EMDR to Treat Children and Adolescents: Clinicians' Experiences Using the EMDR Journey Game

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Childhood trauma is a pervasive social issue with profound consequences. Eye movement desensitization and reprocessing (EMDR) therapy is an effective treatment for children. Challenges can arise when using EMDR with children, such as difficulty engaging children and developmental fit of the protocol. Child experts have developed creative tools to address these challenges. The EMDR Journey Game is one such tool that integrates creative modalities with EMDR. This study explored the relationship between use of the game and clinician's perceived client engagement and clinician confidence. This study employed an observational, cross-sectional design, surveying (online) 69 EMDR-trained clinicians, half of whom had used the game and half of whom had not. Results show clinicians were motivated to use the EMDR Journey Game to engage children in EMDR and to increase their confidence. Findings also suggest the game was perceived to enhance children's engagement with EMDR; clinicians' experience (years and frequency of use) with EMDR impacts their confidence using EMDR with adolescents and adults, but not with children. Results support the efforts of child experts to develop appropriate, creative tools to adapt EMDR for children. Further exploration of clinician confidence using EMDR with children is necessary.

Keywords: EMDR therapy; play therapy; creative therapies; childhood trauma

Each year in the United States, approximately 5 million children younger than the age of 18 years experience a traumatic event. The devastating impacts of childhood trauma include altering a child's physical, emotional, cognitive, and social development, resulting in several symptoms such as depression, anxiety, and hyperactivity, among others (De Bellis & Zisk, 2014; Hodges et al., 2013; Koenen, Roberts, Stone, Dunn, 2010; Perry, Pollard, Blakely, Baker, & Vigilante, 1995). Early treatment is critical to improve mental and behavioral health outcomes in adulthood (Carlson, 2007; Solomon & Siegel, 2003).

EMDR Therapy

Dr. Francine Shapiro created eye movement desensitization and reprocessing (EMDR) therapy as an integrated approach for the treatment of trauma-based symptoms. It incorporates many modalities including cognitive behavioral, psychodynamic, and body-centered therapies and organizes them in an eight-phase protocol (Shapiro, 2001). The EMDR clinician guides the client with bilateral stimulation (eye movements, tactile or auditory) while he or she processes a distressing memory. This process facilitates resolution of the memory and allows for new more positive networks and skills to develop (Shapiro, 2001).

The eight phases of the EMDR therapy process in order are as follows: I. History taking and treatment planning (obtaining background information, assessing suitability of EMDR, identifying potential target memories for processing); II. Preparation (including preparing clients for EMDR and increasing their ability to switch to positive affect states); III. Assessment (accessing the specific target and identifying the components of the memory); IV. Desensitization (reprocessing the experience to resolution with procedures that include bilateral stimulation); V. Installation (increasing connections to positive cognitive and emotional networks); VI. Body scan (bringing awareness to the body and processing any residual disturbance); VII. Closure (ensuring stability at the end of and in between sessions); and VIII. Reevaluation (at the next session, revisiting the processed memory to see if any residual material requires processing; Shapiro, 2001).

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Shapiro also developed the adaptive information processing (AIP) model, which is the conceptual basis of EMDR.

> The model regards most pathologies as derived from earlier life experiences that set in motion a continued pattern of affect, behavior, cognitions, and consequent identity structures . . . pathology is viewed as configured by the impact of earlier experiences that are held in the nervous system in state-specific form. (Shapiro, 2001, pp. 16–17)

She asserts that there is an inherent information processing system in the brain, which processes the multiple elements of an individual's experiences in an adaptive manner. This system gets blocked when traumatic events occur, causing traumatic experiences to get locked in the brain with the original picture, sounds, thoughts, feelings, and body sensations. Whenever a reminder of the traumatic event comes up, those pictures, thoughts, feelings, and sensations can be triggered. Research on the brain science of trauma helps to explain how the implicit memories connected to traumatic experiences are stored in the highly sensitive amygdala and hippocampus, resulting in intense behavioral and emotional responses to present day triggers (Siegel, 2010; van der Kolk & McFarlane, 1996). Furthermore, many emotional problems and disorders are manifestations of these unprocessed trauma memories that are stored in the brain (Shapiro, 2001).

