ABSTRACT

Title of Dissertation: CLIENT ATTACHMENT DIMENSIONS AND THERAPIST SKILLS: A LONGITUDINAL ANALYSIS

Judith Ann Gerstenblith, Doctor of Philosophy, 2023

Dissertation directed by: Professor Clara E. Hill, Department of Psychology, University of Maryland, College Park

Although scholars have highlighted the usefulness of attachment theory for psychotherapy (e.g., Bowlby, 1988; Holmes & Slade, 2018; Mallinckrodt, 2010), minimal empirical research exists examining the relationship between client attachment and therapist skills. In this study, we first investigated the factor structure of the therapist- and client-rated Helping Skills Measure (HSM; Hill & Kellems, 2002) for 5,830 psychodynamic psychotherapy sessions of 202 adult community clients working with 25 doctoral student therapists in a university clinic. The multilevel-confirmatory factor analysis supported a 3-factor structure (Exploration, Insight, Action), stable across time, at the session level in psychodynamic psychotherapy. Next, using a dynamic structural equation model for 592 sessions of 37 clients working with 6 therapists using both the HSM and the Experiences in Close Relationships-Short Form (Wei et al., 2007), we found a slight increase in exploration and insight skills as rated by therapists, but no significant change in client attachment dimensions over time. For the model using the therapist-rated HSM, we found significant and positive auto correlations for Anxiety, Avoidance, and Action, and a significant and positive cross-lagged correlation for Avoidance in one session predicting Action in the next

session. For the model using the client-rated HSM, we found significant and positive auto correlations for Anxiety, Avoidance, and Exploration, and significant and negative cross-lagged correlations for Anxiety in one session predicting Exploration and Action in the next session. We did not find any significant cross-lagged correlations for therapist skills in one session predicting client attachment dimensions in the next session. We provide suggestions for practice and research, including training in attachment-informed therapy to improve therapist responsiveness and linking associations between client attachment and therapist skills to client outcome.

CLIENT ATTACHMENT DIMENSIONS AND THERAPIST SKILLS: A LONGITUDINAL ANALYSIS

by

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Dedication

This dissertation is dedicated to Clara Hill,

who teaches by example how to blend the science and art of psychotherapy

through the creative and flexible use of helping skills.

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Chapter 1: Introduction

From an attachment theory perspective (Bowlby, 1988), the goal of psychotherapy is to help clients become more secure. Through coming to use their therapists as a secure base (Bowlby, 1988; Farber & Metzger, 2009), clients can reflect on their inner world and interactions, become aware of and gain insight into maladaptive relational patterns, better regulate their emotions, and develop healthier ways of being with themselves and others. Theoretically, therapists help clients become more secure in part by tailoring their interventions to different client attachment styles (Wiseman & Egozi, 2021). There is some preliminary evidence to suggest that therapists strategically regulate distance from their clients by attuning to client attachment style, the status of the therapeutic relationship, the emotional intensity of the session, and the needs of the moment (Daniel, 2006; Mallinckrodt, 2010). We speculate that therapists empathically attune to clients by responding differently based on client attachment style and that therapist skills serve to help clients make changes in their relationships with themselves and others. Therefore, the overall purpose of the present study was to investigate the relationship between client attachment and therapist skills in psychodynamic psychotherapy.

Attachment Theory as a Framework for Psychotherapy

Bowlby (1969/1982) theorized that humans have an instinctual behavioral system that drives them to regulate proximity to their primary caregiver(s) for the evolutionary purpose of survival. Ideally, infants use their primary caregiver(s) as a *secure base* from which to explore the world and a *safe haven* to which they can seek comfort during times of threat (Ainsworth, 1989; Bowlby, 1969/1982). Based on the experiences of availability and responsiveness of the caregiver, the child develops adaptive strategies to obtain and maintain proximity to that caregiver (Ainsworth et al., 1978). Children thus develop different attachment patterns

depending on their attachment-related experiences. These three attachment patterns (i.e., secure, anxious-ambivalent, avoidant) identified by Ainsworth et al. (1978), as well as a fourth pattern (i.e., disorganized/disoriented) discovered later by Main and Solomon (1990), can be conceptualized as regions in a two-dimensional space of *attachment anxiety* and *attachment avoidance* (Brennan et al., 1998). One's position on the anxiety dimension indicates the degree to which they use hyperactivating strategies (e.g., intensifying emotional responses) due to worrying about abandonment and rejection. One's position on the avoidance dimension indicates the degree to which they use deactivating strategies (e.g., denying needs and avoiding closeness) as a result of discomfort with interdependence and emotional intimacy (Cassidy & Kobak, 1988; Mikulincer & Shaver, 2007). Research on adult attachment provides evidence for this two-dimensional structure underlying attachment styles (Mikulincer & Shaver, 2012).

Adults' positions on the anxiety and avoidance dimensions are an outgrowth of repeated interactional sequences throughout infancy and childhood, involving the caregiver's responsiveness and the child's adaptive behaviors. These sequences become organized into mental representations called *internal working models* (IWM) which guide individuals in future relational interactions by helping them regulate emotions, interpret information, and predict behavior (Bowlby, 1988; Bretherton & Munholland, 2008; Nelson, 1996). Bowlby posited inter-related IWMs of self, others, and the world (Bowlby, 1973, 1980), which are relatively stable throughout the lifespan yet open to revision based on significant relational experiences.

