

University of Windsor

Scholarship at UWindor

Electronic Theses and Dissertations

Theses, Dissertations, and Major Papers

2022

Effects of Chairwork in Individual Psychotherapy: A Meta-Analytic and Systematic Review

Tabarak Baher
University of Windsor

Follow this and additional works at: <https://scholar.uwindsor.ca/etd>



Part of the [Psychology Commons](#)

Recommended Citation

Baher, Tabarak, "Effects of Chairwork in Individual Psychotherapy: A Meta-Analytic and Systematic Review" (2022). *Electronic Theses and Dissertations*. 8982.
<https://scholar.uwindsor.ca/etd/8982>

This online database contains the full-text of PhD dissertations and Masters' theses of University of Windsor students from 1954 forward. These documents are made available for personal study and research purposes only, in accordance with the Canadian Copyright Act and the Creative Commons license—CC BY-NC-ND (Attribution, Non-Commercial, No Derivative Works). Under this license, works must always be attributed to the copyright holder (original author), cannot be used for any commercial purposes, and may not be altered. Any other use would require the permission of the copyright holder. Students may inquire about withdrawing their dissertation and/or thesis from this database. For additional inquiries, please contact the repository administrator via email (scholarship@uwindsor.ca) or by telephone at 519-253-3000ext. 3208.

Effects of Chairwork in Individual Psychotherapy:

A Meta-analytic and Systematic Review

By

Tabarak Baher

A Thesis

Submitted to the Faculty of Graduate Studies

through the Department of Psychology

in Partial Fulfillment of the Requirements for

the Degree of Master of Arts at the University of Windsor

Windsor, Ontario, Canada

2022

© 2022 Tabarak Baher

**Effects of Chairwork in Individual Psychotherapy:
A Meta-analytic and Systematic Review**

by

Tabarak Baher

APPROVED BY:

R. Arnold

Department of Sociology and Criminology

J. Jarry

Department of Psychology

A. Pascual-Leone, Advisor

Department of Psychology

September 23rd, 2022

DECLARATION OF ORIGINALITY

I declare that, to the best of my knowledge, my thesis does not infringe upon anyone's copyright nor violate any proprietary rights and that any ideas, techniques, quotations, or any other material from the work of other people included in my thesis, published or otherwise, are fully acknowledged in accordance with the standard referencing practices. Furthermore, to the extent that I have included copyrighted material that surpasses the bounds of fair dealing within the meaning of the Canada Copyright Act, I certify that I have obtained a written permission from the copyright owner(s) to include such material(s) in my thesis.

I declare that this is a true copy of my thesis, including any final revisions, as approved by my thesis committee and the Graduate Studies office, and that this thesis has not been submitted for a higher degree to any other University or Institution.

ABSTRACT

Purpose: The present study aims to examine (1) the unique effects of chairwork on emotional process and distal outcomes across treatments in the context of individual psychotherapy, and (2) how these effects compare to those of other treatment interventions. **Method:** Based on the appropriateness of the data available, non-parametric within-group meta-analyses, parametric between-group meta-analyses, and narrative syntheses were conducted. **Study 1:** Noticeable improvements in resolution ($d = 1.20$) and symptom change ($d = .96$) are shown to emerge after a single-session of chairwork. Symptom change becomes increasingly more pronounced in multisession treatments ($d = 1.42$). Meanwhile, improvements in self-compassion/esteem seem to be less clear. **Study 2:** Single session chairwork were found to be more effective in deepening client experiencing ($g = .88$) and sequential transformation, but similarly effective in facilitating emotional arousal as other interventions. Improvements in resolution and symptom change after a single session of chairwork may be comparable to other interventions ($g = -.02$). However, when chairwork was used over multiple sessions, it accumulates a meaningful effect ($g = .39$) compared to treatments that did not use chairwork, with therapeutic orientation emerging as a potential moderator. **Additional Syntheses:** Notwithstanding its evocative nature, clients identify many components of chairwork as helpful in creating therapeutic change. Furthermore, the use of physical chairs offers a slight advantage in therapeutic gains but is not imperative for the intervention. Meanwhile the imaginal component of chairwork was identified as a crucial role in emotional processing. **Conclusion:** Incorporating chairwork into single-session and multi-session treatments may bolster process and distal outcomes.

Keywords: chairwork; two-chair; empty-chair; trial-based thought record; emotional processing; psychotherapy outcome; meta-analysis; systematic review

DEDICATION

I would like to dedicate my master's thesis to my mother and father as a small token of my appreciation for the sacrifices and compromises they have made in their lives to provide my siblings and I with a better life. I hope to one day make them proud of all my pursuit!

ACKNOWLEDGEMENT

My master's thesis would not have been possible without the support and wisdom of many individuals. I would like to express my warmest thanks to my supervisor, Dr. Antonio Pascual-Leone for his encouragement, authentic guidance, and steadfast mentorship in my development as a researcher and clinician. A special thanks goes to my committee members: Dr. Robert Arnold for his role in shaping the analyses and enduring long conversations about my statistical curiosities, and Dr. Josée Jarry for her thought-provoking questions that ignited critical reflections on psychotherapy research at large. I would also like to thank Dr. Kendall Soucie, for her enthusiasm for the project and chairing the defence.

Having made it this far in my studies is a tremendous blessing from God that I will be immensely grateful for – each and every single day of my life. I would like to express my deepest gratitude to all those who have provided me with uplifting support throughout my academic career. These include but are not limited to: Dr. Greg Chung-Yan, who was first to introduce me to the world of research in my undergraduate years, sparked my interest in psychology, and steered me in this direction. I am sincerely thankful for his on-going vote of confidence and the guidance he has provided me over the years. Although my interests led me in a different direction, his previous influences continue to play a pivotal role in this arduous research journey. I owe a debt of gratitude to Conner Motzkus, who was assigned as my peer mentor. I am incredibly grateful for his generous advice on navigating graduate school. His kindness and gracefulness in tackling obstacles is an inspiration. I would like to express my sincerest thanks to Marlene Sebastian, Florencia Christoffanini, Rachel Katzman, and Jewels Adair for always being my voices of reason during notorious times in which 'life is life'.

(Al Nahl: 16:53) And whatever blessing you have, it is from God.

TABLE OF CONTENT

DECLARATION OF ORIGINALITY	III
ABSTRACT.....	IV
DEDICATION.....	V
ACKNOWLEDGEMENT.....	VI
CHAPTER I	1
Introduction.....	1
History of Chairwork	1
Theoretical Development of Chairwork	2
Definitions of Chairwork Interventions	4
<i>Two-Chair Task to Resolve Conflicts within the Self</i>	<i>5</i>
<i>Empty-Chair Tasks to Resolve Conflicts in Relation to Others.....</i>	<i>6</i>
<i>Compassion-Focused Chairwork.....</i>	<i>7</i>
Chairwork Across Different Therapeutic Approaches	8
<i>Chairwork in Gestalt Therapy</i>	<i>8</i>
<i>Chairwork in Emotion-Focused Therapy</i>	<i>9</i>
<i>Chairwork in Schema/Cognitive Behavioral Therapy.....</i>	<i>10</i>
<i>Differences in Chairwork Across Therapy Orientations</i>	<i>12</i>
Clinical Description and Indicators for Initiating Chairwork	13
<i>Markers for the Two-Chair Task</i>	<i>13</i>
<i>Marker for the Empty-Chair Task.....</i>	<i>15</i>
<i>Marker for Compassion-focused Chairwork</i>	<i>15</i>

<i>Overlap in Marker Presentations</i>	<i>16</i>
<i>Clinical Population Characteristics</i>	<i>16</i>
Assessing the Effectiveness of Chairwork.....	18
<i>Engagement.....</i>	<i>19</i>
<i>Assessing Process Outcomes</i>	<i>19</i>
<i>Sequential Transformation.....</i>	<i>21</i>
<i>Assessing Distal Outcomes</i>	<i>24</i>
Rationale for Method	31
Present Study	33
CHAPTER II.....	33
Method	33
Data Collection	33
<i>Data Source</i>	<i>33</i>
<i>Exclusion and Inclusion Criteria.....</i>	<i>34</i>
<i>Method of Assessing Internal Validity</i>	<i>35</i>
<i>Coding.....</i>	<i>36</i>
<i>Calculating Effect Size.....</i>	<i>37</i>
CHAPTER III	40
Study 1: The Effect of Using Chairwork	40
Method of Synthesis	40
Results of Study 1: The Effect of Using Chairwork	42
Single Session Studies of Chairwork.....	42
<i>Credibility of Punitive Core Beliefs.....</i>	<i>42</i>

<i>Resolution.</i>	42
<i>Symptom Change.</i>	43
<i>Self-Compassion/Esteem.</i>	43
Multi-Session Studies of Chairwork: Symptom Change	43
CHAPTER IV.....	44
Study 2: Effects of Chairwork Compared to Other Interventions	44
Method of Synthesis	44
<i>Choice of Model</i>	44
<i>Pooled Summary Effect</i>	45
<i>Testing Heterogeneity</i>	46
<i>Assessment of Publication Bias</i>	47
Results of Study 2: Effects of Chairwork Compared to Other Interventions	48
Single Session Studies of Chairwork.....	48
<i>Emotional Arousal.</i>	48
<i>Sequential Transformation</i>	49
<i>Depth of Experiencing.</i>	49
<i>Resolution.</i>	50
<i>Symptom Change</i>	51
Multi-Session Studies of Chairwork.....	51
<i>Emotional Arousal.</i>	51
<i>Resolution.</i>	52
<i>Symptom Change.</i>	52
<i>Additional Outcomes</i>	54

CHAPTER V	55
Additional Syntheses: Follow-ups, Dismantling Chairwork, and What Clients Say	55
Does Chairwork Have an Enduring Effect at Follow-up?	55
<i>The Follow-Up Effects of Using Chairwork</i>	56
Clarifying Chairwork: How Essential are Defining Functional Components?	59
<i>Is a Real Dialogue Better?</i>	59
<i>Can Chairwork be Done Without Physical Enactments?</i>	60
Qualitative Research: What do Clients Report as Most Helpful about Chairwork?	63
<i>Enactments Vivify and Offer Structure</i>	64
<i>Dialogue Brings out a Covert Process</i>	65
<i>Physical Chairs Serve as Symbols</i>	65
CHAPTER VI.....	66
Discussion.....	66
Chairwork Associated with Facilitating Emotional Processing.....	67
Chairwork Correlated with Individual Improvements	68
<i>Mixed Pathways to Improved Self-Compassion</i>	69
Comparability of Chairwork to Other Therapy Interventions	70
<i>Comparable Processing Effects Differ Between Outcomes</i>	70
<i>Comparable Distal Effects may Differ Between Therapeutic Orientations</i>	71
Clinical Implications	73
Limitations and Future Directions	74
<i>Guidelines for Studying Effects of Chairwork</i>	74
<i>Guidelines for Reporting Effects Related to Chairwork</i>	75

References	78
Appendix A	115
Vita Auctoris.....	120

CHAPTER I

Introduction

Chairwork is a therapeutic intervention that has been used in psychotherapy for almost 100 years (see Moreno, 1948). Chairwork represents a group of enactment interventions in which the client engages in an imaginal dialogue (Perls, 1973). These enactments are unscripted dialogues with varying degrees of structure between (i) the client and an aspect of themselves, or (ii) the client and a vivid imaginal representation of an important other with whom a relational conflict exists. The main objective of engaging in chairwork is to explore underlying feelings and their associated meaning for the purpose of reaching a resolution of personal difficulties through the process of these enactments (Greenberg et al., 1993; Perls, 1973). Despite the prominence of chairwork in many treatment packages for individual psychotherapy, including gestalt therapy, emotion-focused therapy (EFT), schema therapy, and aspects of cognitive behavioural therapy (CBT), research has not systematically explored the effects of chairwork interventions on emotional processing and distal outcomes. Through a systematic approach, the present study aims to examine the effects of chairwork on emotional processing and distal outcomes across therapeutic approaches in the context of individual psychotherapy, with clinical and relevant non-clinical samples. The findings of the current study are of interest for developing a broader conceptual understanding of the individual role of chairwork in therapeutic change. The findings are also informative for therapists seeking empirical evidence to support engaging clients in chairwork to meet specific session or treatment goals.

History of Chairwork

Enactment interventions, which refer to the expression of one's thoughts and feelings into action through dramatization, are at the center of experiential therapies (Moreno, 1948). The

specific application of enactment in resolving emotional difficulties that are precipitated by a conflict between the client and an aspect of themselves or the client and an important other person, was first used in psychodrama group therapy (Moreno, 1948). During a therapy session, a client would be asked to roleplay one side of the conflict, while the remainder of the group roleplayed the other (Moreno, 1948). Role-playing conflicts in psychodrama was later implemented in individual psychotherapy under the Gestalt framework, with the modification of having the client play both sides of the conflict (Perls et al., 1951; Perls, 1973). These modifications helped establish the use of chairwork as a targeted therapeutic intervention (Perls, 1973).

As an experiential therapy, the Gestalt framework proposes that healing from emotional pain can only be achieved after attaining full awareness through re-experiencing one's distressing emotions in the here-and-now (Perls et al., 1951; Perls, 1973). Chairwork was viewed as one method of re-experiencing. In subsequent years, the utility of chairwork was validated by empirical studies conducted in EFT research that aimed to understand the mechanisms through which therapy brings about change (e.g., Greenberg, 1980; 1983; Rice & Greenberg, 1984; Paivio et al., 2010). In these studies, incorporating chairwork into therapy treatments was correlated to emotional processing within a session and distal outcomes at the end of therapy (Elliot et al., 2004; Rice & Greenberg, 1984).

Theoretical Development of Chairwork

The notion of conflict between parts of the self can be understood in relation to the Dialogical Self Theory, in which the authentic self is composed of differentiated parts, known as I-positions (Hermans et al., 1992). Together, these parts of self make up a complex "society of mind" (Hermans et al., 1992, p. 26). Each I-position holds different perspectives of thoughts and

feelings that contribute to how the authentic self feels, thinks, and behaves in the world. These perspectives are expressed through dialogue between the I-positions, which help shape an individual's idea of what their self-image ought to be. Sometimes the I-positions are experienced as the voice of the internal critic or the opinions that others are perceived to hold about the individual, which often become internalized as absolute truths about the self. These voices are then reflected in how one speaks to themselves, which may elicit distressing emotions (Hermans et al., 1992).

As the Gestalt theory highlights in the systems/exchange cycle, interactions between an I-position and the self, or the self and the environment, can become problematic (Perls et al., 1951; Perls, 1973). The system/exchange cycle conceives the self as a continually evolving phenomenon, rather than static, that is influenced by the ways in which individuals interact and process internal experiences within themselves and their environment (Perls et al., 1951; Perls, 1973). When the system is operating optimally, facets of adaptive information (e.g., sensations, emotions) are within one's awareness and can mobilize actions that orient individuals towards an unmet need (Greenberg, 2011; Perls et al., 1951). Satisfaction of these needs contributes to overall cohesiveness within the self. The cohesiveness is disrupted when the dialogue between I-positions begins to generate distressing emotions, which may hinder an individual's ability to creatively and adaptively respond to new situations (Perls et al., 1951; Perls, 1973). This typically occurs when one I-position is overly critical or coercive towards the rest of the self (known as the experiencing self), in a self-monitoring manner that warns and prevents flaws from being exposed, which serves the purpose of preserving the self-image (Gilbert et al., 2004; Perls et al., 1951). Emotional disturbances can also arise when apprehensiveness over encountering pain, typically from the experiential self, leads to unresolved and unexpressed

negative emotions related to an interpersonal interaction. Accordingly, Gestalt's chairwork interventions have been developed based on the assumption that identifying and separating different I-positions and facilitating dialogue between them can ameliorate the associated distressing emotions (Perls, 1973).

Definitions of Chairwork Interventions

Chairwork interventions are defined as the enactment of the relationship between parts of the self or the self and other (Greenberg et al., 1993; Greenberg & Watson, 2006; Perls, 1973). Chairwork is intended as a relatively spontaneous enactment for the immediate ends of gaining some new insight, feeling, or perspective on personal difficulties. In this intervention, the client explores each side of (typically two) *conflicting parts* (i.e., distinct positions, "voices"), which are in juxtaposition to one another. The client vividly engages these parts through an imaginal entry into a scene (i.e., either as an enactment, or in their "mind's eye"), responding spontaneously to the imagined scenario (e.g., "as if"). Each perspective is independently elaborated in relation to the other, often by dynamically switching between parts (i.e., positions, perspectives). The elaboration is intended to integrate or understand the opposing parts in a way that creates a new and overarching experience, meaning, and/or change in emotion (Greenberg et al., 1993; Greenberg & Watson, 2006; Perls, 1973).

Chairwork precludes a number of interventions that may otherwise appear to be similar (Greenberg & Watson, 2006; Perls, 1973). For example, chairwork is not (a) *behavioural rehearsal* to prepare the client for an intended future conversation, confrontation, or assertiveness training. Likewise, it is not simply (b) *emotional role play* (i.e., imagining how one would respond if one was diagnosed with lung cancer) without a juxtaposition of parts to be synthesized. It is not simply (c) *exploring evidence* for/against some belief, without an imaginal

entry and responding to some scenario “as if” or (d) *weighing pros/cons*, where resolution is a “best choice” rather than a synthesis of parts. Finally (e) chairwork differs from implicitly involved exposure to imagined stimuli (e.g., a perpetrator) or to feared emotional experiences (i.e., tolerating, and engaging distress). Since these interventions do not target reaching a resolution through the synthesis of opposing parts, they are not considered forms of chairwork. Moreover, chairwork is not constituted by its use of physical chairs. Instead, it is constituted by the particular roles that are held in differentiated physical spaces and the processes it facilitates (Greenberg et al., 1993; Paivio et al., 2010).

Enactments that constitute as chairwork can be categorized into three types. These include the two-chair task for enacting internal dialogue between conflicting I-positions, the empty-chair task for enacting internal dialogue for conflict with others, and compassion-focused chairwork for enacting affinity towards the self (Greenberg et al., 1993; Kellog, 2004; Perls, 1973). The next sections discusses each of these in turn.

Two-Chair Task to Resolve Conflicts within the Self

Internal dialogue is facilitated through the two-chair task when it is evident that the internal conflict is being caused by a split between aspects of the self (Clarke & Greenberg, 1986; Greenberg & Watson, 2006). A split is said to occur when two distinct parts of the self (e.g., I-positions) are identifiable, the conflicting I-position is perpetuating negative self-treatment or actions against the self, and a client feels torn or a sense of struggle (Clarke & Greenberg, 1986; Elliott & Greenberg, 2007). Negative self-treatment can also occur when an I-position is perpetuating thoughts or feelings that have been internalized from the opinions of a real or imagined other of significance to the client’s life (Clarke & Greenberg, 1986). The two-chair task is used to ameliorate the split by achieving integration and resolution between

conflicting parts, either through initiating dialogue or enactment with the opposing part of self (Greenberg et al., 1993; Greenberg & Watson, 2006).

In these situations, the two-chair task is used to bring into the client's awareness the specific I-positions by embodying the negative self-treatment in one chair (e.g., deliberately enacting one's internal critic, the "critical chair") and the part of the self that experiences the negative self-treatment in another chair (i.e., "experiencing chair"; Clarke & Greenberg, 1986; Greenberg & Safran, 1987; Perls, 1969). The client creates a dialogue between the two chairs by expressing the negative self-treatment in the critical chair and expressing how it feels to receive such criticisms in the experiencing chair (Greenberg et al., 1993). Expressions of negative self-treatment can include being punitively critical of oneself, being restrictively controlling of the self, or interrupting and forbidding emergence or expression of subjective experience. The internal conflict is often resolved when the client reaches self-acceptance, the critical voice softens its stance towards the self, and some level of integration between the parts of self being represented in the two chairs emerges (Clarke & Greenberg, 1986; Greenberg & Safran, 1987; Perls, 1973).

Empty-Chair Tasks to Resolve Conflicts in Relation to Others

External dialogue is facilitated through the empty-chair task when a client presents with unresolved and unexpressed feelings of anger, hurt, or resentment towards a person of significance to their life (e.g., caregiver, romantic partner, friend), known as unfinished business (Clarke & Greenberg, 1986; Elliot & Greenberg, 2007; Perls, 1973). The empty-chair task is used to confront and work through such feelings, which may range from long standing interpersonal grievances to complex relational trauma (Greenberg et al., 1993). Note that although the task addresses interpersonal difficulties, resolution in relation to the significant

other is actually not the same as the interpersonal process of, for example, resolving a conflict between two people in couple's therapy. In contrast, an empty chair task aims to facilitate the personal resolution of a relational injury by helping the client get closure for relational events independently of the other person.

In this task, the client is asked to visualize the important other, towards whom the client has expressed unfinished business, being seated in the empty chair (Greenberg et al., 2008; Perls, 1973). Next, the client may be asked to enact the hurtful actions and attitudes of the target person from the empty chair, in a direct and immediate way towards the experiencing self (Clarke & Greenberg, 1986; Greenberg & Rice, 1981; Perls, 1973). When the client switches into the experiencing chair, they are asked to attend to and express the emerging emotions they are actively experiencing in response to the hurtful actions and attitudes of the target person. The dialogue may consist of multiple shifts between the experiencing chair and the empty chair (Greenberg & Watson, 2006; Perls, 1973). Resolution of unfinished business can consist of fully expressing one's previously unexpressed feelings towards the other person, which may help the client change how they view the person with whom they have unfinished business and have a healthier experience of themselves in relation to past interactions (Greenberg & Watson, 2006; Greenberg & Safran, 1987).

Compassion-Focused Chairwork

The third type of chairwork intervention is compassion-focused chairwork. Compassion-focused chairwork is centred on enacting affinity, closeness, affection, and compassion towards the self (Arntz & Jacob, 2013; Gilbert., 2010). Compassion-focused chairwork can be facilitated as an isolated intervention, with the purpose of increasing positive affect (i.e., compassion, empathy, love, tender respect) for oneself and a broader connection to one's humanity. As a

stand-alone technique, the client may be asked to imagine an important other (e.g., friend, parent, child, etc.), responding to the client's current presenting emotions or problems in a compassionate way. By virtue of its predetermined objective, compassion-focused chairwork as a stand-alone intervention is typically more directed or structured than other kinds of chairwork.

In other instances, compassion-focused chairwork may appear nested toward the end of either the two-chair task or empty-chair task, where those interventions would typically have a client empathize and show compassion towards themselves in light of, or in reaction to, the witnessing of their own negative self-treatment or past negative interpersonal events. In all of these implementations (stand-alone or within an explicit conflict-resolution process), the compassionate self may be enacted as a third-party observer that expresses affinity towards the experiencing self and the opposing self/other (e.g., T: what would an ideal mother say?; What would God say?; How might you encourage a small child?; Can you respond to that with love and tenderness?; Arntz & Jacob, 2013; Gilbert, 2010; Gilbert & Irons, 2005). In contrast to the other interventions, the purpose of compassion-focused chairwork is not to enact conflict or attain resolution between different chairs; instead, the aim is uniquely to increase positive self-treatment (Bell et al., 2020; Gilbert, 2010; Gilbert & Irons, 2005).

Chairwork Across Different Therapeutic Approaches

Chairwork has predominantly been used in Gestalt, EFT, and Schema/CBT therapy. In these treatments, each chairwork intervention is typically carried out with little to no modifications to their original description but they are used to serve different purposes depending on the therapeutic approach being implemented (Pugh, 2018).

Chairwork in Gestalt Therapy

Consistent with its framework, the main objective of Gestalt therapy is to help clients

become aware of, and subsequently integrate, existing polarities that may exist among parts of the self (Perls, 1973). The dialogue serves the purposes of gaining contact between conflicting I-positions, revealing critical information and unmet needs rooted in the conflicts or associated emotions, and reaching a resolution (Perls, 1973). Resolution is believed to be essential for achieving self-acceptance and orienting a client's interactions within their environment in a meaningful way that promotes self-actualization (Perls, 1973; Yontef & Simkin, 1989).

Therapists working in Gestalt therapy typically take an exploratory approach to chairwork that allows the dialogue to be elaborated on in a spontaneous way (Perls, 1973). That is, the direction of the intervention unfolds on a moment-to-moment basis with the only pre-determined objective being to increase awareness and identify underlying needs (Perls, 1973). In gestalt therapy, chairwork is used to foster an existential encounter, a confrontation with the reality of one's experience, and to create a window of opportunity to be candid.

Chairwork in Emotion-Focused Therapy

EFT posits that emotional processing is one of the central mechanisms through which therapeutic change is reached (Greenberg et al., 1993; Greenberg & Watson, 2006). The assumption is that maladaptive emotions can be changed only after they have been fully activated and experienced. As such, EFT treatments try to promote a client's ability to become aware of their internal experiences, for the purpose of subsequently exploring their underlying emotions in a meaningful way. Once these emotions are experienced, therapists focus on helping clients access and identify a need underlying the maladaptive emotions, which in turn, helps facilitate the emergence and activation of more adaptive emotions (Greenberg et al., 1993; Greenberg & Watson, 2006).

