"It feels like the first time" : the use and implications of a chronological approach for treatment of multiple traumas with eye movement desensitization and reprocessing

Michelle M. Marchese

Follow this and additional works at: https://scholarworks.smith.edu/theses

Part of the Social and Behavioral Sciences Commons

Recommended Citation
https://scholarworks.smith.edu/theses/556

This Masters Thesis has been accepted for inclusion in Theses, Dissertations, and Projects by an authorized administrator of Smith ScholarWorks. For more information, please contact scholarworks@smith.edu.
Abstract

This study was undertaken to determine if mental health clinicians employ a chronological approach to organizing the treatment of multiple traumas while using the EMDR modality. Secondly, the opinions of these therapists were mined to see if they believe that working on chronologically earlier traumatic memories decreases the distress and PTSD symptoms related to later traumatic events and also if it positive affects a client’s ability to trust and participate in trauma-focused treatment.

An online survey was sent to three EMDR list serves as well as to the professional contacts of participant EMDR practitioners. Forty-three participants completed the survey, which included quantitative and qualitative questions about their EMDR practice and what, if any, experience and opinions they have of such a chronological approach.

The findings of the research showed that many respondents do use a chronological approach to multiple traumas with the EMDR, and that clinicians have found that working on chronologically earlier traumatic memories decreases the distress and PTSD symptoms related to later traumatic events.
It Feels Like the First Time:
The Use and Implications of a Chronological Approach for Treatment of Multiple Traumas with
Eye Movement Desensitization and Reprocessing

A project based upon an independent investigation, submitted in partial fulfillment of the requirements for the degree of Master of Social Work.

Michelle M. Marchese
Smith College School for Social Work
Northampton, Massachusetts 01063
2011
Acknowledgements

I would first like to thank Dr. Ricky Greenwald for taking the time to share with me his research and interest in this chronological approach, as well as his professional contacts (which aided me in my recruitment process).

Without the clinical skill and research expertise of my advisor Claudia Bepko, I not only could not have completed the technical aspects of this project but I would not have felt so held, validated and witnessed during the process.

I thank my partner Laurie Parent and her excellent Vessel Coffee: The strength of both gave me energy throughout each step of this project.

Thank you also to Carla Costa and my mom Marie Marchese for accepting the word “thesising” so easily into our vocabularies for this past year and providing me with invaluable technical and emotional support.

To Georgia Neil LICSW, words cannot express how you have enriched my own life with your EMDR practice.

Finally, thank you to the U.S. veterans with whom I have had the honor of working at my field placement: The courage and honesty with which you face your experiences inspired much of this work.
# Table of Contents

ACKNOWLEDGEMENTS ........................................................................................................ ii

TABLE OF CONTENTS ........................................................................................................ iii

LIST OF TABLES ................................................................................................................ iv

CHAPTER

I INTRODUCTION .............................................................................................................. 1

II LITERATURE REVIEW ................................................................................................. 3

III METHODOLOGY ......................................................................................................... 21

IV FINDINGS ...................................................................................................................... 26

V DISCUSSION ................................................................................................................... 30

REFERENCES ...................................................................................................................... 43

APPENDICES

Appendix A: Human Subjects Committee Approval Letter .................................................. 48
Appendix B: Recruitment Letter .......................................................................................... 49
Appendix C: Informed Consent ............................................................................................ 50
Appendix D: Survey Questionnaire ...................................................................................... 52
Appendix E: Figure 1: Time Practicing EMDR ..................................................................... 61
Appendix F: Figure 2: Number of Clients Who Experienced Multiple Traumas ............... 62
Appendix G: Figure 3: Decrease in Distress in Later Traumas ............................................. 63
Appendix H: Figure 4: Decrease in Re-Experiencing Symptoms ....................................... 64
Appendix I: Figure 5: Decrease in Hypervigilance ............................................................... 65
Appendix J: Figure 6: Decrease in Avoidance ..................................................................... 66
Chapter I

Introduction

The majority of targeted treatments for psychological trauma tend to focus on treating a memory of a single event; this occurs whether the chosen treatment is grounded in psychodynamic or cognitive treatment models (Bisson & Andrew, 2007, Steinberg, 2010). However, it is estimated that at least 60% of people who present for treatment with either a diagnosis of Post-Traumatic Stress Disorder (PTSD), or with some of the symptoms related to that disorder, have experienced more than one discrete traumatic event (Young, Zangwill & Behary, 2002). Some of the populations who may fit this criteria include: combat Veterans and other military personnel, survivors of intimate partner violence, children who live with abusive caretakers, public service workers such as members of the police or fire department, or individuals who are at higher risk to trauma due to being homeless or living with additional mental health conditions.

Some of these clients may present for treatment due to symptoms related to a specific event (even if they survived numerous traumatic events) and they may be ready to work on the memory associated with that event. If this is the case, all literature on the subject agrees that a clinician should start treating that memory first (Greenwald, 2009). However, other clients may present for treatment, but feel that they are not ready to face their strongest traumatic memory related to a specific event. Still others may not be able to distinguish which event seems to be causing specific symptoms, especially if many of a client’s traumatic experiences have similar themes or happen in similar contexts. In these cases, a clinician must decided which trauma memory to work on first. Yet there is very little research that provides support on how to
navigate this type of clinical situation.

In the theory and some training materials for the modality Eye Movement Desensitization and Reprocessing (EMDR), there is a formulation of multiple trauma treatment that suggests reasons for a chronological approach to treating multiple traumatic memories (Shapiro, 1991). Still, there are no studies showing if and how this chronological approach is used in the field with EMDR, or if there seems to be success with this approach.

It is precisely this information that this research study is interested in collecting. It does this by collecting the opinions of some EMDR trained mental health clinicians. In particular, given the theoretical reasoning found in EMDR literature, this study is also interested in collecting clinicians’ opinions on whether working on chronologically earlier traumatic memories decreases PTSD symptoms (nightmares, flashbacks, intrusive thoughts, avoidance of trauma-related cues, hyper-vigilance) related to later traumatic memories. The answers to these questions may suggest that the chronological approach would be a means of organizing treatment and also be a time-effective way to work on more than one trauma at a time.
Chapter II

Literature Review

This project seeks to document clinicians’ experiences of treating multiple traumas in chronological order with EMDR. Related questions include: Are clinicians using this approach in the field to organize treatment? What is the impact of treating chronologically earlier memories with Eye-Movement Desensitization and Reprocessing (EMDR) on PTSD symptoms (nightmares, intrusions, avoidance of trauma-related cues) related to later events? Does there seem to be an impact on a client’s ability to trust and align in the therapeutic process when this chronological approach is used? When clients have survived numerous traumas—such as in the case of repeated childhood abuse, on-going domestic violence, or instances of traumas from multiple military deployments—and are potentially still struggling with significant psycho-social issues, it can be difficult for a therapist to decide which memory to start treating first. Working with trauma memories in chronological order may be a guide for treatment in some such cases.

Dr. Ricky Greenwald noticed that clinicians in the field were using this chronological approach (Greenwald, 2007). He then co-authored two preliminary double case studies. These studies found some information that targeting someone’s earlier upsetting memory seems to decrease that person’s distress seemingly stemming from a later event (Greenwald & Seubert, 2010; Greenwald & Schmitt, 2008).

This Literature Review looks at each of the above topics in greater detail: PTSD symptomatology, the occurrence of clients who survive multiple traumas, and Dr. Greenwald’s findings. Additionally, the drop-out rates for trauma treatment, why treatment may be triggering to clients, and the theoretical foundations of EMDR and Information Processing Theory are
explored to provide support for this chronological approach. Next, the important trauma theme of trust and its place in a trauma treatment plan is considered. Finally, research on the importance of a therapeutic alliance in the context of trauma treatment is explored for it may too support this chronological approach.

**Pertinent Literature**

**PTSD Symptoms.**

Since this study seeks to look for a change in PTSD related symptoms, it is important to discuss the diagnosis and related symptoms as defined by the American Psychological Association (APA) in the Diagnostic and Statistical Manual (2000). Despite this discussion, the diagnosis of PTSD is not particularly important to this study. Instead the study is curious about any changes in any of the following related symptoms.

First of all, according to the DSM-IV, someone must have experienced an extraordinary event that seriously threatened the safety of that individual or others in order to be diagnosed with PTSD. That person's reaction than has to be one of fear, helplessness or horror (of if the survivor is a child, disorganized behavior).

There are then three symptom clusters evident in someone suffering with PTSD. In each of these clusters, there are many different ways that someone may experience these clusters. The first cluster is often defined as "re-experiencing symptoms", and it has five ways of manifesting: upsetting and recurring recollections of the event; upsetting and recurring nightmares of the event; flashbacks or feeling like the event which occurred in the past is actually occurring in the present; intense distress of event-related cues or reminders; or physiological reactivity of such cues or triggers (such as raised heart rate when thinking about the event).
The second cluster involves persistent avoidance of anything related to the trauma and a numbing of any emotional response. Manifestations of this cluster include: efforts to avoid thoughts, feelings or conversations related to the trauma; efforts to avoid people places or activities related to the trauma, inability to remember all of the traumatic event, diminished interest in significant activities, feeling intensely detached from others, restricted range of affect; and no sense of future or goals related to the future.

The final cluster is called “hypervigilance” which is a markedly increased general arousal response. It may take the form of: sleep difficulties, heightened anger, problems with concentration, and an exaggerated startle response.

