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The Effect of Mindfulness-Based Therapy between Clients and Therapists Practicing

Madni Shaukat[1], Javed Ahmad[2] and Shahzad Gul[3]
[1]Rawalpindi Medical University, Rawalpindi, Pakistan
Email: madni_shaukat84@hotmail.com
[2]Islamic International Medical College, Rawalpindi, Pakistan
Email: ahmedjaved8393@gmail.com
[3]Quaid-e-Azam Medical College, Bahawalpur, Pakistan
Email: elegantnadeem@gmail.com

ABSTRACT

Although a few studies have tested whether therapist mindfulness has an impact on psychotherapy treatment outcomes, no studies have examined whether having clients and therapists practice mindfulness together at the start of treatment can lead to in session benefits. The main goal of this study was to investigate the effects of therapists and clients jointly engaging in a brief mindfulness exercise together at the start of their therapy sessions. Specifically, this study tested whether joint engagement in a mindfulness exercise could lead to more positive ratings of therapist presence and more positive ratings of the treatment sessions compared to a control condition. A total of 16 student therapists and 39 clients agreed to participate in this study. All sessions (*N* = 157) conducted by the participating therapists with their participating clients during the data collection period (six months) were randomized to either begin with a 5-minute mindfulness centering exercise (experimental condition) or 5-minutes of psycho-education (control condition). At the end of all included sessions, regardless of the condition, therapists privately completed a measure of their presence during the session (Therapist Presence Inventory [TPI] – Therapist form) and a rating of session depth and smoothness using the Session Evaluation Questionnaire (SEQ). The data were analyzed using hierarchical linear modeling (HLM) with the condition as a session level (Level 1) predictor of the outcomes (TPI-T, SEQ-Depth Therapist, SEQ-Smoothness Therapist, TPI-C, SEQ-Depth Client, SEQ-Smoothness Client, SEQ Arousal Client, SEQ Positivity Client, and SRS, and sessions nested within clients (Level 2), and clients nested within therapists (Level 3). Contrary to our hypotheses, the findings did not provide any evidence that clients and therapists experienced sessions more positively when they started the session with a mindfulness exercise compared to starting the session with psycho-education. In addition, further data analyses suggest that when the therapist, client, and session predictors were held constant, the difference between the conditions on the clients' and therapists' ratings on all outcome measures was still not significant. Methodological limitations and future directions are discussed.

Keywords: Mindfulness-based therapy, client, therapist

INTRODUCTION

Until recently, mindfulness has not received much attention in Western science, although it has been a part of Eastern and Western spiritual traditions for centuries. In the last twenty years, mindfulness has expanded beyond its spiritual roots and has been more accepted by contemporary Western medicine and psychology. The clinical application of mindfulness began with the work of Jon Kabat-Zinn and his colleagues in the 1980s. Since Jon Kabat-Zinn's early works in this area, mindfulness has been tested as interventions for various physical and psychological disorders (Brown & Cordon, 2009; Shapiro, 2009). Empirical studies on mindfulness and physical health have demonstrated that mindfulness is a promising intervention in reducing various symptoms that often accompany chronic medical conditions, such as chronic pain (Bear, 2003; Rosenzweig et al., 2007), fibromyalgia (Delgado & Postigo, 2013; Grossman, Gilmer, Raysz, Kesper, 2007; Sephton et al., 2007), rheumatoid arthritis (Pradham et al., 2007; Zangi et al., 2011), diabetes (Rosenzweig et al., 2007; van Sons et al., 2013), and cancer-related symptoms (Carlson & Gerald, 2005; Speca et al., 2000). Similarly, research has also documented the effectiveness of mindfulness-based interventions in the treatment of diverse mental and behavioral health problems (Chiesa, Calati, & Seretti, 2011; Hofmann et al., 2010). For example, it has been found that mindfulness practice leads to a significant reduction of a number of symptoms related to anxiety and mood disorders (Hoge et al., 2013; Goldin & Gross, 2010; Grossman et al., 2007). Mindfulness has also been shown to be effective when incorporated into protocols for the treatment of PTSD (Kearney et al., 2012; Kim et al., 2013; King et al., 2013) and eating disorders (Hepworth, 2011; Katterman et al., 2014). In addition, mindfulness-based approaches have also shown positive results in the treatment of substance use disorders (Zgierska et al., 2009).

A smaller but still significant body of research has investigated benefits of mindfulness for clinicians. This research has indicated that mindfulness

practice can enhance therapists' health and well-being, as well as reduce the presence of psychological symptoms (e.g., symptoms of depression and anxiety), and result in work-related benefits such as reduced stress and burnout (Martin-Asuero & Garcia- Banda, 2010; Shapiro, Austin, Bishop, & Cordova, 2005; Shapiro, Brown, & Biegel, 2007). Empirical studies have also documented that engagement in mindfulness can help therapist trainees develop professional skills and attributes associated with effective therapeutic work (Aggs & Bambling, 2010; Christopher et al., 2006; McCollum & Gehart , 2010; Moore, 2008). Further, a smaller body of research has examined the relationship between therapist mindfulness and their clients' treatment outcomes. In this area, two correlational studies found mixed results regarding the relationship of therapist mindfulness and client treatment outcomes (Ryan et al., 2012; Stanley et al., 2006); however, three experimental/quasi-experimental studies have found support indicating that mindfulness practice by therapists can indeed improve client treatment outcomes (Dunn et al., 2013; Grepmair, Mitterlehner, Loew, Bachler, Rother, & Nickel, 2007; Grepmair, Mitterlehner, Loew, & Nickel, 2007). Thus far, only one study has investigated the experience of both clients and clinicians using mindfulness in therapy (Horst, Newsom, & Smith, 2013). Although the results of this qualitative study were informative of the perspective of both parties, the therapist trainees and their clients did not actually engage in the mindfulness exercises together.