As with Gestalt therapy, EFT takes an exploratory approach to chairwork. Chairwork is

viewed as an important method for facilitating emotional processing by creating an evocative dialogue that allows for emotions to be activated and viscerally experienced in-the-moment (Greenberg & Watson, 2006). Critically, imaginal dialogue in EFT is concerned with the emotional impact of emotional laden statements and interpersonal conflicts (Greenberg et al., 1993). A therapist may ask, “what is it like being on the receiving end of that criticism? What happens inside, what does it do to you?” In contrast with cognitive approaches, the question of whether the criticism itself may be true or valid is not of central concern. Within EFT, chairwork becomes an important tool in facilitating the in-depth experience and exploration of maladaptive emotion, identifying unmet needs, and mobilizing adaptive emotional reaction that may have only been sub-dominant (Greenberg & Rice, 1981; Greenberg et al., 1993). In doing so, therapists help their client mobilize more adaptive emotional tendencies, such as asserting personal boundaries, actively grieving personal loss, and then letting go or moving on to embark on newer initiatives and life experiences (Greenberg et al., 1993). Given its evocative nature, chairwork is typically facilitated in the working phase of treatment, after establishing a safe and emotionally empathetic relationship between therapist and client (Greenberg, 2014).

Chairwork in Schema/Cognitive Behavioral Therapy

Schema/CBT therapies generally focus on altering maladaptive affective, cognitive, and behavioural schemas (Arknoff, 1981; Beck et al., 1979; Goldfried & Davidson, 1976). In these approaches, chairwork provides a medium through which clients assess the validity of their core beliefs from different perspectives that may be currently reinforcing maladaptive schemas (Goldfried & Davison, 1976). The dialogue created in chairwork becomes a configuration of the internal dialogue that may focus the client’s attention on confirmatory evidence that strengthens a certain maladaptive belief (Kellogg, 2004). Through this dialogue, the client can challenge and

test the accuracy of the maladaptive thought by differentiating between “rational” evidence and “emotionally-driven” evidence added by one’s inner voice (Dugas & Robichaud, 2007; Goldfried, 2013; Kellogg, 2004; Robichaud & Dugas, 2006). Subsequently, clients begin to discern between what is being perceived as objectively true or false, what is subjectively perceived to be true or false, and what may be a more balanced perspective.

When used for evaluating the validity of one’s beliefs using the two-chair task, one chair represents the confirmatory evidence for a maladaptive schema, and the other represents disconfirmatory evidence against the maladaptive schema. As a modification of the two-chair task, the trial-based chairwork can alternatively be facilitated by personifying the different characters involved in a courtroom trial from different chairs (de Oliveira, 2008; 2015; de Oliveira et al., 2012). In this modification, the client is asked to express a maladaptive thought as an allegation that may be made by a prosecutor. The client subsequently alternates between the internal prosecutor and defence attorney, while presenting confirmatory and disconfirming evidence regarding the maladaptive thought. At the end of the intervention, both the client and the therapist take the juror chair, in which they discuss the accuracy of the evidence the client presented from the prosecutor and defence attorney chair. As a result, the initially held beliefs or evidence that supported the maladaptive schema are re-evaluated and potentially discredited by the dialogue in which the client engages when speaking from the different chairs (de Oliveira, 2008; 2015; de Oliveira et al., 2012).

The empty-chair task can be used to help clients enact certain problematic behaviour in one chair and then practice more adaptive behavioural strategies (Goldfried & Davison, 1976; Pugh, 2018). This role play is for the sole purpose of reinforcing more adaptive behavioural schemas, rather than practice for a real-life situation. The empty-chair task is also used to

confront and alter maladaptive cognitive schemas that were developed from interpersonal interactions or relationships, especially those of abusive or traumatic relationships (e.g., belief of being unloved from how one was treated in a romantic relationship; Goldfried & Davison, 1976).

Differences in Chairwork Across Therapy Orientations

There at least three notable differences in how chairwork is used across treatment orientations. First, the timing and need for specific markers is different (Greenberg & Watson, 2006). A marker is a verbal and nonverbal reaction that delineate some sort of internal experience or readiness to engage (Clarke & Greenberg, 1986). This is a key issue for the implementation of chairwork in EFT, where chairwork is introduced into the flow of the session based on emerging content in the conversation and a client's level of emotional arousal. However, the more directive nature of cognitive behavioral treatments means that the chairwork in that approach is less marker-driven (Castonguay & Hill, 2007; Pugh, 2018). Thus, in schema/CBT, chairwork may be initiated not based so much on a marker being observed in the moment-by-moment client process but rather as part of the session's agenda. Even so, introduction of chairwork in cognitive behavioral treatments is still indicated by the identification of unhelpful core beliefs or action tendencies that create ongoing difficulty.

Second, the role of chairwork in Schema/CBT approaches differs from humanistic-experiential approaches (e.g., Gestalt, EFT) in that they may not emphasize the emotional consequence of internal and external dialogue (Castonguay & Hill, 2007; Pugh, 2018). Instead, the focus is on reaching a convincing rational conclusion. This means, a cognitive approach to chairwork is intended to construct and reinforce a more adaptive internal representation of truth that can help attenuate the prominence of previously maladaptive, unbalanced beliefs of the truth. In short, the discourse within chairwork in experiential approaches (e.g., Gestalt, EFT) is

on the meanings of spontaneously emerging affect (e.g., What did it feel like to be criticized this way?). By contrast, in the cognitive and behavioral approaches (e.g., schema, CBT) the discourse is on critically examining the reasoning behind one's beliefs (e.g., Is this criticism really true?).

Third, the instructive nature of cognitive approaches to therapy (e.g., Socratic questioning) means that chairwork in these approaches tends to be less exploratory in nature as compared to gestalt or emotion-focused applications. Therapists working in Schema/CBT approaches also implement a directive approach to chairwork, with therapists guiding and continuously re-focusing the dialogue towards modifying maladaptive schemas or encourage more adaptive patterns of cognition, affect, and/or behaviour (Castonguay & Hill, 2007; Pugh, 2018). Nevertheless, although the outcome of an intended chairwork intervention may be largely pre-determined in Schema and CBT therapies, there is still a process of discovery of implicit perceptions, assumptions, and practical implications to one's thinking.

Clinical Description and Indicators for Initiating Chairwork

All therapy approaches to chairwork may present an opportunity for learning about oneself by elaborating some deeper level of meaning about the conflicting positions one harbors in relation to oneself or others. However, the extent to which a client can benefit from engaging in chairwork is determined, to varying degrees, by the presentation of a specific marker (Greenberg et al., 1993; Greenberg & Watson, 2006).

Markers for the Two-Chair Task

Conflict Split. Initiating internal dialogue through the two-chair task is best suited for clients who present with one of three types of conflict split marker, which specifically indicates the critical/coercive self-imposing negative self-treatment (Clarke & Greenberg, 1986). In the

negative self-evaluation split, the critical/coercive I-position monitors and criticizes the feelings, behaviours, appearances, and personality traits of the self with harsh and punitive tones, to fit a self-image that the self has failed to meet (Clarke & Greenberg, 1986). In an attributional split, the client may misattribute a self-criticism to another person or situation (Clarke & Greenberg, 1986). Utterances of attributional splits may include “my wife makes me feel belittled.” In such presentations, the self-criticism may be wrongfully perceived to be coming from the external world, rather than from a part of the self. Conflict split marker can also take the form of a decisional split, in which clients may report feeling torn or having difficulty choosing between two choices or courses of action (Clarke & Greenberg, 1986). These difficulties are rooted in the critical/coercive self imposing doubt in the client’s ability to choose or commit to one action or a conflict between the client’s opposing values and beliefs (Clarke & Greenberg, 1986).

These markers can be evident in specific content of the client’s description of the presenting problem (as presented in the examples above) or through patterns of speech (Clarke & Greenberg, 1986). The verbalized speech pattern consists of statements that often include the use of personal pronouns that are indicative of the dominant I-position, and a conjunction (e.g., but, yet, if, why) that fragments the sentence into the opposing stance (Clarke & Greenberg, 1986). For example, a client might say “I really want to, but can’t” or “if I do, I will look stupid.”

Self-Interruptive Split. A self-interruption split is often the result of the “avoiding self” exhorting dominance over the “experiencing self”. The dominance consists of disrupting the flow of emotions is often a result of behavioural efforts to avoid, distance, or block distressing emotions (Clarke & Greenberg, 1986; Elliott et al., 2004). The interruption can take the form of verbalized statements that express feelings of resignation, numbness, or stagnation in one’s emotions or nonverbal gestures (e.g., relaxing fist after a few seconds of it being clenched;

Clarke & Greenberg, 1986; Greenberg & Watson, 2006). Others may express their feelings of numbness or stagnation in the form of a metaphor (e.g., “Well, I was feeling something whelm up inside but then it just went away, like an emergency shut off...”).

Marker for the Empty-Chair Task

Clients who present with unfinished business typically express unresolved and lingering negative feelings towards a personal grievance (Clarke & Greenberg, 1986; Greenberg et al., 1993). Unfinished business can be presented through verbal utterances that convey emotional disturbance over something that was left unsaid, grief over lost opportunities, or actions that the client wish could have been taken (Clarke & Greenberg, 1986; Greenberg et al., 1993). The client may cite intrusive thoughts about a long-standing interpersonal grievance or refer to recurring relational concerns and may suggest a background trauma or a specific conflictual relationship as being thematic (e.g., “it’s always been like that, since I was a kid, I was the family’s scape goat.”) Previous research has shown that the unfinished business with an important other is typically due to an unmet need that may be rooted in abandonment, neglect, betrayals, or violation of boundaries or needs by an important other (Paivio & Pascual-Leone, 2010). The classic marker for an empty chair task is when a client relays dialogue from a past conversation, and literally speaks from the other’s position (e.g., “He would say x”; “She would be, like, ‘You....’”).

Marker for Compassion-focused Chairwork

The more directive the treatment approach, the less reliance there is on client-based markers. Accordingly, when compassion-focused chairwork is introduced as a stand-alone intervention, it is typically based on the therapist’s case formulation and an assessment that developing more self-compassion would be therapeutic. Working within the context of other

chair tasks, self-compassion chairwork is typically initiated when satisfying an unmet need related to a conflict-split, self-evaluative split, or unfinished business requires some level of self-kindness (e.g., blaming oneself for being mistreated in a relationship; Greenberg & Elliot, 1997). Furthermore, compassion-focused chairwork may be initiated when therapists believe that expressing affinity towards the self or an imagined other can augment more adaptive feelings or bolster resolution (Gilbert & Irons, 2005; Greenberg & Watson, 2006).

Overlap in Marker Presentations

These markers and their associated chairwork intervention can be facilitated alone or in conjunction with one another. For example, a client may initially present with an unfinished business marker. During the course of an empty-chair task, the client may begin to show markers for a conflict split, especially when unresolved feelings with an imagined other is rooted in some internalized negative self-evaluation (Greenberg & Watson, 2006). The presence of the negative self-evaluation should signal to the therapist to switch into two-chair task because it may be the core of the issue that is causing the emotional distress (Greenberg & Watson, 2006). Furthermore, self-compassion towards the self may be implemented at the end of treatment as a method of reaching resolution or increasing self-acceptance (Greenberg & Watson, 2006; Paivio & Pascual-Leone, 2010).

Clinical Population Characteristics

Markers for chairwork can occur in both clinical and non-clinical samples (Clarke & Greenberg, 1986). Self-criticisms, avoiding emotions, and unresolved feelings towards an interpersonal relationship are transdiagnostic phenomena that have been found in anxiety (Elliot et al., 2004; Daldrup et al., 1988), depression, (Beck, 1984; Powers & Zuroff, 1992), complex trauma (Paivio & Nieuwenhuis, 2001; Paivio et al., 2010), eating disorders (van der Kaap-

Deeder et al., 2016), and personality disorders (Kellog & Young, 2006; Pos & Greenberg, 2012).

Despite their prevalence, the markers have been shown to present differently in anxiety and depression. In a split associated with anxiety, the critical and coercive self reinforces a fear or doubt of a consequence occurring if the experiencing self attempts to pursue an unmet need (Elliot et al., 2004; Greenberg & Watson, 2006). Specifically, the self-evaluative split serves to overcontrol and constrain the self as a form of self protection (e.g., “You are weak and need to be protected against failure or disappointment, it is a dangerous world and you should not dare or take risks”; Elliot et al., 2004). Splits in those with social anxiety have been shown to present as catastrophic “if then” statements, in which a client believes that a social consequence (e.g., rejection, embarrassment) will occur if they engage in a particular action (Elliot, 2013; Mendes et al., 2016). In contrast, splits in those living with depression are more closely rooted in reinforcing shame towards the self. The inner critic tends to be more critical, derisive, and hostile in nature (i.e., “You are a lazy piece of garbage, and you are inherently unlovable”). Although markers of negative self-evaluation in depression and anxiety may operate differently (e.g., strengthening maladaptive beliefs about the self versus attempting to safeguard against future misfortunes), they tend to be disparaging and punitively hostile and related to shame in both clinical presentations (e.g., I’m such an idiot!). This is often evident in statements that overgeneralize a specific failure as reflecting one’s overall self-worth (Beck, 1979; Blatt et al., 1976; Carver & Ganellen, 1983).

Markers of the empty-chair task seem to vary in their emotional arousal depending on the diagnostic concern. In cases of depression, for example, clients may be ambivalent or restrict the expression of their feelings (Clarke & Greenberg, 1986; Greenberg et al., 1993). However, in cases of complex relational trauma and post-traumatic stress disorder the marker may be signaled

by a precipitous spike in emotional arousal (Paivio & Pascual-Leone, 2010). In all these examples, although the markers are somewhat distinct, the process or resolution for the different kinds of chairwork is very similar and is enacted through comparable steps.

Conversely, some clients do not benefit from chairwork, even when presenting one of the aforementioned markers. This includes clients who are in a very vulnerable state with little resilience to confront the opposing chair. Consequently, these clients may have difficulty enacting a two-sided dialogue, and revert to expressing harsh tones towards the self or maladaptive anger towards an imagined other, regardless of the chair in which they are. Chairwork is also not meant for clients who have a fragmented sense of self (i.e., dissociative identity disorder) because although the task encourages an awareness between parts, it is not intended to be construed literally and may exacerbate symptoms (Greenberg & Watson, 2006). Lastly, clients who are currently in a state of emotional over arousal or dysregulation may not benefit from engaging in chairwork due to the highly evocative nature of the interventions that are likely to further increase emotional arousal. Over arousal may cause overwhelming distress that distorts the client's attentional abilities required to make meaning related to emerging emotions, which renders the arousal non-productive (Briere & Scott, 2006). The excessive levels of distress may also validate pre-existing beliefs about the repercussions associated with engaging with evocative affects, subsequently strengthening defensive tendencies.

Assessing the Effectiveness of Chairwork

Psychotherapy research has demonstrated that chairwork interventions are effective in attaining both process outcomes and distal outcomes (Greenberg & Goldman, 2019; Pugh, 2018). However, the extent to which these outcomes are achieved is contingent on the extent to which clients are engaged in the intervention (Greenberg & Watson, 2006).

Engagement

Emotional engagement consists of three components that speak to a client's willingness to explore their emotions and to their capacity to withstand and endure distressing and painful emotions without losing one's focus (Orlinsky et al., 1994; Paivio et al., 2001). First, the client must be willing to actively participate in the intervention. Clients who are engaged are less likely to show resistance to speaking openly to the imagined other or part of self, verbally express emerging thoughts and feelings towards the chair, and may spontaneously initiate or expand on the on-going dialogue without the directions of the therapist (Paivio et al., 2001). Second, clients who are engaged tend to be more aware of, and express, emotional experiences that emerge in the moment, during the intervention (Paivio et al., 2001). Emotional expression is often evident when a client verbally acknowledges the emergence of distressing feelings or nonverbally displays signs of arousal (e.g., changes in voice, facial expressions, etc.). Third, clients who are engaged tend to maintain psychological contact with the imagined other or part of self (Paivio et al., 2001). Psychological contact is achieved when the client can describe the imagined other or part of self, directs the dialogue to the empty chair rather than the therapist, and refrains from using third person language (e.g., "she, they") and instead uses first or second person language (e.g., "I, you") in their dialogue (Paivio et al., 2001). Clients who demonstrate all three components are more likely to be sufficiently engaged in chairwork, such that they can benefit from the underlying mechanisms being facilitated by the intervention (Greenberg & Watson, 2006).

Assessing Process Outcomes

The process outcomes of chairwork relate to particular emotional processing that occurs through the course of being actively engaged in the intervention, known as client processes.

These process outcomes may be a deliberate target within a session, as they tend to contribute to therapeutic change across therapeutic orientations (e.g., EFT, Schema/CBT; Pugh, 2018).

Emotional awareness, it's arousal and expression, sequential transformations of emotion, insight, and depth of experiencing are examples of process outcomes shown by psychotherapy research to be predominately associated with chairwork. These constructs overlap and are associated with each other to varying degrees, although they have been focused on differently depending on the research.

Emotional Awareness. Emotional awareness consists of being mindful of internal experiences for the purpose of recognizing emerging experiences and symbolizing them into words (Pascual-Leone & Greenberg, 2006). Becoming aware of the existing conflict and identifying the particular emotions that are arising as a consequence of the conflict is often a main goal of treatment (Greenberg et al., 1993; Elliot et al., 2004). In a general sense, the ongoing dialogue between chairs has also been shown to help clients gain access to important emotional facets of information (i.e., memories, images, beliefs, feelings, needs/desires, bodily sensations, action tendency, maladaptive schemes, etc.; Elliot et al., 2004). Bringing these facets of information into awareness allows them to be elaborated and explored, which in turn, can be used to bring about emotional change (Greenberg et al., 1993; Greenberg & Watson, 2006).

Participating in dialogue is believed to help underscore harsh and critical thoughts and feelings towards the experiencing self, while becoming more aware of existing maladaptive emotions associated with the experiencing self that were previously unnoticed (Gilbert, 2010). Others suggest that speaking from, and showing compassion to, the conflicting I-position can help clients identify the emotions that may underly the critical voices (Heriot-Maitland et al., 2019). Furthermore, chairwork may help clients with fear of experiencing distressing emotions

or avoidant behaviours (e.g., self-interruptive split) recognize and identify how they interrupt or block the flow of their emotions (Clarke & Greenberg, 1986). Doing so eventually leads to an augmentation of the emotions that were previously being blocked (Greenberg & Watson, 2006).

Emotional Arousal and Expression. Emotional arousal refers to the intensity with which emotions are internally experienced, whereas expression is the articulation and symbolization of internal arousal through observable verbal and non-verbal behavior (Kennedy-Moore & Watson, 1999). Chairwork is an evocative technique that can (a) bring negative emotions to the surface, and (b) provide a medium by which the negative emotions can be expressed (Greenberg & Rice, 1988; Greenberg et al., 1993; Elliot et al., 2004). For example, some studies have shown that underlying feelings of sadness, anger, or fear of potential rejection, criticism, or attack towards the self can be activated in vivo when opposing I-positions or imagined others are being externalized and confronted from the experiencing chair (Diamond et al., 2010); while embodying the critical self or imagined other can trigger a poignant dialogue that activates feelings of shame, fear, and to a greater extent, anxiety (Bell et al., 2020). In a way, associating each part of self or imagined other to a physical chair helps clients more readily connect with, and express, emotional states or maladaptive thoughts associated with, or elicited by, those chairs (Chadwick, 2003; Greenberg et al., 1993). Moreover, these emotional states are often expressed through subtle changes in vocal qualities, facial expressions, and posture, as clients shift from one chair to another (Elliot et al., 2004).

Sequential Transformation. Sequential transformation refers to changing maladaptive emotions to more adaptive emotions, which is known in EFT as changing emotion with emotion (Greenberg, 2002; Greenberg & Pascual-Leone, 2006; Pascual-Leone & Greenberg, 2007). Chairwork facilitates sequential transformation in a series of steps that typically works in tandem

with emotional awareness and arousal, which are necessary steps that must precede transforming emotions (Elliot & Greenberg, 2007; Greenberg & Pascual-Leone, 2006). The dialogue within a chairwork intervention is first focused on bringing into awareness the presence of a maladaptive emotion and expressing it. Once the maladaptive emotion has been accessed, the therapist begins to shift the focus of the dialogue by guiding clients to expressing more adaptive emotions or enacting their associated behavioural tendencies (Greenberg & Watson, 2006; Pascual-Leone & Greenberg, 2007). In essence, the enactment and dialogue facilitated during chairwork act as tools through which maladaptive emotions are changed by new and more adaptive emotions (Greenberg & Watson, 2006).

Chairwork interventions have been shown to transform a wide variety of emotions. For example, Haberman and colleagues (2019) found that engaging in the empty-chair and two-chair task, on an average of 12.4 sessions in a 24-28 week EFT treatment, led to a decrease in the expression of maladaptive shame and an increase in assertive anger. In these sessions, chairwork facilitated transformation by providing the client with an opportunity to gradually enact assertiveness and explicitly express boundary-setting needs from the experiencing chair (Haberman et al., 2019; Pascual-Leone, 2018). Chairwork has also been reported to transform maladaptive shame, anger, and disgust towards the self into more adaptive expressions of empathy and self-compassion (Greenberg, 1979;1983). Regardless of the specific sequence of emotions, these studies suggest that chairwork may be effective in facilitating emotional transformation.

Insight. Insight is defined as the ability to understand and make sense of one's emotional experience in a meaningful way that often emerges through reflection (Castonguay & Hill, 2007). Across therapeutic approaches, both clients and study participants repeatedly report that

engaging in chairwork interventions helped them become more aware of the internal dialogue and how it contributes to their distressing emotions (Stiegler, Binder, et al., 2018). Insight can also be facilitated through reflecting on the meaning behind the emotions clients are experiencing and realizing that it was prompted by an unmet need (Greenberg, 2011). A number of studies suggest that resolution of unfinished business is linked to greater reflection on one's emotional reaction and recognizing the underlying unmet need that prompted the emotion (e.g., unmet need of respect that led to experiencing anger; Greenberg & Foerster, 1996; Greenberg & Malcom, 2002). Within a cognitive behavioral framework, insight is said to occur through the process of re-evaluating core beliefs (Castonguay & Hill, 2007). That is, clients begin to recognize the lack of helpfulness and credibility associated with their initially held beliefs (Castonguay & Hill, 2007).

Depth of Experiencing. Depth of experiencing is understood as the emerging moment-by-moment embodied and visceral experience of new subjective meaning making (Gendlin, 1961;1981; Klein et al., 1986). This process, which is typically measured using the Experiencing Scale, occurs in different levels that reflect the extent to which clients are engaging with emerging emotions and sensations in a meaningful way (Klein et al., 1986). At low levels of experiencing, clients discuss their inner experiences in an external and superficial manner (Klein et al., 1986). Some may begin to be more aware of underlying sensations or emotions. At medium levels of experiencing, the clients are reflecting on the emerging experiences and coming into new insights on particular problems or meanings associated with the emotions being experienced in-the-moment (Klein et al., 1986). Finally, at higher levels of experiencing, the client may encounter newly emerging emotions as they begin integrating their experiences into new meaning (Klein et a., 1986).

A meta-analysis has shown that regardless of treatment approach, client's moment-by-moment depth of experiencing is an important predictor of symptom reduction post treatment (Pascual-Leone & Yeryomenko, 2017). Between-subject designs have shown that engaging in the two-chair and empty-chair tasks is more effective in increasing levels of experiencing than empathetic response (Greenberg & Clarke, 1979; Goldman et al., 2005; Watson & Greenberg, 1996). Using a counter-balanced design, participants with a split marker underwent a two-session experiential therapy treatment that consisted of empathetic responding and the two-chair task (Greenberg & Clarke, 1979). Although both sessions employed methods that have been shown to increase experiencing, the results showed that chairwork sessions had a significantly greater average level of experiencing than the empathetic response sessions (Greenberg & Clarke, 1979).

Assessing Distal Outcomes

The effectiveness of chairwork in attaining distal outcomes is primarily determined by assessing the extent to which individuals reach the resolution of target complaint (i.e., conflict split, self-interruption split, unfinished business), experience change in presenting symptoms, and/or increases their self-compassion (Watson & Greenberg, 1996). These distal outcomes are often specific goals that are intended to be achieved by the end of therapy. Accordingly, psychotherapy research has primarily assessed distal outcomes in the context of treatment packages, which may consist of several other therapy tasks but predominantly use chairwork as the primary intervention (e.g., O'Connell Kent et al., 2020; Watson et al., 2003). Authors of these studies have pointed to the salience of chairwork as the key explanation for the outcomes attained at the end of treatment (O'Connell Kent et al., 2020; Watson et al., 2003). Despite such conclusions being conflated by the use of many other tasks, they are useful in delineating the type of distal outcomes that may be associated with chairwork. Some of these studies are

summarized below.