EMDR Therapy and Children

The World Health Organization (2013) has recognized EMDR therapy as a recommended treatment for children, adolescents, and adults with posttraumatic stress disorder (PTSD) symptoms. EMDR therapy has been found to reduce posttraumatic stress and other mental health symptoms, such as depression and anxiety, in children and adolescents (Ahmad, Larsson, & Sundelin-Wahlsten, 2007; Chemtob, Nakashima, & Carlson, 2002; Jaberghaderi, Greenwald, Rubin, Dolatabadim, & Zand, 2004; Shapiro, 2001; Wadaa, Zaharim, & Alqashan, 2010; Wanders, Serra, & de Jongh, 2008).

Challenges

Although EMDR therapy is an effective treatment for young clients who have experienced trauma, working with this population can present several challenges. In general, while working with children who have experienced trauma, clinicians have reported difficulty engaging them in the therapeutic process, discomfort in holding a space for the traumatic material, lack of confidence in using trauma-informed approaches, resistance to treatment, developmentally inappropriate treatment approaches, and lack of experience in adapting treatments to be developmentally appropriate (Kazdin, Siegel, & Bass, 1990; Lambert, 1992; Malchiodi, 2005; Purnell, 2010). EMDR clinicians have reported similar challenges: Specifically, avoidance of processing, difficulty engaging in the EMDR process, and developmental appropriateness of the language of the protocol (Adler-Tapia & Settle, 2008). Furthermore, clinicians' own confidence using EMDR and comfort level with child development also are factors connected to their ability to effectively use EMDR therapy with child clients (Adler-Tapia & Settle, 2008). It is important for clinicians to find ways to combat such challenges because engagement, clinician confidence, and developmentally appropriate adjustments are key to successful therapeutic outcomes (Adler-Tapia & Settle, 2008; Chatoor & Krupnick, 2001; Eisler, 2006; Lambert, 1992; Orlinsky, Grawe, & Parks, 1994; Simon, 2006).

Using EMDR Therapy With Children

Play is children's most natural communication, making it the best modality for language and feeling expression. Incorporating play and other creative, developmentally appropriate modalities, into therapy has many positive effects including reduction of stress associated with therapeutic process and outcome, reduction in resistance to treatment, enhanced engagement, and reduction of fear associated with processing traumatic memories because children can project their experiences onto the medium (Landreth, 1991; Malchiodi, 2005; McNiff, 1992; Ruddy & Dent-Brown, 2007; Webb, 2003).

EMDR therapists specializing in the treatment of children have examined the integration of creative modalities with the EMDR protocol and written books and articles to help clinicians more effectively use EMDR therapy with young clients (Adler-Tapia & Settle, 2008; Gomez, 2013; Greenwald, 1999; Tinker & Wilson, 1999). These child experts explain how to make EMDR language more developmentally appropriate while adhering to the protocol. Gomez (2013) explains that allowing children to explore and play with the elements of EMDR therapy allows them to feel safer while exploring traumatic material. Some ways to do so are to integrate art, the feeling finder wand, feeling face and cognition cubes and cards, fostering imagination, creating a team of helpers, and using a family pet or a stuffed animal as a resource, among other playful techniques. Integrating creative modalities with EMDR therapy also helps enhance engagement and

improve clinician confidence in EMDR therapy with children, which has been shown to be related to successful therapeutic outcomes (Adler-Tapia & Settle, 2008; Chatoor & Krupnick, 2001; Eisler, 2006; Gomez, 2013; Orlinsky et al., 1994; Simon, 2006).

The EMDR Journey Game

The EMDR Journey Game (Courtney, 2011) is one such integration of EMDR therapy and playful, creative modalities. The unique aspect of the EMDR Journey Game (Courtney, 2011) is that it puts Phases III–VII of EMDR therapy into a board game to be "played" with the client. During each of these phases, there is a corresponding artistic, visual, and/or tangible component that the client can use creatively to help him or her feel more comfortable and engaged with the EMDR therapy process. While playing the game, clinicians lead clients on a journey across the board starting in the rocky, rough water and working their way to a calm, safe beach. Each space on the board corresponds with a step in the EMDR therapy process. The clients begin by identifying and drawing a target. As they progress across the board they pick a negative and a positive cognition associated with the target, using the Yucky and Good Thought Cards to help find the words. For instance, the client may pick up the Yucky Thought Card, "I am not safe" and the Good Thought Card, "I am safe now." Similarly, they use the Feeling Face Cards and Feeling Finder to identify and locate feelings in their body. There is also a Validity of Cognition (VOC) and Subjective Units of Distress (SUD) Dial, with numbers and faces on it to help the client rate levels throughout the session. The bilateral stimulation and reprocessing is done on the island in the middle of the board, which allows for a place to return if the target is not fully processed in one session. If clients want to slow down processing at any point, there is a Stop Sign and Safe Place Card available to them. After processing, while approaching the beach, clients are guided through a Safe Place Meditation and Closure. There is also room for the clients to creatively play with the clinician throughout the game. For instance, they can draw at any point during the game, rather than verbally express feelings or thoughts. Another example is they may use the Feeling Finder like a private investigator searching their bodies and beeping when a feeling is found in their head, throat, heart, and so forth. Having these tools at hand allows clients to play with them as they wish within the framework of EMDR therapy. There is also a written guide for clinicians to follow, which can be very helpful for newly trained clinicians who are still getting familiar with the protocol.

