this life, ah. . . . There are many talk groups, and it becomes redundant sometimes. It is good to have something different.
Other examples, such as, “It was interesting to draw” (Meriam), “The speed dating was very enjoyable” (Lia), and “[The] movement warmup was very nice” (Ron), support the experiential activities’ contribution to the group environment.

All five participants described at least two experiential activities they remembered (17 total) but did not always remember what they were about. Lia, for example, said, “We did all kinds of activities. One was to create a flower from bottle caps, another was with a yarn. I don’t remember what exactly about; I just remember that it was positive.”

**Awareness and Application**

Three participants discussed how the group increased their awareness to themselves and others. Ron said the group “gave me more awareness . . . to know myself better, . . . to notice the bodies mimics,” and that he learned “how to act; what to do when I have stress.” Shimon said the group helped him acknowledge his illness more, to “acknowledge that there are other people that have it much worse than me,” and that the “group reflected” to him that “I have more readiness to accept all that’s happening.” Lia described what she learned about herself in the group: “Especially to identify [a stressful situation], which is very important [and] to see things differently.” Lia and Ron described how they applied their learning from the group, especially using stress-management tools, in their daily life. Both gave examples of situations in which they used the mantra they had chosen in their groups. Lia also made connections between her newly gained knowledge about her stress signs, recognizing the stressful situation, and acting by moving away from the situation, which was a newly attained resolution for her.

**Group Support**

Three participants shared experiences of feeling comfortable, connected, or good in the group, although each of their groups had different facilitators, settings, and group composition.
Lia mentioned her sense of belonging and enjoying the group’s sociability five times. Shimon, Ron, and Lia gave examples of group interactions or feedback they received in the group. Lia reflected on whether suggestions that arose from the group applied to her: “Someone said to take a walk, . . . but I prefer to listen to music.” She added that the group encouraged her to act on her goal, which she did. Despite feeling the level of the group was beneath him, Shimon reflected on his own situation and shared his knowledge with others: “I recognized that people have it worse than me; I encourage them to participate.” Finally, Lia expressed a wish for the group to continue.

**Embodiment and Mind–Body Connection**

Four participants linked at least two activities with what they said or thought in context of the activities (12 references total). For example, Ron said, “When she put [on] my song, it reminded of a time when . . .” Lia demonstrated a movement: “We did like this to release, like extracting it [the stress] from you.” Shimon demonstrated a relaxing movement shared in group, and Meriam explained, while demonstrating, that the purpose of taking deep breaths is “relaxation, . . . being present, calm.” Lia was the only participant who explained the rationale of some activities. She stated:

> The speed-dating taught us perhaps how to represent ourselves, how to communicate when you don’t have a lot of time. . . . After we did exercises, . . . movement and such, . . . [everyone] released their pressures; . . . everyone became calm.

**Results Summary**

The RODMT and IMR groups were similar in all participant characteristics except the RODMT group had older participants. No significant changes were observed in standardized
self-reported recovery measures, but there was a significant between-group difference in clinicians’ assessment of participants’ recovery. That is, clinicians who were involved with IMR participants rated their recovery higher than did clinicians involved with RODMT participants. Further, the PAM revealed no more engagement among RODMT compared to IMR participants.

The interviews for the RODMT group revealed that participants generally found interest and enjoyment in participating in experiential activities and expressed appreciation for the group support. The five interviewed participants shared the same diagnosis and were close in age but had different needs, goals, and functioning capabilities. The interviews reflected their need for a method that would nurture feelings of hope, support, and self-worth. The researcher acknowledged that the weight of their expressed frustration was greater than their statements indicating motivation for change, personal investment, and hope. The interviews highlighted that participants were occupied with the gaps between wanting and doing.

Some interviewees said they were enriched by the group and had become more articulate in developing their personal awareness and gaining self-perception. Additionally, they described stress-management techniques they learned in the group and then applied to daily life. Although participants reported that the experiential activities during the group were engaging, they did not indicate engagement beyond the group sessions. Only one participant stated that her engagement in the group influenced her engagement in her recovery process outside of group. Dance movement therapy and other mind–body practices adhere to the concept that before being able to apply knowledge, increased awareness and mind–body connections are needed (Acolin, 2016; McLeod, 2017). The creative exploration of different recovery themes in the RODMT intervention served as an opportunity to contribute to participants’ awareness and foster a self-investigation of their hindrances to recovery.
CHAPTER 5

Discussion

This study examined a 13-week RODMT intervention specifically designed to be used with the recovery framework that is the accepted approach in mental health rehabilitation in Israel. The RODMT was based on DMT and experiential activities to elicit, among other things, participants’ expression, creativity, awareness, and engagement in their recovery process. The RODMT intervention included three topics derived from the evidence-based IMR program: developing social support, developing personal goals, and coping with stress. The RODMT groups were compared with active control groups who received the same three IMR program topics but in the standard IMR format. Results of two standardized measures were compared between participants who completed pre- and post-intervention surveys and attended eight sessions or more. In addition, before and after interviews with five RODMT participants were conducted and thematically analyzed to capture their experiences from the group.

There were no between-group differences on demographic variables except for age. That is, the RODMT participants were significantly (average 10 years) older than IMR group participants. However, the groups were comparable in having been diagnosed for more than 20 years with their illnesses. Results indicated no differences between groups in recovery, personal activation, and knowledge based on self-reported measures.

However, there were differences in the clinician ratings. Eleven of the 23 IMR participants were rated by their clinicians, as two IMR facilitators had a dual role both leading groups and serving as direct counselors. This was not true for RODMT facilitators, who did not serve as clinicians or rate participants in the group. A $t$-test was used to examine the possibility that facilitator-counselor bias interfered with the objectivity of clinician assessments.
Specifically, it compared clinician-rating change scores for those in the IMR group whose ratings came from the treating clinician with those who were rated by a neutral (i.e., non-treating) clinician. The difference was not significant, $t = 1.54214, p = 0.1387$, contraindicating facilitator rating bias. Thus, the difference between IMR and RODMT clinician ratings remains unexplained.

No differences between groups were observed in the overall recovery measures, but the qualitative analysis revealed that the RODMT participants interviewed reported their group experience to be enjoyable, engaging, supportive, and applicable to their lives. These participants said the RODMT group helped them gain awareness and embodied skills for coping with stress.

**Engagement**

The researcher had hypothesized that participating in the RODMT intervention would increase participants’ engagement in the group because it was enjoyable and thus would positively affect participants’ recovery. One principle of recovery is taking personal responsibility for the process (Anthony, 1993) by accepting that only the person who set the goals can accomplish the progress. The motivation for change must come from within, and change can happen only after ambivalence around it is resolved (Rollnick & Miller, 1995).

Dissatisfaction with various aspects of life may be a good motivator for change but often results in taking a passive stance or giving up. Amotivation and disengagement are identified as the bigger challenges in recovery work (Morin & Franck, 2017). Disengagement is demonstrated naturally by low attendance and high dropout rates in treatment programs. People who are not engaged in the programs also do not receive the content that might help them cope.

This challenge was one of the researcher’s motivations to develop the RODMT—to make recovery content accessible also for those who do not engage in existing programs for various
reasons. Perhaps a cause of disengagement is the program’s failure to adapt treatment methods to participants’ cognitive barriers, such as language, communication abilities, memory, or attention. In this study, it was hypothesized that the adaptable, embodied techniques and experiential activities offered through RODMT would increase participants’ interest and allow them to take an active stance in the group. The activities encouraged playfulness, spontaneity, and choice to foster hope and therapeutic alliance—two recovery concepts found to facilitate personal engagement (Stanhope et al., 2013).