Further criteria for a PTSD diagnosis include a certain number of manifestations in each of the symptom clusters that cause significant impairment to areas of functioning for more than one month.

**Consideration of Multiple Traumas.**

Many evidence-based treatments used for trauma tend to rely on a single trauma model (Bisson & Andrew, 2007). A single trauma may include someone who was raped once, a police officer who watched her partner get shot, or a survivor of a deadly car crash. A cognitive theorist may use Prolonged Exposure or Cognitive Processing Therapy to increase exposure to trauma related cues from a single index trauma (Hembree, Rauch & Foa, 2003; Resick & Schnicke, 1992). EMDR too structures a series on a single trauma (Shapiro, 2001). However, even psychodynamic theories can have this focus: a therapist guided by Object Relations Theory may look for a single maladaptive relationship pattern and then confront and resolve the pattern in the therapeutic alliance by processing affect restricted by the original experience. (Steinberg, 2010).
Over the years, many of these treatments have helped people. However, no matter what the theoretical orientation or modality, the question remains: When a client has more than one trauma, which one should a therapist work on first?

Before thinking about how to treat experiences of multiple traumas, it is important to acknowledge how large a population actually struggles with this type of repeated exposure to traumas. In specific studies of large community mental health centers, it was found that 63% of clients receiving inpatient care and 67% of clients receiving outpatient care reported two or more exposures to trauma (Davidson, Kundler & Smith, 1990; Escalna, Tupler, Saur, Krishnan & Davidson, 1997). In fact, it has been estimated that more than 60% of clients presenting with PTSD disclose previous trauma exposure (Young, Zangwill & Behary, 2002).

Keep in mind, these figures represent only the clients who disclose previous trauma and that there are a myriad of reasons why a client may not disclose trauma (Roberts, Watlington, Nett & Batten, 2010). In fact, Jacobson, Koehler & Jones-Brown (1987) found that many clients receiving services in inpatient units did not disclose their childhood abuse at the time of assessment. In another study, 87% of female survivors of intimate partner violence did not report childhood abuse in a screening for PTSD (Weaver, 1998). Importantly though, it has been found that individuals who experience multiple trauma are more likely to develop PTSD symptoms (Green, Goodman, Krupnick, Corcoran, Petty, Stockton & Stern, 2000).

As previously mentioned, many of the evidence-based techniques for trauma treatment are based on a single-trauma model. For example, Cognitive Processing Therapy (CPT), a therapy used heavily by the Veterans Administration for PTSD, relies on PTSD symptom scales that correspond to one incident that causes the most PTSD symptoms (Resick & Schnicke, 1992). But for someone with multiple traumas, it might be difficult or impossible to distinguish which event
is causing the symptoms (Carlson, 2001). For example, an Army mortar-man may have seen numerous people hit by IED explosives and he may have recurring nightmares of the blasts. But what if the victims change in the nightmares? Sometimes the victim is an Army buddy, sometimes it is a family member, another time someone unknown. Which event causes these nightmare symptoms and therefore, which event would a therapist treat first?

Even when there seems to be an event where a single incident trauma correlates to symptoms, if there is previous trauma, there is some evidence that treating only the later trauma leaves the client vulnerable to future symptoms due to another event (Siegel, 2002). As Judith Hermann (1992) suggests, many people survive trauma, but not all suffer from significant or lasting symptoms related to PTSD. While there are many risk factors for PTSD including temperament, family history of depression and substance abuse, and environmental supports, it is speculated that the high rate of previous trauma disclosure in clients diagnosed with PTSD points to a vulnerability making someone more susceptible to PTSD (Siegel, 2002; Young, Zangwill & Behary, 2002). This occurs because the unprocessed earlier trauma tends to either magnify the intensity of the traumatic events that later follow (Siegel, 2002) or interrupt crucial coping skill development (Kinniburgh, Blaustein, Spinazzola & van der Kolk, 2005).

As a result, many researchers are urging the DSM to include complex PTSD and/or Developmental Trauma Disorder (van der Kolk, Pelcovitz, Roth, Mendal, McFarlane, Herman, 1996; van der Kolk, Pynoos, Chichetti, Cloitre, D’Andrea, Ford, Leiberman, Putman, Saxe, Spinozza, Stolbach, Teicher, 2009). These diagnoses describe presentations and symptomolgies that are results of chronic early or childhood interpersonal trauma that appear different that the standard PTSD diagnosis used currently in the DSM (Jonsson, 2009; van der Kolk et al, 2009). Yet, for example, if a client receives treatment after a car accident, some PTSD symptoms that
seem related to the accident (nightmares, intrusions, avoidance of driving a car etc), may actually be the result of compounded trauma. This car crash survivor from Sierra Leone may have trouble sleeping and have nightmares about the accident because he never learned how to self-soothe due to childhood abuse or may avoid cars because the incident only confirmed cultural trauma beliefs that he is never safe. In this way, treating only the symptoms as they manifest after the car accident still leaves these unresolved conflicts for the client which could be triggered by another traumatic event -- in-turn recreating symptoms (Shapiro, 2001).

This case may now appear to be an appropriate case for more psychodynamically-oriented trauma treatment, since this framework does focus on a client's early experiences and may be healed through the therapeutic alliance (Schottenbauer, Glass, Arnoff, Gray, 2008 ). Unfortunately, a psychodynamic approach to PTSD symptom treatment has few empirical investigations, randomized designs, controlled variables, or validated outcomes and as a result is not as highly recommended by large agencies such as the National Center for PTSD or as easily covered by insurance companies (Kudler, Krupnick, Blank, Herman, Horowitz, 2009). Perhaps by using a chronological approach with an evidence-based practice such as EMDR, the best of both theoretical frameworks can work together to help clients.

In this case, by targeting trauma memories chronologically, a clinician may be able to target the source of a client's vulnerability. In turn, could this remove a client's risk factors, supporting future resilience in the face of additional traumatic experiences (Shapiro, 2001). Information-processing theory may further support the chronological approach in this case because it suggests that the type of symptoms the car accident survivor experiences are related to both traumas (Kolassa, Ertl, Eckhart, Kolassa, Onyut & Elbert, 2010; van der Kolk, van der Hart & Marmar, 1996). As a result, and by treating the first, the later memory may be less intense.
Greenwald’s Studies.

In 2008, Greenwald and Schmidt presented a study that examined whether treating an earlier upsetting memory decreased distress associated with a later upsetting memory. One hundred and sixty-six mental health professionals were the participants recruited at trauma treatment workshops. Thirty-eight U.S clinicians were treated with EMDR, and 126 clinicians were treated with Greenwald’s Progressive Counting Method. These participants were asked to think about a very upsetting memory and rate the level of distress when thinking about it on a Subjective Unit of Disturbance Scale (SUDS). Then, the participants were asked to think back to an earlier upsetting memory that was similar in event, or related affect and then rate this memory too on the SUDS. Next, the participants received one session of treatment on the earlier memory from one another, and immediately re-rated the intensity of the later memory on the SUDS scale. In most cases, with both modalities and with participants in different countries, the level of discomfort of the later memory decreased after treatment on the earlier memory. Their proposal suggests that for some clients, it may be possible to have an earlier memory treated, feel some relief in distress from the later memory, and then more easily tolerate work on that later memory once the distress is somewhat decreased.

Then in 2010, Greenwald and Seubert presented two case studies involving therapy clients who received treatment with EMDR. First, they completed a full trauma history with their clinicians, which listed their trauma memories in chronological order. Then, treatment progressed such that memories were worked on in chronological order. At each session, a SUDS rating of each memory in the client’s trauma history was recorded. The first client showed reduced SUDS ratings for some later memories as certain earlier memories were resolved. The
second client showed marked decreased SUDS ratings for all memories after the earliest memory was treated, and then continued reduced SUDS ratings for all memories as the treatment progressed chronologically.

**Why Trauma Treatment Triggers.**

As previously discussed, symptoms that trauma survivors may struggle with involve a difficulty integrating these traumatic experiences and moving beyond the experience (Herman, 1992). These symptoms involve being greatly distressed by and strongly avoiding anything related to the trauma such as conversations about the event, or places or persons involved in the event (Foa & Riggs, 1997). For example, rape survivors may avoid intimate relationships or a pedestrian who was hit by a car may avoid crossing the street.

However, almost any modality used for treating trauma includes some sort of exposure component where a client would need to experience or face the trauma or trauma triggers in a specific way (Paunovic, 1997). For a cognitive behavioral therapy like Prolonged Exposure Therapy, a client would experience and increase exposure to certain triggers in the session and between sessions as homework and record how distressing each exposure time was (Hembree, Rouch, & Foa, 2003). For a cognitive therapy like Cognitive Processing Therapy, a client would be asked to write a specific account of how the traumatic incident unfolded with specific attention to sense and affect experience (Resick, & Schnicke, 1992). With psychodynamic psychotherapy, the therapist may either confront the client about unconscious avoidance patterns for example, or work to create a safe holding environment for the client to release restricted affect caused by the event (Moss, 2009). Even EMDR asks clients to picture in their minds that they are back in the traumatic event (Shapiro, 2001).
In other words, in order to be treated for trauma symptoms, someone needs to face or be exposed to specifics related to the traumatic event(s). However, the very symptoms the client is hoping will be treated include elaborately avoiding any reminders of the trauma! The treatment can then be intensely unpleasant for the client (Foa & Riggs, 1993). As a result, most treatment approaches, which first target the index trauma, may just be too difficult for some clients to bear (Greenwald, 2009).