The game was created to address challenges of engaging young clients with EMDR and the developmental suitability of the EMDR therapy protocol. The game was intended to increase clinician confidence by organizing the therapy protocol and providing age-appropriate aids. Furthermore, each component of the game was created with the intention of tapping into children's developmental strengths of play, creativity, and imagination to process material. If the game achieves these goals, it is expected that therapeutic outcomes will improve.

Current Study

The purpose of this study was to explore clinicians' experiences and perceptions regarding their use of the EMDR Journey Game with children and adolescent clients, aged 18 years and younger. Specific clinician experiences that were examined include clinician confidence using EMDR therapy and perceived client engagement during the EMDR process. This exploration allowed for preliminary testing of a clinical tool, developed to add to the resources available to EMDR clinicians working with children. The author (DMC) is also the developer of the game under study. To preclude the possibility of the potential bias influencing outcome, the research was continually examined by the research committee (composed of three senior-level faculty members at Fordham University), and the survey was reviewed by an EMDR clinician with an advanced level of training and experience with survey development. Specifically, she reviewed question wording, question type and design, and survey structure.

Method

Research Design

This study employed an observational, cross-sectional design, sampling EMDR-trained clinicians. Institutional review board (IRB) approval was obtained from Fordham University prior to making contact with any study participants. The survey was both exploratory and explanatory in nature and was the first to explore how a tool like the EMDR Journey Game impacts clinician confidence and perception of client engagement. The survey was administered online to two groups of EMDR clinicians: those that had bought and used the EMDR Journey Game and those that had not.

Hypotheses

There were two main hypotheses in the study. The first was that use of the game would be related to

higher perceived client engagement with the EMDR process (as reported by the clinician), controlling for clinician experience, and that this relationship would be strongest for the youngest clients (age 12 years and younger). The second hypothesis was that use of the game would be related to greater confidence of the clinician, controlling for clinician experience, and that this relationship would be strongest for the youngest clients (age 12 years and younger). Age 12 years was chosen as the cutoff because child development literature suggests that this is the age when individuals begin to move from childhood to adolescence (Erikson, 1959).

Data Collection

Creswell (2003) explains that an initial mailing of the instrument along with a cover letter explaining the purpose of the study is imperative, followed by a second mailing 2 weeks after the initial mailing thanking those that had already participated and encouraging those who have not done so. A similar approach was followed but was adapted to an online process, whereas an informed consent letter and a survey link were sent via an introduction e-mail to 157 EMDR clinicians that had bought the game, and approximately 150 clinicians on a Northeast EMDR listserv, who had not purchased the game. In addition, in line with the assertion by Dillman, Smyth, and Christian (2009) that incentives increase response rate, an optional inclusion in a raffle for a prized drawing was offered to potential participants. The study sample consisted of 69 clinicians, 30 who reported having used the EMDR game and 39 who did not, for a total response rate of 22%.

Study Measures and Variables

The descriptive variables measured included age, gender, type of graduate degree, years practicing as a therapist, years practicing EMDR therapy, practice setting, how often they use EMDR therapy, and the percentage of clients that are children, adolescents, and adults.

Independent Variable. The independent variable in this study is use of the EMDR Journey Game, which was measured as a dichotomous variable, with a yes/no response regarding whether they had ever used the EMDR Journey Game.