Engagement indicators for this study were the PAM and attendance and dropout rates. It was hypothesized that the RODMT group would have greater increases in personal activation, higher attendance, and lower dropout than in the control group. However, the PAM results and attendance and dropout rates were similar in both groups, with no significant differences between them.

It might be relevant to consider whether or how age might influence participants’ engagement. Perhaps, the reason RODMT participants did not exhibit more engagement was unrelated to the RODMT but rather to their age—they were significantly older (about 10 years) than IMR participants. Randomization of participants to the groups may have addressed this issue but was not possible within the logistics of this study.

The literature presented contradictory findings regarding dropout from psychological treatment. For instance, one study reported that higher age and longer duration of illness and treatment were associated with higher program dropout; it found no treatment modality to influence dropout among people with schizophrenia (Villeneuve et al., 2010). However, a different study found no association between age and dropout rates but found treatment delivery
format, treatment duration, setting type (outpatient had the most dropout), and diagnosis were related to dropout (Fernandez et al., 2015).

Age might have an influence on engagement for various reasons. Older participants may have less energy to persist in a group and might be less open to new experiences then are younger participants. It is also likely that older participants have different goals and aspirations than younger people, which may influence their participation motivations and expectations from the group.

Another factor that could influence participants’ engagement is between-session encouragement to attend group from the staff. The RODMT group leaders, who were not part of the hosting programs’ teams, depended on their hosting programs to remind participants about the group and encourage them to attend. Additionally, RODMT facilitators were not acquainted with participants prior to the group, so any therapeutic rapport between the clinician and participants developed only during the study. In contrast, the IMR groups were facilitated by members of the hosting programs’ staff, who had longer and stronger relationships with participants prior to starting the study groups. They also had more opportunities and perhaps more personal investment in reminding and encouraging participants to attend the group every week. However, attendance did not differ between groups despite differences in staff encouragement between programs (as witnessed by the researcher, e.g., staff making reminding phone calls or helping group members enter the session). Finally, the IMR group leaders also were more experienced than were the RODMT group leaders. It would be interesting to evaluate whether controlling for staff experience might affect engagement attendance between groups.
Adaptability

Development of the RODMT leaned on theories in the areas of transformative learning (Papastamatis & Panitsides, 2014), such as the idea that personal development and transformation result from increasing awareness, exploring ambiguity, and expressing emotions (Johnson, 1999; Lusebrink, 1992). Thus, gaining new knowledge through embodiment, pouring meaning into the experiential-based process, and processing it, as offered through RODMT, may lead to higher self-efficacy and application in daily life (Dhami et al., 2015; Evans, 2007; Goren Bar, 1997). However, assessing personal transformation is a challenge because of the many factors that influence learning.

The purposes of this study were to assess whether offering recovery content by experiential and creative methods would be received positively by participants and to compare RODMT to IMR. The qualitative results suggest that the experiential activities in themselves were memorable and made an impression on participants, regardless of which facilitator led the RODMT group. Hence, the RODMT’s adaptability to a wide range of participants who may use recovery-oriented intervention may still be argued. The RODMT is adaptable to different learners, including older participants, giving them an opportunity to explore recovery experientially and achieve similar outcomes. Group diversity (e.g., cultural, cognitive, or stage/phase of illness) has not received much research attention in recovery studies and thus should be further explored (Markowitz, 2005). The adaptability of RODMT needs further research.

Appropriateness to Recovery Practice

This study’s findings align with research in the fields of both DMT and recovery. Research has demonstrated the effectiveness of DMT on symptom reduction in schizophrenia,
anxiety, and depression, as well as its contributions to well-being and quality of life (Goodill, 2016; Koch et al., 2019). Recovery researchers have advocated for a personalized and holistic yet inclusive treatment that adheres to the recovery approach (Slade et al., 2014). One purpose of this study was to bridge the recovery and DMT paradigms, which stem from similar ideologies and have the same aims, to create a common language between embodied psychotherapy and mental health rehabilitation disciplines. The RODMT integrates evidence-based methods and concepts used in recovery work with DMT and offers a new tool to foster recovery.

Being congruent with the recovery approach, specifically addressing hope, motivation for change, self-directedness, responsibility, empowerment, and pertinent recovery topics, RODMT is suggested as an appropriate recovery-oriented intervention. However, this was the first study to examine RODMT. Further research is needed to assess the effectiveness of this intervention, its correspondence with the recovery approach, and its efficacy with a younger population.

**Treatment Duration and Intensity**

The choice of providing 13 RODMT sessions is consistent with many other studies reviewed that offered between 10 and 20 sessions, possibly because the researchers and clinicians acknowledged participants’ difficulty participating in longer-term interventions. In this study, most (62% RODMT and 78% IMR) group participants who completed the intervention attended 11 or more sessions. However, this number of sessions (13)—offered only once a week—might not be enough to yield change among participants who have been coping with schizophrenia for more than 20 years. Laaksonen et al. (2013) suggested that the amount of therapy needed for people coping with SMI differs depending on diagnosis, psychiatric history, personality, motivation, and capacity. People with diagnoses of psychosis were not included in
their study. It seems valuable to assess whether offering RODMT twice a week or more and for a longer period would generate different results.

**Researcher’s Reflexivity**

Finally, the researcher also was aware that her bias, enthusiasm for the study, and roles as researcher, developer, and supervisor may have interfered with her supervision of the RODMT facilitators. During the weekly supervision she provided to the facilitators, the researcher felt challenged maintaining objectivity toward the facilitators’ professional growth processes while ensuring they adhered to the group protocol. For example, some facilitators expressed feeling pressure to rush certain activities in order to adhere to the sessions’ protocol. The researcher processed her feelings and thoughts through journaling and seeking supervision for herself.

**Measurement Challenges Among People Experiencing Schizophrenia**

In the process of this study, the researcher became aware of two challenges that seem relevant to any study with people who are experiencing schizophrenia: the elusiveness of well-being and the obstacles to using standardized measures to evaluate it. Although reflective and valid measures for people experiencing schizophrenia exist, concepts such as well-being, recovery, quality of life, engagement, and motivation are difficult to define and capture because they are subjective and change over time or in different periods of life. The recovery process, which includes well-being, occurs naturally over time (Messer & Wampold, 2002), and many factors influence it, including the participant’s ability to integrate and apply tools to foster well-being. The response to any type of self-report measurement of subjective outcomes depends on the participant’s state of mind at the time they complete the survey. People experiencing episodic illnesses such as schizophrenia are more prone to changeable mindsets, moods, and cognitive
deficits (Fioravanti et al., 2012; Garrison et al., 2017), which may influence their responses to recovery measurements.

In this study, approximately 80% of participants had been diagnosed with schizophrenia. It is important to explain that participants who took part in this study use state-funded rehabilitation services that provide vast supports for people whose integration in the larger society is limited. The latest (2017) statistical abstract for Israel revealed that only up to 60% of people eligible for state-funded services exercised their right and used such a service (State of Israel Ministry of Health, 2019). The estimate is that only a small percentage of people coping with SMI even apply for service eligibility. This may be primarily because of stigma or that those who are eligible simply integrated into society and therefore are not listed and do not attend those programs; however, there is no published data about it.

Therefore, it is assumed that participants in this study, who require more supports, tend to be the ones who struggle more with cognitive deficits due to their schizophrenia. The researcher noted participants’ challenges in completing the survey. Participants were asked to complete 30 items in surveys and a short demographic information questionnaire, which took approximately an hour for all groups, even with at least one staff member to assist each group. In many cases, the staff member and researcher had to read every question aloud, helping participants focus and, in some cases, even marking the client’s stated response for them in the right spot on the surveys.