Attachment theory, including attachment dimensions, strategies, and IWMs, can provide a useful framework for exploring the nature of the therapeutic process and the therapeutic relationship that unfolds in adult psychotherapy (Daniel, 2015; Slade, 2016). Psychotherapy has the potential to activate the client's attachment system because of the psychological threat that

may arise when discussing sensitive material (e.g., Mikulincer et al., 2002). In serving as a secure base for their clients, therapists can provide clients with the feeling of safety necessary to fully explore deeply ingrained fears and experiences (Bowlby, 1988). Thus, Bowlby (1988) theorized that clients can increase attachment security by experiencing their therapist as a secure base and therefore developing a corrective relationship, and revising IWMs by reappraising attachment histories. Supporting Bowlby's theory that therapy can lead to changes in client attachment, there is some preliminary evidence that attachment security increases and attachment insecurity decreases during therapy (e.g., Taylor et al., 2015). However, results need to be interpreted with caution given that most of the studies involve pre-post designs, which lack the nuance of discontinuity and nonlinearity of change in psychotherapy (Hayes et al., 2007) and do not always account for directionality (Martin et al., 2017). Furthermore, results seem inconsistent, with several studies (e.g., Lawson et al., 2006; Muller & Rosenkranz, 2009; Strauss et al., 2011) providing mixed evidence or evidence that attachment does not significantly change in psychotherapy.

Client Attachment Strategies Used in Psychotherapy

The act of seeking therapy and the specific attachment strategies used by clients in psychotherapy differ empirically among clients with different attachment styles and lead to different dynamics in the development of the therapeutic relationship (Wiseman & Atzil-Slonim, 2018). For example, securely-attached people might readily seek treatment in a time of crisis based on positive expectations that help is available and a treatment provider will be reliable in providing support (Riggs et al., 2002). These clients use the most flexible emotion regulation strategies by expressing, managing, and coping with their emotions in healthy ways. In contrast, anxiously attached clients want help with their problems, but sometimes find it difficult to use

help constructively (e.g., Lopez, 2009). Anxiously attached clients tend to hyperactivate or maximize their emotional expression and often demand support and attention from the therapist, communicating in a chaotic and dramatic fashion (e.g., Wallin, 2007). In contrast, people with avoidant attachment styles deactivate or minimize their emotional expression. They may prefer to cope on their own rather than seeking help (Muller, 2010). When they do go to psychotherapy, a client with an avoidant attachment style may shy away from open and clear disclosure in an attempt to distance themselves from the therapist (Mikulincer & Shaver, 2007). Furthermore, they may downplay uncomfortable emotions such as fear and sadness. Unlike anxious or avoidant clients, those with a disorganized/fearful attachment (high on both anxious and avoidant attachment dimensions) display inconsistent, non-systematic, and conflicting deactivating and hyperactivating strategies. They shift strategies suddenly and unpredictably, thus sending mixed messages to the therapist like, "Don't come near me, but please come and help" (Wallin, 2007). An understanding of attachment theory in general and clients' attachment strategies in particular can inform therapists about how to modify treatment to be responsive to their client's attachment needs (Slade, 2008).

Therapist Responsiveness Based on Client Attachment Style

Theoretically, clients benefit from therapy tailored to their attachment style (e.g., Bernier & Dozier, 2002; Daly & Mallinckrodt, 2009). Therapists empathically attune to clients' attachment styles by making microadjustments in response to emerging context of the clients' relational needs (Wiseman & Egozi, 2021). In addition, therapists demonstrate responsiveness by attuning to the status of the therapeutic relationship, as well as the need for balance in terms of the level of transparency and disclosure in the therapeutic relationship and the immediacy and emotional intensity of the specific session (Mallinckrodt, 2000, 2010). In his model of

therapeutic distance, Mallinckrodt (2000, 2010) postulated that therapists should match the client's attachment strategy at the beginning of therapy, and then move to a complementary role during the working phase of therapy. Thus, therapists may employ *counter-complimentary attachment proximity strategies* as the therapy progresses (Mallinckrodt, 2000). For example, with an avoidantly attached client who prefers distance, the therapist might initially keep some distance and then gradually increase proximity by deepening the interpersonal emotional engagement. In contrast, with an anxiously attached client, the therapist might initially allow closeness but then gradually decrease proximity. Thus, Mallinckrodt (2010) proposed that therapists use skills targeted for the client's specific attachment style to build and maintain the working alliance, work through client transference, and manage ruptures.

In one test of this theoretical approach, Daly and Mallinckrodt (2009) interviewed experienced interpersonal therapists about how they would work with hypothetical clients described as having high attachment anxiety or avoidance. Therapists explained how they would strategically regulate therapeutic distance to create a corrective emotional experience by gradually increasing distance for clients with attachment anxiety and gradually decreasing distance for clients with attachment avoidance.

Based on the results of this qualitative study, Mallinckrodt et al. (2015) developed The Therapeutic Distance Scale to assess clients' experiences of distance versus engagement. In a study of university counseling center clients, they found that initial client avoidance was significantly correlated with Growing Engagement during psychotherapy; however, initial client anxiety was not significantly correlated with Growing Autonomy. Therefore, clients with higher initial levels of avoidant attachment may have had a corrective experience in establishing a secure and engaged connection in therapy. Importantly, this was a pilot study, and the authors

noted that data may have been collected too early (e.g., fifth session) to truly assess both the quality of the psychotherapy attachment relationship and the therapeutic distance. Nevertheless, clients with different attachment styles may require different types of therapist responsiveness (Wiseman & Egozi, 2021).