Dependent Variables. Clinician confidence and clinician perception of client engagement are the two main dependent variables in this study. Clinician confidence is the measure of clinicians' self-reported confidence using EMDR therapy with clients. Clinician confidence is based on the Merriam-Webster definition of confidence and explained on the survey as "Confidence is defined as a faith or belief that one will act in the right or effective way. Therefore, with regard to rating your confidence using EMDR please rate your belief in yourself to use EMDR effectively with clients." There are three separate dependent variables related to confidence, relative to each age group of clients.

Perception of client engagement is the measure of clinicians' perceptions of their clients' engagement with EMDR therapy. In the literature, conceptualizations of client engagement that focus on client's attitude have used terms such *cooperation* (McCroskey & Meezan, 1997), *involvement* (Dore & Doris, 1997), *collaboration* (Littell & Tajima, 2000), or *participation* (McKay et al., 1998; Mi Kim, Odallo, Thuo, & Kols, 1999) to describe perceptions of the client's state of mind while participating in the therapy. To clarify for this study, the survey instructions explained, "Client engagement with EMDR can be conceptualized as their cooperative and involved participation with the EMDR process." There are three separate dependent variables related to engagement, relative to each age group of clients.

Control Variable. Clinician experience is the measure of clinicians' self-reported level of experience with EMDR therapy. Because of the small sample size, a composite variable, Experience, was created by standardizing the variables: "Years of EMDR Experience" and "How Often a Clinician Uses EMDR" to maintain as much statistical power as possible. This z score was normally distributed with a range from -1.58 to 1.58.

Analysis

Data were analyzed with SPSS Version 2. Univariate analyses and ordinal regressions describing the strength and direction of the linear relationships between use of the game, clinician confidence, and perceived client engagement controlled for by clinician experience are presented in the following text.

Results

Univariate Analyses

As shown in Table 1, the sample consisted of 69 EMDR-trained clinicians. Participants were predominately female (91%, $n = 61$), White (90%, $n = 60$), social workers (52.9%, $n = 36$), practicing in private practice settings ($SD = 11.47$), and used EMDR therapy "frequently or always" in their clinical practice (52.2%, $n = 36$). They had a mean age of 50.93 years old,

TABLE 1. Sociodemographic Information and Group Comparison (*N* = 69)

Characteristic	*N*	Valid % or *M* (*SD*)	Those Who Used the Game (*N* = 30) Valid % or *M*	Those Who Did Not Use the Game (*N* = 33) Valid % or *M*
Gender				
Female	61	91.0	90.0	90.6
Male	6	9.0	10.0	9.4
Age group		50.93 (*SD* = 11.47)	49.10	53.91
20–29 years	1	1.5		
30–39 years	13	19.1		
40–49 years	11	16.2		
50–59 years	28	41.2		
60–69 years	12	17.6		
70 years and older	3	4.4		
Ethnicity (multiple responses allowed)				
African American	0	0.0	0.0	0.0
Hispanic	5	7.2	10.0	6.1
White	61	88.4	86.7	90.9
Native American	1	1.4	3.3	0.0
Asian/Pacific Islander/Indian	1	1.4	3.3	0.0
Prefer not to answer	2	2.9	3.3	3.0
Graduate degree				
Social worker	36	52.9	53.3	51.5
Psychologist	9	13.2	13.3	12.1
Psychiatrist	1	1.5	0.0	3.0
Other mental health counselor	22	32.4	33.3	33.3
Practice setting (multiple responses allowed)				
Hospital	5	7.2	10.0	6.1
Clinic	19	27.5	33.3	18.2
Private practice	47	69.6	66.7	78.8
School	3	4.3	6.7	3.0
Residential facility	2	2.9	0.0	6.1
Years of practice as a therapist			14.71	16.48
0–5	10	15.9		
6–10	16	25.4		
11–15	10	15.9		
16–20	5	7.9		
21-25	9	14.3		
More than 25	13	20.6		

(Continued)

TABLE 1. Sociodemographic Information and Group Comparison (*N* = 69) *(Continued)*

Characteristic	*N*	Valid % or *M* (*SD*)	Those Who Used the Game (*N* = 30) Valid % or *M*	Those Who Did Not Use the Game (*N* = 33) Valid % or *M*
Years of EMDR experience			6.46	8.10
0–4	33	45.6		
5–9	12	24.6		
10–14	3	14.0		
15–19	9	10.5		
20+	12	5.3		
How often use EMDR				
Seldom	11	17.2		
About half the time	17	26.6		
Frequently	22	34.4		
Almost always/always	14	21.9		
Frequency of use of EMDR				
With children		2.52 (*SD* = 1.37)		
With adolescents		2.86 (*SD* = 1.29)		
With adults		3.51 (*SD* = 1.16)		
Percentage of clients				
Children		19.22 (*SD* = 19.28)		
Adolescents		21.61 (*SD* = 20.23)		
Adults		57.82 (*SD* = 32.61)		

Note. EMDR = eye movement desensitization and reprocessing.