Some researchers have pointed out the complexity of using standardized measures to evaluate the contribution of group treatment to recovery. They argued that the researcher—who defines the group outcomes measurements—chooses the measurements, which may not align with participants’ outcome expectations. Additionally, because many underlying factors, such as
those measures should be considered with discretion (Barber, 2009; Drake & Whitley, 2014; Laaksonene, 2013). As such, there is a need for more intervention-based measures such as the IMRS.

**Study Limitations**

The RODMT groups were offered in settings that could accommodate both the volunteer facilitators (geographical considerations) and a movement group, which required a minimum of 10 participants and a space large enough to allow their movement. The IMR groups were confined to the programs in which the facilitators worked and, therefore, randomization for this study was not possible.

The researcher recruited 125 participants for the study. However, dropout rates exceeded the 30% dropout estimate reported in the literature, resulting in a smaller sample size. Additionally, differences between the groups (setting culture, staff, and participants) were acknowledged but possibly affected the study results.

**Complexity in Recovery-Oriented Dance Movement Therapy Groups**

Because this study had no funding, the researcher recruited DMT facilitators who had limited experience with this research population. This was the first time they applied the RODMT intervention. As in any field, facilitation practice, experience, and skill may influence outcomes (Barber, 2009). Seasoned dance movement therapists might be freer to focus their attention on underlying issues and help participants deepen their experiences. It would be interesting to repeat this study with the same (now experienced) facilitators and examine their experiences, as well.
Limitations of Recovery-Oriented Dance Movement Therapy

For this study, the RODMT was used as a structured intervention, and facilitators were requested to adhere to it. The RODMT manual was detailed to ensure consistency from facilitator to facilitator. When completing supervision and group reflection forms, the facilitators shared that they often felt constrained by the manual; if the groups were not part of a study, then they could have been more flexible and attuned to the group’s specific needs. The researcher’s intent, beyond this study, was to view RODMT with a broader perspective in which therapists could obtain the RODMT principles, themes, topics, and language but adapt it to the groups they lead. The researcher encourages therapists to use the manual as a model, resource, and guideline, but not necessarily as a protocol.

Furthermore, although RODMT is essentially adaptable and accommodates group diversity, the manual does not specify adaptations based on cultural or demographic differences such as gender, race, religion, or sexual orientation. Reflexivity and multicultural sensitivity are left to the group facilitator’s discretion. Multiculturism is not addressed well enough in recovery in general (Lal, 2010) and thus should be further researched in the DMT context, as well.

Recommendations for Future Research

Several questions are recommended for examination in future research: What are the anticipated outcomes of RODMT, and what measures would be best to evaluate them? What specific DMT components and techniques might elicit participants’ engagement and motivation for change? What factors might influence participants’ attendance and persistence in the group, and can RODMT reinforce them? Example factors include intervention duration and intensity, staff encouragement, group members’ connectedness between sessions, therapeutic alliance, facilitator’s skill, and participant-related factors. For future studies, the researcher recommends
recruiting a larger sample of participants and focusing the study on more specific outcomes in addition to the general recovery measurements.

**Study Implications for the Fields of Expressive Therapies and Psychiatric Rehabilitation**

This study’s findings contribute to the pool of knowledge about recovery by reinforcing the relevance of recovery topics worth focusing on in recovery interventions. Recovery themes that emerged in this study were emotional expression, mind–body connection, awareness, readiness for change, self-efficacy, personal engagement, flexibility, and social support. The field of recovery in psychiatric rehabilitation is growing, as is the demand for appropriate and fresh recovery interventions. The RODMT offers a supportive platform to explore recovery topics using techniques that otherwise are not accessible to participants. It is the researcher’s hope to promote interdisciplinary practice in psychiatric rehabilitation.

Another researcher intention was to expose dance movement therapists who are working in mental health, as well as prospective dance movement therapists, to the recovery paradigm, practices, and language and to provide a framework for using DMT within it. The RODMT could be developed into a specialized intervention that would address the needs of people experiencing SMI more accurately. The recovery approach represents a major contribution to psychotherapy practice by encouraging clients’ initiative and active participation, highlighting shared decision-making, and leading personalized care. These values may not be emphasized routinely in traditional psychotherapy or DMT training. Furthermore, the RODMT eventually may make a contribution by being applied to different populations because its dual approach—both DMT and the recovery approach—are holistic and inclusive and, as such, hold potential for use beyond the SMI population.
Recovery-Oriented Dance Movement Therapy – An "experiential and adaptive approach for people coping with SMI"

"experiential and adaptive approach for people coping with SMI"

Aim:

1. The facilitator creates a safe space for the participants to express their emotions.
2. The focus is on the present moment, allowing the participants to connect with their feelings.
3. The group process is guided by the facilitator, who provides support and encourages self-expression.
4. The goal is to foster a sense of community and shared experiences.

Recovery-Oriented Dance Movement Therapy is a unique approach that combines movement, expression, and communication to facilitate healing and self-discovery. It offers a non-judgmental space for individuals to explore their inner worlds and connect with others, promoting a sense of belonging and empowerment.
כבלת הסכמה מרצדיני השיירה:

א. תוקן עם מספרי ממוקדי שירות במערכת הסכים, אךוך ניתן Sözבך דף הסבר לממשקים שונים על ידי המ околת.

ב. ממילא המסרה עם מספרי ממוקדי שירות במערכת הסכים, אשר בamina להבנה של המערכת במערכת.

ג. המmaktות ממוקדי שירות לפי מיקומם עלquisitions, ואכפוה ממציא של בראשי למעシステים הממריץ.

ד. המmaktות ממוקדי שירות עלquisitions, ואכפוה ממציא של בראשי למעシステים הממריץ.

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מודל תחלש בכרาะ היחה, ודון את פיוותה אימוץ

אף על לבריאות השさまざまな

שנודע התרבות

Mental Health Services
Ministry of Health
P.O.B 1176, Jerusalem 91010
Call: 02-6555969
Fax: 02-6355005
APPENDIX B

LESLEY UNIVERSITY INTERNAL REVIEW BOARD APPROVAL
DATE: 4/23/18

To: Talia Bendel-Rozow

From: Dr. Robyn Flaum Cruz & Dr. Ulas Kaplan, Co-Chairs, Lesley IRB

RE: **IRB Number: 17/18 - 054**

The application for the research project, “Recovery-Oriented Dance Movement Therapy – An experiential and adaptive program for people coping with SMI.” provides a detailed description of the recruitment of participants, the method of the proposed research, the protection of participants’ identities and the confidentiality of the data collected. The consent form is sufficient to ensure voluntary participation in the study and contains the appropriate contact information for the researcher and the IRB.

This application is approved for one calendar year from the date of approval.

You may conduct this project.

**Date of approval of application: 4/20/18**

Sincerely,

Robyn Cruz

Investigators shall immediately suspend an inquiry if they observe an adverse change in the health or behavior of a subject that may be attributable to the research. They shall promptly report the circumstances to the IRB. They shall not resume the use of human subjects without the approval of the IRB.
APPENDIX C

PARTICIPANT CONSENT FORM
Research participation consent form (RODMT group)

You are invited to participate in a project called, “Recovery.” The purpose of this project is to teach participants ways to develop social support, stress-management skills, cope with symptoms, and develop personal goals for recovery. The project was specifically designed for people who are coping with mental health challenges and want to learn and practice ways to advance different aspects of their lives.

The project will include your participation in 14 weekly group meetings which will occur at ____________. Each group meeting will be approximately one hour long.

The group meetings will include conversations and different activities, such as movement to music, painting, or practicing relaxation techniques.