Resolution. In the context of experiential therapies, the two-chair task has been shown to be more effective at achieving resolution across conflict split markers, compared to empathetic responding, problem-solving, and a no treatments control group (Greenberg & Dompierre, 1981; Greenberg & Webster, 1982; Greenberg et al., 2008; Stiegler et al., 2017; Sutherland et al., 2014). In some studies, participants who experienced softening of the critical voice while engaging in the two-chair task or compassion-focused chairwork reported having a significantly increased sense of conflict resolution, greater sense of integration of the self, less target complaint of discomfort, more self-acceptance, more assertion of needs, and greater feelings of power (Greenberg & Webster, 1982; Shahar et al., 2012). When applied to decisional conflict markers, engaging in the two-chair task was shown to lead to greater goal attainment and changes in expressed attitudes after engaging in the intervention and during a 1-week follow-up (Greenberg & Webster, 1982).

Treatment studies in which the empty-chair technique is incorporated have also been shown to be more effective in reducing target complaints and resolution of unfinished business, especially in comparison to control treatments (Greenberg et al., 2008). For example, Paivio and Greenberg (1995) found that in comparison to 81% of clients in an EFT treatment who reported resolution of unfinished business after completing treatment, only 29% of clients in psychoeducation treatment reported resolution. However, while this provides a contrast in treatment effects, it does not isolate chairwork from the rest of the treatment package. Other comparison studies have shown superiority of sessions that isolate and incorporate the empty-chair technique chairwork as opposed to sessions in which therapists adopt an empathetic or problem-solving response to the presenting conflict (Clarke & Greenberg, 1986; Greenberg &

Clarke, 1979; Greenberg & Dompierre, 1981). Furthermore, participants report resolved feelings of anger and sadness, increases in adaptive emotions (e.g., grief, assertiveness, etc.), increased sense of “letting go” or closure, better mobilization of an interpersonal need, change in the self-relationship schema, and forgiveness towards the target other after engaging in the empty-chair task (Greenberg et al., 2008; Horowitz et al., 1988). Greenberg and colleagues (2008) found that specific feelings of letting go, forgiveness, and overall resolution of unfinished business were attained immediately after treatment and maintained during the 3-month follow-up. In short, the use of the empty-chair technique within therapy can contribute to long lasting effects of treatment goals.

Symptom Change. Treatments that add chairwork interventions to a treatment package have also been shown to more significantly reduce symptoms related to mental health problems than treatments as usual without chairwork. Research findings suggest that symptoms of depression (Goldman et al., 2006; Stiegler et al., 2017), anxiety (Stiegler et al., 2017), social anxiety (Shahar, 2014), obsessive-compulsive disorder (OCD; Theil et al., 2016), trauma resulting from childhood maltreatment or abusive relationships (Paivio & Nieuwenhuis 2001), and personality disorders (Pos & Greenberg, 2012), are significantly more reduced when the therapists utilize the two-chair dialogue intervention. Interestingly, Greenberg and Watson (1982) found that simply expressing feelings and identifying needs to the critical chair resulted in a reduction of tension, anger, loss of appetite, insomnia, and discouragement associated with the presentation of anxiety, even when full resolution was not obtained. Together, these findings demonstrate that chairwork is an effective intervention that can contribute to distal outcomes associated with alleviating distressing symptoms.

Self-Compassion, Self-Esteem, and Identity. Not only is chairwork useful in

decreasing negative emotions, but it can also increase more positive emotional states. In a within-subjects design, Neff and colleagues (2007) examined the effects of engaging in the two-chair task on a sample of 40 undergraduate students. Comparisons between the self-report measures taken one week prior to the intervention and two weeks after the intervention showed a significant increase in self-compassion and self-esteem after engaging in the two-chair task. The association between self-compassion and self-esteem was theorized to be associated with the fact that those who are kinder to themselves tend to have more positive self-evaluations, which increase self-esteem. The results also showed increases in sense of belongingness, and social connectedness while decreasing symptoms of depression and anxiety. Interestingly, the increase in self-compassion was suggested to be a protective factor against self-critical thoughts that elevate anxiety and depression, which suggest that improvements in positive well-being after chairwork are not simply by-products of attenuated depression and anxiety, and suggest a distinct salubrious effect (Neff et al., 2007). Studies that examine the incorporation of chairwork in the context of EFT treatment have shown similar findings, such that these participants reported an increase in self-compassion and self-reassurance, while simultaneously decreasing symptoms of anxiety and depression that remained constant during a 6-month follow-up (Shahar et al., 2012).

Furthermore, incorporating compassion-focused chairwork has been shown to benefit those of collectivistic cultures, in which individuals are less prone to self-compassion and more prone to self-criticism (Arimitsu, 2016). Arimitsu (2016) designed a treatment program, which included compassion-focused chairwork, for a sample of Japanese participants with initially significantly high self-blaming, condemning, and criticism, as well as low self-compassion. Post-treatment assessments showed a significant increase in self-compassion, self-kindness,

self-esteem, and positive emotion, and decreased self-judgments, shame, and symptoms of anxiety and depression when compared to within-group pre-treatment assessment and to those assigned to the waitlist. These findings were maintained after treatment and during the 3-month follow-up (Arimitsu, 2016).

Finally, understanding chairwork as an existential encounter with oneself or how one perceives others suggests that people mature and develop a clearer sense of identity through these confrontations with meaning (Perls, 1969). However, empirical research to date has not typically examined clarifying one's identity as a distal outcome measure.

Rationale for Present Studies

In line with clinical control trials, determining the effectiveness of psychotherapy treatments often requires evidence of the treatment contributing to intended outcomes within the individual (i.e., changes from pre-post treatment), and for these outcomes to be at least comparable to other established treatments (McAleavey et al., 2019). To date, psychotherapy research on chairwork presents limited conclusions regarding (1) the effectiveness of chairwork in attaining outcomes within the individual, and (2) how these outcomes compare to other interventions. Given the disparities between the nature of such conclusions and their associated research designs, the present investigation examines each separately.

Study 1: Effects of Using Chairwork

The literature presents with two significant limitations in understanding the effect of chairwork as a stand-alone intervention. First, the extent to which chairwork predicts emotional processing and distal outcomes has been examined in an unsystematic way, with studies reporting varying effect sizes that individually may or may not reflect the true predictive power of the intervention (Chadwick, 2003; Greenberg & Clarke, 1979; Greenberg & Pascual-Leone,

2006; Elliot & Greenberg, 2007). Second, many studies have demonstrated the effectiveness of treatment packages (e.g., EFT, Gestalt, Schema/CBT therapy) in obtaining outcome effects (Pugh, 2018). However, such research does not make conclusions about the unique effects contributed by the individual therapy tasks that comprise that treatment package. Similar to an omnibus test, the literature is suggesting that the overall treatment package is significant in creating therapeutic change, while placing less attention on the extent to which particular therapeutic interventions significantly contribute to the observed effectiveness of the treatment. The current study attempts to address this shortcoming by exploring the specific individual changes in process and distal outcomes that are observed after engaging in chairwork.

Demonstrating the unique contribution of chairwork to process outcomes can encourage clinicians to incorporate its use to obtain in-session outcomes, even in treatments where it is not traditionally used. In a previous study, Thiel and colleagues (2016) incorporated chairwork into exposure therapy for obsessive-compulsive disorder. It was suggested that engaging in an empty-chair task preceding an exposure helps participants approach the exposure task from a “healthy adult self” rather than an “avoidant self” (Thiel et al., 2016). Participants specifically reported that engaging in the empty-chair task helped them better understand why certain events were triggering their symptoms (Thiel et al., 2016). However, studies of this kind are limited, with most chairwork-related research predominately conducted in the context of EFT, Schema/CBT, and Gestalt therapy. As such, presenting evidence of the usefulness of chairwork in attaining specific emotional processing outcomes can help in developing new treatment approaches or advance current ones that can benefit from incorporating this intervention.

Examining the unique contribution of chairwork to distal outcome can help clarify its potential use as a stand-alone intervention to meet treatment goals. To date, no clear conclusion

has been reached about whether chairwork independently yields more distal outcomes (e.g., symptom change), or whether these outcomes mostly occur when the intervention is imbedded within a treatment package, in which other interventions are also being used. Reaching a conclusion is important for developing a conceptual model that delineates the mechanisms through which chairwork individually operates or interacts with co-existing treatment interventions. Subsequently, such conclusions can help clinicians evaluate whether engaging a client in chairwork is advantageous in bringing about intended treatment goals.

Study 2: Effects of Chairwork Compared to Other Interventions

The literature also does not provide a clear conclusion on the effects of chairwork compared to other therapy interventions, even though such information can be incidentally extrapolated from various research designs (e.g., between-group comparisons, multiple baselines, dismantling studies) that have been used to assess the therapeutic change associated with using the intervention. For example, some studies use between-group designs to compare differences in outcome between chairwork and another intervention (e.g., Greenberg and Clarke, 1979; Greenberg & Dompierre, 1981); whereas other studies have compared the trajectory of change as clients move from engaging in other intervention to engaging in chairwork (e.g., Stiegler et al., 2017). Such data can help determine whether engaging in chairwork contributes to larger or similar therapeutic gains than other therapy tasks. However, the existing literature has yet to be synthesized in a way that allows for such conclusions to be considered.

Examining whether chairwork is more effective in achieving outcomes than other intervention may address the concerns regarding its continuous use in therapy. Chairwork continues to be perceived as a rather complex task with multiple steps that are intended to purposefully stimulate and intensify distressful experiences in the service of productive

emotional processing (Bell et al., 2019; Nardone et al., 2022; Stiegler, Binder, et al., 2018). The intervention is often perceived as challenging for therapists and distressing for clients, which raises ethical concerns regarding its continuous use in therapy (Nardone et al., 2022; Stiegler, Binder, et al., 2018; Whelton, 2004). Comparing effects across interventions can help clarify whether chairwork is associated with greater benefits or if similar benefits can be achieved with less evocative and complex interventions.

Rationale for Method

The National Health and Medical Research Council guidelines have designated quantitative systematic reviews that synthesize findings across multiple studies as reliable types of evidence for evaluating the effectiveness of health-related interventions (NHMRC, 1995). When making decisions regarding the effectiveness of an intervention, conclusions that rely on results from an individual study are susceptible to an overestimated or underestimated overall effect due to lack of precision inherent to single samples. Quantitatively synthesizing individual studies is more effective at achieving an accurate representation of the overall effect (Borenstein et al., 2009). As such, the current study uses quantitative syntheses that may provide preliminary conclusions regarding the effectiveness of chairwork using the available research.

When quantitative syntheses are not possible, articles are synthesized qualitatively using a systematic narrative review. A systematic narrative review allows researchers to triangulate the information presented across studies to delineate the specific ways in which chairwork predicts outcomes. Variation in research designs (e.g., between-subject, multiple baselines, dismantling, qualitative reports of clients' experiences in chairwork, etc.) allow for different types of conclusions to be drawn, which individually provide pieces of evidence on how chairwork contributes to therapeutic change. By triangulating evidence across relevant studies,

amalgamating these pieces of evidence can help develop a conceptual model that speaks to the impact that chairwork has been observed to have on process and distal outcomes in various contexts of comparison. A systematic narrative review also allows studies that report on clients' post-treatment reflection on their experiences with chairwork to be taken into consideration. These studies can highlight the effects of chairwork that clients are experiencing that might not be directly reflected in quantitative research findings.

Moreover, a strength of the systematic review lies in the steps taken to search the literature in a way that maximizes the number of relevant studies retained. This is crucial for the current studies due to the way in which chairwork is currently used in psychotherapy research. Some studies are conducted with the primary purpose of examining the effects of chairwork on emotional process or distal outcome. Other studies are conducted for the primary purpose of investigating the specific mechanisms of emotions or emotional processes, with chairwork being used to facilitate such emotions and processes. Although these studies provide direct evidence of chairwork effects, their focus on therapist intervention rather than client process may lead to them being excluded from literature searches on the effectiveness of chairwork. The steps of a systematic literature search address this issue by using search terms inclusive of as many potentially relevant studies as possible, independent of the studies' primary scope.

In summary, systematic reviews are the golden standard for synthesizing evidence for reaching conclusions regarding the effectiveness of health-related interventions (NHMRC, 1995). Systematic reviews are useful methods for quantitatively and qualitatively synthesizing existing empirical evidence in a way that provides support for the effectiveness of an interventions. Therefore, applying these methods in the current studies was the most appropriate way of examining the effects of chairwork in individual psychotherapy.

Present Study

The purpose of the present study was to synthesize the existing evidence and explore the extent to which chairwork contributes to process and distal outcomes in individual psychotherapy. The following research questions were examined using an exploratory approach:

- (1) What effect does chairwork have on facilitating emotional processes and distal outcomes within the individual?
- (2) How do the effects of chairwork on emotional process and distal outcomes compare to other therapy interventions?

CHAPTER II

Method

The current systematic review was conducted using the guidelines set by Berkeljon and Baldwin (2009) and Borenstein and colleagues (2009), which specifically outline the steps required for synthesizing findings in relation to psychology and psychotherapy research. The following steps were taken: (1) data sources were searched systematically to identify the relevant primary studies appropriate for synthesis; (2) the relevance of each primary study was evaluated based on the extent to which they meet stated exclusion/inclusion criteria; (3) studies underwent a bias assessment in which the robustness of their methodology was assessed; (4) relevant data was extracted; and finally, (5) data was either quantitatively or qualitatively synthesized.

Data Collection

Data Source

The literature search was conducted using PsycInfo, ERIC, Medline, and Social Sciences Abstracts databases in January 2022. To ensure that all relevant studies are included, the

following search string was used to identify articles and theses/dissertations that include these terms in the title, abstract, key terms, methods, or test and measurement section:

Chairwork OR empty chair OR two chair OR imaginal confrontation OR imaginal
dialogue OR hot seat

AND psychotherapy OR therapy OR counselling OR counseling OR arousal OR
experiencing OR emotion OR awareness OR reflection OR insight OR meaning making
OR symptom OR change OR outcome OR effect

To attenuate potential publication biases, researchers were contacted for unpublished materials and relevant dissertations/theses that may not have been available through search databases.

Inquiries were sent to researchers who are known members of the Society for Psychotherapy Research, the Society for the Exploration of Psychotherapy Integration, and the International Society of Emotion-Focused Therapy. These associations were chosen because their representative membership and journals have disseminated research on chairwork.

Exclusion and Inclusion Criteria

Once the articles were collected, the abstracts were screened using inclusion and exclusion criteria, which were determined using the PICO method. PICO refers to “Participant, Intervention, Comparison, and Outcome,” an approach to systematic reviews that requires that specific characteristics be specified for each of the categories (Richardson et al., 1995). In the current study, no restrictions were placed on participant characteristics, meaning all clinical presentations, age, race/ethnicity demographics were included. Consistent with the objective of the current meta-analysis, studies needed to be conducted in the context of individual psychotherapy where chairwork is facilitated. Group, family, and couples therapy were excluded. Studies were required to have designs capable of identifying individual improvement following

chairwork or in comparison to other interventions/treatments (i.e., between-group, within-group, multiple baselines, dismantling, qualitative accounts of benefits of engaging in chairwork). Studies were retrieved if they measured any form of emotional processing or distal outcome. Additionally, only articles published in English were included due to language barriers. However, this potential bias was monitored by making note of any study that was excluded solely based on language. Each study was also required to report an effect size, or the relevant information required to calculate an effect size (i.e., mean, standard deviation, sample size, correlation, test-statistics).

Method of Assessing Internal Validity

The methodological quality of all primary studies that met the exclusion/inclusion criteria was carefully evaluated for their internal validity. Doing so helped minimize the number of studies with overestimated or underestimated effect sizes that may have been the result of methodological shortcomings from being included in the syntheses. All studies were assessed to ensure that they (a) used measures with adequate internal consistency or interrater reliability (i.e., .70, Cohen, 1960; Cronbach, 1951); (b) non-significant rates of missing data and attrition; (c) provided appropriate comparisons (i.e., between-group or within-group changes in outcome); (d) used random assignment when needed; and (e) included an adherence assessment, such as an explanation of how interventions were facilitated and for what purpose, having a relevant reference to treatment manuals, and/or an adherence check by independent observer (e.g., task supervision process).

Furthermore, some of the sources found in the systematic search consisted of the same data due to the availability of both the unpublished thesis/dissertation and peer-reviewed version of a study, or a collection of articles that used data from one large-scale psychotherapy study.

Since these sources typically provided redundant information that was relevant to the purposes of the current syntheses, only the original peer-reviewed source was used. However, multiple studies were included if different components of the same data set (i.e., outcome measures, comparison groups) were being analyzed, as this allowed for the extrapolation of different, rather than redundant, data.

Coding

For each study retrieved, factors related to (1) *intervention* (i.e., type of chairwork, therapeutic orientation, and experiment versus treatment setting, number of chairwork sessions); (2) *participant* (i.e., clinical presentation, and outpatient versus student sample); (3) *comparisons* (i.e., types of control groups being used; and (4) *outcome*, (i.e., type of outcome measured and when outcomes) were assessed. The data necessary to compute a meta-analysis (i.e., means, standard deviations, effect sizes, standard errors, confidence intervals) for each outcome was also coded when available.

Single session studies of chairwork consisted of experiments designed to examine presenting concerns of a clinical nature (i.e., levels of self-criticism, difficulty making vocational decisions, unresolved anger towards an important other) rather than specific clinical diagnoses. As such, symptom change was primarily associated with changes in distressing emotional responses to the presenting concern. When studies used multiple measures to assess the same or different responses to the presenting concern (i.e., distress and/or depressive symptoms) without a clear distinction of which one was most relevant, the measure with the highest internal consistency was selected. In contrast, multi-session treatments used samples that met clinical diagnostic criteria for a particular mental health concern (i.e., social anxiety, PTSD, OCD, or depression). In the interest of assessing whether chairwork is effective for treating the intended

concerns, the outcome measure pertaining to the client's clinical presentation was selected.

Calculating Effect Size

Given that the purpose of the study is to compare improvements of the same outcome within and between groups, a standardized mean difference (i.e., Cohen's *d*-index) was used as a measure of effect size (Cohen 1969, 1977). Studies that report the effect size associated with the comparison of interest (e.g., pre-post therapy or between intervention groups) were directly extrapolated. When not reported, effect sizes were calculated based on descriptive statistics reported (i.e., means and standard deviations).

Effect Size for Within Group Comparisons (for Study 1). Cohen's *d* for within-group comparisons is often computed using the mean difference between pre-to-post therapy scores and its associated pooled variance (Morris, 2008). However, the pooled variance assumes homoscedasticity between the pre and post therapy scores (Kline et al., 2013). Homoscedasticity is often violated in psychotherapy research because clients do not typically improve in a uniform manner (Kline et al., 2013). Instead, improvements may vary from one client to another due to individual differences and responses to therapy regardless of whether significant improvements are observed among the overall sample, which often contribute to larger variability among post-therapy scores (Liete et al., 2008; Kline et al., 2013). Accordingly, the standard deviation of pre-therapy scores has been recommended as an alternative measure of variance for calculating effect sizes for within-group data (Kline et al., 2013). The calculations of Cohen's *d* for within-group studies in the current syntheses are consistent with these recommendations (Table 1).

Effect Sizes for Between Group Comparisons (for Study 2). For primary studies in which between group comparisons were conducted, Cohen's *d* was computed using the means, standard deviations, and sample sizes of each comparison group (Cohen 1969, 1977). The

formulas and associated steps can be found in Table 1.

Combining Effect Sizes of Intervention Groups. Some studies grouped participants by the therapists' level of experience, extent to which clients reached a resolution, or the use of different modifications of chairwork (e.g., first person versus third person self-compassion, resolvers versus non-resolvers). Since these sorts of subgroups were exposed to the same procedure and were mainly formed during the analysis stage, they were treated as one sample. The pre-to-post therapy means and standard deviation of groups within these studies were amalgamated to produce a single effect size (see Table 2).

Common Metric of Effect Size. All effect sizes must be in the same metric to be synthesized into a pooled summary effect. Borenstein and colleagues (2009) denote that the conversion between indices is appropriate when the individual effect sizes are measuring variables that share conceptual similarities. In the current study, all standardized effect sizes from each primary study represent the strength of the relationship between engaging in chairwork and a process or distal outcome. All outcomes fall into two distinct categories (i.e., process and distal) that represent qualitatively distinct constructs of therapeutic change, and hence were analysed separately. Ensuring each synthesis represents a single outcome allows for conversions between metrics. As follows, the effect sizes reported as r -indices ($k = 2$) were transformed to d -indices (Borenstein et al., 2009; Polanin & Snilstveit, 2016) to illustrate more consistently the changes between and within groups. Formulas for conversions and calculating the associated variances are presented in Table 3. Conversion from r -indices to d -indices assume that the data from which r were calculated possess a bivariate distribution from which dichotomization is possible (Borenstein et al., 2009).

Plan of Analyses

The search produced 366 potential sources (see Figure 1). Of these sources, 74 were either duplicates, could not be accessed, or were not in English. Another 214 consisted of articles that either did not examine chairwork, or were book chapters, case studies, or review papers without qualitative or quantitative comparisons or outcome measures. Of the 64 studies deemed potentially eligible, 30 met one or more exclusion criteria (see Appendix A). The remaining 34 articles were included in the systematic review.

Some of these 34 studies consisted of single sessions, while other studies used chairwork over multiple sessions in the context of a treatment. The multisession studies differed from traditional treatment in that they were limited in the number of additional interventions being facilitated, such that only those needed to prepare the client for chairwork were used. For instance, initial sessions in emotion-focused therapy studies included using empathetic responding for building therapeutic alliance; while studies of cognitive behavioral models used the initial sessions to introduce the CBT model and generate a list of unhelpful thoughts that were later evaluated during chairwork. Subsequent sessions were primarily reserved for chairwork without the use of additional interventions. Accordingly, single session treatments typically reflected the impact of a single implementation of chairwork; whereas the multisession studies likely reflect both the impact of the repeated use of chairwork interventions as well as other supporting interventions as part of a treatment. As such, the single and multisession studies retrieved were analyzed separately. Furthermore, many studies reported on multiple outcomes of interest. Given that such outcomes represented conceptually different underlying constructs, separate syntheses were conducted for each. Table 4 identifies the outcomes reported in each primary study.

Based on the available data, the current investigation consists of two studies. The existing state of research on chairwork interventions shows a heterogeneous array of research designs. The studies were amalgamated by considering how the current investigation could make the most and best use of the available research. Study 1 examined the effects of chairwork on changes within the individual using pre-post therapy data of a single group. Data on each process and distal outcomes following a single session of chairwork and multi-session treatments of chairwork were analyzed separately. Study 2 examined the effect of chairwork compared to other interventions using only post-treatment data from two independent samples (i.e., between-group design) or the trajectory of change as clients shift between treatment conditions (i.e., within-group design). Differences in process and distal outcomes following each intervention were compared for single session of chairwork and multi-session treatments of chairwork, separately.

CHAPTER III

Study 1: The Effect of Using Chairwork

Method of Synthesis

A parametric meta-analysis of improvements within the individual could not be conducted because the data consisted of within-subjects designs that do not typically report the statistics necessary (i.e., standard error, confidence intervals, standard deviation of the difference) to conduct significance testing of the pooled summary effects. This was due to (a) the inclusion of older studies that followed prior reporting standards and/or (b) the inclusion of studies with descriptive statistics (i.e., means and standard deviations associated with pre-post timepoints) relevant for the purpose of the current study but did not reflect the original research questions being examined. The standard error associated with these calculated effect sizes can be derived from the error variance associated with the initial comparison of the pre-post

intervention scores. These error variances include the standard deviation of the difference associated with a paired sample t-test, the mean square error associated with an analysis of variance (ANOVA), or the standard error of a pairwise comparison. However, such information was not typically available. Due to a low response rate, raw data could not be obtained from the original authors to compute these values.

As an alternative synthesis method, non-parametric meta-analyses were used to examine the effects of chairwork on therapeutic change. A non-parametric meta-analysis amalgamates the effect sizes across primary studies, with the weight given to each study determined by the square root of its sample size. Such an analysis differs from a parametric meta-analysis in that the square root of the sample size is used as the weighting factor, rather than the standard error. Based on the Central Limit Theorem, a sample mean begins to approximate the population mean as the size of the sample increases, which leads to an exponential decrease in standard error (Fisher, 1915; Howell, 1997). Accordingly, studies with larger samples are more likely to be representative of the true mean, and hence have a smaller standard error, than studies with smaller samples (Fisher, 1915; Howell, 1997). However, the exponential decrease often leads to an underestimation of standard error, which can be mitigated by taking the square root of the sample size (Howell, 1997). As such, using the square root of the sample size as a weighting factor in the current study allows the individual effect sizes to be ranked based on the precision of its contribution to the standard error.

Additionally, two-tailed binomial p-values corresponding to each weighted mean were computed using the following formula, where n represents the sample size:

$$\text{Binomial } p = .50^n \times 2$$

Binomial p-values assess the likelihood that the observed direction across effect sizes occurred

by chance. Binomial p -values do not provide information on the significance of the weighted means but offer preliminary evidence about the strength of the pattern observed among studies. The weighted mean and associated binomial p -values were conducted when four or more studies were available to ensure sufficient power (Borisenstien et al., 2009). When a sufficient number of studies was unavailable, findings were synthesized using a narrative review.