Further studies are still needed to empirically examine the session impacts of having clients and therapists engage in mindfulness exercises together in therapy. Practicing mindfulness together could be beneficial for a number of reasons. For instance, it has been strongly suggested therapists should practice mindfulness themselves as attempting to teach clients something therapists do not themselves do could be perceived as hypocritical by clients (Davis & Hayes, 2011). Practicing mindfulness together may strengthen the therapeutic alliance and decrease inequality that may exist within the therapeutic relationship. It also gives clients an opportunity to more quickly learn mindfulness skills by observing their therapists perform the desirable behaviors. Similarly, therapists would be able to immediately provide the clients with feedback and encouragement when these practices occur in the session. Also, practicing mindfulness together could help clinicians to quickly understand how the mindfulness exercises affect clients with different psychological problems, and how these exercises might need to be modified so they are more effective with their individual clients.

This present study investigated the effects of clients and therapists practicing mindfulness together on session outcomes. The primary goal of this study was to test whether sessions that were randomized to start with the client and therapist engaging in a mindfulness exercise together would be rated more positively by clients and therapists than control sessions. Specifically, we tested for differences rated by the clients on measures of therapist presence, session experience (depth, smoothness, arousal, and positivity), and session effectiveness, and by the therapists on measures of therapist presence and session experience (depth and smoothness). The second purpose of this study was to test whether a set of measured therapist, client, and session variables could predict the impact of the mindfulness exercises on the session outcomes.

The results from this study did not provide any evidence that clients and therapists experienced sessions more positively when they started the session with a mindfulness exercise compared to starting the session with psycho-education. Also, the results from the random effects analyses indicated that participating clients and participating therapists did not significantly differ from each other in how they responded to the mindfulness exercise and psycho-education conditions. Additionally, after controlling for the therapist, client, and session variables, the current study still did not find a significant difference between the two conditions on any of the client-rated or therapist-rated outcome variables.

The study had several limitations that may explain the non-significant findings. These limitations included reliance on subjective self-report measures, therapists and clients not being blind to the purpose of the study or to the conditions, a longer than expected duration of data collection, and the therapist and client participants not receiving any mindfulness training at the start of the study. While the current study did not find a significant difference between the mindfulness and control conditions on ratings of the treatment outcomes, there were no significant negative effects identified that were associated with clients and therapist practicing mindfulness together. Potential study limitations aside, and despite existing published research to the contrary, the current study data indicate no significant difference exists between the use of mindfulness and the control conditions on treatment outcomes.

Considering the discrepancy between the results of the current study and what other published

literature suggests, further research is needed to determine if mindfulness has no effect, or whether there may have been an effect the current design could not detect. This researcher would be interested in future research to determine what role, if any, mindfulness plays in the therapeutic process as well as whether or not it influences therapists' ability to stay more present during the therapy session. To address potential study limitations, future studies could recruit larger sample a study sample comprising of both therapists- in-training and licensed psychologists. Also, given the inconsistent findings in the literature regarding therapists' self-reported mindfulness and client outcomes, different research designs which do not rely on self-report measures, may be beneficial in future research. It may also be beneficial to test the effects of mindfulness practice on the therapeutic alliance and end-of-treatment outcomes. Alternatively, future studies could utilize a different control task, so that both conditions would include audio-recorded exercises that are listened to together by the client and the therapist in session.

LITERATURE REVIEW

Background, History, and Definitions of Mindfulness

Until recently, mindfulness has not received much attention in Western psychology and it has been a foreign concept to the majority of Americans. Although the concept of mindfulness has historically been primarily associated with Buddhism, its phenomenological nature is embedded in most ancient religious and spiritual traditions (Brown & Cordon, 2009). Today, mindfulness has expanded beyond its spiritual roots, and in the last two decades it has been accepted and embraced by Western medicine and psychology. For example, in medical settings, numerous research studies support the effectiveness of mindfulness practices in reducing the physical symptoms of various medical diagnoses such as chronic pain, heart disease, diabetes, hypertension, asthma, and cancer (Grossman, Niemann, Schmidt, & Walach, 2004). Similarly, in the field of psychology, the concept of mindfulness has also received increased attention in recent years. For example, a recent PsycInfo search of peer-reviewed journal articles with the keyword mindfulness resulted in 2,879 studies. A breakdown of citations by year shows a rapid increase in popularity over just the past decade (see Figure 1). Specific to clinical psychology, the effectiveness of mindfulness-based treatment approaches has been demonstrated for a number of disorders, including depression, anxiety, eating disorders, and addictions (Strauss, Cavanag, Oliver, & Pettman, 2014). In addition, mindfulness techniques have been found to be able to positively influence a number of variables associated with every day well-being, such as reducing stress and workplace burnout, increasing compassion, facilitating empathy, and improving levels of life satisfaction (Keng, Smoski, & Robins, 2011). Given the increasing popularity of mindfulness in recent years and the many medical and psychological applications that have already been documented, it would be of value for researchers and practitioners alike to gain a better understanding of what this "way-of-being" (Kabat-Zinn, 1994) is and to identify and further test ways for utilizing mindfulness techniques in clinical practice.