Therapist Responsiveness to Client Attachment Using the Hill Helping Skills Model

Therapist responsiveness, in part, involves the ways in which therapists formulate and adapt their skills to meet client needs (Watson & Wiseman, 2021). An effective model of therapist skills is Hill's (2020) helping skills model, which integrates exploration, insight, and action skills with theory, cultural considerations, and clinical awareness. Exploration skills (open questions/probes for thoughts and feelings, restatements, reflections of feelings, and disclosure of feelings) are theorized to help clients explore their thoughts and feelings, insight skills (challenges, open questions/probes for insight, interpretations, immediacy, and disclosure of insight) are theorized to help clients gain a deeper understanding of themselves, and action skills (open questions/probes for action, information, feedback, process advisement, direct guidance, and disclosure of strategies) are theorized to help clients change their behaviors. Ridley et al. (2011) concluded that the Hill helping skills model is the most effective training model in terms of skill coverage; culture; theory; cognition and affect; integration of skills, cognition, and affect; and relationship between skills and therapeutic change.

Hill and colleagues conducted a handful of studies investigating the relationship between specific therapist skills (e.g., restatements, reflections of feelings, open questions for thoughts or feelings, advice) and client attachment style (i.e., measured on anxious and avoidant dimensions). In two recent studies (Anvari et al., 2019; Anvari et al., 2022), researchers investigated whether skills associated with emotional expression (i.e., restatements, reflections of

feelings, and open questions for thoughts or feelings) and client attachment style would predict subsequent client expression. In the 3rd and 4th sessions of a sample of 36 clients, Anvari et al. (2019) found that for less avoidantly attached clients, restatements (i.e., rephrasing content) were associated with low levels of subsequent client emotional expression. For more avoidantly attached clients, restatements were associated with higher levels of emotional expression. Anvari et al. (2019) suggested that less avoidant (i.e., more secure) clients may need more structure and direction in order to explore on an emotional level. However, restatements may have been helpful in eliciting emotional expression from avoidant clients because restatements are not forceful. In a follow-up study focusing on the 10th session of psychotherapy of a sample of 62 clients, Anvari et al. (2022) found that less anxiously attached clients responded to restatements and reflections of feeling with decreased emotional exploration. Further, open questions for feelings (as opposed to reflections of feelings) were associated with increased cognitive-behavioral exploration, especially for less anxiously attached clients. In contrast to Anvari et al. (2019), Anvari et al. (2022) suggest that compared to less anxiously attached clients (i.e., more secure), more anxiously attached clients may need more help from therapists to focus on thoughts and feelings. The discrepancy in findings suggests the need for additional research to continue to explicate the complex interaction between therapist skills, client attachment, and phase in psychotherapy.

Prass et al. (2021) looked at the first instance of solicited and unsolicited advice-giving for 98 clients and 30 therapists in the first 20 sessions of psychodynamic psychotherapy to investigate whether therapist and client attachment styles predicted whether therapists gave advice (i.e., recommendation about what to do, think, or feel). For solicited advice, therapists with high attachment anxiety were more likely to give advice to clients with higher anxious

attachment (compared to clients with lower anxious attachment). Therapists with low attachment anxiety were more likely to give advice to clients with lower anxious attachment (compared to clients with higher anxious attachment). Prass et al. suggested that perhaps therapists were "pulled" to give advice to clients who had similar attachment styles to theirs. Therapists were also more likely to give advice to clients when either the therapist or the client had lower attachment avoidance, suggesting that more avoidantly attached therapists may be less responsive to advice-seeking and more avoidantly attached clients may seek advice more indirectly. For unsolicited advice, therapists with high attachment avoidance were less likely to give advice to clients with high attachment anxiety. Avoidant therapists may have distanced themselves from anxious clients.

It is difficult to compare across these three studies due to different skills, methodologies, and results. Taken together, the results suggest that therapists used different amounts of skills and that these skills have different effects based on client attachment styles. As Mallinckrodt (2010) suggested, therapists might moderate the therapeutic distance (e.g., using different types of skills) based on the client's attachment style, the therapist's attachment style, the status of the therapeutic relationship, and the phase of therapy.

Measuring Therapist Skills

Although several measures have been developed to assess post-session report of therapist skills (e.g., the Comparative Psychotherapy Process Scale, CPPS; Hilsenroth et al., 2005), we focus here on the Helping Skills Measure (HSM; Hill & Kellems, 2002), a self-report instrument developed to assess client perceptions of the frequency of helping skills used by therapists-in-training. The HSM specifically assesses the therapist's use of exploration, insight, and action skills described in the Hill (2020) helping skills model. Although Hill and Kellems provided

psychometric evidence for the validity and reliability of the three-factor structure for the client-rated measure, additional investigations of the factor structure for clinical samples have not yet been conducted. Furthermore, a parallel, 13-item therapist version of this measure has also been used in several studies, but has not yet been subjected to a factor analysis.