Results of Study 1: The Effect of Using Chairwork

Single Session Studies of Chairwork

Process Outcome

Credibility of Punitive Core Beliefs. Two studies have provided data on changes in the credibility of punitive core beliefs following the use of trial-based chairwork in a single-session. When challenging core beliefs associated with self-criticism, trial based chairwork is shown to significantly reduce credibility of these beliefs in samples of outpatients with a range of psychiatric presentations ($n = 39$; $d = .46$; Delavechia, 2016) and social phobia ($n = 166$; $d = .72$; de Oliveira, 2012a). Together, these studies suggest that chairwork in the context of CBT produces a medium to large effect on helping clients discern the truth of core maladaptive beliefs.

Distal Outcomes

The following analyses are summarized in Table 5, along with the list of source studies.

Resolution. A set of five studies provided data on changes in resolution after engaging in a single session of chairwork. Together, these studies provide scores from a total of 134 participants, with 3 studies examining self-critical/decision splits and two studies examining unfinished business. All studies reported significant improvement in resolution. Combining these effects using a weighted mean revealed a large outcome effect ($d = 1.20$). The binomial p -value

suggests a .06 likelihood that all studies would show a positive effect by chance.

Symptom Change. A set of seven studies provided data on symptom change after a single session of chairwork. Together, these studies provide scores from a total of 326 participants, with two studies measuring depression, one reporting on anxiety, and four reporting on specific distress associated with their target complaint. Each study reported improvement in symptom change. The weighted mean revealed a large outcome effect ($d = .96$). The binomial p -value suggests a .02 likelihood that all studies would have shown a positive effect by chance.

Self-Compassion/Esteem. A set of three studies reported data on improvements in self-compassion or self-esteem after a single session of chairwork. In one study, compassion-focused chairwork was facilitated in the context of a virtual environment (Falconer et al., 2016). Clients with high levels of self-criticism were asked to directly express compassion towards their ‘child self,’ then experienced their own compassionate response from the perspective of the ‘child self’ or witnessed the interaction as a third-party observer (Falconer et al., 2016). Comparison of the pre-to-post session scores on the Self-Compassion and Self-Criticism Scale - *Self-Compassion Subscale* showed a significantly moderate effect on improvements in self-compassion ($n = 43$; $d = .42$; Falconer et al., 2013; Falconer et al., 2016). In contrast, Greenberg & Webster (1982) found no significant changes in the degree to which clients reported being more pleased with themselves, measured by Epstein’s Prevailing Mood Scale (Epstein, 1971), immediately following the two-chair task ($n = 31$). Similarly, Whelton & Greenberg (2005) found no significant changes in participants’ self-esteem, measured by the State Self-Esteem Scale (Heatherton & Polivy, 1991), after engaging in the empty-chair task ($n = 30$).

Multi-Session Studies of Chairwork: Symptom Change

A set of four studies provided data on symptom change following a multi-session

treatment of chairwork that used the two chair task or trial-based chairwork (see Table 6 for summary of findings). Together, these studies provide scores from a total of 56 participants reporting on depression, PTSD, social anxiety, or OCD. All studies reported significant improvements in symptom change. The weighted mean revealed a large outcome effect ($d = 1.42$). The binomial p -value suggests a .13 likelihood that all studies would have shown a positive effect by chance.

Due to a limited number of multi-session studies reporting data pertaining to process, resolution, or self-esteem/compassion, an accurate weighted estimate could not be calculated.

CHAPTER IV

Study 2: Effects of Chairwork Compared to Other Interventions

Method of Synthesis

Single-session studies comparing chairwork to alternative interventions on process outcomes could not be synthesized using a meta-analysis due to the use of within-group design and the limited number of studies available. As an alternative, the available articles were synthesized in a narrative review. The set of articles comparing chairwork to other interventions through between-group designs allowed for five meta-analyses to be conducted using STATA version 17. The type of interventions being compared, and their associated sample sizes, are summarized in Table 7. To ensure sufficient power, these meta-analyses were only conducted when a minimum of three studies were available (Borriestien et al., 2009). When a sufficient number of studies was unavailable, findings were synthesized using a narrative review.

Choice of Model

The meta-analyses were conducted under a random-effects model. A random-effects model assumes that the true summary effect, in both magnitude and direction, is normally

distributed and that the variance observed in the estimated effect sizes among the primary studies is influenced by true variance in population parameters, characteristics, and sampling error (Raudenbush, 1994). In contrast, fixed-effect model assumes that interventions have one true effect size that is constant across all studies, and that the observed variance in the effect sizes across primary studies are caused by sampling error. The current study used a random-effects model because the primary studies included were diverse in their comparison groups, outcome measure, and clinical presentation within and across samples. In addition to sampling error, the pooled summary effect was expected to vary because of these factors. Furthermore, intentions to generalize the findings of the current study beyond the articles made a random-effects model more suitable (Berkeljon & Baldwin, 2009; Bolestiene et al., 2009).

The random-effect model employed a restricted maximum likelihood estimate (REML) to estimate the between-study variance (i.e., T^2). That is, the variance in the true effect size across population of studies. Since the true magnitude of chairwork effects are not known, T^2 must be estimated from the observed effects of the primary studies. The usefulness of the REML method lies in its ability to replace the presented data set with a set of contrasts calculated from the data (Veroniki et al., 2016). The distribution from the set of contrasts is then used to calculate the between-study variance. This process is specifically robust to differences in designs across studies where multiple sources of variance may exist, while producing more reliable estimates of variance (Bolestiene et al., 2016; Veroniki et al., 2016).

Pooled Summary Effect

Pooled summary effects (i.e., an amalgamation of individual effect sizes from each primary study all) were obtained using the inverse variance weights of each primary study. Since the d -index with a sample with less than 20 participants can introduce bias through

overestimating the summary effect, the effect sizes of each primary study were first converted to hedge's g using the transformation formula presented below (Hedges, 1982; Hedges & Olkin, 1983).

$$\text{Hedges's } g_s = \text{Cohen's } d_s \times \left(1 - \frac{3}{4(n_1+n_2)-9}\right)$$

Then, each primary study was given a specific weight depending on the inverse of its variance, which is comprised of the sum of the estimated between-study variance (T^2) and within-study variance associated with the previously calculated d -index (Bolestiene et al., 2009). Giving each primary study a specific weight helped to ensure that each primary study's contribution to the meta-analysis is proportionate to the precision with which effect sizes were originally obtained. Using weighted means ensures that studies with larger samples are given more weight than studies with smaller samples to prevent smaller samples with larger variances from having an undue influence on the findings. This allows the obtained pooled summary effect to not be heavily influenced by smaller sample sizes. Next, the weighted means were calculated with a 95% confidence interval.

Testing Heterogeneity

Heterogeneity refers to the variance in effect sizes across primary studies. Heterogeneity was first examined using Cochrane's Q -statistic to examine if there was a statistically significant difference between the observed variance in effect sizes across primary studies and the variance that is expected to be present because of sampling error (i.e., chance). The power associated with the Q -statistic is known to be sensitive to the number of studies included in the meta-analysis, with power decreasing as the number of studies decrease. As such, the I^2 statistic was used to quantify heterogeneity by obtaining the proportion of variance between the primary studies that is due to true heterogeneity (Higgins & Thompson, 2002). Although there are no definitive cut-

offs for interpreting I^2 , Higgins and colleagues (2003) recommend that a cut-off of 25% suggests low heterogeneity, 50% suggests moderate heterogeneity, and 75% suggests high heterogeneity. Low heterogeneity indicates a general consistency in observed effect sizes, while high heterogeneity suggests the usefulness of moderation analysis when data permitted. A minimum of four studies per subgroup are required for quantitative moderations to be reliably interpreted (Fu et al., 2011) When this threshold was not met, articles were examined qualitatively for patterns that speak to potential moderations.

Assessment of Publication Bias

Publication bias refers to biases in results due to unpublished studies that could not be found during the systematic search. Although measures to limit the effects of publication bias are taken through contacting known authors and using multiple search databases, publication bias is inevitable and can lead to overestimating the combined effect size (i.e., pooled summary effect) achieved by a meta-analysis. The current study used visual inspections of funnel plots as one indicator of potential publication bias. Typically, studies with more precision are plotted closer to the mean and studies with less precision are plotted further away, creating a funnel shape. Deviations from this shape are known to potentially indicate publication bias. In addition, Egger's (1997) regression-based test was used to determine whether asymmetry in the funnel plot was statistically significant.

In conjunction, Rosenthal's (1979) Fail-Safe test was used to examine the effect of publication bias on the results of the meta-analysis. The Fail-Safe N Test indicates the number of additional studies with an effect size of zero that are needed to nullify the statistical significance of the combined effect size found in the meta-analysis (Rosenthal, 1979). As a general rule, if the Fail-Safe N statistic are equal to or exceeds the number of effect sizes included in a meta-

analysis, the results are considered to be robust, such that the pooled summary effect and its significance is not likely to be overruled by missing or unpublished studies that were not found in the systematic search (Rosenberg, 2005; Rosenthal, 1979). Together, these assessments helped estimate the potential risk of publication bias and determine whether the reported effects are vulnerable to conceivable bias.

Results of Study 2: Effects of Chairwork Compared to Other Interventions

Single Session Studies of Chairwork

Process Outcomes

Emotional Arousal. One study has compared changes in emotional arousal during chairwork to other interventions. Emotional arousal is often measured by non-verbal cues coded by trained observers (Diamond et al., 2010). In a within-subjects study, Diamond et al., (2010) assessed changes in arousal as clients moved from engaging in relational reframe to the empty-chair task over a single session of therapy. The results showed that both interventions facilitated similar arousal patterns in sadness. However, engaging in the empty-chair task initially elicited changes in the voice quality and speech fluency associated with expressions of fear and anxiety, with sadness becoming more prominent as chairwork progressed (Diamond et al., 2010). Arousal of fear and anxiety were theorized to be associated with apprehension towards engaging in chairwork ($n = 21$; Diamond et al., 2010).

Nonetheless, the emotional arousal associated with chairwork seems to differ from emotional arousal as typically experienced in everyday life. Using ecological momentary assessment, Beuchat and colleagues (2021) examined the correspondence between the emotional experiences a participant had during self-critical chairwork and the emotions occurring in their everyday life. Two key observations were made: (1) overall correspondence was low, suggesting

that chairwork offers a unique opportunity for evoking emotion in a way that does not seem to occur under daily circumstances. However, (2) correspondence was stronger on key emotions that relate to primary maladaptive emotion, indicating that while emotional processes facilitated by chairwork do not duplicate those of everyday life, they do discriminatively elicit the most core or central concerns that individuals have ($n = 42$; Beuchat et al., 2021). In essence, these findings further support the notion that chairwork offers a unique opportunity to access and explore emotions associated with personal difficulties clients may be experiencing.

Sequential Transformation. One within-subjects study compared the effectiveness of relational reframing and chairwork in facilitating sequential transformation, using a sample of undergraduate students with unresolved anger towards a parent ($n = 61$; Narkiss-Guez et al., 2015). Relational reframe aims to shift a client's focus away from blaming attributions regarding the cause of their anger and towards acknowledging the loss and sadness associated with unfinished business (Diamond & Siqueland, 1998). Narkiss-Guez and colleagues (2015) found that addressing attachment-related sadness using both interventions intensified feelings of grief over an identified loss while simultaneously decreasing initial feelings of anger. The trajectory over the session showed that corresponding changes from anger to sadness seemed to off-set one another over time. However, the expression of more sadness than anger was significantly more pronounced as participants explored their difficulty during chairwork ($d = .53$) than during the relational reframe intervention ($d = .31$; Narkiss-Guez et al., 2015).

Depth of Experiencing. A total of four studies compared the proportion of segments that clients spend in deeper levels of experiencing (i.e., ≥ 4) between single sessions of chairwork and EFT interventions (i.e., empathetic responding or focusing). Therapy sessions were divided into timed segments (e.g., 2 minutes), with each segment given a rating ranging from 1 to 7 on the

Client Experiencing Scale (Klein et al., 1986). The meta-analysis synthesizing these findings across studies is presented in Figure 2. The meta-analysis revealed a large significant summary effect of $g = .88, p < .001, 95\% \text{ CI } [.47 \text{ to } 1.28]$. This suggests that chairwork may be more effective in deepening experiencing than using empathetic responding or focusing alone. The funnel plots could not be accurately interpreted due to the small number of studies included. However, the Fail-Safe-N test indicated that 9 additional studies would be needed to null the summary effect. Additionally, Egger's test indicated that the asymmetry in the funnel plot was not significant, $z = .03, p = .98$. These parameters suggest an attenuated risk of publication bias. The tests of heterogeneity indicated no significant variability among the individual effect sizes of the primary studies, $Q(3) = .32, p = .96, I^2 = 0$, meaning the magnitude of the effect sizes were relatively consistent across each of the primary studies. As such, no moderators were examined.

Distal Outcomes

Resolution. A total of four studies compared the effectiveness of chairwork and other interventions on helping clients attain resolution. These studies compared chairwork to various interventions, such as empathetic responding, relational reframe, and the CBT decision-making technique. The meta-analysis synthesizing these findings across studies is presented in Figure 3. The meta-analysis revealed a non-significant small summary effect of $g = -.08, p = .68, 95\% \text{ CI } [-.31 \text{ to } .47]$ in resolving decisional splits, self-criticism associated with a past failure, and unfinished business. This suggests that the effectiveness of single session chairwork in attaining resolution is comparable to person-centered empathetic responding, and CBT interventions (i.e., cognitive restructuring, decision-making technique). The funnel plots could not be accurately interpreted due to the small number of studies included. Egger's test indicated non-significant asymmetry in the funnel plot, suggesting a decreased risk of publication bias,

$z = 1.02, p = .31$. The tests of heterogeneity suggested no significant variability among the individual effect sizes of the primary studies, $Q(3) = 3.89, p = .27, I^2 = 26.80$, meaning the magnitude of the effect sizes were relatively consistent across these single intervention studies. Thus, no moderators were examined.

Symptom Change. A total of four studies compared the effects of chairwork on improving symptoms across a range of clinical presentations. These studies compared chairwork using various treatment approaches to empathetic responding or CBT interventions (i.e., cognitive restructuring, decision-making tasks). The meta-analysis synthesizing these findings across studies is presented in Figure 4. The meta-analysis revealed a non-significant small summary effect of $g = -.02, p = .92, 95\% \text{ CI } [-.39 \text{ to } .36]$ on the reduction of symptoms (i.e., distress, anxiety, and depression) following a single session intervention. This suggests that symptom changes following chairwork are comparable to changes related to either person-centered empathetic responding, or CBT-based decision-making tasks. The funnel plots could not be accurately interpreted due to the small number of studies included. However, Egger's test indicated non-significant asymmetry in the funnel plot, which suggests a decreased risk of publication bias, $z = .71, p = .48$. The tests of heterogeneity suggested no significant variability among the individual effect sizes of the primary studies, $Q(2) = 1.32, p = .52, I^2 = 0$, meaning the magnitude of the effect sizes were relatively consistent across these single intervention studies. Thus, no moderators were examined.

Multi-Session Studies of Chairwork

Process Outcomes

Emotional Arousal. In a multiple baseline assessment study, participants with depression engaged in five to seven sessions of empathetic responding, followed by five

consecutive sessions of chairwork ($n = 20$; Stiegler, Molde et al., 2018). Differences in emotional arousal was examined by coding each session using the Client Emotional Arousal Scale II (Warwar & Greenberg, 1999). The chairwork sessions were associated with a larger number of moments with elevated emotional arousal, in contrast to an immediately preceding phase of empathic reflection. However, the intensity of arousal between phases was not statistically different (Stiegler, Molde et al., 2018).

Distal Outcomes

Resolution. Multiple baseline assessments have also been used to compare the trajectory of resolving self-criticism, upon the introduction of chairwork. Stiegler and colleagues (2017) examined the effects of therapists shifting from only using empathic reflections to augmenting it to EFT with the addition of chairwork, in a sample of individuals with depression. The treatment began with a phase of empathic reflections for a duration of five, seven, or ten sessions. In the subsequent treatment phase, five additional sessions were used to engage clients in two-chair tasks. Both phases were equally effective in reducing self-criticism (i.e., Forms of Self-Criticizing/Attacking & Self-Reassuring Scale: Inadequate Self subscale, FSCSR; Gilbert et al., 2004). However, the chairwork phase revealed a mixed pattern: nine clients showed no changes, four had an increase, and eight experienced a decrease in their self-criticism (Stiegler et al., 2017).

Symptom Change. In contrast to single-session studies, the differences in symptom change between interventions are more pronounced in multi-session studies. A total of five studies compared the effectiveness of multi-session chairwork in improving symptoms associated with the clients' clinical presentations. These studies reported on PTSD, social anxiety, depression, or OCD. The meta-analysis synthesizing these findings across studies is

presented in Figure 5. The meta-analysis revealed a small significant summary effect $g = .39$, $p = .01$, 95% CI [.11 to .67] of the improvement in presenting concern (i.e., reduction in symptoms) following the use of chairwork over multiple sessions in comparison to the use of other treatments (i.e., prolonged exposure, client-centered therapy, and automatic thought records). The tests of heterogeneity suggested no significant variability among the individual effect sizes of the primary studies, $Q(2) = 4.38$, $p = .36$, $I^2 = 0$, meaning the magnitude of the effect sizes were relatively consistent across these multisession studies. The funnel plots could not be accurately interpreted due to the small number of studies included. However, the Fail-Safe-N test indicated that 4 additional studies would be needed to null the summary effect. Furthermore, Egger's test suggested non-significant asymmetry in the funnel plot, $z = 1.38$, $p = .17$). Together, these parameters indicate an attenuated risk of publication bias.

Despite the significance of the summary effect, a visual inspection of the forest plot revealed that three primary studies reported nonsignificant effect sizes, while two primary studies reported significant effect sizes (see Figure 5). Although a quantitative moderation could not be conducted due to the small number of studies available, a qualitative examination of the articles revealed that the studies comparing CBT-based chairwork treatments and conventional CBT interventions (e.g., prolonged exposure, standard 7-coloum dysfunctional thought record, positive data log) report no significant difference between conditions (Oliveira et al., 2012b, Duren et al., 2019; Rodrigues et al., 2022). In contrast, the results of EFT studies showed that chairwork treatments leads to significantly greater alleviation of clients presenting concern than client-centered therapy interventions alone (Goldman et al., 2006; Stiegler et al., 2017). Together, the findings suggest that the extent to which chairwork produces greater symptom change than other interventions is dependent on the therapeutic orientation being examined.

Additional Outcomes. Multisession studies have also reported on other distal outcomes that did not fit coherently in the outcomes mentioned above. Using a between-subjects design, Goldman and colleagues (2006) randomly assigned 38 participants who met clinical criteria for depression to a person-centered therapy or an EFT condition. Both conditions made use of empathetic responding and a person-centered relationship, while the EFT condition additionally made use of chairwork. The findings revealed a medium additive effect, in which incorporating chairwork with empathetic responding led to the greater alleviation of interpersonal functioning ($d = 0.58$) and self-esteem ($d = .35$) than classic person-centered therapy alone (Goldman et al., 2006).

Conversely, studies with between-subject designs that have examined chairwork in the context of CBT show mix findings on its effectiveness compared to other interventions. In a sample of individuals with PTSD, Duren et al., (2019) examined the use of prolonged exposure and trial-based chairwork. Prolonged exposure consists of vividly imagining and narrating the details of the traumatic event aloud, while using breathing exercises to down-regulate the emotion aroused by the narrative (Duren et al., 2019). Trial-based chairwork was used to restructure distorted thoughts believed to underly the shame and sadness clients experienced in response to their traumatic event. Results showed no significant difference in the improvements of dysfunctional attitudes between the two conditions. Conversely, de Oliveira et al., (2012b) found that 12-week treatments of trial-based chairwork ($n = 16$) was more efficacious than conventional CBT ($n = 14$) in decreasing fear of negative evaluation ($d = 1.18$) and social avoidance and discomfort ($d = .70$), even though both conditions produced comparable reductions in social anxiety symptoms, such that no significant difference between the conditions were found post-treatment (de Oliveira et al., 2012b).

In summary, incorporating chairwork into EFT treatments seems to generally be associated with greater gains than comparison interventions used in EFT. Whereas, in the context of CBT, chairwork seems to generally perform as well as other CBT interventions in reducing symptoms. Furthermore, multi-session treatments with chairwork may be associated with additional benefits (i.e., improvements in interpersonal functioning, fear of negative evaluation, and social avoidance) that may not be as pronounced with other interventions.

CHAPTER V

Additional Syntheses: Follow-ups, Dismantling Chairwork, and What Clients Say

A number of additional key issues are discussed in the literature, which do not fit coherently with changes in process and distal effects within the individual or differences between interventions at post-therapy, and yet may be of importance for developing a more comprehensive understanding of the effects of chairwork on process and distal outcomes. These three issues are questions explored using a narrative review as the results of this final inquiry.

Does Chairwork Have an Enduring Effect at Follow-up?

Some studies, including a number of those mentioned in the syntheses above, examined the extent to which treatment gains were maintained beyond the end of treatment. Participants in these studies were re-assessed during a follow-up period during which clients did not engage in any treatment. Follow-up periods ranged from 4 to 18 months. Nevertheless, this additional lapse of time introduces a larger range of possible factors (i.e., historical, developmental, ongoing personal work, etc.), which further clouds the unique association between chairwork and outcome effects, even more than when chairwork is nested within a treatment package. For this reason, findings at follow-up were not included in studies 1 or 2.

The Follow-Up Effects of Using Chairwork

Single Session. One study has demonstrated an association between a single session of chairwork and therapeutic gains seen over time. First, Paivio et al., (2001) found that clients with initially high levels of engagement during session 4 continued to fully engage in subsequent chairwork sessions, while clients with initially low levels of engagement continued to be less engaged in chairwork during subsequent sessions. Second, the degree to which clients fully engaged in the first attempt of the empty-chair task (in session 4) was significantly correlated with resolution at a 6-month follow-up after the conclusion of a 16-20 session treatment ($n = 32$; $r_{\text{partial}} = .63$). Notably, when measured at the end of treatment, the impact of that same chairwork session on resolution was less pronounced ($r_{\text{partial}} = .35$). Additionally, the clients' initial level of engagement during their first attempt of chairwork seemed to set the stage for later sessions. The findings corroborate the importance of quality engagement during chairwork as a predictor of outcome and quality of later chairwork sessions (Paivio et al., 2001).

Multi-Session. Engaging in chairwork over multiple sessions has also been associated with therapeutic gains at follow-up. In an EFT treatment study, 10 participants who presented with high levels of self-criticism participated in a 5-8 session of the two-chair task, in which the first session was only used to build therapeutic alliance (Shahar et al., 2012). Post-treatment reductions in anxiety ($d = .70$) and depression ($d = 1.13$) to a non-clinical range were maintained at a 6-month follow-up with no further improvements. However, sleeper effects emerged at follow-up. These include improvements on self-compassion ($d = 1.82$) and on self-reassurance ($d = 1.07$), which were only observable at 6-month (Shahar et al., 2012). The improvement in self-compassion not being detected immediately following treatment is consistent with other multi-session studies on chairwork (Stiegler et al., 2017). Furthermore, pre-to-post therapy scores on

FSCSR show mixed findings on the improvements in self-criticism, such that post-treatment gains indicated on the Inadequate Self subscale were maintained at the 6-month follow-up but reductions on a Self-Hatred subscale were not ($d = -.61$; Shahar et al., 2010).

The Follow-up Effects of Chairwork Compared to other Interventions

Single Session. Trachsel et al., (2012) examined the role of specific interventions in reducing a client's ambivalence about remaining in a romantic relationship after a single session of therapy. Specifically, they compared the effectiveness of the decision-cube task that required clients to make a pros and cons list ($n = 25$) with a two-chair task ($n = 24$). Although the two-chair task was significantly more effective in helping clients actualize their problems than the decision-cube task ($d = .72$), no significant difference was found between the reduction in ambivalence that was maintained at the 4-months follow-up (Trachsel et al., 2012).

Multi-Session. Four studies have compared differences between the improvements attained from chairwork compared to other interventions during follow-ups ranging from 3 to 18 months. These studies reported on PTSD, social anxiety, depression, or OCD. The meta-analysis synthesizing these findings across studies is presented in Figure 6. The meta-analysis revealed a significant small effect $g = .38$, $p = .01$, 95% CI [.01 to .74] of the improvement in presenting concern (i.e., reduction in symptoms) following the use of chairwork over multiple sessions in comparison to the use of suitably comparable treatments with other interventions (i.e., prolonged exposure, client-centered therapy, and automatic thought records). The tests of heterogeneity suggested no significant variability among the individual effect sizes of the primary studies, $Q(3) = 2.18$, $p = .53$, $I^2 = 12.52$, meaning the magnitude of the effect sizes were relatively consistent across these single intervention studies. The funnel plots could not be accurately interpreted due to the small number of studies included. However, the Fail-Safe-N test

indicated that 4 additional studies would be needed to null the summary effect. Furthermore, Egger's test suggested non-significant asymmetry in the funnel plot, $z = -1.09$, $p = .92$).