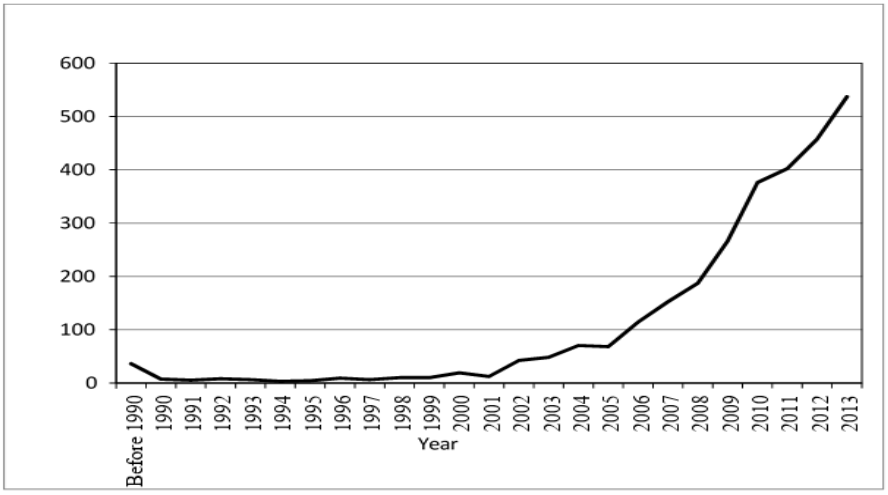

Figure 1 Number of PsycInfo Peer-reviewed journal article citations per year for the keyword 'mindfulness.'

History of mindfulness. Although mindfulness is currently a "hot topic" in the field of psychology, it actually has a long history. Mindfulness comes from Buddhist traditions and is described as a core teaching of a 2,500-year-old Buddhist philosophy (Siegel, Germer, & Olendzki, 2009).

Mindfulness occupies a central role in Buddhism that was developed as a path leading to the cessation of personal suffering (Thera, 1962). In Buddhist traditions, mindfulness was originally taught as the combination of two major meditation practices: samatha and vipassana meditation (Mills, 2004). Samatha meditation, which means tranquility meditation, originated in the ancient Vedic tradition of India.

Viapassana meditation, translated as "insight" or "seeing clearly or realistically," was written down by Siddhattha Gautama, also called the Buddha or enlightened one after his awakening 25 centuries ago (Grossman & Van Dam, 2011; Mills, 2004).

While samatha meditation techniques were already established and highly developed by earlier Indian contemplatives that lived before and during the Buddha's life, vipassana mediation was invented and first taught by the Buddha. As described by Sach (2003), before he achieved the Buddhahood, Buddha spent his early years as the prince of a noble family, and he lived a pampered life. After he realized that human life inevitably involves suffering, Buddha left his home and became a homeless monk. To find a spiritual answer to the human condition of suffering, Buddha practiced the religion of the day, attaining very high meditative states through samatha meditation, and practicing severe asceticism. But after seven years of intense meditation practices and ascetic life, Buddha realized that there is a middle path between indulgence and austerity. It is believed that through mindfulness meditation Buddha discovered what is usually described as an awakening--Buddha's final illumination and transcendence of suffering. Buddha spent the rest of his life (another 45 years) travelling and teaching (Bhikkhu, 2011; Rahula, 1974; Sach, 2003; Williams & Kabat-Zinn, 2011).

The phenomenological nature of mindfulness is also embedded in the other religious and spiritual teachings such as Taoism, Judaism, Sufism, and Islam, as well as in Western philosophical and psychological schools of thought (Brown & Cordon, 2009). For example, in Sufi tradition, zikr, which means remember, is a central meditation practice which aims to overcome inattentiveness and the mind's tendency to wander (Ahsen, 2010). In Jewish tradition various contemplative meditation techniques (like mantra meditation or practicing nothingness) are used to foster development of wisdom, compassion and unwavering attention (Roth, 2009). In Western philosophical traditions, various prominent scholars and philosophers have pointed out that being fully aware of present moment experiences is a basic human ability (Germer, Siegel, & Fulton, 2005). Even Benjamin Franklin stressed in his writings that living a mindful life is one of the most important virtues people need to employ throughout their lives (Franklin, 2009). A mindful life could be achieved, according to Franklin, by practicing daily thirteen principles that include silence, sincerity, tranquility, and humility.

Some of the important ingredients of mindfulness practice are present within Western psychological schools of thought as well. For example, the Humanistic-Existentialist approach emphasizes that change is possible through increased awareness and acceptance, rather than just symptom relief (Dryden & Still, 2006). Similarly, Carl Rogers (cited in Brown, Ryan, & Creswell, 2007) stressed the importance of being in the present moment for enhanced therapist effectiveness and self-actualization. Further, Gestalt psychologists carefully differentiate between living "in the present" and living "for the present," which could involve impulsiveness, fatalism, or hedonism (Brown et al., 2007). Many years earlier from the Psychodynamic approach, Freud (1912) recommended that therapists need to cultivate "evenly hovering attention" in which individuals have simply "to listen and not to trouble to keep in mind anything in particular" (pp. 111–112). Although mindfulness in its entirety has its origins in Buddhism, the principles taught in mindfulness have historically been evident in many different religious, philosophical, and psychological schools of thought.