Purpose of the Present Study

The first purpose of the present study was to investigate the factor structure of the therapist- and client-rated HSM. Because the HSM was developed on a sample of undergraduate students, we wanted to assess the HSM factor structure for therapists and clients in ongoing individual psychodynamic psychotherapy. Because sessions were nested within clients nested within therapists, we used a multilevel-confirmatory factor analysis to investigate the between-client (client) level and the within-client (session) level. We were particularly interested in assessing the factor structure at the within-client level so that we could use these factors in our analyses of the relationships between attachment dimensions and therapist skills (see second purpose below). In addition, we examined if the proposed factor structure of the HSM was invariant over time. Given that the therapists in this study were trained in the Helping Skills Model (Hill, 2020), we hypothesized that

Hypothesis 1 (H1): The therapist-rated HSM would have a similar three-factor structure as found for the client-rated HSM in Hill and Kellems (2002).

Hypothesis 2 (H2): The client-rated HSM would have a similar three-factor structure as found for the client-rated HSM in Hill and Kellems (2002).

The second purpose of the present study was to examine the relationship between client attachment and therapist skills. More specifically, we investigated if and how client attachment dimensions (Anxiety and Avoidance) and therapist skills (Exploration, Insight, and Action)

changed independently and in relation to each other throughout the therapeutic process. We first tested whether attachment styles changed over time in therapy. Given the mixed results found in previous studies regarding change in client attachment over the course of psychotherapy (e.g., Muller & Rosenkranz, 2009; Strauss et al., 2011), we posed research questions here rather than making hypotheses.

Research Question 1 (RQ1): How does Anxiety change over time in psychotherapy?

Research Question 2 (RQ2): How does Avoidance change over time in psychotherapy?

In addition, we tested changes in therapist skills over time. We based our hypotheses on the Helping Skills Model (Hill, 2020), although we caution that these theoretical propositions have not yet received empirical attention.

Hypothesis 3 (H3): Exploration will be consistent over time in psychotherapy, given that exploration skills are foundational to every stage of treatment.

Hypothesis 4 (H4): Insight will increase over time in psychotherapy, given that insight skills theoretically rely on the establishment of a strong therapeutic relationship.

Hypothesis 5 (H5): Action will increase over time in psychotherapy, given that action skills theoretically require a solid base of exploration and insight.

Finally, we were curious to understand how client attachment and therapist skills dynamically impact each other over the course of psychotherapy. Given Bowlby's (1988) theory that exploring and understanding IWMs within a safe and secure therapeutic relationship leads to IWM reconstruction, we hypothesized that

Hypothesis 6 (H6): More Exploration in one session will predict lower Anxiety in the next session.

Hypothesis 7 (H7): More Exploration in one session will predict lower Avoidance in the next session.

Hypothesis 8 (H8): More Insight in one session will predict lower Anxiety in the next session.

Hypothesis 9 (H9): More Insight in one session will predict lower Avoidance in the next session.

Overall, similar to Ahn and Kivlighan's (2022) finding that working alliance served as a signal for therapists to use specific skills and other mediational models examining how therapists respond to client markers as a basis for their interventions (e.g., Kivlighan et al., 2019), we expected that attachment would be predictive of subsequent skills. We developed the next set of hypotheses based on the results from Anvari et al. (2022) in which more anxiously attached clients needed more assistance from therapists to focus on thoughts and feelings (e.g., exploration) and Prass et al. (2021) in which some therapists gave more advice to clients with higher anxious attachment in response to those clients asking directly for guidance. These anxious clients may be pulling for more engagement from the therapist (e.g., exploration and action skills), but may not be regulated enough for insight.

Hypothesis 10 (H10): Higher Anxiety in one session will predict more Exploration in the next session.

Hypothesis 11 (H11): Higher Anxiety in one session will predict more Action in the next session.

More avoidantly attached clients may seek advice indirectly (Prass et al., 2021) or not at all given their withdrawal from the therapist, and therefore we expect therapists would respond with less action. However, given that the therapists may try to provide a corrective experience by

regulating their therapeutic distance (Mallinckrodt, 2010), they may work to more actively engage the clients through the use of exploration. Thus, we hypothesized that

Hypothesis 12 (H12): Higher Avoidance in one session will predict more Exploration in the next session.

Hypothesis 13 (H13): Higher Avoidance in one session will predict less Action in the next session.

We also anticipated that more client security (i.e., lower attachment anxiety and avoidance) would allow therapists to more easily challenge clients to think in new ways (e.g., use insight skills). This fits with findings that clients with secure attachment styles tend to develop more secure attachments to their therapists (e.g., Mallinckrodt & Jeong, 2015), stronger working alliances (e.g., Diener & Monroe, 2011), and better therapy outcomes (Levy et al., 2018). We therefore hypothesized that

Hypothesis 14 (H14): Lower Anxiety in one session will predict more Insight in the next session.

Hypothesis 15 (H15): Lower Avoidance in one session will predict more Insight in the next session.