It is important for you to know:

- This project is part of a study that examines different ways of teaching recovery.
- You may gain a variety of strategies to help you in your recovery process. Participation in the project puts you at minimal risk or potential for harm or discomfort.
- Your participation in the study is not a requirement. You are permitted to stop your participation at any point of the study without it having any kind of implication on you or harm you in any way in the future. Participation in this project is voluntary, and you have the freedom to discontinue your participation at any time without any consequences.
- It is very important for Talia Bendel-Rozow (the researcher) to hear and understand your opinion on your own recovery process and the sessions you will attend. Therefore, she will ask you some questions about recovery in a short personal interview and will ask you to complete some questionnaires about recovery during the first and the last group sessions. Any information that you will share during the sessions, the personal interview, or the questionnaires will be kept with the research team and will not be shared with anyone else.
- The group facilitator will be a dance/movement therapy student who is qualified to facilitate these groups. You will meet the facilitator in the first group session. Any information collected during the meetings will be kept by the researcher and group facilitator.
- Any personal or identifying information about you will remain confidential and will not be exposed to anyone besides the researcher and the group facilitator. Any information that will be published in the research will be written in a way that will make it impossible to know who gave it.
- The research results will be used for educational purposes and may be presented at professional conferences and supervision or published in professional journals.
The researcher will answer any question you might have, and you can consult with anyone you like regarding your decision to participate in this project. If you experience any problem during the project, you may contact the researcher Talia Bendel-Rozow directly at: xxx-xxxxxxx or by email: xxxxxxx@lesley.edu. The research is under supervision of Lesley University in Massachusetts, United States. The research advisor is Dr. Robyn Flaum Cruz, xxxxxxx@lesley.edu

Additionally, there is a Standing Committee for Human Subjects in Research at Lesley University to which complaints or problems concerning any research project may, and should, be reported if they arise. Contact the Committee Chairpersons at irb@lesley.edu

My agreement to participate in this project, “Recovery,” is of my own free will, and I understand all that is written in this consent form.

A signed copy of this form will be given to you.

Participants name: __________________  Date: _______________  Signature: ______________
Researchers name: __________________ Date: _______________  Signature: ______________
Research participation consent form (IMR group)

You are invited to participate in a project called, “Recovery.” The purpose of this project is to teach participants ways to develop social support, stress-management skills, cope with symptoms, and develop personal goals for recovery. The project was specifically designed for people who are coping with mental health challenges and want to learn and practice ways to advance different aspects of their lives.

The project will include your participation in 14 weekly group meetings which will occur at ___________. Each group meeting will be approximately one hour long.

The group meetings will include conversations and different activities such as writing or practicing coping skills.

It is important for you to know:

- This project is part of a study that examines different ways of teaching recovery.
- You may gain a variety of strategies to help you in your recovery process. Participation in the project puts you at minimal risk or potential for harm or discomfort.
- Your participation in the study is not a requirement. You are permitted to stop your participation at any point of the study without it having any kind of implication on you or harm you in any way in the future. Participation in this project is voluntary, and you have the freedom to discontinue your participation at any time without any consequences.
- It is very important for Talia Bendel-Rozow (the researcher) to hear and understand your opinion on your own recovery process and the sessions you will attend. Therefore, she will ask you some questions about recovery in a short personal interview and will ask you to complete some questionnaires about recovery during the first and the last group sessions. Any information that you will share during the sessions, the personal interview, or the questionnaires will be kept with the research team and will not be shared with anyone else.
- The group facilitator will be a certified Illness Management and Recovery (IMR) facilitator. You will meet the facilitator in the first group session. Any information that will be collected during the meetings will be kept by the researcher and group facilitator.
- Any personal or identifying information about you will remain confidential and will not be exposed to anyone besides the researcher and the group facilitator. Any information that will be published in the research will be written in a way that will make it impossible to know who gave it.
- The research results will be used for educational purposes and may be presented at professional conferences and supervision or published in professional journals.

The researcher will answer any question you might have, and you can consult with anyone you like regarding your decision to participate in this project. If you experience any problem during the project, you may contact the researcher Talia Bendel-Rozow directly at: xxx-xxxxxxx or by email: xxxxxxxx@lesley.edu. The research is under supervision of Lesley University in
Massachusetts, United States. The research advisor is Dr. Robyn Flaum Cruz, xxxxxx@lesley.edu

Additionally, there is a Standing Committee for Human Subjects in Research at Lesley University to which complaints or problems concerning any research project may, and should, be reported if they arise. Contact the Committee Chairpersons at irb@lesley.edu

My agreement to participate in this project, “Recovery,” is of my own free will, and I understand all that is written in this consent form.

A signed copy of this form will be given to you.

Participants name: _________________ Date: _______________ Signature:_____________
Researchers name: _________________ Date: _______________ Signature:_____________
APPENDIX D

EXAMPLE GROUP SESSION PROTOCOLS FROM THE RECOVERY-ORIENTED DANCE MOVEMENT THERAPY MANUAL
RODMT Session 3: Developing Social Support

Accessories for this session: music, personal qualities slips from last week, pencils, markers, large paper for social atom

Goals for session

- Practice making connections (eye contact, smile, and awareness of partner’s availability for connection)
- Self-presentation—increase awareness of how participants present themselves and practice it
- Identify relationships that participants want to strengthen/develop

Quick Movement to Music warmup (5 min). Stretching + body awareness (moving body parts from top to bottom), grounding, and presence

Repeat: Do you remember the three ways we talked about to increase social support?

- Talk to people
- Reconnect with family and old friends
- Make new friends

What is the first thing that happens in any kind of a relationship? Or the first thing that must happen to even start a conversation? Make eye contact!

Eye-Tag Game (5 min). In pairs, Person 1 tries to “tag” Person 2 by making eye contact; Person 2 needs to be elusive and avoid eye contact. Switch roles.

Discussion: How do we feel when someone is looking at us? Trying to make eye contact with us? (Embarrassed? Self-conscious? Curious? Do I enjoy that someone takes an interest in me? Seen/noticed?) What types of eye contact are there? Direct? Invasive? Compassionate? Appropriate? Inappropriate? “A look” (eye contact) can be welcoming and inviting or unpleasant.

The first thing that happens in any relationship is eye contact. If you want to initiate connection, you first need to pay attention to if the person you are trying to make contact with is available for contact. Does he/she seem busy or available at the moment? Do they seem relaxed or upset? Do they seem to avoid eye contact like we did in the game or do they reciprocate eye contact? (Notice the body language of the person you are making contact with.) If eye contact is obtained, you can move on to starting a conversation.

Self-Presentation (20 min). Group in circle, standing up. Facilitator brings the slips with participants qualities written on them from last week.
How do you usually initiate/make connection with others? (Name? Handshake? Body posture? Facial expression—smile?) How do you want to present yourself? What parts of your personality do you want to highlight/expose/express when you meet someone new?

The facilitator draws one slip and asks the group to express the quality written on it through movements: How would you show these qualities if you couldn’t use words?

The facilitator brings the group’s attention to the different ideas and expressions of the quality. The facilitator asks who in the group owns this particular quality and asks them to try out their own expression of the quality and present themselves in the group, without words; focus being on the individual who relates to the quality.

Discussion: Did you present yourself differently than usual? What was easy, difficult, or surprising for you? How was it to get feedback from the group? Did you want to change something?

- Adaptation for participants who need more direction and support: If a participant does not relate to any positive quality about himself/herself, the facilitator can offer the group to help by recognizing a quality they appreciate about that person. That is, other participants reflect in movement to the inhibited participant what they see in them. A short movement and verbal dialogue between the reflector and the person receiving the feedback can be encouraged.