Those clinicians who agreed to participate were first asked to complete some baseline measures. These measures included demographic information, Likert-type questions about their attitudes toward, knowledge about, and experience with mindfulness, and the Five Facet Mindfulness Questionnaire (FFMQ). A 20-30 minute training session was then provided. During the training, participating clinicians were provided with an introduction to some of the basic principles of mindfulness and were guided in practicing the mindfulness exercise that was used in the remainder of the study for a script of the mindfulness exercise. The goal of this training session was to familiarize clinicians with the mindfulness exercise before they start practicing it with their clients in session. Also, this brief training

gave clinicians an opportunity to experience firsthand the benefits from and struggles with mindfulness practice (i.e., frustrations, boredom, impatience, and distractibility). This additional knowledge and experience could then be used to answer clients' questions and/or address difficulties should they experience them during the study.

The clients who agreed to participate were also asked to complete a set of questions at baseline. These questions included a demographic questionnaire, Likert-type questions about their attitudes toward, knowledge about, and experience with mindfulness, and the FFMQ.

*The data collection period occurred immediately after the brief mindfulness trainings. Data were collected over the course of six months, and included approximately 157 therapy sessions (approximately 10 sessions per week). As Raudenbush and Liu (2000) point out, power calculations in nested designs depend both on the number of observations (in this study sessions are the observations), and on the number of nesting groups (in this study sessions are nested within clients who are nested within therapists). However, when little variance between nested groups is expected, power calculations can follow the procedures of non-nested types of analyses (Raudenbush & Liu, 2000). Given that only non-significant variance between nested groups was found in our previous study that used a very similar design (Dunn et al., 2013), the power analysis for this study was based on repeated measures ANOVA. Using G*Power (Faul, Erdfelder, Lang, & Buchner, 2007) 147 observations were needed to detect a small sized effect between two related conditions (sessions with or without the mindfulness exercise) with a power of .95 and an alpha of .05.*

During these six months of data collection, the sessions with participating clients that were conducted by the participating therapists were randomized to either mindfulness or control groups. Immediately prior to the start of a session during this time period, the participating therapists drew a slip of paper from a box. The slips of paper were previously randomized and contained instructions to the therapists to either begin the therapy session with the mindfulness centering exercise or to begin the session with brief psycho-education on various psychological topics.

Psycho-education. If the clinician pulled a slip of paper with "Psycho-education" written on it, then he or she was instructed to grab a psycho-education topic paper for that week. The psycho-education topics included: anger management, emotions, exercise, fears, health, interpersonal skills, procrastination, self-esteem, sleep, and stress. These topics were chosen with the belief that the material would be useful to most clients. Information for these topics was taken from existing. The clinicians were instructed to begin the session by reading a psycho-education topic paper verbatim to the client. If the client had a question regarding the topic, the therapist could provide him or her with a brief explanation. The amount of information on the paper was planned to take approximately 3 to 5 minutes to read.

Mindfulness. If the clinician pulled a slip of paper with "Mindfulness" written on it, then he or she was instructed to grab an audio recorder devise to play during the session. The therapists were to start these sessions by providing the client with a brief rationale for the exercise. They were then to play the audio recording and engage in the exercise with their clients. The specific mindfulness exercise used in this study is taken from Eifert and Forsyth's (2005) Acceptance and Commitment Therapy for Anxiety Disorders, and its recorded instructions were provided by Dr. Joshua Swift. This particular centering exercise included elements of bringing awareness to one's breath, bodily sensations, thoughts, emotions, and investment in the activities that were about to take place. The goal of using this exercise was to help both the clients and the therapists increase their level of non-judgmental attention and investment in the present moment during the therapy session. The audio recording took about 5 minutes to play.

Immediately after completing the condition (centering exercise or the psycho-education control task), the clients completed a brief questionnaire consisting of Likert-type questions, to assess their adherence/engagement in the conditions (i.e., how present do you feel you were during the mindfulness/psycho-education and how engaged do you feel you were during the mindfulness/psycho-education), post-conditions immediate feelings and distress level. The clients and therapists were allowed to briefly discuss the experience, but therapists were instructed to resume their usual session activities shortly after the exercise ended. At the end of all included sessions, regardless of the condition, therapists were asked to privately complete a measure of their presence during the session (TPI – Therapist form) and a question about how much mindfulness was used as part of the session. Separately, clients were asked to complete a measure of their therapists' presence (TPI – Client from), their session experiences (Session Evaluation Questionnaire), and an

evaluation of the effectiveness of the session (Session Rating Scale). Participating clinicians and clients turned their forms directly in to a survey box in the clinic to maintain confidentiality. The researchers removed the paper measures from the clinic drop boxes on a regular basis.