Because of the recognition in attachment literature of the importance of helping clients develop insight into the influence of past relationships on present relationships (e.g., Berry & Danquah, 2016; Wallin, 2007), it seemed apt to explore the relationship between client attachment and therapist skills in a clinic that emphasized a psychodynamic theoretical orientation and psychodynamic techniques. Indeed, Shedler (2010) delineated seven features of psychodynamic psychotherapy that reliably distinguished it from other types of therapy, three of which included identifying recurring themes and patterns, recognizing ways in which the past

continues to impact the present, and focusing on interpersonal relations often shaped in the context of attachment relationships. In terms of measures, we used the Experiences in Close Relationships Scale-Short Form (ECR-S; Wei et al., 2007), a self-report measure of attachment that allows for conceptualization of attachment patterns on continuous dimensions. Using this measure allowed for frequent assessment of attachment (as opposed to a pre and post interview-based measure such as the Adult Attachment Interview). We also used the Helping Skills Measure (HSM; Hill & Kellems, 2002) to assess helping skills because of the ability to capture both therapist and client perceptions of the therapist skills.

Chapter 2: Methods

Data Set

Doctoral student therapists working in a university clinic provided low-fee, open-ended, psychodynamic psychotherapy to adult community clients. The data set for the multilevel-confirmatory factor analysis (M-CFA) of the HSM contained 5,830 sessions of 202 clients working with 25 therapists. Number of sessions for the M-CFA ranged from 1 to 163 (*M* = 29.00, *SD* = 27.94).The data set for the dynamic structural equation model (DSEM) analyzing the relationship between client attachment dimensions (i.e., Anxiety and Avoidance) and therapist helping skills (i.e., Exploration, Insight, and Action) contained 592 sessions of 37 clients working with 6 doctoral student therapists. Number of sessions for the DSEM ranged from 3 to 46 (*M* = 15.95, *SD* = 11.59). The data were multilevel given the nesting of sessions within clients and clients within therapists. Although transfers to another therapist within the clinic were possible, only the treatment with the first therapist was included in these data sets. For both the M-CFA and the DSEM, we used two models: one for therapist-rated helping skills and one for client-rated helping skills.

Participants

Therapists

M-CFA Sample. Therapists in the M-CFA sample were 25 (19 female, 5 male, 1 transgender man; age 24 to 36, *M*= 27.96, *SD* = 2.91; 11 White/European American, 6 Asian International, 5 Asian American, 1 Black/African American, 1 Hispanic/Latinx American, 1 White International) trainees in at least their third year of a doctoral program in counseling psychology. All therapists had to have completed at least three practica prior to working in the clinic.

Therapists had received training throughout their doctoral program in several theoretical approaches, with a slight emphasis on psychodynamic orientations. Of note, during their first semester of the program, therapists had completed extensive helping skills training using Hill's (2020) Helping Skills Model. All therapists agreed to work from a psychodynamic theoretical orientation in the clinic. They typically met with an average of 3 to 5 clients per week and participated in weekly, individual supervision and biweekly, group supervision with licensed and experienced psychodynamic therapists. Using the Therapist Orientation Profile Scale – Revised (TOPS-R; Worthington & Dillon, 2003) therapists identified their theoretical orientations on a 10-point scale (1 = *not at all*, 10 = *completely*) as Psychoanalytic/Psychodynamic (*M* = 8.05, *SD* = .97), Humanistic/Existential (*M* = 6.13, *SD* = 2.14), and Cognitive Behavioral (*M* = 3.67, *SD* = 1.36.

DSEM Subsample. Therapists in the DSEM subsample (all were also in the M-CFA sample) were 6 female (age 26 to 30, *M* = 28.5, *SD* = 1.76; 3 Asian International, 2 Asian American, 1 White/European American) doctoral student trainees. Therapists identified their theoretical orientations as Psychoanalytic/Psychodynamic (*M* = 7.78, *SD* = .86), Humanistic/Existential (*M* = 6.56, *SD* = 1.63), and Cognitive Behavioral (*M* = 4.00, *SD* = 1.58).

Clients

M-CFA Sample. Clients in the M-CFA sample were 202 (3 missing demographics; 113 female, 77 male, 4 transgender men, 3 genderqueer/gender non-conforming, 1 transgender woman, 1 gender not reported; age 18 to 72, *M* = 30.60, *SD* = 11.59; race/ethnicity (could indicate more than one): 100 White/European American, 43 Black/African American, 23 Asian American, 22 Hispanic/Latinx American, 14 Multiracial, 14 International (2 Brazilian International, 2 Indian International, 1 Caribbean International, 1 Croatian International, 1

French International, 1 Haitian International, 1 Norwegian International, 1 South Asian International, 4 Unreported International), 6 Middle Eastern, 4 Other, 3 Native American, 1 race/ethnicity not reported) adults from the community. Clients identified the following presenting problem(s) at screening (could indicate more than one): relationship issues (*N* = 127), anxiety (*N* = 124), depression (*N* = 114), meaning in life (*N* = 56), career (*N* = 46), grief and loss (*N* = 45), and other (*N* = 108).

DSEM Sample. Clients in the DSEM sample were 37 (21 female, 13 male, 2 genderqueer/gender non-conforming, 1 gender not reported; age 18 to 55, *M* = 26.84, *SD* = 8.03; race/ethnicity (could indicate more than one): 17 White/European American, 6 Asian American, 6 Hispanic/Latinx American, 3 Black/African American, 2 Multiracial, 2 Indian International, 1 Croatian International) adults from the community. Clients identified the following presenting problem(s) at screening (could indicate more than one): anxiety (*N* = 22), depression (*N* = 21), relationship issues (*N* = 16), meaning in life (*N* = 14), grief and loss (*N* = 7), career (*N* = 3), and other (*N* = 24).