**Rates of Treatment Completion.**

It has been found in numerous studies that clients drop out of treatment for PTSD and trauma at a rate of at least 50% (Hembree, Foa, Dorfan, Street, Kolawski & Tu, 2003; Schottenbauer, Glass, Arnkoff, Tendick & Gray, 2008). This may be because, as discussed previously, PTSD and trauma related symptoms are exacerbated by any exposure that reminds the client of the traumatic event, in turn causing the client to want to avoid any trigger, such as treatment (Foa & Riggs, 1993). Many therapeutic approaches have different ways of dealing with a client's inclination to avoid trauma triggers in treatment (Schottenbauer et al., 2008; Hembree et al., 2003). Yet even CPT, which shows a high rate of treatment completion in clinical trials and specifically addresses this issue with trauma and cognitive theory psycho-education, still produces a drop-out rate of 20% (Resick, & Schnicke, 1992).

As a result, it would be important to know that by treating an earlier memory that is not as effected by avoidance or arousal or re-experiencing symptoms, that those symptoms can still be somewhat alleviated- especially without the same level of client discomfort that treating the later index trauma would produce. In turn, after treating an earlier memory which also decreases symptoms related to a later trauma, treating the later memory may now produce less discomfort.
then if tackled first. It then follows that this chronological approach may be a way of combating the high treatment drop-out rates.

**Eye Movement Desensitization and Reprocessing (EMDR).**

Eye Movement Desensitization and Reprocessing (EMDR) is a phase-oriented type of psychotherapy that aims to help someone process traumatic or upsetting experiences (Shapiro & Forrest, 2004). EMDR pairs the activation of traumatic memories with bilateral stimulation in order to more quickly stimulate the brain's information processing system to integrate the trauma into the client's central nervous system (van den Hout, Muris, Salemink & Kindt, 2001).

Some phases of EMDR which are undertaken first to prepare for the bilateral stimulation phase have cognitive behavioral therapy (CBT) components (Shapiro & Forrest, 2004). Also, the bilateral stimulation phase has an exposure therapy component by asking the client to think about the upsetting memory while the therapist performs eye movement stimulation (Shapiro & Forrest, 2004). Like CBT and Prolonged Exposure (PE) therapies designed to treat PTSD, EMDR is supported by numerous random clinical trials and is considered by the Society for Traumatic Stress Studies, The National Center for PTSD, the Veterans Administration, and the APA Division of Clinical Society to be "efficacious" treatment for PTSD (Bisson & Andrew, 2007).

Dr. Francine Shapiro, who developed EMDR, described EMDR as a "bottom-up" means to processing trauma (Shapiro & Forrest, 2004) What this means, is that the processing of the trauma in EMDR begins on a physiological level, by accessing the information-processing part of the brain (Shapiro & Forrest, 2004). In this way, a client does not just talk about his/her traumatic experiences, nor does the therapist focus only on the cognitive judgment of the
experience created by a client's frontal-cortex. Instead, EMDR activates the "stuck" trauma memory and allows it to be processed by activating the type of memory network in which it is stored (Shapiro & Forrest, 2004). This network that holds the trauma has been isolated from other memory networks and once processed and integrated with other networks allows the client to create new insight, physical sensations and emotions as the memory is processed (Shapiro & Forrest, 2004). This isolation of the memory network is what causes the trauma to not be integrated into the client's experience and instead be easily activated by related triggers to the event (van den Hout, Rijkeboer, Koekebakker, Hornsveld, Leer, Toffolo & Akse, 2010).

The main phase of EMDR accesses these memories in a physiological state by having the client think about the upsetting memory while the therapist stimulates the client's eye movements (Shapiro & Forrest, 2004). There have been suggestions that other types of stimulation such as bilateral beeps or sounds, or bilateral taps on a client's legs can be effective in this therapy—especially for clients who are blind (Shapiro & Forrest). However, a more recent study has shown that the eye movements are the most effective stimulation (van den Hout et al., 2010).

As stated earlier, phases of EMDR use components of other therapies: cognitive, exposure, psychodynamic, interpersonal and more (Shapiro & Forrest, 2004). However, what makes EMDR different is the bilateral stimulation of the eye movements combined with the exposure of thinking about the upsetting memory (Shapiro & Forrest, 2004).

Since traumatic memories appear to be stored and stuck in the brain's "working memory", these memories cause a client to feel a reaction as if the event is actually taking place in the present, unlike non-traumatic memories which are stored in "long-term memory" and experienced without discomfort (Siegel, 2002). This explains why in the case of someone with PTSD, they re-experience the traumatic event in the form of nightmares, intrusions, and
flashbacks. Because memories that are stored in working memory are so intense, they are also able to be more easily changed than the narrative stories of our experiences that we store in long-term (Baddeley, 1998). When someone follows something with their eyes, he/she is also using working memory, because in the present the eyes are remembering where the object it is following just was (van der Hout, et al., 2010). As a result, pairing eye movements with recalling a traumatic memory means working memory is drained by completing two tasks at once (van den Hout et al., 2001). In other words, if a client is asked to recall something in working memory which is currently intense and also labile, by adding an additional task such as eye movements, the working memory is drained and therefore cannot complete both tasks with the same intensity. The theory then continues that because the traumatic memory is being recalled with less power and it is able to be changed in that state, it will now be remembered with less intensity. This results in it being integrated into long-term narrative memory (van den Hout et al., 2010). Also, the memory will probably be recalled with significantly less intensity (van den Hout et al, 2001).

Another theory on how EMDR works neurobiologically involves rapid eye movement (REM) sleep. It has been proposed that during REM, the brain integrates experience and information into narrative long-term memory (Carskadon, 1993). Dr. Shapiro (2004) also argues that since experiences (which can trigger a range of intense affect) are integrated during sleep, the body is able to process these experiences and still be relaxed. Perhaps it is the horizontal eye movements (the same used in EMDR) that allow the body to relax enough to process memories in working memories into narrative memory. She interestingly points out the most common symptom of PTSD and trauma is a client's sleep disturbance (Shapiro & Forrest, 2004).
Information-Processing Theory.

Practitioners who use EMDR have begun targeting clients' earlier trauma memories during certain unique cases rather than beginning with the index trauma, even though there is little research to support this approach (Greenwald, 2007). Clinicians began implementing this strategy because some noticed that earlier memories seemed to be a "touchstone" that acts as a foundation that collects later pain, hurt and trauma (Shapiro, 2001). Targeting the earlier memory has seemed to facilitate a smoother resolution because it only holds its own power, whereas later memories hold the accumulated power of the foundation plus other related memories (Shapiro, 2001).

This idea of a "touchstone" memory relates to Information Processing Theory (Hollon & Di Giuseppe, 2011). This view of memory and cognitive development describes information being processed, categorized and filed in the brain in core schemas, or grouped bunches of memories (Atkinson & Shiffrin, 1968). Applying this to trauma memories, this would mean that later traumas would be characterized and connected in the same schema as an original trauma memory. However, the schemas are not processed and stored in long-term memory and are instead "stuck" in working memory. For example, imagine that someone experiences childhood sexual abuse at a young age. That person's brain creates a mental "file" where it stores the memory of the experience as well as any thoughts or emotions that result from the trauma such as confusion, hopelessness or fear. Later, if that person is hit by a romantic partner, or is in a terrible car accident, any similar emotions and experience are integrated into the brain by being filed into the original "folder" created by the childhood sexual abuse encounter. The later encounter is "assimilated" into the schema of the first. (Atkinson & Shiffrin, 1968).

This Information Processing Theory suggests that by resolving the earlier traumatic
memory, a later memory will no longer have the original schema association. In that way the later memory only holds its own power and not the power of the additional earlier trauma, so symptoms for the later trauma should decrease in intensity.

**Trust and Trauma.**

Across many therapeutic orientations, trust is considered a major trauma theme (Herman, 1992). There are many reasons for this. First, due to the nature of trauma, the fact that something so extraordinarily painful and so seemingly without reason or meaning can happen to someone can shatter that person's trust in how the world works. It may also cause that person to wonder if there is any basic goodness operating in the universe (Herman, 1992). Trauma can also shatter self-trust, because a survivor may in hindsight think she/he could have done something differently to spare the event from happening; because it feels safer to lose trust in oneself rather than in the world; or because symptoms such as intrusions or dissociation make reality unsure and unstable (Herman, 1992).

When treating someone for multiple traumas, most literature suggests working with the index or most intense trauma first (Greenwald, 2007). However, there is no evidence on how this approach is helpful to a client with trust difficulties. Nor is there evidence that there are any proven modifications to adjust this type of treatment for clients who have more difficulties. It has recently been proposed that identifying symptoms that can be treated fastest can help a client develop trust in the therapist and the therapeutic process and therefore, help clients work on more upsetting memories later (Stallworthy, 2009). Perhaps similarly, by treating an earlier memory with less associated symptoms, there may be some relief in symptoms related to later memory, resulting in the same outcome: helping clients develop trust in the therapist and the process
leading to the resolution of later traumatic memories.

**Importance of Therapeutic Alliance in Trauma Treatment.**

Many people with PTSD report significant interpersonal problems across populations (Schottenbauer et al., 2008; Okey, McWhirter & Delaney, 2000). This may be for a variety of reasons such as a symptomatic need to isolate, a fear of the stigma related to discussing mental health issues, or available support network overload (Schottenbauer et al., 2008).