15.58 (*SD* = 10.16) years practicing as a therapist, and 7.01 (*SD* = 5.86) years practicing EMDR therapy. Regarding client population, adult clients made up the highest percentage of participants' caseloads (*M* = 57.82, *SD* = 32.61), followed by adolescents (*M* = 21.61, *SD* = 20.23), and then children (*M* = 19.22, *SD* = 19.28). Participants most often used EMDR therapy with adult clients (*M* = 3.51), then adolescents (*M* = 2.86), and least with child clients (*M* = 2.52) as measured on a 4-point frequency scale, where 4 = *always* and 1 = *seldom*. In other words, most clinicians used EMDR with all age clients but least frequently with children.

If clinicians reported using the EMDR Journey Game, they were asked questions specific to their experiences with the game. Table 2 illustrates that the large majority of these 30 clinicians reported the greatest motivating factor in using the game was to help engage younger children with EMDR therapy (92.9%), followed by a desire to help increase their own confidence using EMDR therapy (67.9%). The majority (78.6%) also reported they "agree/strongly agree" the game enhanced child/adolescent clients' engagement with EMDR therapy, and (72.4%) reported they "agree/strongly agree" the game had a positive therapeutic value for their child/adolescent clients. Furthermore, nearly half (48.3%) reported that they "agree/strongly agree" that the game helped increase their confidence using EMDR therapy with child/adolescent clients.

Multivariate Analyses

A series of ordinal regressions were performed to test the hypotheses that the EMDR Journey Game is related to higher perceived client engagement and greater clinician confidence with the EMDR process. More specifically, six ordinal regressions were conducted, three confidence models (confidence with children, confidence with adolescents, confidence with adults) and three engagement models (perceived engagement with children, perceived engagement with adolescents, perceived engagement with adults). The results are depicted in Tables 3 and 4. The variable

TABLE 2. EMDR Journey Game Information Among Those Who Used the Game ($N = 30$)

Characteristic	*N*	Valid Percentage or *M* (*SD*)
Used EMDR Journey Game		
Yes	30	47.6
No	33	52.4
Frequency of use of game		
With children		2.96 (*SD* = 1.20)
With adolescents		2.25 (*SD* = 1.17)
With adults		1.40 (*SD* = 0.86)
Motivations for buying Journey Game (% responding yes)		
Help me engage younger clients with EMDR	26	92.9
Increase confidence with EMDR	19	67.9
Become more familiar with EMDR methodology	8	32.0
Use as a training tool for consultation/trainings	6	25.0
The EMDR Journey Game has increased my confidence with children/adolescent clients		
Strongly disagree/disagree	2	6.9
Neither agree or disagree	13	44.8
Agree/strongly agree	14	48.3
The EMDR Journey Game appears to enhance engagement of children/adolescent clients with EMDR		
Strongly disagree/disagree	1	3.6
Neither agree or disagree	5	17.9
Agree/strongly agree	22	78.6
The EMDR Journey Game appears to have a positive therapeutic value for my children/adolescent clients		
Strongly disagree/disagree	1	3.4
Neither agree or disagree	7	24.1
Agree/strongly agree	21	72.4

Note. EMDR = eye movement desensitization and reprocessing.

"Clinician Experience" was entered into the models as an independent variable to be controlled for. No other variables were entered as controls because there were no significant differences between the clinicians that used and did not use the game.

The assumptions of multicollinearity and proportional odds were tested and met. There was a very small correlation between the independent variables "Use of the Game" and "Clinician Experience" (.156), as well as a tolerance of (.976), which is well above the standard .40, indicating no evidence of collinearity. Regarding proportional odds, the *p* values for the tests of parallel lines were each much larger than .05, thus meeting the assumption for each model.