**Aims of activity (nonverbal expression):** Permission and encouragement for self-expression in nonverbal ways. This component of the session brings smiles to people’s faces. They can experience freedom, playfulness, experimentation (leading to an expansion of movement repertoire—leading to flexibility in mind, as well), risk taking (in trying something new and surviving it), getting attention from the group, receiving feedback from others, and joining others. People seem to enjoy themselves. Being in a group and dancing to music with friends in the middle of the day is fun and has a healing component of its own. Additionally, this activity helps increase self-awareness and elicits listening to others (important communication skills).

**Social Atom (25 min).** Each participant gets a blank piece of paper and a pencil. Erasers and color markers would be available.

*Note: This activity might feel personal, intimate, and emotion-provoking for some participants. Make sure safety is established and privacy is kept. This activity is done individually, and sharing will be at each person’s comfort level.*

Please mark on the paper according to the following instructions.

**Stage 1:** Represent yourself in the center of the page (write your name in small letters or make a mark representing you). Around it and using the whole page, start marking people in your life (initial the names of the people in your life). Include people with whom you have regular—
ongoing—relationships closer to you and people with whom you have some relationship, but you
don’t meet or talk to often farther away. Include all family members, friends (close and distant),
roommates, peers, neighbors and social acquaintances with whom you wish to have
relationships, professionals (psychiatrist, psychologist, social worker, etc.), and people in your
life with whom you do not have a good or supportive relationship with but are in your life (staff
and other people with whom you have contact).

Stage 2: Think about the influence each of these relationships has on you. Mark with one color
the people whose relationship you consider as being supportive—relationships you enjoy having,
that are fun, accepting, energizing, and reciprocal. Use a different color to mark people with who
you have nonsupportive relationships—that make you uncomfortable, angry, have a negative
effect on you, take up too much of your energy, or tire and confuse you. Leave blank people with
who you have a neutral relationship and you are satisfied leaving them as they are.

Stage 3: Use a third color to mark people with whom you wish to strengthen or deepen
relationships.

- Adaptation: If these directions are too complicated for the group, the facilitator could ask
them to pick two colors and circle people who are supportive in one color and people with whom
they would like to strengthen relationship in another color.

There is not enough time or intimacy built to process the social atoms in the group—
encourage participants to continue this conversation with their care providers at length.

Discussion: Here are some follow-up questions that we can start thinking about in this group:
What do you notice about your social atom? Look again and see which relationships take the
most effort and energy to maintain. Would you like something to be different in these
relationships (or is there anyone you would like to cut out from your life at this point)? What
challenges do you face in your relationships? How would you like to pursue the relationships
that you want to strengthen? What can you do to deepen the relationships you have? Can you
define a specific goal for yourself based on this activity? (If yes, then write it down).

Each participant can take this social atom as a homework assignment and answer some questions
at home. A great assignment would be to write a letter (not necessarily send it but write it) to the
person with whom they want to reconnect or repair the relationship.

Closure (5 min). Stand in a circle. Each person in turn shares (and offers the gesture to the
center of the circle) one word and movement that represents a hope or wish they have relating to
relationships or something they will take from the group today. After all are done, gather and
collect all the wishes and learnings and throw them up into the air.

Note to facilitator: It is important to end the session with lightness after the social atom, which
might be intense. Focus the wishes on the potential for improving relationships (hope) and
accent the fact that this reflection (of the social atom) is an opportunity to identify personal goals in the area of social support and relationships.
RODMT Session 8: Coping with Stress

Accessories for this session: music, empty trashcan, whiteboard, whiteboard markers, stress violability diagram

Goals for session
- Increase body awareness
- Identify and define stress
- Practice stress-reduction techniques

Introduction. In the next five sessions, we will learn about stress and ways to manage it. We will also practice effective tools for stress reduction.

Personal Stress Scale. On a scale of 1 to 10, how would you describe your stress level in general on a regular day (1 = not stressed at all, 10 = most acute stress)? Say a number and show the level with your hand, marking your stress level on an imaginary scale of low, medium, or high. Would you say that this is your “baseline”? (Some people tend to be naturally more mellow, and others might be more stressed-out types).

From 1 to 10, what is your level of stress right now? (Say a number and show with hand).

Note to facilitator: Make sure to invest some time in explaining the stress scale because it will return in every session. This exercise is very important for development of participants’ self-awareness and a great tool to apply anytime and anywhere. The goal is that participants will learn to ask themselves, “How stressed am I right now, from 1 to 10?” whenever they notice the appearance of their stress signs (learned next session).

In this session, focus only on these initial questions, but the rationale and vision are important for you to know: The second question asked (added later) after identifying the level of stress is, “So, what should I do to reduce it? (or, “Which strategies might be useful for me now?”). Ideally, participants will learn what strategies are efficient for them for each level of stress. For example, if I identified my level of stress to be 8, then I know I should: 1. Get away from the situation, 2. Take a walk around the block, focusing on breathing and affirmations, 3. Call my support—someone who can help me think through the situation, 4. Do my favorite stress-reduction technique, 5. Organize my thoughts on paper. The goal is to be able self-manage stress and get back to baseline.

Movement to Music warmup (20 min). Breathing, stretches, moving all joints and body parts from head to toe—grounding exercises—brushing, stomping. Pay attention to your body sensations. What do you notice? Describe what you feel in your body right now.
Note to facilitators: Be sure to help participants make the connection between these types of grounding exercises and stress reduction. They will be repeated in every session for embodiment and application.

**Contrasting Movements.** Closed movements (squeezing, tightening) in different body parts: What images come up when doing those closed movements? Open (wide movements): How do these movements affect your feelings? What feelings/images come to mind now?

**Quick-Shifting Movements Game.** The facilitator says a word, and the participants respond in a movement:
Squeeze/release, fast/slow, stiff/soft, stressed/relaxed, anxious/calm. What did you notice in this exercise? There are a lot of similarities in the movements we did. State your observation.

*Anticipate seeing common movements as “tight”/“restless” movements in relation to stress/anxiety versus relaxed/soft movements that relate to feeling calm.*

**What does stress look like?** Where do you feel stress in your body (where does stress “sit” in the body)? What movement well demonstrates stress? What pace/rhythm does stress have? What facial expressions fit to show stress? *(Reach a common demonstration of what stress looks like.)*

**Shake Off the Stress Movement Circle (20 min).** Jumping, shaking, brushing off the stress together. *Put an empty trashcan in the center of the circle—imagery work—and throw things in it using movement: What are the things that stress us out? Share and “throw away” a stressful experience from your past (allow time for participant sharing).*

- A natural flow of this activity will make room for relaxation movements to appear. Continue movement circle with relaxing movements. What does calm look like?

**Group Sculpture of Relaxation/Calm.** If we were exhibiting a “sculpture of calm” in a museum, what would it look like? Each person comes to the center of the circle and adds a pose/posture to the group sculpture.

**Definition of Stress + Discussion (15 min).** (Sitting in the circle on chairs). So, what is stress actually? *(Let participants describe it first and then add.)* Stress is a feeling of distress or an overbearing feeling resulting from stepping out of balance. When dealing with life situations that are perceived as threatening, we get out of balance and feel stressed. For instance, when someone yells at you, you may perceive the situation as threatening and fear that person. Your brain tells you that you are in danger and signals it through bodily sensations of stress.

Many things can cause us to be stressed and take us out of balance. Stress looks and feels similar among many people—tight and unpleasant.
Stress + biological tendency (vulnerability) may cause psychiatric and physical symptoms to appear \textit{(draw the stress vulnerability model on the whiteboard)}. Allow participants to share personal experiences. \textit{There are things we can do about stress, and we can learn how to manage it!}

\textbf{Closure—Abdominal Breathing exercise (5 min).} Put your hands on your abdomen with the tips of your fingers touching. Inflate and deflate your stomach like a balloon. Notice how your fingers part from one another in each inhale and come back together in each exhale.