Together, these parameters indicate an attenuated risk of publication bias.

Despite the significance of the summary effect, a visual inspection of the forest plot revealed that three primary studies reported nonsignificant effect sizes, while one primary study reported a significant effect size (see Figure 6). Although a quantitative moderation could not be conducted due to the small number of studies available, a qualitative examination of the articles revealed that the studies comparing CBT-based chairwork treatments and conventional CBT interventions (e.g., prolonged exposure, standard 7-column dysfunctional thought record, positive data log) report no significant difference between conditions (Oliveira et al., 2012b, Duren et al., 2019; Rodrigues et al., 2022). In contrast, the study conducted under the EFT model report that chairwork is associated with significantly greater alleviation of clients presenting concern than client-centered therapy interventions alone (Goldman et al., 2006; Stiegler et al., 2017).

Additional Outcomes. To examine the extent to which the additive benefits of chairwork were maintained overtime, clients who participated in the Goldman et al (2006) study were assessed once again 6-months and 18-months after the completion of treatment (Ellison et al., 2009). Clients in both conditions of this study (i.e., person-centered therapy, $n = 29$ vs. person-centered plus chairwork, also known as EFT, $n = 27$) had comparable improvements on self-report measures of self-esteem and interpersonal problems during the 6-months following the end of treatment. However, only those who had also engaged in chairwork showed continuous improvement on these outcomes at 18-months, leading to a significant difference between conditions on self-esteem ($d = .65$) interpersonal functioning ($d = .58$).

Together, these studies preliminarily illustrate that the enduring changes associated with chairwork at follow-up might follow two patterns: (1) improvements are not present at post-treatment but begin to emerge at follow-up; (2) improvements attained at post-treatment are maintained overtime; or (3) improvements that are attained by post-treatment may increase over time even after the conclusion of treatment.

Clarifying Chairwork: How Essential are Defining Functional Components?

Another set of studies offer the opportunity to consider key facets of chairwork, which helps in clarifying what the unique functional components of this intervention might be. Meanwhile, dismantling studies have examined whether procedural aspects of chairwork (i.e., physically switching between chairs) contribute a distinguishable effect to treatment outcome.

Is a Real Dialogue Better?

Empty chairwork, in which a client imagines speaking to a significant other with whom they have long standing interpersonal grievances involves the client working independently from the other person (i.e., in individual therapy). When the significant other has been a perpetrator of trauma and abuse it is often futile if not inappropriate, or could even be re-traumatizing, for a client to disclose the vulnerability of their experience in a real-life interpersonal encounter with the offender. Such circumstances are one reason why using chairwork can be more desirable than interpersonal interventions (Pavio & Pascual-Leone, in press). However, when presenting concerns are not related to trauma inflicted by a callous or unrepentant other, an obvious question is how directly facilitating an interpersonal dialogue may compare to the empty-chair task. In the only study to consider this question, Diamond et al. (2016) used Attachment-Based Family Therapy (ABFT) and EFT to compare the effects of real and imaginal dialogue in improving symptoms, unresolved anger, and attachment avoidance. Young adults with

unresolved anger towards a parent were assigned to each condition. Those in the family therapy condition (i.e., ABFT) expressed their emotion and needs directly to their parent who was also attending the session. In contrast, clients in the individual therapy condition (i.e., EFT) expressed emotion as they imagined speaking to their parent in an empty-chair task. Clients in both conditions showed similar improvements in anger resolution, state of anger, attachment anxiety, and psychological symptoms. Furthermore, productive emotional processing during both forms of “dialogue” was correlated with the alleviation of psychological symptoms but not with decreases in attachment avoidance. However, the process pathways seemed to be different. Engaging in the empty-chair task in individual therapy produced more productive emotional processing than a direct interpersonal dialogue ($d = .84$). Whereas in terms of treatment outcome effects, only the direct interpersonal dialogue within family therapy was related to decreased attachment avoidance ($d = .56$), such that these clients were more likely to turn to their parents for support in the future than those used the empty-chair task (Diamond et al., 2016).

These findings highlight that the imaginal component of chairwork can play a crucial role in emotional processing and emphasize that chairwork is not about addressing interpersonal conflict per se, but aims to resolve intra-personal conflict (e.g., anger, attachment anxiety, relational distress). Consequently, chairwork does not directly impact interpersonal relationships, although follow-up studies point to an indirect impact that increases over time (Ellision et al., 2009).

Can Chairwork be Done Without Physical Enactments?

Chairwork using physical enactments (e.g., switching from chair to chair) can be impractical for some clients and the theatricality of it can also create performance anxiety, which becomes an obstacle to a successful intervention. This begs the question of how literal the

enactment must be. In other words: does one need chairs to do “chairwork?” The contributing effects of engaging in the empty-chair task while physically alternating between chairs (i.e., “physical condition”) as opposed to imagining the other person within the mind’s eye while remaining in the same chair (i.e., “static condition”), has also been examined in two studies each working within different treatment approaches (Delavechia et al., 2016; Paivio et al., 2010).

In one study, a sample of 45 clients with unfinished business associated with childhood trauma participated in 16-20 weeks of EFT (Paivio et al., 2010). Separate conditions were used to compare two versions of how the empty-chair task would be implemented: a physical condition that required clients to enact both roles in separate physical chairs (i.e., chairwork with switching between chairs) vs. a static condition in which “chairwork” required clients to contemplate each position from the same physical chair (i.e., chairwork without switching chairs). Analyses on process outcomes revealed that both conditions produce comparably high levels of engagement and depth of experiencing during the task, a process that significantly contributed to treatment outcome (Chagigiorgis, 2011; Ralston, 2006). In contrast, the conditions produced different patterns of emotional arousal (Ralston, 2006). Classic chairwork was associated with initially higher levels of arousal that only began to decrease during the chairwork sessions occurring closer to the end of treatment; whereas static chairwork was associated with initially low levels of arousal that had a steady increase over the course of therapy (Ralston, 2006). The distal outcomes consisted of resolution, symptom change (i.e., impact of traumatic event, state anxiety, PTSD, depression, distress from interpersonal sources), and improvements in self-esteem. Although both conditions showed very large improvements in distal outcomes, those in the physical chair condition showed a slight advantage compared to the static condition across all measures during post-treatment ($d = 1.67$) for physically switching chairs vs.

remaining static ($d = 1.24$) and the 6-month follow-up ($d = 1.59$ vs. 1.29). In comparison to the static condition, those in the physical condition also showed a higher rate of clinically significant improvements (88% versus 78%), recovery (64% versus 52%), and lower rates of deterioration (3% versus 8%) on all outcome measures after the completion of treatment. At the 6-month follow-up, however, the advantage the physical chair condition became less pronounced on rates in improvements (79% versus 77%), recovery (67% versus 64%) and deterioration (6% versus 13%; Paivio et al., 2010).

Similarly, Delavechia and colleagues (2016) found that within a CBT treatment framework, a single session of trial-based chairwork with physically moving between chairs was found to be more effective in discrediting maladaptive core beliefs than using a static approach to the intervention. In contrast to the study of EFT by Pavio et al., (2010), the physical chairwork condition in the CBT framework was not found to elicit emotions more intensely than static chairwork (Delavechia et al., 2016). The discrepancy in levels of arousal between the two studies may be explained by the variations in number of sessions being used (i.e., single session versus multiple sessions), such that the differences in arousal between the physically moving and static conditions might only become pronounced as clients engage in chairwork over multiple sessions. As follows, the lower levels of emotional intensity associated with the physical enactment condition in trial-based chairwork may be due to the use of single sessions. The lower levels of emotional intensity associated with the physically static conditions of trial-based chairwork could also presumably reflect the baseline levels of evocative emotional engagement in EFT as compared to CBT (for a similar argument see Watson & Bedard, 2006). Nonetheless, both conditions did produce significant symptom improvements from pre to post treatment. In summary, both studies suggest that the use of physical chairs offered a slight advantage to the

effectiveness of chairwork but is not imperative for the intervention to be of benefit (Delavechia et al., 2016; Paivio et al., 2010).

Qualitative Research: What do Clients Report as Most Helpful about Chairwork?

Although chairwork has been associated with a range of benefits, the novelty of an enactment, social norms being violated by asking clients to speak to themselves, and the sheer evocative nature of such enactments can make clients feel hesitant or even resistant to participating in the intervention (Paivio & Pascual-Leone, in press; Stiegler, Binder, et al., 2018). Some clients have expressed worry and uncertainty about how well they can technically execute the enactment; while others report experiencing painful emotions more intensely when they fully engage in the intervention (Stiegler, Binder, et al., 2018). Nonetheless, clients in EFT for complex trauma or generalized anxiety rate chairwork among the most helpful component of treatment (Holowaty, 2005; O'Connell Kent et al., 2020). Meanwhile, clients with BPD who worked in two contrasting ways, using standard cognitive challenges as well as doing chairwork within a CBT treatment framework, reported a preference for chairwork (van Maarschalkerweerd et al., 2021). These findings beg the questions: What specific components of chairwork do clients find helpful and why?

A total of nine studies offer qualitative reports on the experience of chairwork, five of which aimed specifically to explore the subjective experience of participating in a two-chair task (see Table 8 for the list of studies). The themes discussed below emerge from conducting interpretative phenomenological analyses (Smith et al., 2009) and thematic analyses (Bruan & Clarke, 2006) on client responses following semi-structured interviews. Most of these studies were conducted in the context of multi-session treatment where chairwork was used to address self-critical splits. The accounts summarized below were either spontaneous responses to general

questions about helpful aspects of therapy or responses to focused questions specifically about their experience with chairwork. Notably, these accounts incidentally illustrate the prominence of emotional processes, particularly awareness, arousal, and insight, during the intervention. The sub-sections that follow (i.e., Enactment, Dialogue, and Chairs) are themes extracted from reviewing the qualitative studies.

Enactments Vivify and Offer Structure

Across studies, clients report that *embodying* the inner critic and experiencing a response within the self allowed them to become more aware of the different thoughts, attitudes, and feelings that are being held by each part of self (Bell et al., 2019; Bell et al., 2020; Bell et al., 2021; Chadwick, 2003; Stiegler, Binder, et al., 2018). The *separation of parts* or “voices” within the self by assigning them to chairs helped create more space for each of the associated feelings to then be experienced more clearly and intensely (Bell et al., 2019; Chadwick, 2003; Stiegler, Binder, et al., 2018). For example, while embodying conflicting parts of the self, many noticed unintentional changes in their posture, such as submissive posture from the experiencing self (e.g., shrugged shoulder, physically pushing away) and dominant posture from the critical self (e.g., moving forward; Bell et al., 2019). These bodily enactments were used to help evoke and intensify feelings associated with the corresponding parts of self, especially emotions that were otherwise less readily accessible (e.g., sadness; Bell, 2020). Participants report that attending to, and allowing space for, these emotions through a structured task helped them become aware of how their over-identification with an internal critic had drowned out previously unnoticed emotions, which emerged during the intervention (Bell et al., 2018; Stiegler, Binder, et al., 2018).

Dialogue Brings out a Covert Process

Clients also reported that *directly speaking to* their inner critics lead to experiencing painful emotions more intensity but also more clearly than simply *talking about* their internal conflict with a therapist (Bell et al., 2019; Stiegler, Binder, et al., 2018). This intensity of evoked emotions was perceived as productive, in that it allowed the self-critical conflict to be concretized in the here-and-now and brought awareness to the severity and harsh tone of the critical self (Bell et al., 2019; Stiegler et al., 2018b).

In addition, many clients stated that the *alternating dialogue* between the internal critic and the client ‘self’ helped them identify and articulate the specific negative content of an otherwise covert processes contributing to their distress and maladaptive emotions/thoughts/behaviours (Bell et al., 2019; Bell et al., 2020; Stiegler, Binder, et al., 2018). Bell et al., 2021). This led to some participants recognizing how they might be contributing to their own emotional difficulties through the way in which they treat themselves (Bell et al., 2019; Stiegler, Binder, et al., 2018). For others, they began to realize something more: that they are also active agents in generating such inner experiences and therefore have the power to alter that inner dialogue and begin treating themselves in new and healthier ways (Bell et al., 2020; Stiegler, Binder, et al., 2018).

Physical Chairs Serve as Symbols

Participants have also specifically emphasized that *physically moving* between chairs (i.e., “switching chairs”) made it easier to take on and shift between the emotions, thought process, and characteristics that are associated with the different parts of self (Bell et al., 2020; Bell et al., 2021; Stiegler, Binder, et al., 2018). In a way, the chairs symbolize the oppositional stances associated between conflicting parts of self. The act of leaving one chair and entering

another becomes a physical representation that primes the client to mentally shift between different perspective in the dialogue (Bell et al., 2019; Stiegler, Binder, et al., 2018). Finally, the chairs themselves become physical referents that invite the personification of “voices.” Those parts could then be given labels for reference to use in explorations of meaning and discussions on case formulation (Bell et al., 2020; Bell et al., 2021; Stiegler, Binder, et al., 2018).

CHAPTER VI

Discussion

The purpose of the current study was to synthesize the existing literature on emotional processing and distal outcomes related to the use of chairwork interventions. Conclusions on the effects of chairwork are important for developing a broader conceptual understanding of the individual role that this intervention plays in therapeutic change. Understanding these effects can help clinicians evaluate whether engaging a client in chairwork may be advantageous in bringing about the intended in-session and/or treatment goals.

The systematic search indicated that the literature to date is comprised of a small number of studies that range in the (a) types of outcomes measured, (b) research designs used, (c) number of intervention sessions being examined, and (d) time points in which outcomes were assessed. These variations allowed for different types of observations to be made, which individually provide pieces of evidence for the different effects associated with chairwork. Overall, the overwhelming majority of these studies provide preliminary evidence that are in support of chairwork uniquely contributing to emotional processes and distal outcomes. The available data allowed for limited findings using meta-analyses, while other findings that use weighted averages could only speak to the significance in the direction of the effects. Nonetheless, these weighted averages outline preliminary patterns and the potential magnitude of

effects.

Chairwork Associated with Facilitating Emotional Processing

Although a quantitative synthesis regarding the effects that chairwork has on facilitating emotional processes during therapy could not be computed due to the limited numerical data available, the narrative synthesis of these studies suggest promising associations between chairwork and altering a client's punitive beliefs, increasing their emotional arousal, and in facilitating shifts from secondary to primary emotions (Bell et al., 2019; Bell et al., 2020; de Oliveira et al., 2012a; Stiegler, Binder, et al., 2018). These key treatment processes also seem to figure prominently in clients' accounts of why engaging in the intervention was helpful. Many report that engaging in chairwork helped them become more aware of emotions associated with different components of a conflict, productive arousal, and insight into their experiences (Bell et al., 2019; Bell et al., 2020; Stiegler, Binder, et al., 2018). Furthermore, these processes seem to emerge while engaging in specific components of the intervention. Clients' own accounts suggest those components include the specific enactment of each side of a conflict, having to physically switch between chairs, and the alternating dialogue between different components of the conflict (Bell et al., 2019; Bell et al., 2020; Stiegler, Binder, et al., 2018).

Several task-analyses on the emotion-focused approach to chairwork have underscored the prominence of the processes discussed in the current synthesis (Greenberg, 1983; Greenberg & Foerster, 1996; Greenberg & Malcolm, 2002). A task analysis is a qualitative-quantitative hybrid method for causally modeling how clients improve over the course of chairwork (Elliott, 2010). Ordered components of chairwork include: (1) experiential engagement, (2) activating emotion, (3) mobilizing emotion, (4) deepening experience and expressing unmet need to access new emotional meaning, and (5) gaining a better understanding or change in view of oneself or

other (Greenberg, 1983; Greenberg & Foerster, 1996; Greenberg & Malcolm, 2002). The clients' accounts in the current synthesis offer corroboration of these key processes being at work during chairwork.

Chairwork Correlated with Individual Improvements

The studies that provided data from pre-post intervention suggest that improvements within the individual may be evident after engaging in chairwork. The quantitative syntheses revealed a positive trend, in which all effect sizes were in the positive direction. The consistency in positive effect sizes across the primary studies were found to have a low likelihood of occurring by chance. However, preliminary patterns can be observed from the current analyses, in which the time of onset of when these effects emerge seem to vary amongst the different outcomes.

Immediate Pathways to Resolution and Symptom Change

As indicated by the large effect sizes, the within-group meta-analyses suggest that noticeable improvements in resolution and symptom change might be seen after a single session of chairwork. The comparison between the weighted effect of symptom change seen in single-session studies ($d = .96$) and multi-session studies ($d = 1.98$) provide preliminary support that effects of chairwork on symptom change become increasingly more pronounced as clients continues to engage in the intervention over treatment. These findings are consistent with literature demonstrating that therapeutic change can occur in spurts over a given session with more therapy sessions likely to bolster gains, rather than exclusively emerging through a steady incremental increase over treatment (Tang & DeRubeis, 1999). Furthermore, chairwork has been shown to facilitate many mechanisms of change that allow for distressing thoughts and emotions towards the self to be elicited and processed in the here and now (Greenberg, 1983; Greenberg &

Foerster, 1996; Greenberg & Malcolm, 2002). These processes are believed to contribute to a more immediate sense of resolution and the attenuation of symptoms, which may explain the prominence and magnitude of these effect at post-therapy (Greenberg, 1983; Greenberg & Foerster, 1996; Greenberg & Malcolm, 2002).

Mixed Pathways to Improved Self-Compassion

Although limited in number, the studies suggest that self-compassion may be evident immediately after a single session or emerge more readily at follow-up. The time of onset may depend on how explicitly self-compassion is being targeted during chairwork. Gilbert (2004) denoted that cultivating self-reassurance, which is the ability to relate to the self in a warm, soothing, and reassuring manner, as the central mechanism of change associated with self-compassion. Previous research has suggested that self-reassurance is more readily evident when treatments incorporate interventions that intentionally facilitate affiliation towards the self (Beaumont et al., 2016). Accordingly, improvements in self-compassion may be evident immediately post-therapy in compassion-focused chairwork due to the intentional, direct, and prolonged emphasis on self-reassurance during the intervention (e.g., Falconer et al., 2015; Matos et al., 2017; Sommers-Spijkerman et al., 2018).

In contrast, the remaining chairwork interventions might tap into self-reassurance during certain components of the interventions (i.e., resolution stage; Greenberg et al., 1993). In these instances, self-reassurance may be used in the service of attenuating the critical stance rather than explicitly fostering tendencies to express benevolences towards the self (Greenberg et al., 1993; Greenberg & Watson, 2006; Greenberg & Webster, 1982). Given that the construct is not simply the by-product of attenuated negative thoughts and emotions (Neff et al., 2007), self-compassion might not always be evident following chairwork interventions. When not directly

targeted, self-compassion is believed to emerge as part of a larger transformational process as clients develop more adaptive emotional responses in their daily life (Shahar, 2020). As such, it may appear as a delayed effect (e.g., Shahar et al., 2010). Moreover, these findings help consolidate the need to categorize compassion-focused chairwork as a distinct chairwork intervention.

Comparability of Chairwork to Other Therapy Interventions

The current study also examined whether the outcomes attained by engaging in chairwork are comparable to those attained by other therapy interventions/treatments. Overall, the findings suggest that the effectiveness of chairwork in attaining therapeutic gains fair well in comparison to other interventions. However, the type of process and therapeutic modality emerged in the narrative review as a potential moderator associated with the effectiveness of chairwork, which could not be quantitatively examined in the current study due to the limited data available.

Comparable Processing Effects Differ Between Outcomes

Process effects have been primarily studied in the context of single-session chairwork. Although these studies are limited in number, the narrative review suggests that chairwork is not associated with greater effectiveness in facilitating emotional arousal than other therapy interventions. In contrast, chairwork seems to be more effective in producing sequential transformation than relational reframing. Furthermore, the present meta-analysis revealed that chairwork produces longer moments of deepened experience than other EFT interventions (i.e., empathetic responding, focusing) alone.

The discrepancy in process outcomes among interventions may be explained by how pervasive emotional arousal is across psychotherapy. High levels of emotional arousal are a common feature in therapy and has been associated with many tasks that range in level of

complexity (e.g., empathetic responding, describing presenting concerns using first-person pronouns, exposure therapy, focusing, chairwork; Culver et al., 2012; Cummings et al., 2014; Nigro & Neisser, 1983; Whelton, 2004). As follows, noticeable differences in emotional arousal may not be detectable. Where chairwork may differ from other interventions is in how arousal is used during the session (Pascual-Leone & Greenberg, 2007). For instance, relational reframing works to shift the client's attention away from anger by eliciting sadness, which interrupts the full arousal and expression of anger to some extent (Diamond & Siqueland, 1998). Conversely, chairwork makes way for a co-activation in which the maladaptive emotions (e.g., anger) are fully expressed and simultaneously paired with moments of adaptive emotions (e.g., sadness), which may contribute to a more robust shift between emotions (Greenberg et al., 1993; Pascual-Leone & Greenberg, 2007). In the context of deepened experiencing, the vividness of the enactment and dialogue may help clients connect with and explore the aroused emotions in a more direct and concrete manner than what would be attained from talking about one's difficulties with a therapist (Greenberg et al., 1993; Greenberg & Watson, 2006; Trachsel et al., 2012).

Comparable Distal Effects may Differ Between Therapeutic Orientations

The between-group meta-analysis suggests that a single-session of chairwork is not associated with greater resolution or symptom improvement than what would be obtained from engaging in other interventions drawn from either EFT or CBT (i.e., empathetic responding, problem-solving, decision-cube, cognitive restructuring). Nonetheless, differences between interventions seem to emerge as clients begin to engage in chairwork over multiple sessions. In particular, the current narrative review found that EFT treatments incorporating chairwork see greater improvements in resolution, symptom change, and interpersonal difficulties at post-

treatment (Goldmen et al., 2006; Shahar et al., 2012; Stiegler et al., 2017). Clients seem to continue to improve on these outcomes after leaving treatment (Ellison et al., 2009; Shahar et al., 2012). In contrast, chairwork conducted under a CBT framework seems to perform as well as other CBT interventions in attaining treatment gains (e.g., pro-longed exposure, dysfunctional thought records; de Oliveira et al., 2012b; Duren et al., 2019). Generally, those gains seem to be maintained post-treatment with no further improvement over time.

One potential explanation for the discrepancy among orientations is the processes associated with the therapeutic framework in which chairwork is being used. The CBT framework suggests that dysfunctional thought patterns can precipitate distressing emotions and maladaptive behaviour. Accordingly, many of the interventions used in CBT tasks are tailored towards helping clients effectively evaluate the credibility of thought patterns and reduce their associated distress (Castonguay & Hill, 2007; Pugh, 2018). Given that these components are at the centre of a trial-based chairwork as much as other conventional CBT interventions (e.g., cognitive reframe, pro-longed exposure), it seems unsurprising that chairwork performed just as well, but not better than, these other tasks in CBT studies. In contrast, EFT uses interventions to generate key emotional experience, and hence may focus heavily on up-regulating emotions for the purposes of further processing (Greenberg et al., 1993; Greenberg & Watson, 2006).

Previous research has identified depth of experiencing as a significant predictor of treatment outcome (Pascual-leone & Yeryomenko, 2017), while the current synthesis found that chairwork is more effective in facilitating deeper experiencing than empathetic responding. As follows, the benefits observed after engaging in chairwork but not after empathetic responding may be explained by the role of these enactments in helping clients more readily activate and process

emotional experiences in a more productive manner (Greenberg et al., 1993; Greenberg & Watson, 2006).

Clinical Implications

While tentative, the findings have several implications for therapeutic practice. The current study suggests that chairwork may be effective in promoting depth of experiencing, beyond the use of empathetic responding and focusing (Greenberg & Clarke, 1979; Greenberg & Dompierre, 1981; Greenberg & Higgins, 1980). Given the increases in credibility of core beliefs, productive emotional arousal, and insight indicated by clients' own accounts (Bell et al., 2019; Bell et al., 2020; Bell et al., 2021; de Oliveira et al., 2012a), incorporating chairwork into therapy sessions may be advantageous in bolstering these emotional processes. Moreover, the non-significant difference in arousal between interventions suggests that chairwork is not any more evocative than what clients may experience during other interventions. These findings encourage therapists to incorporate chairwork into treatments with less hesitancy regarding the intensity of emotions that may arise during the intervention.

The current findings also support the use of a single session of chairwork in helping clients reach a resolution and attenuate symptoms associated with presenting concerns that are clinical in nature but pertain to a particular situation (e.g., decision-splits, self-criticism about past failure). Therapists may engage clients in chairwork in subsequent sessions to further bolster distal outcomes. However, there is evidence suggesting that the quality of the client's first-time exposure to chairwork predicts the effectiveness of later chairwork (Paivio et al., 2001). As follows, it may be advantageous for therapists to fully commit to facilitating the intervention rather than making the client's first attempt a gradual introduction.