While many evidence-based therapies for PTSD work on the three clusters of symptoms, they do not focus as much on the interpersonal aspect of the trauma or life after the trauma as psychodynamic approaches (Kudler, Blank & Krupnick, 2000). For example, CPT offers only 1.5 sessions on each module such as trust or intimacy and they are near the end of the protocol (Resick & Schnicke, 1992). However research suggests that individual's interpersonal relationships improve most through a successful relationship with their therapist (Norville, Sampson, & Weiss, 1996). Psychodynamic psychotherapy prioritizes this alliance in treatment and in fact uses it as the means to accomplish much of the work (Kudler, Blank & Krupnick, 2000). It has also been argued that the large drop-out rates of clients receiving more evidence-based trauma treatment points to the importance of a strong therapeutic alliance, especially since a strong alliance correlates with higher treatment outcomes across modalities (Martin, Garske & Davis, 2000; Sharf, Primavera & Diener, 2010).

Additionally, PTSD treatments such as CPT and PE initially produce relatively high success rates (Zayfert, & DeViva, 2010). However, psychodynamic PTSD treatment which focuses on the therapeutic relationship initially has a lower success rate but improvement steadily continues after treatment is over (Brom, Kleber & Defares, 1989).
A therapeutic alliance takes time to develop. As a result, it is interesting to consider that a perhaps unintentional positive consequence to a chronological approach with EMDR to multiple traumas would allow more time for the therapist and client to develop and work on this alliance, in addition to the other potential benefits of this approach as discussed earlier.

Summary

Analysis of the literature does not offer much research on specific suggestions regarding which trauma memory to begin treating first when working with clients who have experienced multiple traumas, apart from the two co-authored by Greenwald (Greenwald & Schmitt 2008; Greenwald & Seubert, 2010). However, as Young, Zangwill & Behary (2002) show, given that 60% of clients presenting for trauma treatment disclose previous trauma, a suggestion about where to start seems important. Next, the high rates of PTSD and trauma treatment drop-out considered in the context of how triggering trauma treatment can be for clients supposes that the "best practice" of using a single index trauma treatment model may be too unpleasant for some clients (Foa & Riggs, 1997; Greenwald, 2009; Schottenbauer et al., 2008).

EMDR is a proven effective treatment for trauma (Bisson & Andrew, 2007). It does include an exposure component like many other evidence-based trauma treatments, but it pairs this with b-lateral stimulation in order to increase the brain's capacity to rapidly process and integrate information and specifically, trauma memories (Shapiro, 2001; Shapiro & Forrest, 2004). Information-Processing Theory plays a part in the theoretical foundation for EMDR in that it explains how the brain collects like memories and information into schemas based on an original like experience (Atkinson & Shiffrin, 1968; Hollon & Di Giuseppe, 2011). If an original experience becomes the foundation memory for later like experiences and memories, it would
make sense that resolving the early memory may bring relief to associated later memories (Shapiro, 2001). This points to a theoretical basis for treating trauma memories chronologically.

Finally, trust is one of the major themes in someone's trauma recovery for a variety of reasons (Herman, 1992). It then begs the question that if "best practice" trauma treatment for multiple traumas includes targeting the most uncomfortable and difficult to treat memory, how does this foster trust in the therapeutic process or therapist? Likewise, many people who survive multiple traumas report significant interpersonal difficulties. Given that interpersonal difficulties seem to improve for clients in a good relationship with their therapist and that a strong alliance is associated with higher treatment outcomes across models, any approach seems like it should include a focus on this alliance in addition to evidence-based outcomes (Norville, Sampson, & Weiss, 1996; Sharf, Primavera & Diener, 2010). An approach that works on establishing safety and trust while still producing symptom relief may be the chronological one.

**Final Remarks**

This study seeks to find if there are any changes in the intensity of PTSD related symptoms when earlier trauma memories are treated first, and if indeed this is something that clinicians have noticed and are using in the field. Relationships between therapeutic alliance and the chronological approach to treatment are also of interest. However, it must be stated that if there is a clear relation between symptoms and a certain event and if a client is stable enough to handle treating the index event, current research suggests that the index trauma should be treated first (Greenwald, 2007). This study is concerned with cases that do not fit that mold. Furthermore, the reason this study looks at EMDR is that in numerous studies it has a 77-80% success rate with clients who experienced multiple trauma (Shapiro & Forrest, 2004). It is also
the modality used in Greenwald & Seubert’s 2010 study, on which this project hopes to expand.
Chapter III
Methodology

This study collects some clinicians' experiences and opinions of treating a client's multiple traumas with EMDR in the chronological order in which they occurred. These opinions and experiences were amassed in a mixed method online survey utilizing both quantitative and qualitative questions. This survey was accessed by licensed mental health clinicians and two licensed nurses who practice EMDR in mental health settings with clients who have survived multiple traumas. The reason this study employs mixed methods is that the research questions that inspired the topic are very specific; however it seemed important to give an opportunity for participating clinicians to share any additional comments based on their rich expertise of working with multiply traumatized clients in the field.

This study was created in order to explore specific questions about the results of such a chronological approach on multiple trauma memory treatment. However, before asking clinicians about specific results, it was important to first ask, are clinicians using a chronological approach to multiple trauma treatment with the EMDR modality when working in the field? Secondly, additional questions were inspired by the results of studies by Greenwald & Schmitt (2008) and Greenwald & Seubert (2010) that suggest that treating earlier upsetting memories may decrease the distress of later memories. These additional research questions include: Do particular PTSD symptoms related to a later event seem to decrease when a chronologically earlier trauma is treated first? Do clinicians believe that targeting multiple trauma memories chronologically seem to affect a client's trust in the therapeutic process? Do these clinicians feel
that clients may drop out of trauma treatment due to fear of facing trauma triggers or cues? What EMDR clinicians are using this chronological approach? (What settings are they working in? How long have they been trained in EMDR? What populations have they tried this approach with?) As a result, in order to gather the categorical information related to these questions, a structured quantitative questionnaire was created and posted online for this project.

Also, a set of open-ended qualitative questions complete the questionnaire. These were posed to therapists who do purposefully use this chronological approach with EMDR. The previous quantitative questions sought to survey any therapists treating multiple traumas with EMDR to see if they noticed anything pertaining to this approach without them necessarily having chosen to use this approach in their practice. The qualitative questions were broader and were present to capture any additional comments as well as further specifics about this approach for clinicians who purposefully choose it to organize treatment.

Sample

Participants in the survey met the following criteria: they are licensed mental health clinicians, work with clients who suffer from multiple traumas, use EMDR in clinical practice, and treat clients who experience symptoms associated with PTSD. Additionally, these clinicians needed access to a computer to complete the survey and they were also fluent in English. While I did not collect data on what type of clinicians completed the survey, I did find out that they are working or have worked in a variety of outpatient, inpatient, private practice or agency settings.

While the study is structured mainly to see if treating earlier multiple traumas in a chronological order decreased PTSD symptoms related to later traumatic events, I was curious about other potential positive reasons a therapist may choose a chronological approach to
treating multiple traumas. As a result, I asked questions about the clinicians' opinions on how this approach may affect a therapeutic alliance or trust. Since I was interested in the effects of the therapeutic alliance, I was curious about the therapists' theoretical orientations so I did ask questions about other treatments or frameworks the clinicians use when treating traumas. Most importantly, while there is some theoretical material and training protocol for clinicians trained in EMDR to use a chronological approach to multiple traumas, given that there is next to no research of its application in the field, I felt it imperative to record any experience that clinicians have in using this type of approach in their practice.

Data Collection & Analysis

A snowball method was used to recruit therapists who participated in the study. First, an e-mail request was created explaining the reasons for the research project and the qualities needed in study participants as well as a link to the online survey. This request also asked readers to send this request to others who may be interested in participating in the study. Then, Dr. Ricky Greenwald, the mental health clinician, researcher, and modality trainer who first researched this chronological approach agreed to forward this email request to his professional contacts. Next, the request was also sent to the Western Massachusetts EMDRIA and International EMDRIA list servs.

Therapists who chose to participate were connected to an online survey on the SurveyMonkey.com website. This survey included 32 multiple choice and open-ended questions. The last 12 questions were specifically for clinicians who have purposefully chosen to use a chronological approach to treating traumas, clinicians without such experiences did not need to complete the remaining questions. Since this study was not only interested in the effects of the
chronological approach but also on its actual use in the field, it was important to structure the survey to collect voices from clinicians who may have noticed any effects as well as those who have specifically chosen this type of treatment organization.

At the beginning of the survey, there were four questions to verify eligibility. This was followed by a detailed informed consent letter which asked participants to consent by checking a button designated "yes", which indicated that the clinician read and understood the consent letter. Participants were also reminded to print out a copy of the online consent letter for their personal records.

Project participants were then asked a series of questions about their clinical experience of treating clients who have survived multiple traumas or whose symptoms related to the DSM-IV diagnosis of PTSD, the kinds of settings they do this work in, their experience in using the EMDR modality, and other information regarding their theoretical and practice orientations. Questions then focused on the three symptom clusters related to a PTSD diagnosis (avoidance, re-experiencing and hyper-vigilance symptoms). In them, therapists were asked if they noticed changes in these symptoms that were related to a later traumatic event after treating a chronologically earlier trauma. Next, questions were asked about the conditions for and modalities with which a chronological approach have been used. The final questions were about specifics that clinicians may have noticed when choosing to utilize a chronological approach.