- From 1 to 10, what is your energy level right now? What is your stress level? (Say a number and show with hand.)
APPENDIX E

RECOVERY-ORIENTED DANCE MOVEMENT THERAPY FACILITATOR CONSENT FORM
Information and Consent to Facilitate RODMT Groups as Part of a Research Study

You are invited to take part in a research called Recovery-Oriented Dance Movement Therapy (RODMT). The purpose of the study is to examine a new intervention in psychiatric rehabilitation that is based on dance movement therapy and the recovery approach in mental health.

Expectations from group facilitators:

1. Attendance and active participation in the 20-hour training that will precede the group facilitation. RODMT training includes learning about the population of adults coping with SMI and background information about the mental health rehabilitation system in Israel, the recovery approach in mental health rehabilitation, and an in-depth experiential learning of RODMT group protocols.

2. Facilitation of 13 RODMT sessions in a mental health rehabilitation program (the researcher will try as best she can to find a program that would be geographically accessible to you)

3. Completion of a reflection form after each session. The reflection form has two objectives: for you, as a therapist in training, to (a) process the session and (b) provide feedback to the researcher regarding RODMT activities and session structure.

4. Participation in weekly individual supervision meetings with the researcher.

5. Keep confidentiality and privacy of group participants according to the professional DMT code of ethics.

6. Honoring the RODMT developer’s copyrights to the intervention. You may not take credit for, copy, or distribute RODMT content.
It is important for you to know:

- The study is not meant to evaluate the RODMT group facilitator; rather, the intervention itself and any benefits the participants receive from it.
- The researcher will not take part in the sessions you will facilitate. Therefore, it is crucial for you to complete the reflection form at the end of each session and to attend the weekly supervision meetings.
- The research results will be used for educational purposes and possibly will be presented in conferences and/or article publications. Your name will not be used without your permission.
- Your participation in the study will credit you with 50 hours of clinical work hours and 14 hours of individual supervision that you can use toward your DMT accreditation.

Your signature signifies your consent to the terms above and your agreement to take part in this study.

Facilitator’s Name_________ Date___________ Signature__________

Researcher’s Name_________ Date___________ Signature__________
APPENDIX F

EXAMPLES FROM THE ILLNESS MANAGEMENT AND RECOVERY GROUP

PROTOCOL
Recognizing the Importance of Social Support  [module 4, topic 1]

Defining Social Support

“Social support” refers to relationships that are rewarding, enriching, and helpful. The most rewarding and strongest relationships are usually reciprocal; that is, each person gives something to the relationship and each person receives something from it. Supportive relationships go in both directions; each person helps and supports the other.

Social support can come from relationships with lots of different people, including family members, friends, peers, spouses, boyfriends/girlfriends, co-workers, neighbors, members of religious or other spiritual groups, classmates, mental health practitioners, or members of peer support groups.

Supportive relationships are usually positively focused and have little conflict and strife. However, differences in opinions are natural in any relationship, and this includes a supportive relationship, where disagreements occur from time to time. In a supportive relationship, disagreements can usually be resolved in a peaceful manner, and people learn how to compromise.

QUESTIONS

Which of your relationships do you find supportive?

What is a recent example of when someone gave you support? What did the person say or do?

What is a recent example of when you gave support to someone else? What did you say or do?

The Role of Social Support

Supportive social relationships are an important part of people’s lives because they
make people feel good about themselves and more hopeful about the future. For many
individuals, having quality relationships leads to personal satisfaction. Having supportive
relationships can also help people reduce stress. As noted in handout 3, the Stress-Vulnerability
Model, reducing stress can help reduce relapses.

Having people to talk to and do things with is important to everyone. Social support
from friends and family members helps people enjoy their lives more and cope better
with life challenges. Many activities are more fun when you do them with others, and
just being able to hang out with someone who understands you helps you feel supported
and can relieve some of the pressure you are under.

People in your support system can help you achieve your goals, both by encouraging
you and by helping you develop and make concrete steps toward your goals. They can
also help you solve problems that come up and even help you monitor how things are
going with mental health symptoms. For example, sometimes friends and family may
notice that your energy is lower than usual or that you are staying in your room more.
They can support you by helping you figure out what might make you feel better.

QUESTIONS
How is social support important in your life?

What is an example of when you got through a difficult time because someone was supportive to
you?

What is an example of when you supported someone else who was going through a tough time?

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for personal or group use is permissible.
APPENDIX G

DEMOGRAPHIC SURVEYS
Personal Information Form

This information is for the purpose of the research alone and will be kept confidential.

Name ______________ Age _______________ Gender ______________

Ethnicity ____________

If you immigrated to Israel, where from and since when? ___________

Number of school years completed (including after high-school)? __________

Circle the applicable answer: Graduated high school with full final exam report/ partial exam report/ without final exams (according to the Israeli system)?

My reading and writing abilities in Hebrew are: (circle)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Avoid and need assistance</td>
<td>Read and write only when I have to</td>
<td>My reading and writing are fluent</td>
</tr>
</tbody>
</table>

Generally, my ability to concentrate is: (circle)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>It is difficult to concentrate</td>
<td>My concentration is so-so</td>
<td>I generally don’t have difficulty concentrating</td>
</tr>
</tbody>
</table>

Circle: What is your current primary occupation: work / education / other?

How long have you been engaging in your current occupation? ________ years

(In the data compilation, I specified: less than 1 year, 1-to-3 years, or more than 3 years.)

What rehabilitation services and supports do you currently receive? Circle the applicable answer: residential / occupational/ social / (listed a few more options from the Israeli system) / psychologist or other therapy / other__________________

What is your psychiatric diagnosis?___________________

Age of diagnosis_______________

If you were ever hospitalized in a psychiatric hospital, when was the first time? ___________
APPENDIX H

ILLNESS MANAGEMENT AND RECOVERY SCALES (ENGLISH)
Illness Management and Recovery Scale:  
Client Self-Rating

ID Number: ____________________________                                       Date: _______

Please take a few minutes to fill out this survey. We are interested in the way things are for you, so there is no right or wrong answer. If you are not sure about a question, just answer it as best as you can.

Just circle the number of the answer that fits you best.

1. **Progress toward personal goals:** In the past 3 months, I have come up with…

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No personal goals.</td>
<td>A personal goal but have not done anything to finish my goal.</td>
<td>A personal goal and made it a little way toward finishing it.</td>
<td>A personal goal and have gotten pretty far in finishing my goal.</td>
<td>A personal goal and have finished it.</td>
</tr>
</tbody>
</table>

2. **Knowledge:** How much do you feel like you know about symptoms, treatment, coping strategies (coping methods), and medication?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not very much.</td>
<td>A little.</td>
<td>Some</td>
<td>Quite a bit.</td>
<td>A great deal</td>
</tr>
</tbody>
</table>

3. **Involvement of family and friends in my mental health treatment:** How much are family members, friends, boyfriend/girlfriend, and other people who are important to you (outside your mental health agency) involved in your mental health treatment?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all</td>
<td>Only when there is a serious problem</td>
<td>Sometimes, like when things are starting to go badly</td>
<td>Much of the time</td>
<td>A lot of the time and they really help me with my mental health</td>
</tr>
</tbody>
</table>

4. **Contact with people outside of my family:** In a normal week, how many times do you talk to someone outside of your family (like a friend, co-worker, classmate, roommate, etc.)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 times/week</td>
<td>1-2 times/week</td>
<td>3-4 times/week</td>
<td>6-7 times/week</td>
<td>8 or more times/week</td>
</tr>
</tbody>
</table>
5. **Time in Structured Roles**: How much time do you spend working, volunteering, being a student, taking care of someone else or someone else’s house or apartment? That is, how much time do you spend in doing activities for or with another person that are expected of you? (This would not include self-care or personal home maintenance.)