Moreover, the differences between therapeutic approaches in multisession studies underscore the instances chairwork may be more beneficial for clients than other interventions. In particular, therapists working under an EFT framework should be sure to implement chairwork into treatment to attain greater therapeutic gains. Whereas therapists working under a CBT framework could attain similar distal outcomes using other interventions. As such, it may be beneficial for therapists in CBT to tailor the use of chairwork according to case conceptualization and idiosyncratic characteristics that suggest the client will be more responsive to chairwork (Lutz, 2003; Narcross & Wampold, 2011). The findings also point clinicians towards incorporating physically moving between chairs to amplify process and distal outcome effects, regardless of the therapeutic approach being used.

Limitations and Future Directions

The limitation of the current study is its lack of precision, significance, available studies, which led to limited conclusion that can be made about the effects of chairwork. These limitations are primarily due to the methodological shortcomings of the literature and reporting standards of the field.

Guidelines for Studying Effects of Chairwork

First, only a marginal number of studies examined the isolated effects of chairwork on facilitating emotional process and distal outcomes. Chairwork is known to purposefully stimulate and intensify distressful experiences in the service of activating adaptive emotional resources (Nardone et al., 2022; Greenberg & Pascual-Leone, 2006). The intervention involves many components (e.g., embodiment, imaginal dialogue, switching chairs) that can be taxing for clinicians to facilitate and for clients to engage in (Greenberg & Pascual-Leone, 2006). Presenting empirical evidence of the usefulness of chairwork in fostering these outcomes might

help dispel concerns regarding its evocative nature and complexity by demonstrating its helpfulness in therapy. As such, more dismantling studies are needed that explore a variety of the emotional processes and distal outcomes hypothesized to be associated with chairwork.

Two types of dismantling study are of particular importance. The first consists of separately comparing differences in emotional process and distal outcome between engaging in chairwork and alternative interventions. These studies are useful in solidifying internal validity by showing how chairwork alone may individually lead to emotional processing and therapeutic change, in the absence of other interventions which might interact to produce an outcome. Second, studies that examine the effects of incorporating chairwork into existing treatment interventions are needed. These designs tend to have a strong external validity, in that they reflect the true nature of therapy settings where treatment is likely to consist of more than a single intervention and session. Given that chairwork might function via multiple and different mechanisms working together, which may be leveraged in different combinations depending on the treatment perspective, these studies can help provide an empirical illustration of these interactions. Furthermore, these studies are encouraged to include a measure of resolution, symptom change, and self-compassion/self-esteem to help further understand the effects of chairwork on each of these outcomes.

Guidelines for Reporting Effects Related to Chairwork

The precision of study 1 is limited due to an inability to calculate standard error. When incorporating the use of chairwork in a research design, researchers are encouraged to directly report the effect sizes and their associated standard error for both within-group comparisons and between-group comparisons, regardless of whether these comparisons are directly linked to the purpose of the investigation. This is specifically important in the context of within-subjects' data

that provide a comparison between pre-post chairwork where the formulas for calculating effect sizes and associated standard error are less clear and cannot be computed from descriptive statistics alone. Alternatively, and less favourably, researchers should provide the information necessary for third parties to calculate the effect size. This includes a specific reporting of standard error associated to the comparisons that particularly pertain to chairwork (i.e., standard deviation of the difference of the mean in paired sample *T*-Tests; Mean Square Error, MSE; and/or standard error of pairwise comparisons in ANOVAs). Additionally, multisession studies that collect data overtime need to ensure that the statistical comparisons are conducted after removing missing data associated with attrition at post-treatment.

The precision of study 1 is also affected by the extrapolation of within-subjects' data that may produce positively skewed effect sizes. The inflation in these effect sizes is an artifact of research design that might not be sufficiently attenuated in pre-to-post therapy data alone (Kline, 2013). Moreover, it is not uncommon for the magnitude of effects from pre-post therapy data to be larger in magnitude than effects from between-subjects data (Minami et al., 2007; Wampold & Brown, 2005). Accordingly, the guidelines used to interpret a Cohen's *d* (small, moderate, large, very large) may miscategorise effect sizes from within-subjects as larger than they are demonstrating. This warrants caution when interpreting the size of effects reported in the current systematic review, such that the size of the weighted means (i.e., .96 to 1.42) likely does not represent as large of an effect as the magnitude suggests.

Potential Areas of Exploration

The extent to which emotional processes operate similarly in EFT and CBT versions of chairwork remains to be clarified. Chairwork under a CBT framework likely does not draw on the same processes as chairwork in an EFT framework (Castonguay & Hill, 2007; Greenberg &

Watson, 2006). The distinct use of chairwork as a “fact-finding mission” as in CBT or as an “open-ended emotional exploration” as in EFT suggest some fundamental differences that need to be empirically considered. Studies are also encouraged to examine the different emotional processes that emerge in chairwork across different orientations and the extent to which these explain the findings of the current study (e.g., chairwork superior to empathic reflection but comparable to CBT). Additionally, given that CBT studies have found that chairwork alone produces comparable results to other CBT tasks, the next step would be the use of additive/dismantling designs to examine chairwork in relation to standard CBT/Schema therapy treatments. Such inquiries are important for understanding process of change within and between the modalities.

Furthermore, it is not clear whether the continuous improvement and maintenance effects observed among the studies speak to differences between therapeutic models. It may be that chairwork in EFT and CBT frameworks have comparable outcomes at post-treatments, with chairwork in EFT surpassing those effects at follow-up. Alternatively, the effects observed at follow-up under EFT models may be comparable to the post-treatment effects attained under CBT models. The former would suggest differences in the magnitude of effect between modalities. The latter would indicate that both modalities ultimately have comparable magnitudes of effect, but differ in time of onset (i.e., immediately observing outcomes more fully in CBT versus a gradual increase after immediate gains in EFT). Comparing these orientations in future studies is important for clarifying conceptual models of change.

References

* designates studies used in the analyses

- Arimitsu, K. (2016). The effects of a program to enhance self-compassion in Japanese individuals: A randomized controlled pilot study. *The Journal of Positive Psychology, 11*(6), 559–571. <https://doi.org/10.1080/17439760.2016.1152593>
- Arknoff, D. B. (1981). Flexibility in practicing cognitive therapy. In G. Emery, S. D. Hollon, & R. C. Bedrosian (Eds.), *New directions in cognitive therapy: A casebook* (pp. 203–223). New York: Guilford.
- Arntz, A., & Jacob, G. (2013). *Schema therapy in practice: An introductory guide to the schema mode approach*. Wiley-Blackwell.
- Arntz, A., & Weertman, A. (1999). Treatment of childhood memories: Theory and practice. *Behaviour Research and Therapy, 37*(8), 715–740.
- Beck, A., Rush, J., Shaw, B., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford Press.
- Beck, A. T., & Steer, R. A. (1984). Internal consistencies of the original and revised Beck Depression Inventory. *Journal of Clinical Psychology, 40*(6), 1365–1367.
- Beaumont, Durkin, M., McAndrew, S., & Martin, C. R. (2016). Using Compassion Focused Therapy as an adjunct to Trauma-Focused CBT for Fire Service personnel suffering with trauma-related symptoms. *Cognitive Behaviour Therapist, 9*.
<https://doi.org/10.1017/S1754470X16000209>
- *Bell, T., Montague, J., Elander, J., & Gilbert, P. (2019). Multiple emotions, multiple selves: Compassion focused therapy chairwork. *The Cognitive Behaviour Therapist, 14*, 17.

doi:<http://dx.doi.org/10.1017/S1754470X21000180>

- *Bell, T., Montague, J., Elander, J., & Gilbert, P. (2020). “A definite feel-it moment”: Embodiment, externalisation and emotion during chair-work in compassion-focused therapy. *Counselling & Psychotherapy Research*, 20(1), 143-153.
doi:<http://dx.doi.org/10.1002/capr.12248>
- *Bell, T., Montague, J., Elander, J., & Gilbert, P. (2021). “Suddenly you are king solomon”: Multiplicity, transformation and integration in compassion focused therapy chairwork. *Journal of Psychotherapy Integration*, 31(3), 223-237.
- Berkeljon, A., & Baldwin, S. A. (2009). An introduction to meta-analysis for psychotherapy outcome research. *Psychotherapy Research*, 19(4-5), 511–518. <https://doi.org/10.1080/10503300802621172>
- *Beuchat, H., Grandjean, L., Despland, J. N., Pascual-Leone, A., Gholam, M., Swendsen, J. & Kramer, U. (2021). Ecological momentary assessment of emotional processing: An exploratory analysis comparing daily life and a psychotherapy analogue session. *Counselling and Psychotherapy Research*, May, 1–12. <https://doi.org/10.1002/capr.12455>
- Blatt, S. J., D'Afflitti, J. P., & Quinlan, D. M. (1976). Experiences of depression in normal young adults. *Journal of Abnormal Psychology*, 85(4), 383–389.
- Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. R. (2009). *Introduction to Meta-Analysis*. John Wiley and Sons.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Briere, J., & Scott, C. (2006). *Principles of Trauma Therapy: A Guide to Symptoms, Evaluation, and Treatment*. New York: Sage Publications.

- Butler, R. (1987). Task-involving and ego-involving properties of evaluation: Effects of different feedback conditions on motivational perceptions, interest, and performance. *Journal of Educational Psychology*, 79(4), 474–482. <https://doi.org/10.1037/0022-0663.79.4.474>
- Carver, C. S., & Ganellen, R. J. (1983). Depression and components of self-punitiveness: High standards, self-criticism, and overgeneralization. *Journal of Abnormal Psychology*, 92(3), 330–337.
- Castonguay, L. G., & Hill, C. (Eds.). (2007). *Insight in psychotherapy*. American Psychological Association. <https://doi.org/10.1037/11532-000>
- *Chadwick, P. (2003). Two-chairs, self-schemata and a person based approach to psychosis. *Behavioural and Cognitive Psychotherapy*, 31, 439–449.
- *Chagigiorgis, H. (2012). *The contribution of emotional engagement with trauma material to outcome in two versions of emotion focused therapy for trauma (EFTT)* (Order No. AAINR73697). Available from APA PsycInfo®. (1001922075; 2012-99040-378).
- *Clarke, K. M. (1981). *The differential effects of the gestalt two-chair experiment and cognitive problem-solving on career decision-making* Available from APA PsycInfo®. (616692134; 1982-71772-001).
- *Clarke, K. M., & Greenberg, L. S. (1986). Differential effects of the Gestalt two-chair intervention and problem solving in resolving decisional conflict. *Journal of Counseling Psychology*, 33(1), 11–15.
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20, 37–46. <https://doi.org/10.1177/001316446002000104>
- Cohen, J. (1969). *Statistical power analysis for the behavioral sciences*. San Diego, CA:

Academic Press.

Cohen, J. (1977). *Statistical power analysis for the behavioral sciences* (Rev. Ed.). Hillsdale, NJ:

Lawrence Erlbaum Associates.

Cronbach, L. J. (1951) Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297–334.

Culver, N. C., Stoyanova, M., & Craske, M. G. (2012). Emotional variability and sustained arousal during exposure. *Journal of Behavior Therapy and Experimental Psychiatry*, 43(2), 787-793.

Cummings, J. A., Hayes, A. M., Saint, D. S., & Park, J. (2014). Expressive writing in psychotherapy: A tool to promote and track therapeutic change. *Professional Psychology: Research and Practice*, 45(5), 378–386. <https://doi.org/10.1037/a0037682>

Daldrup, R. J., Beutler, L. E., Engle, D., & Greenberg, L. S. (1988). *Focus expressive psychotherapy: Freeing the overcontrolled patient*. New York: Guilford Press.

*Delavechia, T. R., Velasquez, M. L., Duran, É. P., Matsumoto, L. S. & de Oliveira, I. R. (2016). Changing negative core beliefs with trial-based thought record. *Revista de Psiquiatria Clinica*, 43(2), 31–33. <https://doi.org/10.1590/0101-608300000000078>

de Oliveira, I. R. (2008). Trial-Based Thought Record (TBTR): Preliminary data on a strategy to deal with core beliefs by combining sentence reversion and the use of analogy with a judicial process. *Revista Brasileira de Psiquiatria*, 30(1), 12–18. <https://doi.org/10.1590/S1516-44462008000100003>

de Oliveira, I. R. (2015). *Trial-based cognitive therapy: a manual for clinicians*. New York: Routledge.

- *de Oliveira, I. R., Hemmany, C., Powell, V. B., Bonfim, T. D., Duran, E. P., Novais, N., et al. (2012a). Trial- based psychotherapy and the efficacy of trial-based thought record in changing unhelpful core beliefs and reducing self-criticism. *CNS Spectrums*, 17, 16–23.
- *de Oliveira, I. R., Powell, V. B., Wenzel, A., Caldas, M., Seixas, C., Almeida, C., Bonfim, T., Grangeon, M. C., Castro, M., Galvão, A., De Oliveira Moraes, R. & Sudak, D. (2012b). Efficacy of the trial-based thought record, a new cognitive therapy strategy designed to change core beliefs, in social phobia. *Journal of Clinical Pharmacy and Therapeutics*, 37(3), 328–334. <https://doi.org/10.1111/j.1365-2710.2011.01299.x>
- *Diamond, G. M., Rochman, D., & Amir, O. (2010). Arousing Primary Vulnerable Emotions in the Context of Unresolved Anger: “Speaking About” Versus “Speaking To.” *Journal of Counseling Psychology*, 57(4), 402–410.
<https://doi.org/10.1037/a0021115>
- *Diamond, G. M., Shahar, B., Sabo, D., & Tsvieli, N. (2016). Attachment-based family therapy and emotion-focused therapy for unresolved anger: The role of productive emotional processing. *Psychotherapy (Chicago, Ill.)*, 53(1), 34–44.
<https://doi.org/10.1037/pst0000025>
- Dugas, M. J., & Robichaud, M. (2007). *Cognitive-behavioral treatment for generalized anxiety disorder: From science to practice*. Routledge/Taylor & Francis Group.
- *Duran, É. P., Corchs, F., Vianna, A., Araújo, Á. C., Del Real, N., Silva, C., Ferreira, A. P., De Vitto Francez, P., Godói, C., Silveira, H., Matsumoto, L., Gebara, C. M., De Barros Neto, T. P., Chilvarquer, R., De Siqueira, L. L., Bernik, M. & Neto, F. L. (2021). A randomized clinical trial to assess the efficacy of trial-based cognitive therapy compared to prolonged exposure for post-traumatic stress disorder: Preliminary findings. *CNS Spectrums*, 26(4),

- 427–434. <https://doi.org/10.1017/S1092852920001455>
- Egger, M., Davey Smith, G., Schneider, M., & Minder, C. (1997). Bias in meta-analysis detected by a simple, graphical test. *BMJ (Clinical research ed.)*, 315(7109), 629–634.
<https://doi.org/10.1136/bmj.315.7109.629>
- Elliott, R. (2013). Person-centered/experiential psychotherapy for anxiety difficulties: Theory, research and practice. *Person-Centered & Experiential Psychotherapies*, 12(1), 16–32.
<https://doi.org/10.1080/14779757.2013.767750>
- Elliott, R., & Greenberg, L. S. (2007). The essence of process-experiential/emotion-focused therapy. *American Journal of Psychotherapy*, 61(3), 241–254.
<https://doi.org/10.1176/appi.psychotherapy.2007.61.3.241>
- Elliott, R., Watson, JC, Goldman, RN & Greenberg, LS (2004). *Learning Emotion-Focused Therapy: The process- experiential approach to change*. Washington, DC: American Psychological Association.
- *Ellison, J. A., Greenberg, L. S., Goldman, R. N. & Angus, L. (2009). Maintenance of Gains Following Experiential Therapies for Depression. *Journal of Consulting and Clinical Psychology*, 77(1), 103–112. <https://doi.org/10.1037/a0014653>
- *Falconer, C. J., Slater, M., Rovira, A., King, J. A., Gilbert, P., Antley, A. & Brewin, C. R. (2014). Embodying compassion: A virtual reality paradigm for overcoming excessive self-criticism. *PLoS ONE*, 9(11). <https://doi.org/10.1371/journal.pone.0111933>
- Fisher, R. A. (1915). "Frequency distribution of the values of the correlation coefficient in samples of an indefinitely large population". *Biometrika*. 10 (4): 507–521.
doi:10.2307/2331838.
- Gendlin, E. T. (1961). Experiencing: A variable in the process of therapeutic change. *American*

- Journal of Psychotherapy*, 15, 233–245.
- Gendlin, E. T. (1981). *Focusing*. New York: Bantam Books.
- Gilbert, P. (2010). *Compassion focused therapy: Distinctive features*. Routledge/Taylor & Francis Group.
- Gilbert, P., & Irons, C. (2005). Focused therapies and compassionate mind training for shame and self-attacking. In P. Gilbert (Ed.), *Compassion: Conceptualisations, research and use in psychotherapy* (pp. 263–325). Routledge.
- Goldfried, M. R. (2013). What should we expect from psychotherapy? *Clinical Psychology Review*, 33(7), 862–869. <https://doi.org/10.1016/j.cpr.2013.05.003>
- Goldfried, M. R., & Davison, G. C. (1976). *Clinical behavior therapy*. New York: Holt, Rinehart And Winston.
- *Goldman, R. N., Greenberg, L. S., & Angus, L. (2006). The effects of adding emotion-focused interventions to the client-centered relationship conditions in the treatment of depression. *Psychotherapy Research*, 16(5), 536–546. <https://doi.org/10.1080/10503300600589456>
- Goldman, R. N., Greenberg, L. S. & Pos, A. E. (2005). Depth of emotional experience and outcome. *Psychotherapy Research*, 15(3), 248–260. <https://doi.org/10.1080/10503300512331385188>
- Greenberg, L. (1979). Resolving splits: Use of the two chair technique. *Psychotherapy: Theory, Research & Practice*, 16(3), 316–324.
- Greenberg, L. (1980). The intensive analysis of recurring events from the practice of Gestalt therapy. *Psychotherapy: Theory, Research & Practice*, 17(2), 143–152.
- Greenberg, L. (1983). Toward a task analysis of conflict resolution in Gestalt therapy.

- Psychotherapy: *Theory, Research & Practice*, 20, 190-201.
- Greenberg, L. S. (2002). Integrating an emotion-focused approach to treatment into psychotherapy integration. *Journal of Psychotherapy Integration*, 12(2), 154–189.
- Greenberg, L. S. (2011). *Emotion-focused therapy*. American Psychological Association.
- Greenberg, L. (2014). The therapeutic relationship in emotion-focused therapy. *Psychotherapy*, 51(3), 350–357.
- *Greenberg, L. S., & Clarke, K. M. (1979). Differential effects of the two-chair experiment and empathic reflections at a conflict marker. *Journal of Counseling Psychology*, 26(1), 1–8. <https://doi.org/10.1037/0022-0167.26.1.1>
- *Greenberg, L. S., & Dompierre, L. M. (1981). Specific effects of Gestalt two-chair dialogue on intrapsychic conflict in counseling. *Journal of Counseling Psychology*, 28(4), 288–294. <https://doi.org/10.1037/0022-0167.28.4.288>
- Greenberg, L. S., & Elliott, R. (1997). Varieties of empathic responding. In A. C. Bohart & L. S. Greenberg (Eds.), *Empathy reconsidered: New directions in psychotherapy* (pp. 167–186). American Psychological Association. <https://doi.org/10.1037/10226-007>
- *Greenberg, L. S., & Higgins, H. M. (1980). Effects of two-chair dialogue and focusing on conflict resolution. *Journal of Counseling Psychology*, 27(3), 221–224. <https://doi.org/10.1037/0022-0167.27.3.221>
- Greenberg, L. S., & Foerster, F. S. (1996). Task analysis exemplified: The process of resolving unfinished business. *Journal of Consulting and Clinical Psychology*, 64(3), 439–446. <https://doi.org/10.1037/0022-006X.64.3.439>
- Greenberg, L. S., & Goldman, R. N. (2019). Theory of practice of emotion-focused

- therapy. In L. S. Greenberg & R. N. Goldman (Eds.), *Clinical handbook of emotion-focused therapy* (pp. 61–89). American Psychological Association. <https://doi.org/10.1037/0000112-003>
- Greenberg, L. S., & Malcolm, W. (2002). Resolving unfinished business: Relating process to outcome. *Journal of Consulting and Clinical Psychology, 70*(2), 406–416. <https://doi.org/10.1037/0022-006X.70.2.406>
- Greenberg, L. S., & Pascual-Leone, A. (2006). Emotion in psychotherapy: A practice-friendly research review. *Journal of Clinical Psychology, 62*(5), 611–630. <https://doi.org/10.1002/jclp.20252>
- Greenberg, L. S., & Rice, L. N. (1981). The specific effects of a Gestalt intervention. *Psychotherapy: Theory, Research, and Practice, 18*, 31–37.
- Greenberg, L. S., Rice, L. N., & Elliott, R. (1993). *Facilitating emotional change: The moment-by-moment process*. New York: Guilford Press.
- Greenberg, L. S., & Safran, J. D. (1987). *Emotion in psychotherapy: Affect, cognition, and the process of change*. Guilford Press.
- Greenberg, L. J., Warwar, S. H., & Malcolm, W. M. (2008). Differential effects of emotion-focused therapy and psychoeducation in facilitating forgiveness and letting go of emotional injuries. *Journal of Counseling Psychology, 55*(2), 185–196. <https://doi.org/10.1037/0022-0167.55.2.185>
- *Greenberg, L.S., & Watson, J.C. (1998). Experiential therapy of depression: Differential effects Of client-centered relationship conditions and process experiential interventions. *Psychotherapy Research, 8*(2), 210-224.
- Greenberg, L. S., & Watson, J. C. (2006). *Emotion-focused therapy for depression*. American

Psychological Association. <https://doi.org/10.1037/11286-000>

*Greenberg, L. S., & Webster, M. C. (1982). Resolving decisional conflict by Gestalt two-chair dialogue: Relating process to outcome. *Journal of Counseling Psychology*, 29(5), 468–477. <https://doi.org/10.1037/0022-0167.29.5.468>

Haberman, A., Shahar, B., Bar-Kalifa, E., Zilcha-Mano, S., & Diamond, G. M. (2019). Exploring the process of change in emotion-focused therapy for social anxiety. *Psychotherapy Research*, 29(7), 908–918. <https://doi.org/10.1080/10503307.2018.1426896>

Halamová, J., Kanovský, M., Gilbert, P., Troop, N. A., Zuroff, D. C., Hermanto, N., Petrocchi, N., Sommers-Spijkerman, M., Kirby, J. N., Shahar, B., Krieger, T., Matos, M., Asano, K., Yu, F., Basran, J., & Kupeli, N. (2018). The factor structure of the forms of Self-Criticising/Attacking & Self-Reassuring Scale in thirteen distinct populations. *Journal of Psychopathology and Behavioral Assessment*, 40(4), 736–751.

Hedges, L.V. (1982). Estimating effect size from a series of independent experiments. *Psychological Bulletin*, 92, 490-499.

Hedges, L.V. , & Olkin, I. (1983). Regression models in research synthesis. *The American Statistician*, 37, 137-140.

Hedges, L. V., & Pigott, T. D. (2001). The power of statistical tests in meta- analysis. *Psychological methods*, 6(3), 203–217.

Heriot-Maitland, C., McCarthy-Jones, S., Longden, E., & Gilbert, P. (2019). Compassion Focused Approaches to Working With Distressing Voices. *Frontiers in psychology*, 10, 152. <https://doi.org/10.3389/fpsyg.2019.00152>

Hermans, H. & Kempen, H. (1992). “The Dialogical Self: Beyond Individualism and

- Rationalism.” *American Psychologist*, 47, 23-33.
- Higgins, J. P., & Thompson, S. J. (2002) Quantifying heterogeneity in a meta-analysis. *Stat Med*, 21, 1539-1558.
- Higgins, J. P., Thompson, S. G., Deeks, J. J., & Altman, D. G. (2003). Measuring inconsistency in meta-analyses. *British Medical Journal (Clinical research ed.)*, 327(7414), 557–560.
<https://doi.org/10.1136/bmj.327.7414.557>
- Holowaty, K. A. M. (2005). *Process characteristics of client-identified helpful events in emotion-focused therapy for adult survivors of childhood abuse (EFT-AS)* (Order No. AAINQ92546). Available from APA PsycInfo®. (621044564; 2005-99002-280).
- Horowitz, M. J., Adler, N., & Kegeles, S. (1988). A scale for measuring the occurrence of positive states of mind: A preliminary report. *Psychosomatic Medicine*, 50(5), 477–483. <https://doi.org/10.1097/00006842-198809000-00004>
- Howell, D. C. (1997). *Statistical Methods for Psychology*. Duxbury Press.
- Kellogg, S. (2004). Dialogical encounters: Contemporary perspectives on “chairwork” in psychotherapy. *Psychotherapy: Theory Research, Practice, Training*, 41, 310–320.
- Kellogg, S. H., & Young, J. E. (2006). Schema therapy for borderline personality disorder. *Journal of Clinical Psychology*, 4(4), 445–458.
<https://doi.org/10.1002/jclp.20240>
- Kennedy-Moore, E., & Watson, J. C. (1999). *Expressing emotion: Myths, realities, and therapeutic strategies*. Guilford Press.
- Klein, M. H., Mathieu-Coughlan, P., & Kiesler, D. J. (1986). The experiencing scales. In L. S. Greenberg, & W. M. Pinsof (Eds.), *The psychotherapeutic process: A research handbook* (pp. 21-71). New York: Guilford.
- Kline, R. B. (2013). (2nd ed.). *American Psychological Association*. <https://doi.org/10.1037/>

14136-000

Leite, C., Kuiper, N.A. (2008). Client uncertainty and the process of change in psychotherapy:

The impact of individual differences in self-concept clarity and intolerance of uncertainty.