Data collected from the study was amassed and organized through the SurveyMonkey.com website. It was then analyzed in the Microsoft Excel program. For quantitative questions, each question was calculated into percentages and amounts of responses. For the qualitative questions, the data was coded for types of positive or negative attitudes to the approach, if the benefits or drawbacks were for clients or therapists, and if the benefits or draw
backs had to do with its effectiveness or organization.

The survey was available online from February 5, 2011 through March 31, 2011. Once the encoded answers to the survey were sent to me by Survey Monkey, I transferred the data to flash drives reserved specifically for this project. All flash drives have been kept in a separate locked drawer of a file cabinet in my home. I did not receive any identifying information about the clinicians or their clients as a result of their participation in the study. All data will be kept secure for three years as required by Federal regulations and after that time, they will be destroyed or continue to be kept secured as long as needed for the completion of the project presentation. Once the data is no longer needed, it will be erased from the flash drives.
Chapter IV

Findings

The major findings in this project respond to the following two research questions: Do mental health clinicians ever use a chronological approach to organize the treatment of a client's multiple traumas while using the EMDR modality? Have clinicians noticed that treating chronologically earlier trauma memories with EMDR seems to reduce distress and/or PTSD symptoms related to later traumatic memories? Clinicians surveyed for this project overwhelmingly reported that when appropriate, they (84.6%) do in fact use a chronological approach to trauma treatment with EMDR. Additionally, the majority of surveyed therapists (94.9%) have also found that treating an earlier traumatic memory with EMDR decreases the general distress associated with a later traumatic memory (see Figure 3, Appendix G., on page 63). Furthermore, these therapists report that symptoms corresponding to the three PTSD symptom clusters, when related to later events, decrease when an earlier traumatic memory is resolved with EMDR. The break-down of percentage of clinicians who believe this to be effective with the corresponding symptom cluster is as follows: re-experiencing 97.4%, hypervigilance 94.7%, avoidance 89.5% (see Figures 4-6, Appendices H.-J., on pages 64-66).

In this study, 51 mental health clinicians began the survey, however only 43 completed it. Two of the clinicians who completed the survey would have been ineligible since questions determining eligibility were unintentionally worded to exclude licensed nurses who provide mental health treatment. Both of these participants contacted me after completing the survey. Given that they are licensed professionals who do provide EMDR services to clients with multiple traumas, their valuable responses have been kept in the findings.
Data about the participating therapists (N=43) was also gathered in this survey. Fifty-five percent of participants work in outpatient settings and the remaining in inpatient settings. Sixty percent report that they practice in private practices, with the remaining working for agencies. While participants were not asked how long they have been practicing in general, the majority (38.5%) report practicing EMDR for 10-15 years followed by 28.2% practicing EMDR between 5-10 years, 15.4% practicing from 3-5 years, 7.7% practicing between 1-2 years, and 5.1% each practicing less than 1 year and 15 or more years respectively (see Figure 1, Appendix E., on page 61). With regard to other types of therapeutic modalities and frameworks, most of the participants (65%) state that they are not trained in any other trauma phase-oriented modalities. Sixty percent of surveyed clinicians also report that they do not utilize interpersonal or dynamic trauma treatments with their clients.

Other data collected about these clinicians' use of EMDR include their choice of bilateral stimulation. As discussed briefly in the Literature Review Chapter, there is some debate over the most effective means of bi-lateral stimulation. In this project, of therapists who only use one form of bi-lateral stimulation, 50% use eye movements, 17.6% use tapping, and 32.4 use sounds. However, 48.6% of total number of therapists added in that they tend to use more than one stimulation at a time, or different ones for clients with unique needs. Also, three clinicians commented that eye movements and tapping can be uncomfortable for therapists over time.

Clinicians also reported that they primarily deliver trauma-informed (TI) treatment in their settings; 38.1% of participants report that 76% of their clients receive TI treatment; 23.8% report that 51-75% of their clients receive it; 19% report that 26-50% of their clients receive TI treatment; 16.7% of participants report that 11-25% of their clients receive it and 2.4% report that they 5% of less of their clients receive TI treatment. Clinicians chose the percentage that
best corresponded to the number of their clients who require services due to experiencing multiple traumas: 21.4% reported that 76% or more of the clients survived multiple traumas, 42.9% reported that 51-75% of their clients survived multiple traumas, and 11.9% each reported that 26-50%, 11-25% and 6-10% of their clients respectively, have survived multiple traumas (see Figure 2, Appendix F., on page 62).

Another research question was, do clients drop out of trauma treatment due to a fear of facing trauma triggers? Participants' opinions were overwhelmingly negative in response to this hypothesis: 50% of clinicians believe that only 5% or less of their clients drop out of treatment due to this reason followed by: 37.5% who believe 6-10% of their clients drop out due to this fear; 5% who believe 11-25% drop-out; and 7.5% who believe that 26-50% drop-out.

This study was also created to explore additional questions about the chronological approach's effect on trust and treatment alliance. One such question is: Does the chronological approach seem to positively effect a client's ability to trust to the therapist and the therapeutic process? Participants who use the approach responded that yes, they feel that the approach does enhance a client's ability to trust the therapeutic process (74.3%) and the therapist (72.2%). When asked if the approach seems to positively enhance the therapeutic alliance, the majority of participants (72.2%) stated that they believe that it does.

Since there is little to no reference in empirical literature about a chronological approach to the treatment of multiple traumas, it was important to understand how clinicians began using this approach. Clinicians who disclosed utilizing this approach report that they have learned of it from a training (63.9%), from a peer or in supervision (13.9%) or through their own clinical experience (22.2%). No one reported using the approach for only one client population or in only one clinical context.
Finally, clinicians who use this approach \((n=36)\) were asked to provide any additional qualitative data on the strengths of this chronological approach which they have identified in their clinical experience (in addition to the reduction in symptoms for later traumas or its ability to treat numerous traumas at once). Forty three percent describe this method as a means to positive treatment organization. Some comments include: "it is a straightforward and logical approach", "systemic" and "it anchors the treatment". Therapists also added comments on the drawbacks to this method: Fifty-seven percent stated that some clients are too "fragile", "hesitant" or "dissociative" to handle facing early traumas. Thirty-four percent stated that other clients may only want to work on their most recent trauma. (However, in that case, a therapist would know where to start treating multiple traumas because the client is able to vocalize a preference. This supports the best practice proposed by the literature that states that clients with specific, discrete "big" traumas who can handle targeting that trauma memory first, should have that traumatic memory prioritized in the treatment. )

Finally, it is important to note that 34.2\% of participants report that they use the chronological approach to trauma treatment with other modalities besides EMDR. This suggests further questions about the approaches' use and how it might affect symptoms with other modalities. This means it is possible that the chronological approach could be a means of treatment organization across modalities.
Chapter V

Discussion

The purpose of this thesis was to determine what percentage of clinicians may be using a chronological approach to treat multiple traumas (treating traumas from earliest occurrence to latest) with the EMDR modality. Of additional interest was whether clinicians have witnessed that PTSD symptoms and general distress related to chronologically later traumas decrease when earlier ones are resolved.

Findings indicate that the majority of participants have utilized a chronological approach to organize their client’s treatment of multiple traumas, despite the lack of empirical evidence of its efficacy. Furthermore, these clinicians also report that they find that a chronological approach to treatment is beneficial for both clients and therapists because symptoms and distress from later traumas seem to decrease when earlier ones are first targeted.

The results of this project support the theories found in EMDR and Information Processing Theory literature which hypothesizes that earlier memories may serve as a foundation for later memories which then become connected to it (Hollon & Di Giuseppe, 2011; Shapiro, 2001). This study's goal of testing to see if clinicians are using a chronological approach in the field was successful given that 84.6% of participants report utilizing the approach during the course of their clinical practice. Interestingly, while only some clinicians (84.6%) disclosed that they purposefully choose a chronological treatment approach to multiple traumas with the EMDR modality, 94.9% of participants report that they have still noticed that a client's rate of distress associated from later traumatic events has decreased once a chronologically earlier memory is successfully treated first. This implies that even participating clinicians who may
have not been exposed to this approach in a formal training (36.9%) or have not chosen it as a formal approach, nonetheless have already noticed a value in it.

The study's main hypothesis that treating chronologically earlier memories may reduce symptoms related to later traumatic events was also supported. Asked about treatment of specific PTSD symptoms, the majority of therapists answered that they have noticed a decrease in the three PTSD symptom clusters of hyper-vigilance (94.7%), avoidance (89.5%) and re-experiencing (97.4%) symptoms related to later traumatic events once earlier ones were resolved. This data supports the earlier work of Greenwald & Schmitt (2008) and Greenwald & Seubert (2010) and their studies suggesting that the chronological approach with EMDR may be effective at reducing distress related to later events when targeting earlier events.

**Who is Using the Chronological Approach?**

Since this is a preliminary study of this chronological approach to multiple trauma treatment, this project also sought to answer the question: Who is using this approach? Results show that participants practice in a variety of settings (as reported in the previous Findings Chapter), although the sample primarily captures providers in outpatient private practice settings. It is important to mention that since my recruitment was mainly through the contacts and peers of private practice clinicians and educators, this sample may be skewed due to this methodology. It is possible, therefore, that there is no correlation between use of this treatment approach and a clinical setting.