Perceived Engagement Models. The model assessing use of the game and clinician experience on clinicians' perceptions of children's engagement with EMDR therapy was significant ($p = .034$). Specifically, use of the game was significant ($p = .021$), but clinician experience was not ($p = .367$). Therefore, playing the game, as opposed to not playing the game, increased the likelihood of children being in a higher category of perceived engagement by 3.42 odds.

The model assessing use of the game and clinician experience on clinicians' perceptions of adolescents' engagement with EMDR therapy was not significant ($p = .195$). However, playing the game did make a marginally statistically significant contribution to the model ($p = .084$), with a 2.45 odds ratio indicating that playing the game increased the likelihood of adolescents being in a higher category of engagement by 2.45 odds.

The engagement model with adult clients was marginally significant ($p = .062$). However in this

TABLE 3. Ordinal Regression Models of Perceived Engagement of Children, Adolescent, and Adult Clients

Independent Variables	*B*	*SE*	Odds Ratio (*OR*)	95% Confidence Interval
Children				
Use of game	1.2**	0.53	3.42	[0.18, 2.28]
Clinician experience	0.31	0.34	1.36	[−0.36, 0.99]
$\chi^2 = 6.78$, $df = 2$, $p = .034$, $n = 53$				
Adolescents				
Use of game	0.90*	0.52	2.45	[−0.12, 1.92]
Clinician experience	0.07	0.33	1.07	[−0.58, 0.72]
$\chi^2 = 3.28$, $df = 2$, $p = .195$, $n = 56$				
Adults				
Use of game	−1.23	1.08	0.29	[−3.35, 0.89]
Clinician experience	1.66**	0.84	5.24	[0.01, 3.30]
$\chi^2 = 5.57$, $df = 2$, $p = .062$, $n = 61$				

Note. *df* = degrees of freedom.
*$p < .10$. **$p < .05$.

case, clinician experience was significant ($p = .049$), but use of the game was not ($p = .255$). This finding was expected because the game was designed for use with young clients. The odds ratio of 5.24 indicates that with each additional level of experience, clinicians were 5.24 times more likely to report a higher category of perceived adult client engagement with EMDR therapy.

Overall, these models show that what predicts clinicians' perceptions of children and adolescents' engagement with EMDR therapy is use of the game, and not clinician experience. However, regarding working with adults, it is clinician experience that predicts perception of client engagement and not use of the game.

Confidence Models

The model assessing use of the game and clinician experience on clinicians' level of confidence with children was marginally significant ($p = .09$). However, neither of the variables, use of the game (.121)

TABLE 4. Ordinal Regression Models of Confidence With Children, Adolescent, and Adult Clients

Independent Variables	*B*	*SE*	Odds Ratio (*OR*)	95% Confidence Interval
Children				
Use of game	0.77*	0.50	2.17	[−0.20, 1.75]
Clinician experience	0.42*	0.32	1.53	[−0.20, 1.05]
$\chi^2 = 4.77$, $df = 2$, $p = < .092$, $n = 59$				
Adolescents				
Use of game	0.25	0.53	1.29	[−0.79, 1.30]
Clinician experience	1.26**	0.40	3.53	[0.487, 2.04]
$\chi^2 = 12.94$, $df = 2$, $p = .002$, $n = 59$				
Adults				
Use of game	−0.35	0.77	0.71	[−1.86, 1.17]
Clinician experience	2.30**	0.68	9.94	[0.96, 3.63]
$\chi^2 = 18.75$, $df = 2$, $p = < .001$, $n = 60$				

Note. *df* = degrees of freedom.
*$p < .10$. **$p < .05$.

and clinician experience (.182), was independently significant.

The model examining confidence with adolescents was a better fitting model ($p = .002$). The odds ratio of 3.53 indicates that with each additional level of experience, clinicians were 3.53 times more likely to report a higher category of confidence working with adolescents.

Similarly, the model examining experience and use of the game and confidence using EMDR therapy with adults was significant ($p = .000$). The odds ratio of 9.94 indicates that with each additional level of experience, clinicians were 9.94 times more likely to report a higher category of confidence working with adults.

Overall, these models show that what predicts clinician confidence using EMDR therapy with adolescents and adults is level of clinician experience and not use of the game. However, regarding working with children neither use of the game nor clinician experience predicts clinician confidence.

Discussion

This study provided preliminary evidence of the utility and effectiveness of the EMDR Journey Game. The study predicted that use of the game would be related to higher perceived engagement of young clients and greater clinician confidence using EMDR. Findings emerged that were relevant to both EMDR therapy in general and specific to the EMDR Journey Game.