Measures

Demographics

Demographic information was collected regarding age, gender, and race/ethnicity of therapists and clients.

Experiences in Close Relationships Scale-Short Form

The Experiences in Close Relationships Scale-Short Form (ECR-S; Wei et al., 2007) is a 12-item self-report measure of adult attachment. The ECR-S was developed from the 36-item Experiences in Close Relationships Scale (ECR; Brennan et al., 1998), the gold standard of adult attachment self-report measures built on the foundation of 60 subscales of all known measures of

attachment. The ECR-S measures individual differences in adult attachment style along two dimensions: Anxiety measures the extent to which one fears being neglected, rejected, or abandoned by close partners (e.g., "I worry that others won't care about me as much as I care about them"); Avoidance measures the extent to which one is uncomfortable with openness, interdependence, and emotional intimacy in relationships (e.g., "I don't feel comfortable opening up to others"). Participants rate the extent to which they agree with each item on a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*); high scores reflect higher levels of the construct. A participant's attachment style, as measured by the ECR-S, includes one score on the attachment anxiety subscale and another score on the attachment avoidance subscale. Validity of the ECR has been supported in many studies (e.g., the Anxiety subscale correlated positively with the Anxiety subscale of Collins and Read's (1990) Adult Attachment Scale (.79)). Both subscales of the ECR have high internal consistency estimates (.91 for Anxiety, .94 for Avoidance) and high six-month test-retest reliability estimates (.68 for Anxiety, .71 for Avoidance; Lopez & Gormley, 2002). Both subscales of the ECR-S also have high internal consistency estimates (e.g., .83 for Anxiety, .89 for Avoidance) and high test-retest reliability estimates (e.g., .72 for Anxiety, .80 for Avoidance; Peng et al., 2021). In the present study, αs for internal consistency (calculated for each session and then averaged across sessions) were .81 (*SD* = .10) for Anxiety and .90 (*SD* = .06) for Avoidance.

Helping Skills Measure

The Helping Skills Measure (HSM; Hill & Kellems, 2002) was developed to assess client perceptions of helping skills used by undergraduate students. The HSM is a 13-item measure with three subscales: Exploration (e.g., "In this session, my helper asked questions to help me explore what I was thinking or feeling"), Insight (e.g., "In this session, my helper helped me

understand the reasons behind my thoughts, feelings, and/or behaviors"), and Action (e.g., "In this session, my helper helped me figure out how to solve a specific problem"). Clients rate the extent to which they agree with each item using a 5-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*). The total score is an average of the scores on all items (after reversing negatively-worded items), with higher scores indicating a greater use of skills. Hill and Kellems reported that Exploration and Insight correlated between .51 and .53, Insight and Action correlated between .40 and .49, and Exploration and Action correlated between .34 and .50. There were also positive correlations between Exploration and Session Impact Scale-Relationship (r = .43, p < .001; SIS; Elliott & Wexler, 1994), Insight and SIS-Understanding (r = .44, p < .001), and Action and SIS-Problem Solving (r = .60, p < .001), suggesting evidence of concurrent validity. Internal consistency coefficients ranged from .66 to .83 for the three subscales and total score (Hill & Kellems, 2002). In the present study, αs for internal consistency (averaged for clients across sessions) for the client-rated HSM were .73 (*SD* = .14) for Exploration, .81 (*SD* = .09) for Insight, and .88 (*SD* = .04) for Action. A parallel, 13-item therapist version of this measure has also been used in several studies, but has never been subjected to a factor analysis. In the present study, αs for internal consistency (calculated for each session and then averaged across sessions) for the therapist-rated HSM were .72 (*SD* = .11) for Exploration, .72 (*SD* = .10) for Insight, and .85 (*SD* = .04) for Action.

Procedures

The Institutional Review Board approval was obtained for the research within the clinic where the data were collected. None of the therapists or clients were aware of the purposes of the present study. Therapists and clients were assigned code numbers to protect confidentiality.

Recruitment

Therapists were recruited from within the counseling psychology doctoral program affiliated with the clinic and committed to working in the clinic for a minimum of two years. During an annual orientation, therapists signed consent forms and completed demographic forms.

Clients were recruited through various means (e.g., word of mouth, referrals from other providers, online advertising) and screened by phone by one of the therapists. Therapists informed potential clients about the nature of the clinic and assessed eligibility for therapy at the clinic using the following criteria: at least 18 years of age, not receiving concurrent individual psychotherapy, no current substance abuse, no current symptoms of psychosis or active suicidality, and stable for at least two months if taking psychotropic medication. Those not eligible for treatment in the clinic were referred to other mental health settings and providers as appropriate. Eligible clients were added to the clinic waitlist and were scheduled for an intake session based on therapist availability. Prior to the intake session, clients signed consent forms and completed demographic forms, and continued working with the intake therapist for treatment.

Treatment

Therapy was open-ended, typically terminating when clients chose to end or therapists finished their externship at the clinic (although clients were offered a transfer within the clinic if deemed clinically appropriate when terminated due to therapists leaving). In weekly 45 to 50-minute sessions, therapists used interventions that seemed clinically appropriate for each individual client, with an emphasis on psychodynamic techniques (e.g., focusing on unconscious processes, internal conflicts, the way the past lives in the present, defenses, transference, and relational dynamics).