Participating therapists who report previous exposure to the chronological approach mostly report this exposure coming from a training (63.9%) with the remaining learning about it from other therapists/supervision, or noticing it in their own clinical experience. These particular
findings may support the usefulness of this approach because it has been noticed both in a
theory-to-practice direction, a peer-to-peer direction, and a practice-to-theory direction. In other
words, the awareness of this approach in a variety of contexts may further speak to its efficacy.

It is also interesting to note that these participants have practiced EMDR for varying
amounts of time (which is again reported in the previous Findings Chapter), with the majority
practicing EMDR between 5-15 years (66.7%). Again, it would be important to purposefully
sample therapists based on years of practice in order to determine if length of practice correlates
to the use of or attention about the chronological approach. However the data does suggest that
therapists with different lengths of practice are familiar with this treatment approach.

Consideration of Multiple Traumas

This study's participants all report working with clients with multiple traumas and in fact,
42.9% of them describe 51-75% of their case load as being comprised of people suffering with
multiple traumas. These findings do support the limited literature on the prevalence of a client
population who seek mental health services due to exposure to multiple traumas.

As a result, this study points to an incredible need for more research and documentation
on this population. Similarly, this study speaks to a necessity for the evidence-based trauma
modalities such as EMDR, which are in such heavy use throughout the field, to be modified
from their usual single discrete event protocols to more adequately address the needs of this
population (Kudler, Krupnick, Blank, Herman, & Horowitz 2009).

Also, mental health providers have been adding considerably to the literature in order to
include other trauma-related diagnoses for multiple trauma experiences in the DSM such as:
Complex Trauma and Developmental Trauma Disorder (van der Kolk, Pynoos, Cicchetti,
Cloitre, D'Andrea, Ford, Lieberman, Putnam, Saxe, Spinazzola, Stolbach, & Teicher, 2009). As
the advocacy and activism of clinicians continue to refine trauma-related diagnoses, again, the
need for specific treatments to address these diagnoses will become emphasized by the mental
health and health insurance communities. Looking at approaches to multiple traumas may help
provide information and mobilize clinicians in this attempt to more accurately describe and treat
a client's reality.

**Consideration of Populations**

Participating therapists report the approach to be useful with a variety of client
populations, with no particular population seeming to benefit more from its use. Such
populations mentioned by participants include children, adults, Veterans, women, men,
individuals of different socioeconomic classes, and of different races. It is of note that no
participants mentioned using the approach with clients who identify as lesbian, gay, bisexual,
transgender, queer or intersex individuals.

My own limited clinical experiences of working with survivors of intimate partner
violence (IPV) and U.S. Veterans provides some information on populations that may benefit
from this chronological approach. While working for two different domestic violence shelters, I
witnessed residents often struggling with memories from repeated incidents. For example, I have
taken numerous calls on hotlines from IPV survivors after they woke from nightmares where
discrete traumatic episodes morphed together into one connected narrative. In this type of
scenario, a clinician using EMDR to treat this survivor may not be able to tease out one event
that the client feels is the most intense one to be first treated with EMDR (Greenwald, 2007).

My second year clinical placement in a PTSD residential program that is part of the
Veterans Administration, also provided me examples of when such a chronological approach might be useful. I worked with one Veteran who described his specific traumatic event as "each day that I was in Iraq". He recounted numerous similarly charged traumatic events that left us both unsure where to begin, so that we spent extra sessions just choosing how to organize treatment. While working with a different Veteran who suffered from multiple traumas, I consulted with his previous clinician (who happened to utilize EMDR with him) on which trauma to begin treating first. She had no suggestions and replied that she felt that her trauma treatment training lacked information on targeting multiple traumas.

**Trust and the Chronological Approach**

The majority of participants responded that they believe that using the chronological approach positively effects their client’s ability to trust both them and the therapeutic process. The reasons therapists give for this include: it gives the client choice on how to organize treatment; it allows for the therapeutic dyad to work on childhood attachment traumas which in turn can increase a client's sense of safety and esteem to do more work; it provides order and structure to a client’s life trajectory; it provides symptom relief for multiple traumatic events.

These responses on why this might be the case can be grouped into four types. The first one supports the work of Stallworthy (2009): These clinicians believe that some clients are indeed more comfortable targeting a chronologically older trauma, and once they feel some relief, they are able to open up about a later trauma: "By returning to the earlier traumas clients get their earlier needs met and then feel safer in the therapy relationship to bear the intensity [of later trauma work]".

In the second type, some therapists suggest that with the profound relief from both earlier
memories and later ones gained by targeting only the earliest event, that clients were more able to trust the therapeutic process:

"Success builds trust and confidence in the process, in the relationship, and in themselves."

“It tends to resolve many traumas/issues simultaneously.”

“Clients are amazed at the positive differences it makes.”

“A sense of trust is established with the decrease or disappearance of symptoms.”

In the third category, some participants remarked that by approaching treatment in such an organized chronological way, the treatment process made more sense to clients and therefore, it was easier for them to trust the work:

"Makes them feel we are approaching treatment in structured, organized, logical way."

"The client feels more secure that the therapist has a structured and proved plan of treatment."

"Patients feel safer because some sense of order has been imposed, therefore can connect with therapist."

“It is systematic. The patient can get "on-board" if explained well. Or decline. Choice is always good with a traumatized person.”

Finally, therapists commented that the sheer attending to earlier traumas enhanced their clients' ability to trust themselves, the therapist and the process. In this way, the therapists seem to be suggesting that the chronological method used with EMDR attending to attachment trauma with a successful evidence-based modality, perhaps like Control-Mastery Theory and practice as described by Nol, Shilkret & Silkhret (2008). Then, the treatment not only enhances the EMDR
trauma work, but allows clients to feel more comfortable, learn coping skills and feel more capable. All of these may help with the common destabilizing trauma symptoms such as dissociation and intrusive thoughts (Allen, 2000; Herman, 1992). One comment added:

“Clients feel mastery over the early traumas which allows them to feel more resiliency and resourcefulness.”

Another such comment surmised:

“It seems to enhance trust a bit that you're tackling the earliest first, that you're willing to go back in their childhood and be there for them-teach them how to be there for themselves in a loving protective adult role-often they didn't have anyone that was a protector/and or nurturer back then.”

**Therapeutic Alliance and the Chronological Approach**

Similar to the reasons stated earlier (ability to build up to most intense trauma, fast results, and understandable format) many therapists found the chronological approach helpful in building a therapeutic alliance with their clients.

In order to gain more information about the participants' beliefs in the treatment alliance, the study sought to gather information on the theoretical framework the therapists had experience in. Questions about other cognitive-based treatment modalities (like EMDR) and experience with dynamic trauma treatments were posed. The majority of clinicians did not report experience with other cognitively-based modalities, yet only a third of participants disclosed using dynamic or interpersonal trauma approaches. This may suggest that the participants do not rely on dynamic approaches to trauma, but the lack of other cognitive approaches may speak to a dynamic orientation, as well as the emphasis many participants stressed about the importance of
a therapeutic alliance. Either way, participants lack of self-identification with dynamic trauma approaches seems to have no correlation with their belief that the chronological approach is an effective way to organize treatment. Given that the approach does seem to positively affect the treatment alliance, it was important to try and look for any potential bias that may originate from a practice theoretical framework.

Interestingly, some participants commented on how the chronological approach positively affected their transference, which they believe strengthened the alliance:

“I believe we experience success more often by treating chronologically and therefore, the positive transference increases.”

“Enhances my empathic approach to treating clients.”

“My lack of fear builds their confidence in their own well being and ability to move through the trauma issues.”

As for my hypothesis that perhaps going through traumas chronologically would allow more time for this alliance to develop, many clinicians instead stated that the approach was so successful that treating earlier memories that then relieves distress from later memories actually means clients feel better in fewer sessions.
Trauma Triggers and Rates of Completion

Another hypothesis I had in creating this study was that the high rate of treatment drop-out was due to the difficulty clients experience in facing their trauma triggers. This is based on the research that at least 50% of clients who present for trauma treatment drop-out early (Schottenbauer, Glass, Arnkoff, Tendick & Gray, 2008; Hembree, Foa, Dorfan, Street et al., 2003). Given that most trauma treatment tends to unpleasantly increase a client's exposure to trauma triggers, I wondered about the connection between treatment drop-out and increased trauma trigger exposure (Foa & Rigs, 1993). However, the majority of clinicians (87.5%) did not believe clients dropped out of treatment due to an increased exposure to triggers. Of course, clients who drop-out are less likely to be asked why they are did so by their therapist. Still, it would be interesting to further study this phenomenon.

Other Benefits to the approach: Organization

Numerous therapists suggested that not only does the chronological approach work well at decreasing symptoms for numerous traumas at one time, but that the sheer organization of the process is beneficial to both client and clinicians. This came up in many aspects of the survey and therapists attributed the positives of this organization to increased client trust, positive transference, and self confidence for both the client and therapist.

Comments on the Study

This project is the first to study the current use of a chronological approach to multiple trauma treatment when utilizing EMDR in the clinical practice field. This is important because while there is discussion in EMDR literature and training about this approach, if therapists are
not utilizing it, that information is wasted. Additionally, if therapists are finding this approach to be useful, disseminating the results of its clinical utility could have vast implications throughout the mental health field.