Baseline Measures

Five Facet Mindfulness Questionnaire. The Five Facet Mindfulness Questionnaire (FFMQ) was developed by Baer, Smith, Hopkins, Krietemeyer, and Toney (2006). The subscales for this measure resulted from an exploratory factor analysis, which merged together the items of five independently developed mindfulness scales. This factor analysis yielded five unique facets of mindfulness, including observing, describing, acting with awareness, non-judging of inner experience, and non-reactivity to inner experience. All five are viewed as facets reflecting key mindfulness skills. The structure of the five facets emphasizes the difference between general, everyday mindfulness and the kind of mindfulness cultivated through meditation practice. The final version of the FFMQ consisted of 39 self-report items rated using a five-point Likert scale with possibilities ranging from 0 ("Never or very rarely true") to 4 ("Very often or always true"). Higher scores reflect greater levels of mindfulness. The FFMQ has shown itself to be a reliable and valid instrument. The five subscales have been found to be internally consistent with Cronbach alphas for the facets at Non-Reactivity to Inner Experiences, α = .75, Observing, α = .83, Acting with Awareness, α = .87, Non-Judging of Inner Experiences, α = .87, and Describing, α = .91 (Baer et al., 2006, p.36).

Treatment Outcome Measures

To test these hypotheses, ratings on all dependent variables (therapist's presence, session experience, and session effectiveness) were compared between sessions with the mindfulness exercise and sessions without the mindfulness exercise using hierarchical linear modeling (HLM). Traditional parametric tests assume independence of observations; however, in this study, the data points (or observations) were not independent of each other. Multi-level or HLM refers to a statistical method that accounts for the non-independence based on the nesting of the data. For instance, HLM is often used in education research given that students are nested within classrooms (given that they share the same classroom setting, the behavior of individual students within a class is not independent of the behavior of the other students in that same class), classrooms are nested within schools, schools are nested within districts, and so on. HLM controls for the variance that is shared due to the overlapping setting (the non- independence). In this study the data was nested given that several clients were seen for multiple sessions (some in the control condition and others in the mindfulness condition), and some clients shared the same therapist. Given the non-independence of the data, HLM, rather than an independent sample t-test, provides a more appropriate method for comparing the two conditions (Adelson & Owen, 2012; Kenny & Hoyt, 2009).

To account for dependence of the data, at the highest level of the hierarchy (Level 3) we added the therapists and the therapist-related variables, at the middle level of the hierarchy (Level 2) we added the clients and the client-related variables, while the Level 1 variable was the specific session outcomes and whether or not they were started with the mindfulness centering exercise. The group comparisons using HLM was conducted several times, once for each of the outcome variables. For the main analyses, we were primarily interested in the Level 1 analysis: the relationship between the presence (or lack thereof) of the mindfulness exercise jointly performed by clients and therapists, on session outcomes including session effectiveness, therapist presence, and session experiences.

Secondary Hypotheses and Data Analyses

In addition to the main questions and hypotheses, we investigated whether some of the measured therapist, client, and session related variables would predict the effectiveness of mindfulness exercise.

To test the relationship between these variables and the impact of the mindfulness exercises, the therapist-related variables (therapist's prior clinical experience, trait mindfulness, and knowledge about/experience with/attitude toward mindfulness), were entered at the therapist level (Level 3), client- related variables (age, education level, trait mindfulness, and knowledge about/experience with/attitude toward mindfulness) were entered at the client level (Level 2), and session-related variables (clients' engagement/adherence to the conditions, post-condition mood and distress level, and percentage of therapist use of mindfulness in therapy after the condition) were entered at the session level (Level 1) in order to predict scores for the different dependent variables. Models were conducted separately, first with only the therapist predictors, then with only the client predictors, then with only the session predictors.

RESULTS

Descriptive Analyses of the Baseline and Outcome Measures

All data were entered into an SPSS spreadsheet and checked for noticeable errors, skewness, kurtosis, and outliers. The z-Score method was used to assess the data for outliers. Scores lower than -3.5 or higher than +3.5 were removed from the data and excluded from further analyses. Subsequently, descriptive statistics for all dependent variables were calculated. The following are the results of this analysis.

FFMQ. This baseline measure was completed by both client and therapist participants. The descriptive statistics for the therapist and client trait FFMQ subscale scores are reported in Table 1. The client participants' responses on FFMQ were assessed for outliers. No outliers were detected. The reported total scores ranged from 88 to 167. The mean score was M = 120.70 (SD = 16.62), the median was 122.00, and the mode 100.00 was. No evidence of kurtosis (kurtosis = 0. 22, SEkurtosis = 0.74) or skew (skewness = 0.384 SEskewness = 0. 39) problems were present. In terms of reliability, the internal consistency for client participants' responses in this study was α = .78. The therapist participants' responses on FFMQ were also assessed for outliers using z-Score method. No outliers were detected. The FFMQ scores for therapist participants ranged from 110 to 161. The mean was M = 134.25 (SD = 14.73), the median was 134.00, and the mode was 110.00. Again, no evidence of kurtosis (kurtosis = -0.80 SEkurtosis = 1.09) or skew (skewness = 0.05 SEskewness = 0.56) problems were present. The FFMQ internal consistency for the therapist participants was α = .85.