J Contemp Psychother 38, 55–64 <https://doi.org/10.1007/s10879-007-9068-7>

Lutz, W. (2003). Efficacy, effectiveness, and expected treatment response in psychotherapy.

Journal of Clinical Psychology, 59(7), 745–750. <https://doi.org/10.1002/jclp.10169>

*Maslove, V. J. (1989). *The differential effects of empathic reflection and the Gestalt empty-*

chair dialogue on depth of experiencing when used with an issue of unfinished business

(T). University of British Columbia. Retrieved from

<https://open.library.ubc.ca/collections/ubctheses/831/items/1.0053761>

Matos, M., Duarte, J., Duarte, C., Gilbert, P., & Pinto-Gouveia, J. (2018). How one experiences

and embodies compassionate mind training influences its effectiveness. *Mindfulness*,

9(4), 1224–1235. <https://doi.org/10.1007/s12671-017-0864-1>

McAleavey, Youn, S. J., Xiao, H., Castonguay, L. G., Hayes, J. A., & Locke, B. D. (2019).

Effectiveness of routine psychotherapy: Method matters. *Psychotherapy Research*, 29(2),

139–156. <https://doi.org/10.1080/10503307.2017.1395921>

Mendes, I., Rosa, C., Stiles, W. B., Caro Gabalda, I., Gomes, P., Basto, I., et al. (2016). Setbacks

in the process of assimilation of problematic experiences in two cases of emotion-focused

therapy for depression. *Psychotherapy. Research*. 26, 638–652. doi:

10.1080/10503307.2015.1136443

Minami, T., Wampold, B. E., Serlin, R. C., Kircher, J. C., & Brown, G. S. (J.). (2007).

Benchmarks for psychotherapy efficacy in adult major depression. *Journal of Consulting*

- and *Clinical Psychology*, 75(2), 232–243. <https://doi.org/10.1037/0022-006X.75.2.232>
- Moreno, J. L. (1948). *Psychodrama* (Vol. 1). New York, NY: Beacon House.
- Norcross, J. C., & Wampold, B. E. (2011). What works for whom: Tailoring psychotherapy to the person. *Journal of clinical psychology*, 67(2), 127–132.
<https://doi.org/10.1002/jclp.20764>
- Nardone, S., Pascual-Leone, A., & Kramer, U. (2022) “Strike while the iron is hot”: Increased arousal anticipates unmet needs, *Counselling Psychology Quarterly*, 35:1, 110-128, DOI: [10.1080/09515070.2021.1955659](https://doi.org/10.1080/09515070.2021.1955659).
- *Narkiss-Guez, T., Zichor, Y. E., Guez, J., & Diamond, G. M. (2015). Intensifying attachment-related sadness and decreasing anger intensity among individuals suffering from unresolved anger: The role of relational reframe followed by empty-chair interventions. *Counselling Psychology Quarterly*, 28(1), 44-56
- Neff, K. D., Kirkpatrick, K. L., & Rude, S. S. (2007). Self-compassion and adaptive psychological functioning. *Journal of Research in Personality*, 41(1), 139–154.
<https://doi.org/10.1016/j.jrp.2006.03.004>
- NHMRC. (1995). *Guidelines for the Development and Implementation of Clinical Guidelines*, 1st edn. Australian Government Publishing Service, Canberra.
- Nigro, G., & Neisser, U. (1983). Point of view in personal memories. *Cognitive psychology*, 15(4), 467-482.
- O’Connell Kent, J. A., Jackson, A., Robinson, M., Rashleigh, C. & Timulak, L. (2021). Emotion-focused therapy for symptoms of generalised anxiety in a student population: An exploratory study. *Counselling and Psychotherapy Research*, 21(2), 260–268.
<https://doi.org/10.1002/capr.12346>

- Orlinsky, D.E., Grawe, K., Parks, B.K. (1994) Process and outcome in psychotherapy. In: Bergin A, Garfield S (eds) *Handbook of psychotherapy and behavior change*, 4th edn. Wiley, New York, NY.
- Paivio, S. C., & Greenberg, L. S. (1995). Resolving "unfinished business": Efficacy of experiential therapy using empty-chair dialogue. *Journal of Consulting and Clinical Psychology*, 63(3), 419–425. <https://doi.org/10.1037/0022-006X.63.3.419>
- Paivio, S. C., Hall, I. E., Holowaty, K. A. M., Jellis, J. B., & Tran, N. (2001). Imaginal confrontation for resolving child abuse issues. *Psychotherapy Research*, 11(4), 433–453.
- *Paivio, S. C., Jarry, J. L., Chagigiorgis, H., Hall, I. & Ralston, M. (2010). Efficacy of two versions of emotion-focused therapy for resolving child abuse trauma. *Psychotherapy Research*, 20(3), 353-366.
- *Paivio, S. C., & Nieuwenhuis, J. A. (2001). Efficacy of emotion focused therapy for adult survivors of child abuse: A preliminary study. *Journal of Taumatic Stress*, 14(1), 115–133. <https://doi.org/10.1023/A:1007891716593>
- Paivio, S. C. & Pascual-Leone, A. (in press). *Emotion focused therapy for complex trauma: An integrative approach, 2nd Edition*. American Psychological Association.
- Pascual-Leone, A. (2018). How clients “change emotion with emotion”: A programme of research on emotional processing. *Psychotherapy Research*, 28(2), 165–182. <https://doi.org/10.1080/10503307.2017.1349350>
- Pascual-Leone, A. & Greenberg, L. S. (2006). Insight and awareness in experiential therapy. In L. G. Castonguay & C. E. Hill (Eds.) *Insight in psychotherapy*. Washington, DC: American Psychological Association.

- Pascual-Leone, A., & Greenberg, L. S. (2007). Emotional processing in experiential therapy: Why "the only way out is through." *Journal of Consulting and Clinical Psychology*, 75(6), 875–887. <https://doi.org/10.1037/0022-006X.75.6.875>
- Pascual-Leone, A. & Yeryomenko, N. (2017). The client “experiencing” scale as a predictor of treatment outcomes: A meta-analysis on psychotherapy process. *Psychotherapy Research*, 27(6), 653-665. <http://dx.doi.org/10.1080/10503307.2016.1152409>
- Perls, F. S. (1969). *Gestalt therapy verbatim*. Real People Press.
- Perls, F. S. (1973). *Gestalt approach, and eye witness to therapy*. New York: Bantam.
- Perls, F.S., Hefferline, R.E. and Goodman, P. (1951). *Gestalt Therapy: Excitement and Growth in the Human Personality*. Dell, New York.
- Polanin, J. R., & Snilstveit, B. (2016). Converting between effect sizes. *Campbell Systematic Review*, 12(1), 1–13. <https://doi.org/10.4073/cmpn.2016.3>
- Pos, A. E., & Greenberg, L. S. (2012). Organizing awareness and increasing emotion regulation: revising chair work in emotion-focused therapy for borderline personality disorder. *Journal of personality disorders*, 26(1), 84–107. <https://doi.org/10.1521/pedi.2012.26.1.84>
- Powers, T. A., & Zuroff, D. C. (1988). Interpersonal consequences of overt self-criticism: A comparison with neutral and self-enhancing presentations of self. *Journal of Personality and Social Psychology*, 54(6), 1054–1062. <https://doi.org/10.1037/0022-3514.54.6.1054>
- Pugh, M. (2018). Cognitive Behavioural Chairwork. *International Journal of Cognitive Therapy*, 11(1), 100–116. <https://doi.org/10.1007/s41811-018-0001-5>
- Pugh, M., & Broome, N. (2020). Dialogical coaching: An experiential approach to personal and professional development. *Consulting Psychology Journal: Practice*

- and Research*, 72(3), 223–241.
- *Ralston, M. (2006). Emotional arousal and depth of experiencing in imaginal confrontation versus evocative empathy. Unpublished doctoral dissertation, University of Windsor.
- Raudenbush, S. W. (1994). Random effects models. In H. Cooper & L. V. Hedges (Eds.), *The handbook of research synthesis* (p. 301–321). Russell Sage Foundation.
- Rice, L. N., & Greenberg, L. S. (1984). Future research directions. In L. N. Rice, & L. S. Greenberg (Eds.), *Patterns of change: Intensive analysis of psychotherapy process* (pp. 289–308). New York: Guilford.
- Richardson, W. S., Wilson, M. C., Nishikawa, J., & Hayward, R. S. A. (1995). The well-built clinical question: A key to evidence-based decisions. *ACP Journal Club*, 123, A12-13.
- Robichaud, M., & Dugas, M. J. (2006). A Cognitive-Behavioral Treatment Targeting Intolerance of Uncertainty. In G. C. L. Davey & A. Wells (Eds.), *Worry and its psychological disorders: Theory, assessment and treatment* (pp. 289–304). Wiley Publishing.
- Robinson, A. L., McCague, E. A., & Whissell, C. (2014). That chair work thing was great^: a pilot study of group-based emotion-focused therapy for anxiety and depression. *Person-centered and Experiential Psychotherapies*, 13, 263–277.
- *Rodrigues, E. P., Fechine, A., Oliveira, A. C., Matos, C., Passarela, C. M., Hemanny, C., Dias, F. M., Batista, J. W., Albuquerque, L. N., Soares, M. S., Coelho, P. E., Neto, Araújo, V. P., Ayres, Z. M., & Oliveira, I. R. (2022). Randomized clinical trial of the efficacy of trial-based cognitive therapy for obsessive-compulsive disorder: Preliminary findings. *Trends in psychiatry and psychotherapy*, 44, 10.47626/2237-6089-2021-0247. Advance online publication. <https://doi.org/10.47626/2237-6089-2021-0247>

- Rosenberg M. S. (2005). The file-drawer problem revisited: a general weighted method for calculating fail-safe numbers in meta-analysis. *Evolution; international journal of organic evolution*, 59(2), 464–468.
- Rosenthal, R. (1979). The file drawer problem and tolerance for null results. *Psychological Bulletin*, 86(3), 638–641. <https://doi.org/10.1037/0033-2909.86.3.638>
- Rosenthal, R. & Rubin, D. B. (1986). Meta-analytic procedures for combining studies with multiple effect sizes. *Psychological Bulletin*, 99, 400-406.
- Shahar, B. (2014). Emotion-focused therapy for the treatment of social anxiety: An overview of the model and a case description. *Clinical Psychology and Psychotherapy*, 21(6), 536–547. <https://doi.org/10.1002/cpp.1853>
- Shahar B. (2020). New Developments in Emotion-Focused Therapy for Social Anxiety Disorder. *Journal of clinical medicine*, 9(9), 2918. <https://doi.org/10.3390/jcm9092918>
- *Shahar, B., Carlin, E. R., Engle, D. E., Hegde, J., Szepesenwol, O. & Arkowitz, H. (2012). A Pilot Investigation of Emotion-Focused Two-Chair Dialogue Intervention for Self-Criticism. *Clinical Psychology and Psychotherapy*, 19(6), 496–507. <https://doi.org/10.1002/cpp.762>
- Smith, J. A., Flowers, P., & Larkin, M. (2009). Interpretative phenomenological analysis: Theory, method and research. London: Sage.
- Sommers-Spijkerman, M., Trompetter, H., Schreurs, K., & Bohlmeijer, E. (2018). Pathways to Improving Mental Health in Compassion-Focused Therapy: Self-Reassurance, Self-Criticism and Affect as Mediators of Change. *Frontiers in psychology*, 9, 2442. <https://doi.org/10.3389/fpsyg.2018.02442>
- *Souliere, M. (1995). *The differential effects of the empty chair dialogue and cognitive*

- restructuring on the resolution of lingering angry feelings*. (Doctoral dissertation, University of Ottawa, 1994). Dissertation Abstracts International, 56, 2342B. (University Microfilms No. AAT NN95979)
- StataCorp. 2021. Stata Statistical Software: Release 17. College Station, TX: StataCorp LLC.
- *Stiegler, J. R., Binder, P. E., Hjeltne, A., Stige, S. H. & Schanche, E. (2018). 'It's heavy, intense, horrendous and nice': clients' experiences in two-chair dialogues. *Person-Centered and Experiential Psychotherapies*, 17(2), 139–159.
<https://doi.org/10.1080/14779757.2018.1472138>
- *Stiegler, J., Molde, H., & Schanche, E. (2017). Does an emotion-focused two-chair dialogue add to the therapeutic effect of the empathic attunement to affect? *Clinical Psychology and Psychotherapy*, 25, 1-10.
- *Stiegler, J. R., Molde, H., & Schanche, E. (2018). Does the two-chair dialogue intervention facilitate processing of emotions more efficiently than basic Rogerian conditions? *European Journal of Psychotherapy & Counselling*, 20(3), 337–355.
<https://doi.org/10.1080/13642537.2018.1495245>
- Sutherland, O., Peräkylä, A., & Elliott, R. (2014). Conversation analysis of the two-chair self-soothing task in emotion-focused therapy. *Psychotherapy Research*, 24(6), 738–751.
<https://doi.org/10.1080/10503307.2014.885146>
- Tang, T. Z., & DeRubeis, R. J. (1999). Sudden gains and critical sessions in cognitive-behavioral therapy for depression. *Journal of Consulting and Clinical Psychology*, 67(6), 894–904. <https://doi.org/10.1037/0022-006X.67.6.894>
- *Trachsel, M., Ferrari, L., & Holtforth, M. G. (2012). Resolving partnership ambivalence: A randomized controlled trial of very brief cognitive and experiential interventions with

- follow-up. *Canadian Journal of Counselling and Psychotherapy*, 46(3), 239-258.
- Thiel, N., Jacob, G., Tuschen-Caffier, B., Herbst, N., Külz, A., Hertenstein, E., Nissen, C., & Voderholzer, U. (2016). Schema Therapy augmented Exposure and Response Prevention in Patients with Obsessive-Compulsive Disorder: Feasibility and Efficacy of a Pilot Study. *Journal of Behavior Therapy and Experimental Psychiatry*, 52, 59–67.
<https://doi.org/10.1016/j.jbtep.2016.03.006>
- Timulak, L., McElvaney, J., Keogh, D., Martin, E., Clare, P., Chepukova, E. & Greenberg, L. S. (2017). Emotion-focused therapy for generalized anxiety disorder: An exploratory study. *Psychotherapy*, 54(4), 361–366. <https://doi.org/10.1037/pst0000128>
- van der Kaap-Deeder, J., Smets, J., & Boone, L. (2016). The impeding role of self-critical perfectionism on therapeutic alliance during treatment and eating disorder symptoms at follow-up in patients with an eating disorder. *Psychologica Belgica*, 56(2), 100–110.
- *van Maarschalkerweerd, F., Engelmoer, I. M., Simon, S., & Arntz, A. (2021). Addressing the punitive parent mode in schema therapy for borderline personality disorder: Short-term effects of the empty chair technique as compared to cognitive challenging. *Journal of behavior therapy and experimental psychiatry*, 73, 101-138.
- Veroniki, A. A., Jackson, D., Viechtbauer, W., Bender, R., Bowden, J., Knapp, G., Kuss, O., Higgins, J. P., Langan, D., & Salanti, G. (2016). Methods to estimate the between-study variance and its uncertainty in meta-analysis. *Research synthesis methods*, 7(1), 55–79.
<https://doi.org/10.1002/jrsm.1164>
- Vrana, G. C. (2021). *Resolution of self-interruption in emotion-focused therapy: A model of client process*. Unpublished dissertation. York University, Retrieved from:

https://yorkspace.library.yorku.ca/xmlui/bitstream/handle/10315/39140/Vrana_Genevieve_C_2021_PhD.pdf?sequence=2&isAllowed=y

- Warwar, S. H., & Greenberg, L. S. (1999). *Client Emotional Arousal Scale—III*. Unpublished manuscript, York University, Toronto, Ontario, Canada.
- Watson, J. C., & Bedard, D. L. (2006). Clients' emotional processing in psychotherapy: a comparison between cognitive-behavioral and process-experiential therapies. *Journal of Consulting and Clinical Psychology, 74*, 152–159.
- Wampold, B. E., & Brown, G. S. (2005). Estimating variability in outcomes attributable to therapists: a naturalistic study of outcomes in managed care. *Journal of consulting and clinical psychology, 73*(5), 914–923. <https://doi.org/10.1037/0022-006X.73.5.914>
- Whelton, W. J. (2004). Emotional processes in psychotherapy: Evidence across therapeutic modalities. *Clinical Psychology & Psychotherapy, 11*(1), 58–71.
- *Whelton, W. J., & Greenberg, L. S. (2005). Emotion in self-criticism. *Personality and Individual Differences, 38*(7), 1583–1595. <https://doi.org/10.1016/j.paid.2004.09.024>
- Yontef, G. M., & Simkin, J. S. (1989). Gestalt therapy. In R. J. Corsini & D. Wedding (Eds.), *Current psychotherapies* (pp. 323–361). F E Peacock Publishers.
- Young, J. E., Klosko, J. S., & Weishaar, M. E. (2003). *Schema therapy: a practitioner's guide*. New York: Guilford.

Table 1*Computational Formulas for D-Index*

Steps	Within Group	Between- Group
1	$\frac{d = \bar{X}_1 - \bar{X}_2}{S_{\text{Time1}}}$	$S_{\text{within}} = \sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}}$
2		$d = \frac{\bar{X}_1 - \bar{X}_2}{S_{\text{within}}}$

Note. d = Cohen's d , $X_1 - X_2$ = mean difference of comparison data (i.e., time points or groups being compared); S_{Time1} , standard deviation Time 1; S_{within} = pooled estimate of the population standard deviation; n = sample size of group; S = group standard deviation.

Table 2*Computational Formulas for Combining Independent Groups*

Means	Standard Deviation
$\frac{N_1 M_1 + N_2 M_2}{N_1 + N_2}$	$\sqrt{\frac{(N_1 - 1) SD_1^2 + (N_2 - 1) SD_2^2 + \frac{N_1 N_2}{N_1 + N_2} (M_1^2 + M_2^2 - 2M_1 M_2)}{N_1 + N_2 - 1}}$

Note. N = group sample sizes; M = group mean; SD; group standard deviation.

Table 3*Conversion Formulas*

Steps	Conversion of r-indices to d-indices
1	$d = \frac{2r}{\sqrt{1 - r^2}}$
2	$V_d = \frac{4V_r}{(1 - r^2)^3}.$

Note. d = Cohen's d ; r = Pearson's correlation; V_d = variance of Cohen's d ; V_r = variance of Pearson's correlation.

Table 4*Studies Included in Study 1 and 2: Quantitative Studies on the Effect of Chairwork*

Study	Between	Within	Resolution	Symptom	Self-Esteem/Self-Compassion	Process
Single- Session						
Beauchet et al., (2019)		X				X
Clarke (1981)	X	X	X			
Delavechia et al., (2016)		X		X		X
de Oliveira et al., (2012a)		X		X		X
Diamond et al., (2010)		X				X
Falconer et al., (2014)		X	X		X	
Greenberg & Clarke (1981)	X					X
Greenberg & Dompierre (1981)	X	X		X		X
Greenberg & Higgins (1980)	X					X
Greenberg & Webster (1982)		X	X	X	X	
Maslove (1989)	X					X
Narkiss-Guez et al., (2015)		X				X
Paivio et al., (2001)		X	X			
Souliere (1995)	X	X	X	X		
Trachsel et al., (2012)	X	X	X	X		
Whelton & Greenberg (2005)		X		X	X	X
Multi-Session						
Chagigiorgis, (2011)		X				X
de Oliveira et al., (2012b)	X	X		X		
Diamond et al., (2016)	X		X	X		X
Duran et al., (2019)	X			X		X

Ellison et al., (2009)	X			X	X	
Goldman et al., (2006)	X			X	X	
Paivio et al., (2010)		X	X	X	X	
Ralston (2006)		X				X
Rodrigues et al., (2022)	X	X		X		
Shahar et al., (2012)		X	X	X	X	
Stiegler et al., (2017)		X	X	X		
Stiegler, Molde et al., (2018)		X				X

Table 5*The Outcome Effects of using a Single-Session of Chairwork*

Study	Measure	Sample Size	Effect Size	Weight	Outcome Effect	Binomial <i>p</i>
Resolution						
Clarke (1981)	Scale of Vocational Indecision (Osipow and Carney, 1975)	16	1.63	4	1.20	.06
*Falconer et al., (2014)	Forms of Self-Criticism/Self-Reassurance Scale (Gilbert et al., 2004)	43	0.68	6.56		
*Greenberg & Webster (1982)	Conflict Resolution Scale (Greenberg & Dompierre, 1981)	31	0.4	5.57		
Souliere (1995)	Unfinished Business Resolution Scale (Singh & Greenberg, 1991)	20	2.66	4.47		
Trachsel et al., (2012)	Ambivalence Regarding Continuation or Separation of the Relationship (Trachsel & Boller, 2008)	24	1.1	4.90		
Symptom Change						
Delavechia et al., (2016)	Valence of punitive belief	39	0.15	6.24	.96	.02
de Oliveira et al., (2012a)	Valence of punitive belief	166	0.41	12.88		
*Greenberg & Dompierre (1981)	Target Complaint Discomfort Box Scale (Battle et al., 1966)	16	1.75	4		
Greenberg & Webster (1982)	The State-Trait Anxiety Inventory - <i>State-Form Subscale</i> (Janis & Mann, 1977)	31	1.00	5.57		
Souliere (1995)	Target Complaint Discomfort Box Scale (Battle et al., 1966)	20	4.58	4.47		

Trachsel et al., (2012)	Center for epidemiologic studies depression scale (Hautzinger & Bailer, 1993)	24	0.26	4.9		
Whelton & Greenberg (2005)	The Visual Analogue Scale - <i>Dysphoria</i> (Albersnagel, 1988)	30	0.25	5.48		
<hr/>						
Self-Compassion/Self-Esteem						
*Falconer et al., (2014)	The Self-Compassion and Self-Criticism Scale - <i>Self-Compassion Subscale</i> (Falconer et al., 2013)	43	0.42		n/a	n/a
Greenberg & Webster (1982)	Epstein's Prevailing Mood Scale - <i>Pleased with Self Subscale</i> (Epstein, 1971)	31	0.36			
Whelton & Greenberg (2005)	The State Self-Esteem Scale (Heatherton & Polivy, 1991)	30	0.08			

Note. *Combined effect of two chairwork conditions (e.g., 1st person self-compassion and 3rd person self-compassion; high experienced and low experienced therapists; resolvers and non-resolvers); n/a; not applicable.

Table 6*Effects of using a Multi-Session Course of Chairwork on Symptom Change*

Study	Measure	Sample Size	Effect Size	Weight	Outcome Effect	Binomial <i>p</i>
de Oliveira et al., (2012b)	The Liebowitz Social Anxiety Scale (Liebowitz, 1987)	16	1.69	4	1.42	.13
Rodrigues et al., (2022)	Yale-Brown Obsessive-Compulsive Scale (Goodman et al., 1989)	9	0.58	3		
Shahar et al., (2012)	Beck Depression Inventory-II (Becks et al., 1996)	10	1.13	3.16		
^a Stiegler et al., (2017)	Beck Depression Inventory (Beck et al., 1996)	21	1.80	4.58		

Note. *n.s.*, not significant; ^a effect size converted from standardized beta coefficient. Two studies used a gestalt's approach to the two-chair task (i.e., Shahar et al., 2012; Stiegler et al., 2017) and two studies used trial-based chairwork (i.e., de Oliveira et al., 2012b; Rodrigues et al., 2022).