Data were collected using secure, internet-based surveys on Qualtrics. Along with other measures not used in the present study, clients completed the ECR-S following every session. Both therapists and clients completed their respective versions of the HSM after every session, including the intake. Therapists and clients did not see each other's data. Most of the M-CFA data (65.92%) were collected following in-person sessions, with the remainder (34.08%) collected following telehealth sessions due to the COVID-19 pandemic. All of the DSEM data were collected following telehealth sessions. The telehealth sessions occurred on a secure web-based video platform.

Data Analysis

Multilevel-Confirmatory Factor Analysis

We tested the 3-factor (4 items on Exploration, 4 items on Insight, and 5 items on Action) structure of the Helping Skills Measure (HSM) that had been derived theoretically and through a previous single-level exploratory factor analysis (EFA) using a sample of undergraduate helping skills students in single sessions (Hill & Kellems, 2002). Using a traditional confirmatory factor analysis (CFA) method for our sample could result in incorrect parameter estimates given that we had longitudinal data that could vary over time, and our data contained both within-client and between-client variations in helping skills use. We therefore used a multilevel-confirmatory factor analysis (M-CFA), which is a subset of multilevel-structural equation modeling (M-SEM; Mehta & Neale, 2005), to examine the data within and across cases. Psychotherapy researchers have recently begun to use this method to investigate different levels of analysis with the hope of more accurately assessing multilevel data (e.g., McAleavey et al., 2020; Wright et al., 2015). Because we were interested in session to session changes in attachment dimensions and helping

skills use, we focused on the within-client aspect of this analysis. We used separate models for therapist- and client-rated HSM data.

Model estimation was completed using Mplus version 8.6 (Muthén & Muthén, 2017), with the maximum-likelihood estimator for both models on both levels. As suggested by McAleavey et al. (2020) and Sadikaj et al. (2021), we used single-level SEM model fit conventions for this multilevel model: Comparative Fit Index (CFI) ≥ .95, Tucker-Lewis Index (TLI) ≥ .95, Root-Mean-Square Error of Approximation (RMSEA) ≤ .06, and Standardized Root-Mean-Square Residual (SRMR) ≤ .08 (Hu & Bentler, 1999). We also took into consideration Hau et al.'s (2004) suggested criteria for acceptable model fit: CFI ≥ .90, TLI ≥ .90, RMSEA ≤ .08, and SRMR ≤ .10. We used the operational threshold of .30 for evaluating factor loadings (Peterson, 2000) and selected the most parsimonious solution that both met these fit criteria and was meaningfully interpretable.

We also used Mplus version 8.6 (Muthén & Muthén, 2017) to test the measurement invariance of the HSM, ensuring that the factor loadings for the HSM scales were equivalent across time. We tested invariance across people (between clients) to assess individual differences in factor loadings (Adolf et al., 2014; Borsboom & Dolan, 2007). Without testing for measurement invariance across people, different item responses could be confounded with differences in the HSM factors (Vandenberg & Lance, 2000). We also tested invariance across time (between sessions) to assess if factor loadings were equivalent across sessions (Millsap, 2010). Demonstrating measurement invariance across time would strengthen the interpretation of our results by excluding the possibility that change is a result of the HSM itself as opposed to change in the factors (Widaman et al., 2010). McNeish et al. (2021) recommended using approximate invariance testing by placing between person and between time random effects on

item parameters to quantify the degree of variability across people and measurement occasions (e.g., Asparouhov & Muthén, 2016; de Jong et al., 2007; Jak et al., 2013, 2014). Small variance indicates that the item parameters are approximately invariant and the measurement properties are stable, whereas large variance indicates that there may be non-invariance.

Dynamic Structural Equation Model

We used dynamic structural equation modeling (DSEM; Asparouhov et al., 2018) to test the relationship between client attachment and therapist helping skills. DSEM allows an understanding of the dynamic relationships among multiple variables over time, combining elements of structural equation modeling, time-series analysis, and multilevel modeling, with flexibility in model specification and the potential to incorporate latent variables. Although DSEM cannot account for the nesting of clients within therapists, it separates within- (differences between sessions) and between (differences between clients) components (McNeish & Hamaker, 2020; Schultzberg & Muthén, 2018) and may improve within-client parameter estimates when using a small number of therapists (Falkenström et al., 2017).

When using traditional multilevel modeling, lagged dependent variables can cause dynamic panel bias, leading to statistical conclusion validity issues (Falkenström et al., 2020). DSEM prevents dynamic panel bias by (1) modeling lagged effects as latent variables and (2) simultaneously modeling the random effects for attachment and helping skills as predictors and criteria (Gidhagen et al., 2021). Gidhagen et al. described the within-client aspect of the DSEM as similar to a cross-lagged panel model. Therefore, we used DSEM to examine the within-client, reciprocal relationships between attachment and helping skills.

In our DSEM model, Anxiety, Avoidance, Exploration, Insight, and Action were the observed values for all clients and sessions. We used latent variables to decompose attachment

and helping skills into within- and between-client components. For example, an observed variable is Insight, and the latent variable includes within-client Insight and between-client Insight components. The within-client latent variables represent session-to-session changes in attachment and helping skills, and the between-client latent variables represent the "trait-like" differences in attachment and helping skills between clients.