However this survey was designed not only to test whether therapists are utilizing the approach, but what their opinions of the approach are. Questions specifically asked about changes in symptoms when using this approach sought to provide a framework for assessing clinical utility. Open-ended questions sought to capture other opinions and comments. This project is the first to collect these opinions. Again, while there may be some theoretical literature on this approach available, since clinicians’ evaluation of an approach or tool determines its use in the field, it is precisely this evaluation and subsequent application that determines its efficacy.

Limitations.

This study does have several limitations. As mentioned earlier, the main limitation is a participant bias. Given that the sample was obtained through websites and contacts of independent EMDR trainers, practitioners in agencies whose professional training was sponsored by their practice setting may not have been adequately captured by this survey. As a result, the sample includes a high number of private practice therapists. Also, since the survey was a voluntary online instrument with EMDR in the title, practitioners who specialize in EMDR may have been more inclined to participate, whereas there are numerous therapists in different agencies settings who may use more than one evidence-based trauma treatment. Sixty-five percent of this study's participants report that they are not trained in other phase-oriented trauma treatments. Both of these limitations make the study's findings difficult to generalize.

Another limitation of this study is that it collects only clinicians’ perceptions of using a chronological approach when using EMDR to treat multiple traumas. While it is useful to gather
these perceptions, a next step would be for therapists and researchers to track the rates of symptom distress for later trauma memories after first treating an chronologically earlier one. It would also be important to gather the perceptions of clients after such a treatment organization. A way to structure this type of project would be to have therapists administer and share the results of completed PTSD Patient Check-List (PCL) of symptoms or Subjective Units of Distress Scale (SUDS), both of which are in wide use throughout the field (Garland, Kruse, Aarons, 2003). This may then help account for any bias in clinicians' perceptions of the approach's utility not necessarily due to some theoretical training, but because of their sincere hopes that their clients are feeling better.

Of course, since this is the first study to measure issues related to the use of this approach in current practice scenarios, the results are purely preliminary. Consequently, more research would be needed to extend any of these findings.

Final Comments

The implication of this project is that the chronological approach may be a valid way not only to organize treatment for multiple traumas, but that it may also provide a means of working on symptoms of numerous traumas in shorter time periods. First of all, it would give therapists a proven way to organize the treatment of multiple traumas and eliminate any possible guesswork. Secondly, such organization would support other trauma treatment in its goals of creating predictable and containing elements which are helpful in trauma for recovery (Allen, 2000). Third, if symptoms from later traumas are indeed decreased as earlier ones are resolved, this would provide profound relief to a client. Finally, while it is still important to advocate for services for our clients and to continually question current service re-imbursement procedures,
research on the utility of this approach and its effectiveness in providing treatment organization-all in a more timely manner- may provide valuable outcomes for insurance companies.

Additionally, there is nothing to suggest that this chronological approach is useful only with EMDR. Since Information Processing Theory is a theoretical basis for this approach and is referenced by other modalities such as Accelerated Experiential-Dynamic Psychotherapy (ACEDP) or Cognitive Behavioral Therapy (Fosha, 2000; Beck & Clark, 1997), the chronological approach may then also be useful with other modalities. This study focused on the approach's use with EMDR given previous literature and research on this. However, it would be fascinating to further assess its utility with other trauma modalities; in particular, it would be interesting to research the chronological approach with the modalities Prolonged Exposure or Cognitive Processing Therapy, both of which dictate and theorize working on the "biggest" traumatic event first and then folding others in as treatment progresses (Hembree, Rausch & Foa, 2003; Resick & Schnicke, 1992). The reason this may be important is that CPT was created and researched through the National Center for PTSD and the Veterans Administration (VA); PE is also used by the VA. Given my experience, the reality of current service members facing numerous deployments overseas, and the example I gave above regarding the opinion of another VA clinician, it seems important for these other modalities to empirically address protocols for clients with multiple traumatic events that may not produce a “most intense” one.

Dr. Jon G. Allen (2001) writes, “Treatment needs a focus. Faced with many problems and many interventions, our treatment approaches can become as fragmented and chaotic as our traumatized client’s world.” It is precisely this focus that research on using a chronological approach when working with clients who have survived multiple traumatic events may provide. Given that the majority of participants have noticed that the general distress and PTSD
symptoms connected to later events decrease in their intensity when chronologically earlier trauma memories are processed with EMDR, this is important information to disseminate. Other clinically relevant data provided by the participants include that therapists believe that this approach strengthens the working therapeutic alliance between clinician and client because the approach allows earlier wounds to be attended to and as one participant stated: “It knocks [all the traumas] out at once”. Additionally, the approach may help clients strengthen their trust of the treatment process and the therapist because it provides a clear, organized and somewhat predictable path for treatment. In turn, this can provide a sense of control and safety for clients. While therapists believe the above positive effects of a chronological treatment of multiple traumas, and utilize the approach, this study also provides information on the importance of advocating for evidenced-based practice to address the large population of clients who do struggle with multiple traumas.
References


Appendix A:

HSR Committee Approval Letter

February 2, 2011

Michelle Marchese

Dear Michelle,

Your second set of revisions has been reviewed and they are fine. We are now happy to give final approval to your very interesting study.

Please note the following requirements:

Consent Maintaining Data: You must retain all data and other documents for at least three (3) years past completion of the research activity.

In addition, these requirements may also be applicable:

Amendments: If you wish to change any aspect of the study (such as design, procedures, consent forms or subject population), please submit these changes to the Committee.

Renewal: You are required to apply for renewal of approval every year for as long as the study is active.

Completion: You are required to notify the Chair of the Human Subjects Review Committee when your study is completed (data collection finished). This requirement is met by completion of the thesis project during the Third Summer.

Good luck with your project. I hope your recruitment is successful.

Sincerely,

Ann Hartman, D.S.W.
Chair, Human Subjects Review Committee

CC: Claudia Bepko, Research Advisor
Appendix B:

Recruitment Letter

Dear licensed mental health clinician,

My name is Michelle Marchese and I am a second year master's student at the Smith College School for Social Work. I am currently working on a thesis research project and would greatly appreciate your help with it. I am currently recruiting licensed clinicians who use Eye Movement Desensitization and Reprocessing (EMDR) to treat clients who have experienced multiple traumas. I will use an online survey that should take approximately 20 minutes to complete. Your survey responses are entirely anonymous.

When a therapist works with a client who has survived multiple traumas, it can be difficult to decide which trauma memory to begin treating first. I will gather data on therapists' experience of first treating a client's earlier trauma memory and whether this treatment seemed to impact the intensity of symptoms (such as nightmares, intrusions or avoidance of trauma-related cues) related to the memory of a later event.

If you are interested in learning more about and perhaps participating in this project, please click on the link below. (This link will have the informed consent form followed by the survey.) I would also appreciate you forwarding this email on to any additional EMDR-trained clinicians whom you may know.

I thank you in advance for your participation in this study!

Sincerely,

Michelle M. Marchese

Please contact me with any questions at:
Appendix C:

Informed Consent Form

Dear Participant,

As a master’s level student of clinical social work at Smith College School for Social Work, I am interested in ways that treatment for trauma and PTSD can be made more useful and more comfortable for clients who have survived multiple traumas. To this end, I am looking to survey licensed clinicians who have used Eye Movement Desensitization and Reprocessing (EMDR) to treat their clients’ multiple trauma memories.

When working with clients who have experienced multiple traumas, it can be difficult to know which memory to start treating first. The purpose of this study is to examine and document an approach that some therapists are already utilizing in the field. This approach involves treating trauma memories in chronological order starting with an earlier memory and then working on later memories. I also seek to learn if therapists have noticed if working through a client’s earlier traumatic memory seemed to reduced the intensity of symptoms (nightmares, intrusions, avoidance of trauma-related cues) associated with a later memory. The knowledge will enable therapists to be able to better help their clients. Any information collected will be used in my MSW thesis project and may also be used for presentation and publication.

Your participation in the study entails you completing an anonymous on line survey about your experiences or observations regarding the use of this chronological approach to the treatment of multiple traumas. Most questions will require you to select an answer and a few questions will ask you to provide brief remarks, should you choose. The entire survey should take approximately 20 minutes. Should you share any specific information regarding particular clients with whom you have worked, please take care to disguise the identities of these clients.

There will be no charges or payments and there are no anticipated risks to you in participating in this survey. The primary potential benefit to you is the satisfaction of knowing that you have contributed to the development of knowledge that may help others. Additionally, you may be providing information which will further support your clinical practice. Confidentiality is provided by through Survey Monkey, an on line survey program that will encode your answers. This means that once you have completed your survey, I will be unable to identify who filled it out. Due to this, once you have submitted your survey, I cannot distinguish your data to pull it from the study. If any vignettes or quotes are described in detail in a publication or presentation, any identifying information will be further disguised by me to protect confidentiality.

All collected data from the survey will be kept in a secure location for three years as required by federal guidelines. If I need to keep the data longer than three years, I will continue to keep it secure. When I no longer need the materials, I will destroy them.

Participation in this study is voluntary. You may withdraw from participation before you submit it simply by leaving the site. You may also leave any questions blank. However
once you have submitted your survey, you cannot withdraw as it is impossible to identify any individual survey. If you decide not to participate, or decide to stop participating, there will be no adverse consequences other than the loss of the potential benefits of participation described above.

Please print out a copy of this page for your records.

If you have any questions, at any time, about this research, please contact me, Michelle Marchese, at: . If you have any concerns about your rights or any other aspect of this study, you may contact the Chair of the Smith College School for Social Work Human Subjects Review Committee at (413) 585-7974.