Table 7*Comparison Groups Examined Through Meta-Analyses*

Study	Chairwork Intervention	Sample Size	Comparison Intervention	Sample Size
Single-Session: Post-Session Comparisons				
Clarke (1981)	Two-Chair Task	15	Problem-Solving	15
Greenberg & Clarke (1978)	Two-Chair Task	15	Empathetic Responding	15
Greenberg & Dompierre (1981)	Two-Chair Task	8	Empathetic Responding	8
Greenberg & Higgins (1980)	Two-Chair Task	14	Focusing	14
Maslove (1989)	Empty-Chair Task	12	Empathetic Responding	12
Soulliere (1995)	Empty-Chair Task	20	Cognitive Restructuring	20
Traschsel et al., (2012)	Two-Chair Task	24	Decision-Making	25
Multi-Session: Post-Treatment Comparisons				
de Oliveira et al., (2012b)	Trial-Based Chairwork	16	Conventional CBT	14
Duren et al., (2019)	Trial-Based Chairwork	38	Prolonged	34
Goldman et al., (2006)	Two-Chair/Empty-Chair Task	36	Person-Centered Therapy	36
Rodrigeous et al., (2022)	Trial-Based Chairwork	9	Conventional CBT Interventions	13
^a Stiegler et al., (2017)	Two-Chair Task	21	Empathetic Responding	21
Multi-Session: Follow-Up Comparisons				
de Oliveira et al., (2012b)	Trial-Based Chairwork	12	Conventional CBT Interventions	11

Duren et al., (2019)	Trial-Based Chairwork	31	Prolonged	28
Ellison et al., (2010)	Two-Chair/Empty-Chair Task	27	Person-Centered Therapy	29
Rodríguez et al., (2022)	Trial-Based Chairwork	9	Conventional CBT Interventions	13

Note. CBT, Cognitive Behavioural Therapy; ^a A within-subject design was used to examine changes in outcome between earlier sessions of treatment, in which empathetic responding was used, and later chairwork session

Table 8*Articles Included in Study 3: Qualitative Inquires on Participating in Chairwork*

Bell et al. (2019)

Bell et al. (2020)

Bell et al. (2021)

Chadwick (2003)

*Holowaty (2005)

*O'Connell Kent et al. (2020)

Stiegler, Binder et al. (2018)

*Timulak et al. (2017)

van Maarschalkerweerd et al. (2021)

Note. * = These qualitative inquires were not exclusively focused on the study of chairwork but rather of treatment packages that included chairwork. However, in these studies clients spontaneously identified chairwork as a helpful intervention.

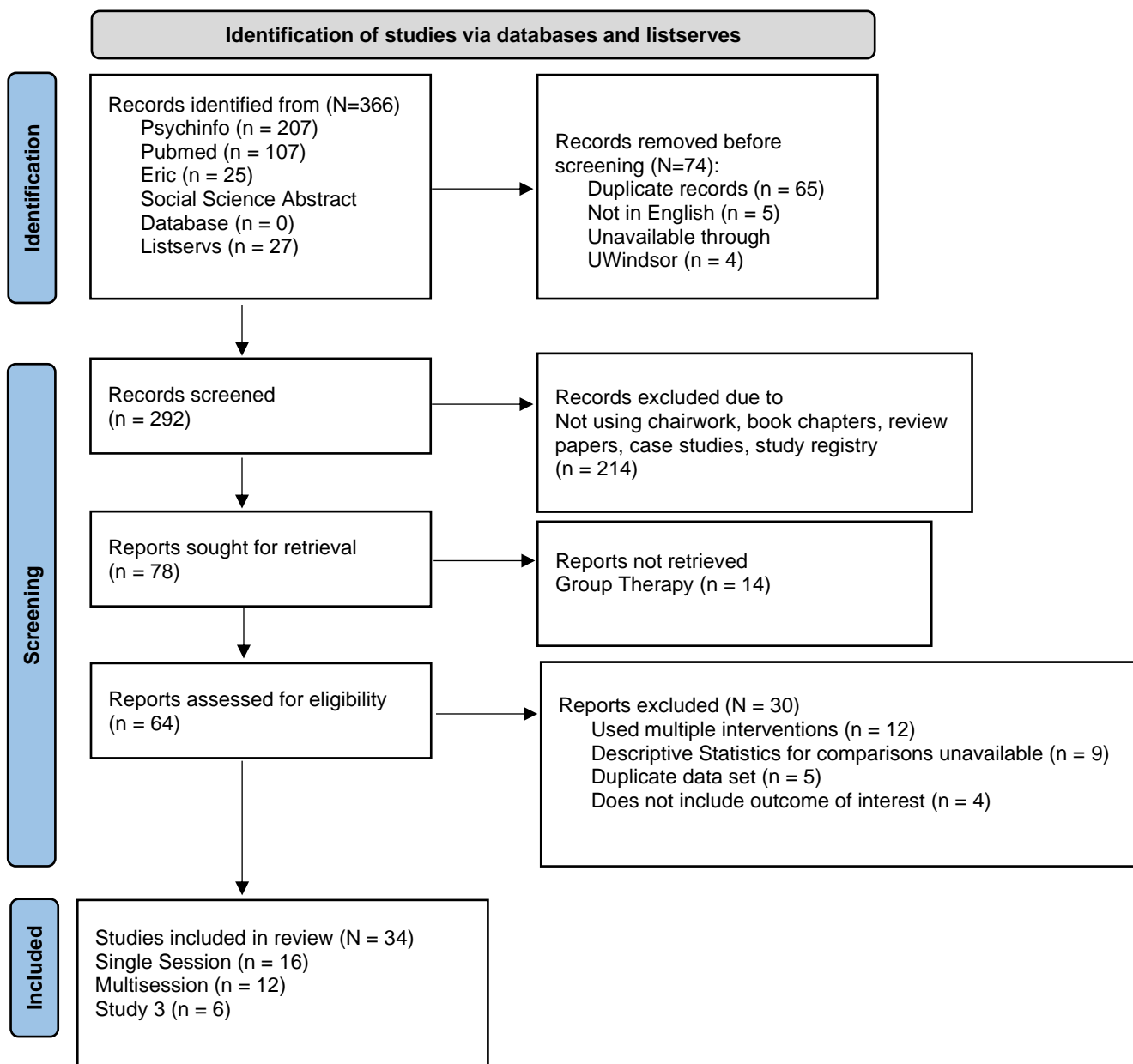
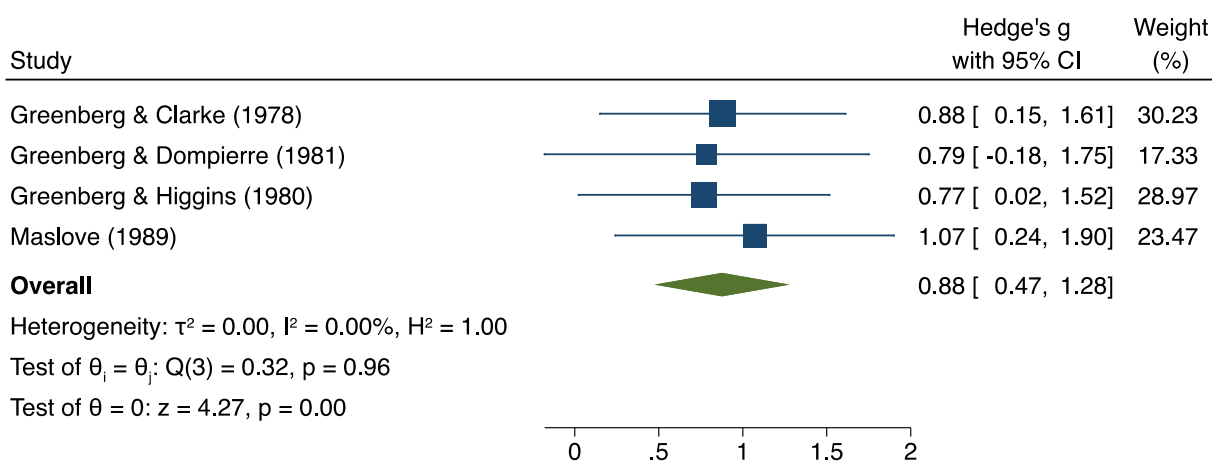
Figure 1*Prisma Diagram: Search Results*

Figure 2

Meta-Analysis: Effects of Single-Session Chairwork on Depth of Experiencing, Compared to Other Interventions



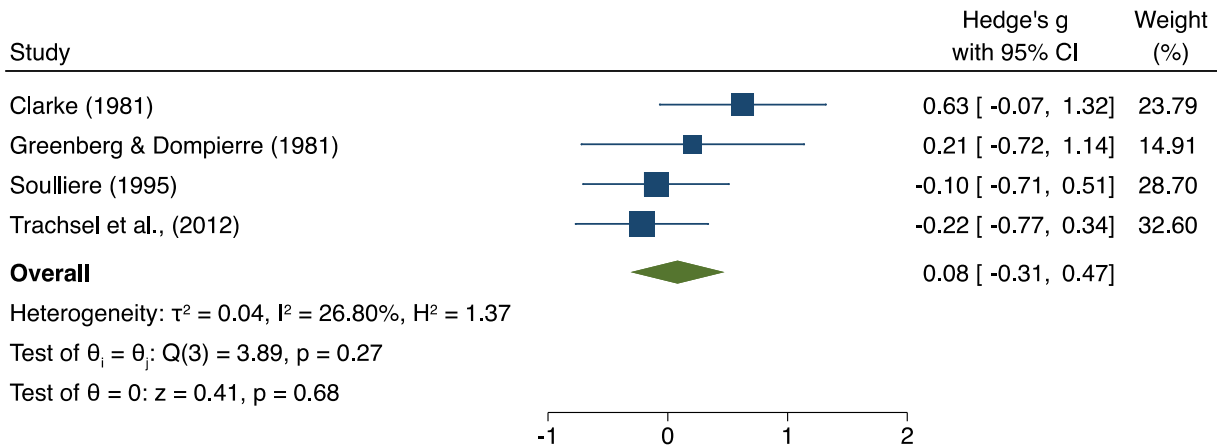
Random-effects REML model

Note. All four studies included in this analysis each used a gestalt therapy approach to chairwork.

Figure 3

Meta-analysis: Effects of Single-Session Chairwork on Resolution, Compared to Other

Interventions

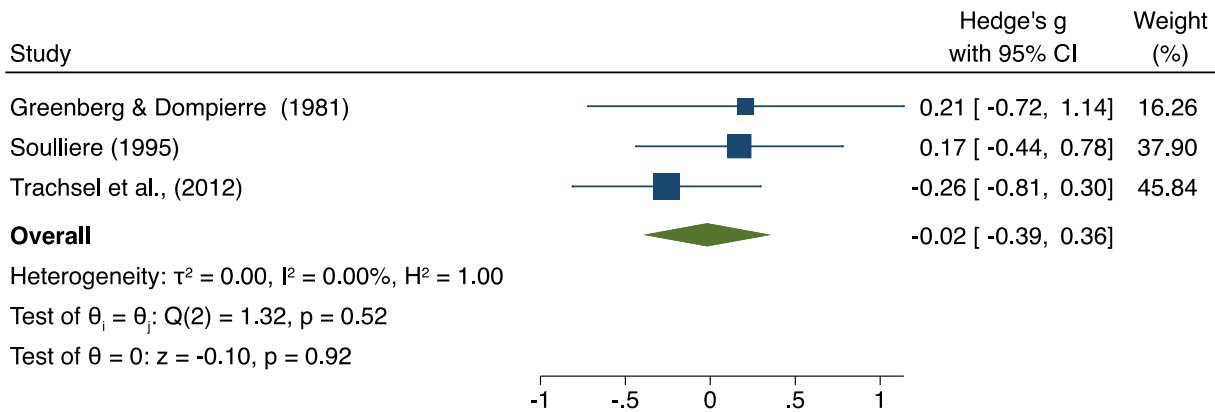


Random-effects REML model

Note. Three studies included in this analysis use a gestalt therapy approach to chairwork, while the fourth (Trachsel et al., 2012) used a Trial-Based chairwork.

Figure 4

Meta-analysis: Effects of Single-Session Chairwork on Symptom Change, Compared to Other Interventions

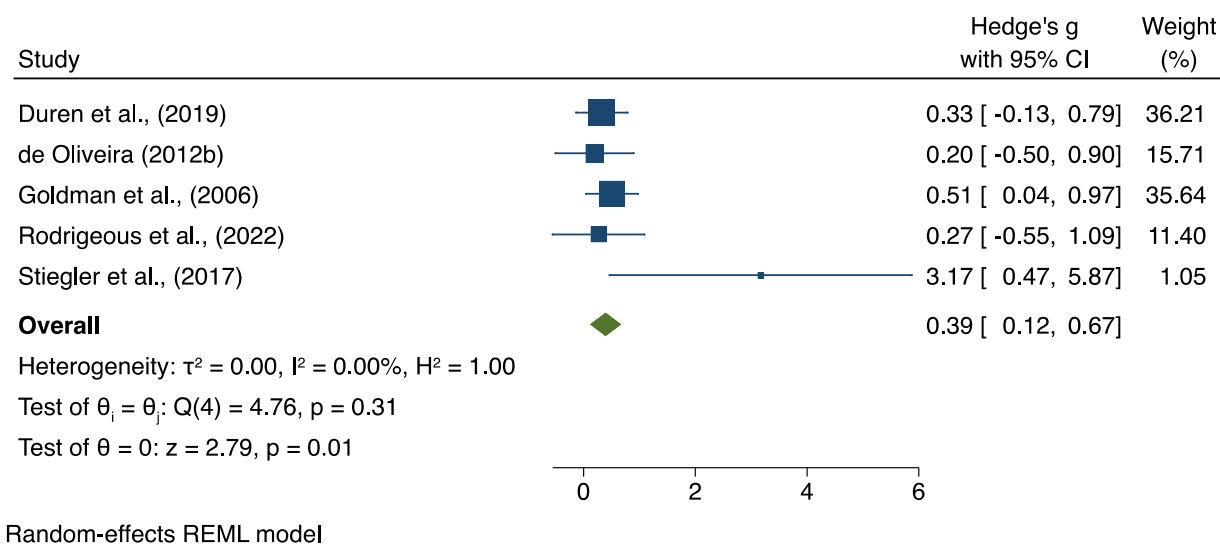


Random-effects REML model

Note. Two studies included in this analysis use a gestalt therapy approach to chairwork, while the third (Trachsel et al., 2012) used Trial-Based chairwork.

Figure 5

Meta-analysis: Effects of Multi-Session Chairwork on Symptom Change, Compared to Other Interventions

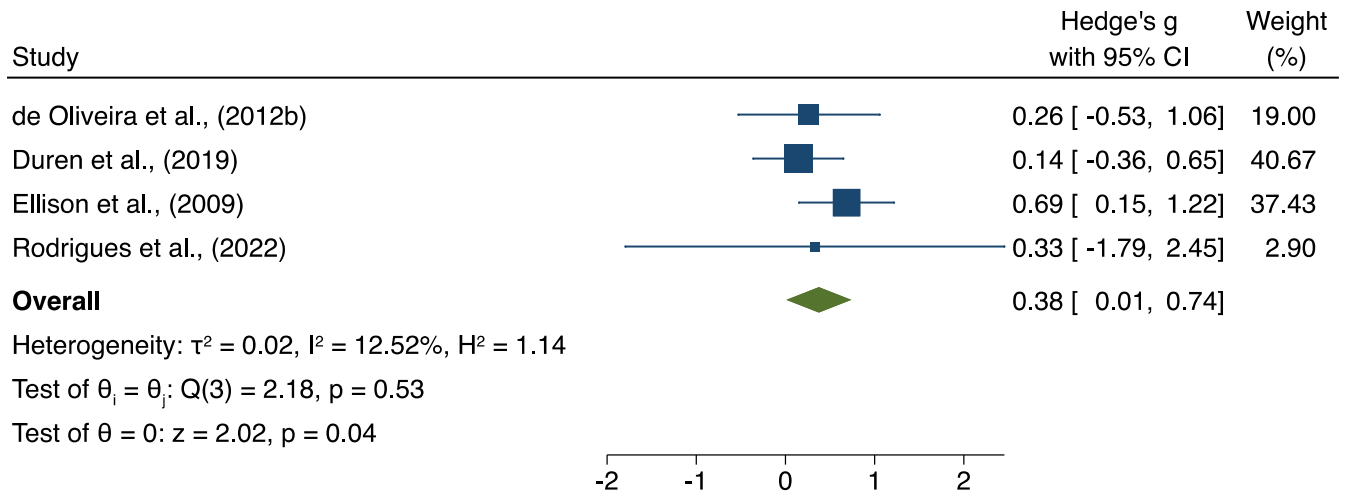


Note. Three studies included in this analysis use Trial-Based chairwork, while two (Goldman et al., 2006; Stiegler et al., 2017) use a gestalt approach to chairwork.

Figure 6

Meta-analysis: Effects of Multi-Session Chairwork on Symptom Change at Follow-up,

Compared to Other Interventions



Random-effects REML model

Note. Three studies included in this analysis use Trial-Based chairwork, while one (Ellison et al., 2009) use a gestalt approach to chairwork.

Appendix A

Eligible Studies Meeting the Exclusion Criteria (N = 30)

Used multiple Interventions (n = 12)

1. Arimitsu, K. (2016). The effects of a program to enhance self-compassion in Japanese individuals: A randomized controlled pilot study. *The Journal of Positive Psychology, 11*(6), 559–571. <https://doi.org/10.1080/17439760.2016.1152593>
2. Babl, A., Grosse Holtforth, M., Heer, S., Lin, M., Stähli, A., Holstein, D., Belz, M., Egenolf, Y., Frischknecht, E., Ramseyer, F., Regli, D., Schmied, E., Flückiger, C., Brodbeck, J., Berger, T., & Caspar, F. (2016). Psychotherapy integration under scrutiny: investigating the impact of integrating emotion-focused components into a CBT-based approach: a study protocol of a randomized controlled trial. *BMC psychiatry, 16*(1), 423. <https://doi.org/10.1186/s12888-016-1136-7>
3. Caetano, Depreeuw, B., Papenfuss, I., Curtiss, J., Langwerden, R. J., Hofmann, S. G., & Neufeld, C. B. (2018). Trial-Based Cognitive Therapy: Efficacy of a New CBT Approach for Treating Social Anxiety Disorder with Comorbid Depression. *International Journal of Cognitive Therapy, 11*(3), 325–342. <https://doi.org/10.1007/s41811-018-0028-7>
4. de Oliveira, I. R. (2008). Trial-Based Thought Record (TBTR): Preliminary data on a strategy to deal with core beliefs by combining sentence reversion and the use of analogy with a judicial process. *Revista Brasileira de Psiquiatria, 30*(1), 12–18. <https://doi.org/10.1590/S1516-44462008000100003>
5. Greenberg, L. S., & Malcolm, W. (2002). Resolving unfinished business: Relating process to outcome. *Journal of Consulting and Clinical Psychology, 70*(2), 406–416. [doi:http://dx.doi.org/10.1037/0022-006X.70.2.406](http://dx.doi.org/10.1037/0022-006X.70.2.406)

6. Greenberg, L. J., Warwar, S. H., & Malcolm, W. M. (2008). Differential effects of emotion-focused therapy and psychoeducation in facilitating forgiveness and letting go of emotional injuries. *Journal of Counseling Psychology*, 55(2), 185–196. <https://doi.org/10.1037/0022-0167.55.2.185>
7. Grosse Holtforth, M., Hayes, A. M., Sutter, M., Wilm, K., Schmied, E., Laurenceau, J. P., & Caspar, F. (2012). Fostering cognitive-emotional processing in the treatment of depression: a preliminary investigation in exposure-based cognitive therapy. *Psychotherapy and psychosomatics*, 81(4), 259–260. - <https://doi.org/10.1159/000336813>
8. Raw Data provided from Listserv member (Rafael Jódar Anchía)
9. Shahar, B., Bar-Kalifa, E., & Alon, E. (2017). Emotion-focused therapy for social anxiety disorder: Results from a multiple-baseline study. *Journal of Consulting and Clinical Psychology*, 85(3), 238-249. doi:<http://dx.doi.org/10.1037/ccp0000166>
10. Paivio, S. C., & Greenberg, L. S. (1995). Resolving "unfinished business": Efficacy of experiential therapy using empty-chair dialogue. *Journal of Consulting and Clinical Psychology*, 63(3), 419-425
11. O'Connell Kent, J. A., Jackson, A., Robinson, M., Rashleigh, C. & Timulak, L. (2021). Emotion-focused therapy for symptoms of generalised anxiety in a student population: An exploratory study. *Counselling and Psychotherapy Research*, 21(2), 260–268. <https://doi.org/10.1002/capr.12346>
12. Timulak, L., McElvaney, J., Keogh, D., Martin, E., Clare, P., Chepukova, E. & Greenberg, L. S. (2017). Emotion-focused therapy for generalized anxiety disorder: An exploratory study. *Psychotherapy*, 54(4), 361–366. <https://doi.org/10.1037/pst0000128>

Descriptive Statistics for Comparisons not Unavailable (n = 9)

1. Conoley, C.W., Conoley, J.C., McConnell, J.A. & Kimzey, C.E. (1983) The effect of the ABCs of rational emotive therapy the empty-chair techniques of Gestalt therapy on anger reduction. *Psychotherapy: Theory, Research and Practice*, 20, 112–117. doi: 10.1037/h0088470.
2. Johnson, W. R., & Smith, E. W. L. (1997). Gestalt empty-chair dialogue versus systematic desensitization in the treatment of a phobia. *Gestalt Review*, 1(2), 150-162.
3. Nardone, S., Pascual-Leone, A., & Kramer, U. (2021). “strike while the iron is hot”: Increased arousal anticipates unmet needs. *Counselling Psychology Quarterly*, doi:http://dx.doi.org/10.1080/09515070.2021.1955659
4. Neff, K. D., Kirkpatrick, K. L., & Rude, S. S. (2007). Self-compassion and adaptive psychological functioning. *Journal of Research in Personality*, 41(1), 139–154. <https://doi.org/10.1016/j.jrp.2006.03.004>
5. Sabey, A. K., Stillar, A., & Lafrance, A. (2021). Processes and outcomes of an emotion-focused family therapy two-chair intervention for transforming problematic parenting patterns. *Journal of Marital and Family Therapy*, doi:http://dx.doi.org/10.1111/jmft.12580
6. Sicoli, L. A., & Hallberg, E. T. (1998). An analysis of client performance in the two-chair method. *Canadian Journal of Counselling*, 32(2), 151-162.
7. Sturgeon, S. (2005). *Object relations as a predictor of conjugal bereavement adjustment* (Order No. AAI3159275). Available from APA PsycInfo®. (621051363; 2005-99012-330).
8. O'Grady, D. F. (1986). *The effects of adding a somatic intervention to the gestalt two-chair technique on career decision-making* Available from APA PsycInfo®. (617331957;

1987-54725-001).

9. Vrana, G. C. (2021). *Resolution of self-interruption in emotion-focused therapy: A model of client process*. Unpublished dissertation. York University, Retrieved from:
https://yorkspace.library.yorku.ca/xmlui/bitstream/handle/10315/39140/Vrana_Genevieve_C_2021_PhD.pdf?sequence=2&isAllowed=y

Does not include outcome of interest (n = 4)

1. Hall, I. E. (2008). *Therapist relationship and technical skills in two versions of emotion focused trauma therapy* (Order No. AAINR35100). Available from APA PsycInfo®. (621736031; 2008-99120-159). – treatment adherence
2. Holowaty, K. A. M. (2005). *Process characteristics of client-identified helpful events in emotion-focused therapy for adult survivors of childhood abuse (EFT-AS)* (Order No. AAINQ92546). Available from APA PsycInfo®. (621044564; 2005-99002-280).
3. Kramer, U., Kolly, S., Maillard, P., Pascual-Leone, A., Samson, A. C., Schmitt, R., . . . Draganski, B. (2018). Change in emotional and theory of mind processing in borderline personality disorder: A pilot study. *Journal of Nervous and Mental Disease*, 206(12), 935-943. doi:<http://dx.doi.org/10.1097/NMD.0000000000000905>
4. Powell, Oliveira, O. H. de, Seixas, C., Almeida, C., Grangeon, M. C., Caldas, M., Bonfim, T. D., Castro, M., Galvão-de Almeida, A., Galvão-de Almeida, Moraes, R. de O., Sudak, D., & de-Oliveira, I. R. (2013). Changing core beliefs with trial-based cognitive therapy may improve quality of life in social phobia: a randomized study. *Revista Brasileira de Psiquiatria*, 35(3), 243–247. <https://doi.org/10.1590/1516-4446-2012-0863>

Duplicate data set (n = 5)

1. Malcolm, W. M. (2000). *Relating process to outcome in the resolution of unfinished business in process experiential psychotherapy* (Order No. AAINQ39287). Available from APA PsycInfo®. (619559146; 2000-95004-159).
2. Mcmain, S. F. (1996). *Relating changes in self-other schemas to psychotherapy outcome* (Order No. AAMNN99634). Available from APA PsycInfo®. (618988669; 1996-95007-028). – same as Paivio and Greenberg 1995
3. Paivio, S. C., Holowaty, K. A. M., & Hall, I. E. (2004). The influence of therapist adherence and competence on client reprocessing of child abuse memories. *Psychotherapy: Theory, Research, Practice, Training*, 41(1), 56-68.
doi:<http://dx.doi.org/10.1037/0033-3204.41.1.56>
4. Paivio, S. C., & Bahr, L. M. (1998). Interpersonal problems, working alliance, and outcome in short-term experiential therapy. *Psychotherapy Research*, 8(4), 392-407.
doi:<http://dx.doi.org/10.1093/ptr/8.4.392>.
5. Paivio, S. C. (1994). *Comparative efficacy of experiential therapy using empty-chair dialogue and psychoeducational group treatment for resolving unfinished business* Available from APA PsycInfo®. (618955516; 1996-74332-001).

Vita Auctoris

Tabarak Baher was born on May 2nd, 1998 in Babylon, Iraq. She obtained her degree in Honours Psychology with Thesis from the University of Windsor in 2020. She is currently completing her second year of the Adult Clinical Psychology MA program and is anticipated to graduate in 2023.