SRS. The scores for the SRS were assessed for outliers. Four outliers were identified and their SRS scores were removed from further analyses. The descriptive statistics for the SRS are reported in Table 1. The scores on the SRS ranged from 28.10 to 40.00. The mean of client participants' responses was M = 37.61 (SD = 2.46), the median was 38.40, and the mode was 40.00. The distribution was platykurtic (kurtosis = 2.91, SEkurtosis = 0.32) and negatively skewed (skewness = -1.57, SEskewness = 0.19). In terms of reliability, in this sample the internal consistency was α = .75.

TPI-T and TPI-C. The TPI was given to both clients (TPI-C, client version) and therapists (TPI-T, therapist version). The descriptive statistics are presented in Table 1. TPI-C data were assessed for outliers. Two outliers were identified and their TPI-C scores were removed from further analyses. The remaining TPI-C scores reported by the client participants ranged from 16 to 21. The mean score was M =

19.99 (SD = 1.14), the median was 20.00, and the mode was 21.00. The distribution was platykurtic (kurtosis = 2.11, SEkurtosis = 0.39) and negatively skewed (skewness = -1.429, SEskewness = 0.20). In terms of reliability, the TPI-C internal consistency in this sample was α = .61. The data for TPI-T was also assessed for outliers. Six outliers were identified and their TPI-T scores were removed from further analyses. The remaining TPI-T scores ranged from 80 to 148. The mean was M = 123.67 (SD = 14.94), the median was 126.00, and the mode was 139.00. The distribution for TPI-T was significantly leptokurtic (kurtosis = 10.20, SEkurtosis = 0.38) and negatively skewed (skewness = -.2.95, SEskewness = 0.19). In terms of reliability, the internal consistency for the TPI-T was α = .92.

Table 1
Descriptive Statistics for the Outcome Measures

	N	Minimum	Maximum	Mean	SD	Median	Mode
TPI-Clients	39	16	21	19.99	20.0	21	1.14
TPI-Therapists	15	118.89	148.0	118.88	125.0	139	28.1
Clients-rated SEQ Depth	39	2.6	6.0	3.76	3.6	3.4	.59
Clients-rated SEQ Smoothness	39	2.4	6.2	4.36	4.4	4.6	.56
Client-rated SEQ Sensitivity	39	2.4	4.8	3.69	3.8	3.8	.55
Clients-rated SEQ Arousal	39	2.4	5.0	3.69	3.6	3.4	.45
Therapists-rated SEQ Depth	15	3.0	5.4	4.13	4.2	4.2	.48
Therapists-rated SEQ Smoothness	15	3.0	6.0	4.252	4.4	4.4	.45

SEQ. The SEQ was given to both client and therapist participants. Scores on the SEQ yield four indexes (Depth, Smoothness, Sensitivity, and Arousal). Client participants rated their experience on all four subscales of the SEQ; however, therapist participants were only asked to rate the Depth and Smoothness items. The descriptive statistics for both client and therapist participants are presented in Table. # 1. Using the z-Scores method, four outliers were also detected for the client participants' self- report for all four SEQ subscales. The identified outlier scores were deleted and excluded from further analyses. The remaining scores on the Depth subscale for client participants ranged from 2.60 to 6.00, with a mean of M = 3.76 (SD = 0.59), a median of 3.60, and a mode of 3.40. The distribution had a slight positively skew (skewness = 0.92, SEskewness = 0.19) and was slightly platykurtic (kurtosis = 1.01, SEkurtosis

= 0.38). The scores on the Smoothness subscale ranged from 2.40 to 6.20, with a mean of M = 4.36 (SD = 0.55), a median of 4.40, and a mode was 4.60. The distribution was slightly platykurtic (kurtosis = 1.59, SEkurtosis = 0.39), but no evidence of skew was present (skewness = 0.11, SEskewness = 0.20). The scores on Arousal subscale ranged from 2.40 to 4.80, the mean was M = 3.67 (SD = 0.54), the median was 3.80, and the mode was 3.80. No evidence of skew (skewness = -0.26, SEskewness = 0.19) or kurtosis (kurtosis = -0.41, SEkurtosis = 0.39) problems were present. The scores on Positivity subscale ranged from 2.50 to 5.00, the mean was M = 3.69 (SD = 0.45), the median was 3.60, and the mode was 3.40. No evidence of skew (skewness = 0.26, SEskewness = 0. 19) or kurtosis (kurtosis = 0.42, SEkurtosis = 0.39) problems were present. In terms of reliability, the internal consistency for the client participants' responses was α = .75 for Depth, α = .81 for Smoothness, α = .85 for Positivity, and α = .72 for Arousal. Two outliers were detected for the therapist participants' self-report scores for the SEQ Depth subscales, and one for the Smoothness subscale. The identified outlier scores were deleted and excluded from further analyses. The scores on the Depth subscale for therapist participants ranged from 3.00 to 5.40, the mean was M = 4.12 (SD = 0.48), the median was 4.20, and the mode was 4.20. No evidence of skew (skewness = 0.21, SEskewness = 0.19) or kurtosis (kurtosis = -0.30, SEkurtosis = 0.38) problems were evident. The scores on the Smoothness subscale for therapist participants ranged from 3.00 to 6.00, the mean was M = 4.25 (SD = 0.45), the median was 4.40, and the mode was 4.40. No evidence of skew (skewness = -0.47, SEskewness = 0.19) or kurtosis (kurtosis = -0.31, SEkurtosis = 0.38) problems were evident. In terms of reliability, internal consistency for the therapist participants' responses were α = .65 for the Depth index and α = .75 for the Smoothness index.