Findings Relevant to EMDR Therapy

EMDR child experts suggest that clinicians may struggle to engage children in EMDR or adapt the protocol to the appropriate developmental level (Adler-Tapia & Settle, 2008; Gomez, 2013). This study found that most participants were motivated to use the EMDR Journey Game to more effectively engage children in EMDR therapy and to increase their confidence using EMDR therapy with them, further supporting the aforementioned notion. These findings champion current work being done and speak to the need for child experts to continue to write books, develop creative tools, and hold trainings to help EMDR clinicians feel more confident in engaging this population and develop the skills to adapt the protocol to the appropriate developmental level, both of which can help improve therapeutic outcome (Malchiodi, 2005; Webb, 2003).

This study's findings also suggest that clinicians' level of experience, as measured by the number of years they have been practicing EMDR and how often they use EMDR, largely determines their confidence using EMDR with adolescent and adult clients. This supports the EMDR training model of requiring consultation hours after the training to help newly trained clinicians feel supported in their use of EMDR therapy, which may result in more frequent use of the therapy. Because, as clinicians use it more often, their confidence will likely grow. However, the same relationship did not exist between clinician experience and confidence using EMDR with children. This is significant because it highlights the previously stated fact that children are a unique client population (Adler-Tapia & Settle, 2008; Gomez, 2013; Malchiodi, 2005; Webb, 2003). Further exploration of clinicians' confidence in using EMDR with children is important because the research tells us that confidence in the therapy enhances engagement and improves therapeutic outcome (Chatoor & Krupnick, 2001).

Findings Relevant to EMDR Journey Game

The primary finding of this study was that clinicians who used the EMDR Journey Game perceived it as useful in working with young clients. Specifically, a large majority reported they perceived it to enhance young clients' engagement with EMDR therapy and positively impacted their young clients' experiences with EMDR therapy. This finding is important because a major goal of the game was to help young clients engage with EMDR therapy. Although the scope of this study cannot determine if it does so, these preliminary findings based on clinician report suggest that it is helping.

With further regard to engagement with EMDR therapy, clinicians' use of the game most impacted perceived engagement of child clients, followed by adolescent clients. These findings support the hypothesis that the game would enhance perceived engagement of children. These findings further suggest that adapting EMDR therapy into developmentally appropriate, creative tools may assist children in engaging in the process of EMDR therapy more easily. Therefore, the importance of continued development of tools to help EMDR clinicians work with children is crucial (Adler-Tapia & Settle, 2008; Gomez, 2013; Malchiodi, 2005; Webb, 2003). Such adaptations appear to be less necessary for clients during the adolescent stage of development because they may be better able to engage with the abstract nature of EMDR during adolescence (Erikson, 1959).

Limitations

This study has some major limitations. First, the outcome measures were created for this study and were

not previously validated, making reliability and validity questionable and limiting generalizability. Second, the small sample size limits relevance to EMDR therapy at large. The small percentage of respondents indicates that those that did respond are potentially clinicians that are most invested in EMDR treatment, which may have biased results. Third, this study employed a cross-sectional design, which does not capture clinicians' experiences over time. Fourth, lack of randomization was another major limitation, and thus, the two groups may be different in some meaningful way. For instance, those clinicians who bought the game may have more interest in improving their clinical work with children. Because of this lack of randomization, the comparison between groups cannot be interpreted with confidence. Therefore, the primary finding of this study is that those clinicians who used the game perceived it as useful in working with young clients.

Directions for Future Research

In the future, research should take this preliminary study a step further and explore how the integration of creative approaches with EMDR therapy impact client engagement, rather than clinician perception of client engagement. Future research should also study the relationship between client engagement with EMDR therapy and therapeutic outcome and clinician confidence using EMDR therapy with children and therapeutic outcome. As more research is conducted on integrating creative approaches with EMDR, clinicians will have access to more evidence-based, play-focused approaches to use with children. This is very important because of the challenges that arise while working with children who have experienced trauma and the significant adverse consequences of childhood trauma (De Bellis & Zisk, 2014; Hodges et al., 2013). The more accessible EMDR is to both clinicians and children, the greater potential for enhanced therapeutic outcomes and improved long-term behavioral and emotional health (Carlson, 2007).

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