<table>
<thead>
<tr>
<th>Hours/Week</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 hours or less/week</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3-5 hours/week</td>
<td>6 to 15 hours/week</td>
<td>16-30 hours/week</td>
<td>More than 30 hours/week</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. **Symptom distress**: How much do your symptoms bother you?

<table>
<thead>
<tr>
<th>Degree of Bother</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>My symptoms really bother me a lot.</td>
<td>My symptoms bother me quite a bit.</td>
<td>My symptoms bother me somewhat.</td>
<td>My symptoms bother me very little.</td>
<td>My symptoms don’t bother me at all.</td>
<td></td>
</tr>
</tbody>
</table>

7. **Impairment of functioning**: How much do your symptoms get in the way of you doing things that you would like to or need to do?

<table>
<thead>
<tr>
<th>Degree of Impairment</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>My symptoms really get in my way a lot.</td>
<td>My symptoms get in my way quite a bit.</td>
<td>My symptoms get in my way somewhat.</td>
<td>My symptoms get in my way very little.</td>
<td>My symptoms don’t get in my way at all.</td>
<td></td>
</tr>
</tbody>
</table>

8. **Relapse Prevention Planning**: Which of the following would best describe what you know and what you have done in order not to have a relapse?

<table>
<thead>
<tr>
<th>Knowledge and Plan</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don’t know how to prevent relapses.</td>
<td>I know a little, but I haven’t made a relapse prevention plan.</td>
<td>I know 1 or 2 things I can do, but I don’t have a written plan</td>
<td>I have several things that I can do, but I don’t have a written plan</td>
<td>I have a written plan that I have shared with others.</td>
<td></td>
</tr>
</tbody>
</table>

9. **Relapse of Symptoms**: When is the last time you had a relapse of symptoms (that is, when your symptoms have gotten much worse)?

<table>
<thead>
<tr>
<th>Time of Relapse</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within the last month</td>
<td>In the past 2 to 3 months</td>
<td>In the past 4 to 6 months</td>
<td>In the past 7 to 12 months</td>
<td>I haven’t had a relapse in the past year</td>
<td></td>
</tr>
</tbody>
</table>
10. **Psychiatric Hospitalizations:** When is the last time you have been hospitalized for mental health or substance abuse reasons?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Within the last month</td>
<td>In the past 2 to 3 months</td>
<td>In the past 4 to 6 months</td>
<td>In the past 7 to 12 months</td>
<td>I haven’t been hospitalized in the past year</td>
</tr>
</tbody>
</table>

11. **Coping:** How well do you feel like you are coping with your mental or emotional illness from day to day?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not well at all</td>
<td>Not very well</td>
<td>Alright</td>
<td>Well</td>
<td>Very well</td>
</tr>
</tbody>
</table>

12. **Involvement with self-help activities:** How involved are you in consumer run services, peer support groups, Alcoholics Anonymous, drop-in centers, WRAP (Wellness Recovery Action Plan), or other similar self-help programs?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I don’t know about any self-help activities.</td>
<td>I know about some self-help activities, but I’m not interested</td>
<td>I’m interested in self-help activities, but I have not participated in the past year</td>
<td>I participate in self-help activities occasionally.</td>
<td>I participate in self-help activities regularly.</td>
</tr>
</tbody>
</table>

13. **Using Medication Effectively:** (Don’t answer this question if your doctor has not prescribed medication for you). How often do you take your medication as prescribed?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>Occasionally</td>
<td>About half the time.</td>
<td>Most of the time.</td>
<td>Every day.</td>
</tr>
</tbody>
</table>

14. **Functioning affected by alcohol use:** Drinking can interfere with functioning when it contributes to conflict in relationships, or to money, housing, and legal concerns, to difficulty showing up at appointments or paying attention during them, or to increased symptoms. Over the past 3 months, how much did drinking get in the way of your functioning?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alcohol use really gets in my way a lot</td>
<td>Alcohol use gets in my way quite a bit</td>
<td>Alcohol use gets in my way somewhat</td>
<td>Alcohol use gets in my way very little</td>
<td>Alcohol use is not a factor in my functioning</td>
</tr>
</tbody>
</table>
15. Functioning affected by drug use. Using street drugs, and misusing prescription or over-the-counter medication can interfere with functioning when it contributes to conflict in relationships, or to money, housing, and legal concerns, to difficulty showing up at appointments or paying attention during them, or to increased symptoms. Over the past 3 months, how much did drug use get in the way of your functioning?

<p>| | | | | | |</p>
<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Drug use really gets in my way a lot</td>
<td>Drug use gets in my way quite a bit</td>
<td>Drug use gets in my way somewhat</td>
<td>Drug use gets in my way very little</td>
<td>Drug use is not a factor in my functioning</td>
<td></td>
</tr>
</tbody>
</table>
Illness Management and Recovery Scale:  
Clinician Rating

Clinician/Team Name: ____________ Date: __________ Study ID#: __________

Please take a few moments to fill out the following survey regarding your perception of your client’s ability to manage her or his illness, as well as her or his progress toward recovery. We are interested in the way you feel about how things are going for your client, so please answer with your honest opinion. If you are not sure about an item, just answer as best as you can.

Please circle the answer that fits your client the best.

1. Progress toward goals: In the past 3 months, s/he has come up with…

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>No personal goals</td>
<td>A personal goal, but has not done anything to finish the goal</td>
<td>A personal goal and made it a little way toward finishing it</td>
<td>A personal goal and has gotten pretty far in finishing the goal</td>
<td>A personal goal and has finished it</td>
<td></td>
</tr>
</tbody>
</table>

2. Knowledge: How much do you feel your client knows about symptoms, treatment, coping strategies (coping methods), and medication?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not very much</td>
<td>A little</td>
<td>Some</td>
<td>Quite a bit</td>
<td>A great deal</td>
<td></td>
</tr>
</tbody>
</table>

3. Involvement of family and friends in his/her mental health treatment: How much are people like family, friends, boyfriends/girlfriends, and other people who are important to your client (outside the mental health agency) involved in his/her treatment?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>Only when there is a serious problem</td>
<td>Sometimes, like when things are starting to go badly</td>
<td>Much of the time</td>
<td>A lot of the time and they really help with his/her mental health</td>
<td></td>
</tr>
</tbody>
</table>

4. Contact with people outside of the family: In a normal week, how many times does s/he talk to someone outside of her/his family (like a friend, co-worker, classmate, roommate, etc.)?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 times/week</td>
<td>1-2 times/week</td>
<td>3-4 times/week</td>
<td>6-7 times/week</td>
<td>8 or more times/week</td>
<td></td>
</tr>
</tbody>
</table>
5. **Time in Structured Roles:** How much time does s/he spend working, volunteering, being a student, being a parent, taking care of someone else or someone else’s house or apartment? That is, how much time does s/he spend in doing activities for or with another person that are expected of him/her? (This would not include self-care or personal home maintenance.)