BY CHECKING "YES" BELOW, YOU ARE INDICATING THAT YOU HAVE READ AND UNDERSTAND THE ABOVE INFORMATION; THAT YOU HAVE HAD THE OPPORTUNITY TO.

yes

no
## Appendix D:

Survey Questionnaire

### 1. Screening Page

Welcome! Before you begin the survey, please answer the following four participation criteria questions. All answers must be "yes" in order to proceed with the survey.

**1. Are you or have you been a licensed clinical therapist?**
- [ ] Yes
- [ ] No

**2. Have you worked with clients who have experienced multiple traumas?**
- [ ] Yes
- [ ] No

**3. Have you worked with clients with symptoms associated with Post-traumatic Stress Disorder (PTSD) with or a diagnosis of PTSD**
- [ ] Yes
- [ ] No

**4. Have you delivered trauma-focused treatment using Eye-Movement Desensitization and Reprocessing (EMDR)?**
- [ ] Yes
- [ ] No

### 2. Informed Consent
1. Dear Participant,

As a master's level student of clinical social work at Smith College School for Social Work, I am interested in ways that treatment for trauma and PTSD can be made more useful and more comfortable for clients who have survived multiple traumas. To this end, I am looking to survey licensed clinicians who have used Eye Movement Desensitization and Reprocessing (EMDR) to treat their clients' multiple trauma memories.

When working with clients who have experienced multiple traumas, it can be difficult to know which memory to start treating first. The purpose of this study is to examine and document an approach that some therapists are already utilizing in the field.

This approach involves treating trauma memories in chronological order starting with an earlier memory and then working on later memories. I also seek to learn if therapists have noticed if working through a client's earlier traumatic memory seemed to reduce the intensity of symptoms (nightmares, intrusions, avoidance of trauma-related cues) associated with a later memory. The knowledge will enable therapists to be able to better help their clients. Any information collected will be used in my MSW thesis project and may also be used for presentation and publication.

Your participation in the study entails you completing an anonymous online survey about your experiences or observations regarding the use of this chronological approach to the treatment of multiple traumas. Most questions will require you to select an answer and a few questions will ask you to provide brief remarks, should you choose. The entire survey should take approximately 20 minutes. Should you share any specific information regarding particular clients with whom you have worked, please take care to disguise the identities of these clients.

There will be no charges or payments and there are no anticipated risks to you in participating in this survey. The primary potential benefit to you is the satisfaction of knowing that you have contributed to the development of knowledge that may help others. Additionally, you may be providing information which will further support your clinical practice.

Confidentiality is provided by through Survey Monkey, an on-line survey program that will encode your answers. This means that once you have completed your survey, I will be unable to identify who filled it out. Due to this, once you have submitted your survey,
I cannot distinguish your data to pull it from the study. If any vignettes or quotes are described in detail in a publication or presentation, any identifying information will be further disguised by me to protect confidentiality.

All collected data from the survey will be kept in a secure location for three years as required by federal guidelines. If I need to keep the data longer than three years, I will continue to keep it secure. When I no longer need the materials, I will destroy them. Participation in this study is voluntary. You may withdraw from participation before you submit it simply by leaving the site. You may also leave any questions blank. However once you have submitted your survey, you cannot withdraw as it is impossible to identify any individual survey. If you decide not to participate, or decide to stop participating, there will be no adverse consequences other than the loss of the potential benefits of participation described above.

Please print out a copy of this page for your records.

If you have any questions, at any time, about this research, please contact me, Michelle Marchese, at chronological.project@gmail.com or at (508) 496-8643. If you have any concerns about your rights or any other aspect of this study, you may contact the Chair of the Smith College School for Social Work Human Subjects Review Committee at (413) 585-7974.

BY CHECKING "YES" BELOW, YOU ARE INDICATING THAT YOU HAVE READ AND UNDERSTAND THE ABOVE INFORMATION; THAT YOU

☐ yes
☐ no

3.

I thank you for your participation in this study! Please click "next" to begin the survey.

4.
1. **What type of clinical setting do you practice in? (Please check all that apply.)**

- [ ] Outpatient
- [ ] Inpatient
- [ ] Private practice
- [ ] Agency

2. **Please approximate the percentage of clients to whom you have delivered trauma-informed treatment.**

- [ ] 5% or less
- [ ] 6-10%
- [ ] 11-25%
- [ ] 26-50%
- [ ] 51-75%
- [ ] 76% or more

3. **Approximate the percentage of these clients who have survived multiple traumas or who struggle with multiple trauma memories.**

- [ ] 5% or less
- [ ] 6-10%
- [ ] 11-25%
- [ ] 26-50%
- [ ] 51-75%
- [ ] 76% or more

4. **Are you trained in any other phase-oriented trauma treatments besides EMDR (such as CPT or PE)?**

- [ ] Yes
- [ ] No
2. Are you trained in dynamic or interpersonal trauma treatments?
   - Yes
   - No
   - Yes (please specify)

3. If yes, what type in particular?

4. Do you ever utilize dynamic or interpersonal trauma treatment with your clients?
   - Never
   - Hardly ever
   - Neutral
   - Sometimes
   - Often
   - Very often

6.

1. How long have you been delivering EMDR?
   - Less than one year
   - 1-2 years
   - 3-5 years
   - 5-10 years
   - 10-15 years
   - 15+ years

2. When you use EMDR, what is the means of bi-lateral stimulation that you use?
   - Eye movements
   - Sounds
   - Tapping
   - Other (please specify)
3. If you have chosen bi-lateral stimulation other than eye movements, please share why you chose it.

7.

1. Approximate the percentage of clients you have worked with who may have dropped out from trauma treatment due to a fear of facing trauma-related cues or triggers.
   - 0% or less
   - 5-10%
   - 11-25%
   - 26-50%
   - 51-75%
   - 76% or more

8.

1. Have you ever noticed the rate of distress that a client experiences from a later trauma decrease once an earlier trauma was successfully treated first?
   - Yes
   - No

2. Have you ever noticed a client’s symptoms of re-experiencing a later trauma decrease once an earlier trauma memory has been successfully treated first?
   - Yes
   - No

3. Have you ever noticed that a client’s symptoms of hyper-vigilance related to a later trauma decrease once an earlier trauma memory has been successfully treated first?
   - Yes
   - No
4. Have you noticed that a client's symptoms of avoiding triggers related to a later trauma decrease once an earlier trauma memory has been treated first?
   - Yes
   - No

5. In your clinical experience, have you noticed any benefit to treating multiple traumas chronologically (in the order in which they occurred)?
   - Yes
   - No

6. If yes, what are these benefits?

9.

1. Have you ever used a chronological approach with EMDR in cases of multiple traumas?
   - Yes
   - No

2. Have you ever used a chronological approach using any modality besides EMDR in cases of multiple traumas?
   - Yes
   - No

3. If so, what modality?

4. Have you ever used a chronological approach with EMDR in cases of multiple traumas and a diagnosis of PTSD?
   - Yes
   - No

10.

If you have no experience treating trauma memories chronologically, you may skip the remaining questions.
1. How did you first come to consider a chronological method to treating multiple trauma memories?
   ○ in a training
   ○ Through clinical experience
   ○ Other (please specify)

2. How often do you use the chronological approach to trauma treatment when treating with EMDR?
   ○ Never
   ○ Hardly ever
   ○ Sometimes
   ○ Often
   ○ Very often

11.

1. Do you believe that approaching trauma memories chronologically has any effect on your therapeutic alliance with your clients?
   ○ Yes
   ○ No

2. If yes, please explain.

3. Do you believe that approaching trauma memories chronologically has any effect on your client's ability to trust you?
   ○ Yes
   ○ No

4. Do you believe that approaching trauma memories chronologically has any effect on your client's ability to trust the therapeutic process?
   ○ Yes
   ○ No

12. Final Page
1. What kinds of specific considerations might lead you to decide to use the chronological method instead of first targeting the index trauma?

2. Are there any specific reasons why you would not use the chronological approach for a client with multiple traumas?

3. What population(s) of clients have you used EMDR and this chronological approach with?

4. What, if any, populations seem to respond better to this approach?

5. In your opinion, are you aware of any drawbacks to this chronological method?

6. In your opinion, are you aware of any strengths of this method?

13.

Thank you again for your time and participation in this study.
Appendix E:

Figure 1: Time Practicing EMDR

How long have you been delivering EMDR?
Appendix F:

Figure 2: Number of Clients Who Experienced Multiple Traumas

Approximate the percentage of these clients who have survived multiple traumas or who struggle with multiple trauma memories.

[Bar chart showing percentage distribution]
Appendix G:

Figure 3: Decrease in Distress

Have you ever noticed the rate of distress that a client experiences from a later trauma decrease once an earlier trauma was successfully treated first?
Appendix H:

Figure 4: Decrease in Re-Experiencing Symptoms

Have you ever noticed a client’s symptoms of re-experiencing a later trauma decrease once an earlier trauma memory has been successfully treated first?
Appendix I:

Figure 5: Decrease in Hypervigilance

Have you ever noticed that a client’s symptoms of hyper-vigilance related to a later trauma decrease once an earlier trauma memory has been successfully treated first?
Appendix J:

Figure 6: Decrease in Avoidance

Have you noticed that a client’s symptoms of avoiding triggers related to a later trauma decrease once an earlier trauma memory has been treated first?