Main Analyses: Clients' Ratings of the Session Outcomes

SRS. The session outcome in this study was operationalized using SRS. It was hypothesized that client participants would rate the sessions that began with the mindfulness exercises higher on the SRS compared to the control sessions. The average SRS scores for sessions that began with mindfulness was M = 37.64 and the average for control sessions was M = 37.27, with a mean difference between the two conditions of M = -0.37, 95% CI [-1.11, 0. 38]. An HLM analysis was conducted with condition modeled as a level one variable, clients entered for level two, and therapists entered for level three. The intercept and condition were modeled as fixed effects at level one, but were also allowed to vary (random effects) between therapists (level three) and clients (level two). The difference between the two conditions on the SRS was not significant, t(17.74) = -1.03, p = 0.37. Results from the random effects tests indicated that the therapists did not differ from each other in their average SRS scores, Estimate = 0.83, Wald Z = 0.45, p = 0.65, and did not differ in their response to the conditions, Estimate = 0.13, Wald Z = 0.12, p = 0.90. The client participants also did not differ significantly from each other in their SRS scores, Estimate = 2.7, Wald Z = 1.49, p = 0.14, or their response to the conditions, Estimate = 0.57, Wald Z = 0.70, p = 0.49.

TPI-C. It was further hypothesized that clients would rate their therapists' presence during the mindfulness sessions higher on TPI, than during control sessions. The average scores on the TPI-C for sessions that began with mindfulness was M = 19.92 and the average for control sessions was M = 19.70, with a mean difference between the two conditions of M = -0.21, 95% CI [-1.22, 0.79]. An HLM analysis was conducted with condition modeled as a level one variable, clients entered for level two, and therapists entered for level three. The intercept and condition were modeled as fixed effects at level one, but were allowed to vary (random effects) between therapists (level three) and clients (level two). The difference

between the two conditions on the TPI-C was not significant, t(1.57) = 1.20, p = 0.38. Results from the random effects tests indicated that the therapists did not differ from each other in their average TPI-

C scores, Estimate = 0.10, Wald Z = 0.00, p = 1.00, and did not differ in their response to the conditions, Estimate = 0.12, Wald Z = 0.38, p = 0.71. The client participants also did not differ significantly from each other in their ratings on the TPI-C, Estimate = 0.26, Wald Z = 1.10, p = 0.27, or their response to the

DISCUSSION

The purpose of the current study was to empirically examine the effects of therapists and clients engaging in a brief mindfulness exercise jointly at the start of psychotherapy sessions. Specifically, the study compared sessions that began with a mindfulness exercise to control sessions that began with psycho-education on client and therapist ratings of session outcomes and therapist presence during the session. Contrary to our hypotheses, the findings from this study did not provide any evidence that clients and therapists experienced sessions more positively when they started the session with a mindfulness exercise compared to the control condition. In other words, this study failed to find significant differences in SRS, TPI, and SEQ scores between the two conditions. Further, the results from the random effects analyses indicated that the participating clients and therapists did not significantly differ from each other in how they responded to the mindfulness exercise and psycho-education conditions.

Based on these findings, it is possible that the hypotheses that were originally made for this study were wrong – that beginning sessions with a 5-minute joint mindfulness experience is not sufficient to produce an impact on session outcomes. Considering that the literature indicates that several variables play a role in explaining treatment outcomes, and any given variable can only explain a small portion of variance in client change (e.g., the type of treatment that is used only explains 5 to 7% of the variance in client change) (Lambert, 2013), it may be difficult for a such a brief exercise to make a meaningful or significant difference in session outcomes.

It is important to consider the null results of this study in the context of the existing research on mindfulness for therapists. Studies have found that the general use of mindfulness offers many personal and professional benefits for therapists and trainees (Dunn et al., 2012). However, to date, only four published studies have empirically examined whether therapist mindfulness actually improves psychotherapy outcomes for clients. While Stanley et al.'s (2006) published study found no relationship between trainee therapists' trait mindfulness and clients' report of treatment outcomes, the results of two other published studies found training therapists in mindfulness practice does enhance client outcomes. These two studies demonstrated that clients of therapists who engaged in a daily meditation program reported a greater improvement in their overall clinical symptoms and perceived treatment as more effective, when compared to clients of non-meditating therapists (Grepmair, Mitterlehner, Loew, Bachler, et al., 2007; Grepmair, Mitterlehner, Loew, & Nickel, 2007). Perhaps most similar to the current study, Dunn et al. (2012) found that clients perceived therapy sessions as being more effective when their therapists engaged in a brief 5-minute mindfulness meditation exercise prior to the session. Therefore, there does appear to be some indication that therapist mindfulness can be related to client outcome; however, the results of this study did not support the significant findings from previous research.

Ultimately the data from this study did not identify a significant difference in outcomes. Based on the data from this study it does not appear that a 5-minute mindfulness exercise resulted in a significant difference in treatment outcome. One possible interpretation of insignificant findings is that mindfulness mediation, as introduced to the therapists and clients in this study, did not have a benefit, or that it does not benefit everyone.