<table>
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<tr>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 hours or less/week</td>
<td>3-5 hours/week</td>
<td>6 to 15 hours/week</td>
<td>16-30 hours/week</td>
<td>More than 30 hours/week</td>
<td></td>
</tr>
</tbody>
</table>

6. **Symptom distress:** How much do symptoms bother him/her?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Symptoms really bother him/her a lot</strong></td>
<td>Symptoms bother him/her quite a bit</td>
<td>Symptoms bother him/her somewhat</td>
<td>Symptoms bother him/her very little</td>
<td>Symptoms don’t bother him/her at all</td>
<td></td>
</tr>
</tbody>
</table>

7. **Impairment of functioning:** How much do symptoms get in the way of him/her doing things that s/he would like to do or needs to do?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Symptoms really get in her/his way a lot</strong></td>
<td>Symptoms get in his/her way quite a bit</td>
<td>Symptoms get in his/her way somewhat</td>
<td>Symptoms get in his/her way very little</td>
<td>Symptoms don’t get in his/her way at all</td>
<td></td>
</tr>
</tbody>
</table>

8. **Relapse Prevention Planning:** Which of the following would best describe what s/he knows and has done in order not to have a relapse?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Doesn’t know how to prevent relapses</strong></td>
<td>Knows a little, but hasn’t made a relapse prevention plan</td>
<td>Knows 1 or 2 things to do, but doesn’t have a written plan</td>
<td>Knows several things to do, but doesn’t have a written plan</td>
<td>Has a written plan and has shared it with others</td>
<td></td>
</tr>
</tbody>
</table>

9. **Relapse of Symptoms:** When is the last time s/he had a relapse of symptoms (that is, when his/her symptoms have gotten much worse)?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Within the last month</strong></td>
<td>In the past 2 to 3 months</td>
<td>In the past 4 to 6 months</td>
<td>In the past 7 to 12 months</td>
<td>Hasn’t had a relapse in the past year</td>
<td></td>
</tr>
</tbody>
</table>
10. Psychiatric Hospitalizations: When is the last time s/he has been hospitalized for mental health or substance abuse reasons?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Within the last month</td>
<td>In the past 2 to 3 months</td>
<td>In the past 4 to 6 months</td>
<td>In the past 7 to 12 months</td>
<td>No hospitalization in the past year</td>
</tr>
</tbody>
</table>

11. Coping: How well do feel your client is coping with her/his mental or emotional illness from day to day?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not well at all</td>
<td>Not very well</td>
<td>Alright</td>
<td>Well</td>
<td>Very well</td>
</tr>
</tbody>
</table>

12. Involvement with self-help activities: How involved is s/he in consumer run services, peer support groups, Alcoholics Anonymous, drop-in centers, WRAP (Wellness Recovery Action Plan), or other similar self-help programs?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Doesn’t know about any self-help activities</td>
<td>Knows about some self-help activities, but isn’t interested</td>
<td>Is interested in self-help activities, but hasn’t participated in the past year</td>
<td>Participates in self-help activities occasionally</td>
<td>Participates in self-help activities regularly</td>
</tr>
</tbody>
</table>

13. Using Medication Effectively: (Don’t answer this question if her/his doctor has not prescribed medication). How often does s/he take his/her medication as prescribed?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>Occasionally</td>
<td>About half the time</td>
<td>Most of the time</td>
<td>Every day</td>
</tr>
</tbody>
</table>

Check here if the client is not prescribed psychiatric medications.

14. Impairment of functioning through alcohol use: Drinking can interfere with functioning when it contributes to conflict in relationships, or to financial, housing, and legal concerns, to difficulty attending appointments or focusing during them, or to increases of symptoms. Over the past 3 months, did alcohol use get in the way of his/her functioning?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alcohol use really gets in her/his way a lot</td>
<td>Alcohol use gets in his/her way <em>quite a bit</em></td>
<td>Alcohol use gets in his/her way <em>somewhat</em></td>
<td>Alcohol use gets in his/her way <em>very little</em></td>
<td>Alcohol use is <em>not a factor</em> in his/her functioning</td>
</tr>
</tbody>
</table>
15. **Impairment of functioning through drug use**: Using street drugs, and misusing prescription or over-the-counter medication can interfere with functioning when it contributes to conflict in relationships, or to financial, housing, and legal concerns, to difficulty attending appointments or focusing during them, or to increases of symptoms. Over the past 3 months, did drug use get in the way of his/her functioning?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug use <strong>really</strong> gets in her/his way <em>a lot</em></td>
<td>Drug use gets in his/her way <em>quite a bit</em></td>
<td>Drug use gets in his/her way <em>somewhat</em></td>
<td>Drug use gets in his/her way <em>very little</em></td>
<td>Drug use is <em>not a factor</em> in his/her functioning</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX I

PATIENT ACTIVATION MEASURE: LICENSE AND SURVEY
Below are statements people sometimes make when they talk about their health. Please indicate how much you agree or disagree with each statement as it applies to you personally.

Circle the answer that is most true for you today. If the statement does not apply, select N/A.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td>1. When all is said and done, I am the person who is responsible for taking care of my health.</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>2. Taking an active role in my own health care is the most important thing that affects my health.</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>3. I am confident I can help prevent or reduce problems associated with my health.</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>4. I know what each of my prescribed medications do.</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>5. I am confident that I can tell whether I need to go to the doctor or whether I can take care of a health problem myself.</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>6. I am confident that I can follow through on medical treatments I may need to do at home.</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>7. I understand my health problems and what causes them.</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>8. I know what treatments are available for my health problems.</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>9. I have been able to maintain (keep up with) lifestyle changes, like eating right or exercising.</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>10. I am confident I can figure out solutions when new problems arise with my health.</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>11. I am confident that I can maintain lifestyle changes, like eating right and exercising, even during times of stress.</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

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APPENDIX J

KNOWLEDGE QUESTIONNAIRES FROM THE ILLNESS MANAGEMENT AND RECOVERY WORKBOOK
Review Questions for Module 4: Building Social Support

**Multiple-choice and true-or-false questions**

1. A sign of a supportive relationship is
   a. Arguments
   b. Criticism
   c. Helpfulness

2. Which of the following is **not** a good place to meet new people?
   a. At your workplace
   b. At a toll booth
   c. At a drop-in center

3. When starting a conversation, it is a good idea to first think of some topics that might interest the other person.
   a. True
   b. False

4. To increase closeness in a relationship, you can
   a. Offer someone help when they need it
   b. Keep your thoughts and feelings to yourself
   c. Refuse to compromise

5. When you are interested in developing a close relationship, it is a good idea to tell personal information
   a. Gradually as you get to know each other better
   b. As much as possible the first time you talk to someone
   c. Never

Review Questions for Module 8: Coping with Stress

**Multiple-choice and true-or-false questions**

1. A life event can be stressful even when it is a positive event, like getting married.
   a. True
   b. False

2. Which of the following is an example of a daily hassle?
   a. A tornado
   b. Unreliable transportation
   c. Receiving a compliment
3. Which of the following is a sign of being under stress?
   a. Happiness
   b. Headaches
   c. Feeling rested

4. Which of the following is an effective strategy for preventing stress?
   a. Scheduling time for relaxation on a regular basis
   b. Keeping your feelings to yourself
   c. Drinking alcohol or smoking marijuana
APPENDIX K

BEFORE AND AFTER INTERVIEW QUESTIONS FOR RECOVERY-ORIENTED DANCE MOVEMENT THERAPY PARTICIPANTS
Interview Guide

[Transcribed from Hebrew. Interviews were conducted in Hebrew]

Pre-Group Interview Questions:

- What is your definition of recovery?
- What are your personal goals?
- What would you want to change in your life so that it becomes more fulfilling and manageable?
- From 1 to 10, how satisfied are you with how you cope? How active do you feel you are in promoting your recovery (from 1 to 10)?

Post-Group Interview Questions:

- What was the overall experience of the group for you? What did you think about the group? Has the group informed you in any way?
- Why did you attend the group and continue coming to it (persevered)?
- Before the group, you said that ________ were your personal goals. Has the group affected these goals/hopes for you? How? What do you think about them now?
- Did the group fulfill your expectations? (Remind participant what they said prior to group.) Do you feel any differently than before attending the group?
- Did you try or do you use any of the things you learned in the group outside of the group setting?
- From 1 to 10, how satisfied are you with how you cope?
- What do you remember most from the groups?
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