Another possibility exists as well. There is a growing awareness that different types of meditation, including mindfulness meditation, works differently for each client and individual (Farias & Wikholm, 2015). Although research literature supports the effectiveness of mindfulness in treating various physical and psychological conditions, the empirical evidence also suggests meditation is not a cure-all (Goyal at al., 2014). The results of this study indicated that a brief meaningful psychoeducational topic, introduced at the start of the session, was equally as effective as a mindfulness intervention. Given the inconsistency of research findings between meditation practice and treatment outcomes, other therapeutic techniques, such as psychoeducation, progressive muscle relaxation, deep-breathing exercises, could also be researched as an alternative to mindfulness. The therapists need to offer the clients a choice and find what is best for the clients.

In clinical practice, if mindfulness appeared to be beneficial for a client, it would be most helpful to tailor a selected mindfulness exercise to individual clients. The clients would need to be familiarized with the concept, goal, and purpose of mindfulness practice and educated about potential benefits and

challenges of these exercises. Some clients with developmental trauma and complex PTSD are more vulnerable to interventions that increase access to negative internal states (Briere, 2015). Considering that some of the mindfulness practices primarily focus on awareness of body, thoughts or emotions, depending on the client's presenting problems and diagnosis, the therapist may choose one of these three areas on which to focus mindfulness exercises. If the client is not able to safely engage in awareness of body, thoughts, or emotions due to trauma history or other presentation, mindfulness practice may need to be delayed until it is therapeutically appropriate to utilize these tools.

Future Research Directions

A number of future directions can be identified for this area of research. First, given the inconsistent findings in the existing research based on using self-report measures, better measures of mindfulness may need to be developed. In fact, on some self-report measures of mindfulness, long-time meditators have been shown to have poorer scores than binge-drinking college students (Bear, 2011). It has been suggested that the next-generation of mindfulness research needs to include changes in measurement in four areas: (1) performance-based measures of mindfulness, as opposed to self-reports of mindfulness; (2) scientific evaluation of notions espoused by Buddhist traditions; (3) neuroimaging technology and testing to verify self-report data; and (4) changes in gene expression as a result of mindfulness (Garland & Gaylord, 2009). Although potentially more cumbersome, research that addresses these four areas is likely to provide greater increases in the field's understanding of mindfulness meditation and its possible benefits to psychotherapy (Davis & Hays, 2011).

In the recent years, various mindfulness meditation tools have been developed to help clinical and non-clinical populations better cope with stress, anxiety, and/or increase their overall well-being. In fact, some "apps" have been developed for individuals with no prior experience with mindfulness. Certain features of these "apps," like the explanations of the science behind meditation, could be used as brief mindfulness training for participating therapists and clients prior to engaging in the mindfulness exercises together. Researchers could choose among different guided meditations that focus on a single concept, like equanimity, or guided sitting meditation that encompasses different elements of mindfulness practices. Further, instead of using mindfulness practice logs, like in the Ivanovic et al. (2015) study, many current "apps" include a feature that allow participants to tracks the time they spend meditating. If, as a part of the research protocol, participants were required to practice mindfulness outside of therapy sessions, the features of the various "apps" could be used to help individuals pinpoint their current mood and emotions, and then choose different mindfulness practice based on their answers.

Future studies could also examine whether longer mindfulness exercises (e.g., 15 to 20 minutes) could lead to improved session outcomes and therapeutic presence by therapists. The existing literature suggests that engagement in a 15 to 20 minutes of mindfulness practice on a daily basis leads to reductions in stress and improvements in attention, emotional regulation, and increased overall well-being in clinical and non-clinical populations (Davis & Hays, 2011); however, this study failed to find an effect with a 5-minute exercise completed approximately once per week during therapy sessions. The "proper" or "right" amount of mindfulness practice is yet another issue in research on mindfulness that needs to be addressed. A review of the literature indicates the length of mindfulness practice utilized in studies varies significantly. While the most researched MBSR usually consist of eight 2-hour weekly group sessions, other studies either focused on testing the effects of brief mindfulness practices (e.g., completing two-15 minute meditation sessions) or very intense mindfulness practices (e.g., ten days mindfulness meditation retreats) (Polak, 2009; Wenk-Sormaz, 2005). Moore et al. (2012) have noted that is almost impossible to find any guidance from the literature regarding the right amount or duration of mindfulness practice, and that future research needs to address this issue.

CONCLUSION

The literature on benefits of therapist mindfulness on treatment outcomes is in its early development. No studies before this one have examined the treatment benefits of mindfulness mediation when practiced together by therapists and clients. The main goal of this study was to investigate the effects of therapists and clients jointly engaging in a brief mindfulness exercise together at the start of their therapy sessions. This study failed to find a difference between conditions on participants' scores on the SRS, SEQ, and TPI. In other words, the client and therapist participants rated the sessions as equally effective, and therapists perceived themselves and were perceived by clients as equally present, regardless of whether they were

engaged in the centering exercise or psycho-education at the beginning of the treatment sessions. In addition, when the therapist, client, and session predictors were held constant, the difference in client and therapist ratings between the conditions on the SRS, SEQ, and TPI were still not significant. These null findings may partially be explained by the study's limitations, including the ceiling effects associated with several outcome measures, reliance on subjective self-report measures, and therapists not being blind to the purpose of the study or to the conditions, to name just a few. However, based on the results of prior studies, the potential uses for mindfulness in psychotherapy should continue to be explored.

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