For within- and between-person effects, estimates can be strongly influenced based on whether variables are detrended (Falkenström et al., 2017). For example, positive linear trends of Anxiety on Session and Action on Session would indicate that Anxiety and Action are increasing over time based on time alone. Without detrending these positive linear trends, the model would produce a biased estimate due to both variables increasing over time instead of one variable at a previous session (e.g., Anxiety) predicting the other variable (e.g., Action) in the current session. Detrending (e.g., Hamaker et al., 2018; Wang & Maxwell, 2015) removes this linear effect by explicitly modeling the trend and thus controlling for time (session). Therefore, based on significant trends found in the preliminary analysis, we detrended the models.

To examine the linear trends, we regressed the attachment scores and helping skills scores on session number, the within-client predictor. To examine the reciprocal relationships, we modeled autocorrelations to control for previous attachment and helping skills scores.

Current (T) and previous (T-1) attachment and helping skills were modeled within the analysis. Contemporaneous correlations (e.g., Anxiety T and Exploration T) are correlations within the same session. Autocorrelations (e.g., Anxiety T on Anxiety T-1) index the change in variables between the previous (T-1) and current (T) session. Cross-lagged correlations were created by regressing a current (T) variable onto a set of previous (T-1) variables. For example, Anxiety T was regressed on Avoidance T-1, Exploration T-1, Insight T-1, and Action T-1. The

hypothesized effects involve the cross-lagged relationships between attachment and helping skills.

We used Mplus version 8.6 (Muthén & Muthén, 2017) to run the DSEM. We used the Bayesian estimator in Mplus, with the Markov Chain Monte Carlo (MCMC) algorithm, because the DSEM uses Bayesian approaches to Structural Equation Modeling (SEM). Two MCMCs were used, each with 50,000 iterations, with the first 40,000 iterations discarded as burn-in. We also used the GIBBS (RW) algorithm for an arbitrary structured variance covariance matrix (Chib & Greenberg, 1998) and assessed the model using a Gelman-Rubin Rhat Statistic (Gelman & Rubin, 1992). By default, Mplus uses a scale reduction statistic of 1.05, which is a conservative statistic below the recommended upper limit of 1.1 (Brooks & Gelman, 1998). After burn-in, parameter estimates were means for the iterations. Significance of the parameter estimates was assessed using the 95% credible intervals (CI), with significance indicated when the CI did not contain zero.

Conventional effect size guidelines should not be applied to cross-lagged effects because these guidelines (1) are estimated based on prospective relations over time different from typical concurrent relations and (2) have limited range due to modeling the autoregressive and between-client effects (Orth et al., 2022). In a recent meta-analysis focusing on the cross-lagged panel model (CLPM) and the random intercept cross-lagged panel model (RI-CLPM), Orth et al. proposed benchmark values for cross-lagged effects. DSEM is similar to RI-CLPM in that both models (1) simultaneously estimate cross-lagged effects and autocorrelations and (2) separate between-person and within-person effects. Thus, following Orth et al.'s effect size guidelines, we used .03 (small effect), .07 (medium effect), and .12 (large effect) as benchmark values to interpret the effect size of the cross-lagged correlations.

Chapter 3: Results

Multilevel-Confirmatory Factor Analysis

Preliminary Results

Because a three-level model (sessions nested within clients nested within therapists) failed to converge, we used a two-level model with sessions nested within clients. Therapist nesting was modeled using the Mplus complex command, which adjusts standard errors to account for therapist nesting.

There were missing data for all therapist-rated HSM items (range from .1% for HS1 to .4% for HS7). The percentage of missing data for the client-rated HSM was < .1% for all items. We used all available data (no deletion). Means and standard deviations for therapist-rated HSM subscales were: Exploration, $M = 4.23$ ($SD = .21$); Insight, $M = 3.28$ ($SD = .31$); Action, $M = 2.44$ ($SD = .43$). Means and standard deviations for client-rated HSM subscales were: Exploration, $M = 4.74$ ($SD = .07$); Insight, $M = 4.39$ ($SD = .03$); Action, $M = 4.15$ ($SD = .25$). Therapist-rated Exploration was higher than therapist-rated Insight ($d = 3.59$), and therapist-rated Insight was higher than therapist-rated Action ($d = 2.24$). Client-rated Exploration was higher than client-rated Insight ($d = 5.95$), and client-rated Insight was higher than client-rated Action ($d = 1.42$). Client-rated HSM scores were higher than therapist-rated HSM scores across all three factors (Exploration $d = 3.26$; Insight $d = 5.07$; Action $d = 4.86$).

Factor Structure of the Therapist-Rated HSM

We were most concerned with the fit at the within-client level because our DSEM analyses were focused at that level. The CFI (.80) and TLI (.74) were below conventional cut-offs for good model fit (refer back to the Data Analysis section), but the RMSEA (.04) and SRMR value for the within model (.05) both indicated that the model was a good fit to the data.

The chi square test of model fit was significant, χ^2 (156) = 4618.79, p = 0.0000, likely due to the large number of sessions in the sample.

See Table 1 for descriptive statistics of the items for the 3-factor model (Exploration, Insight, Action) of the therapist-rated HSM. All items loaded on the identified factor at .40 or higher (range from .40 to .76), all significant at $p < .001$ (see Table 2). Exploration was significantly and positively correlated with Insight, r = .59, p = 0.00, Exploration and Action were not significantly correlated, r = .02, p = 0.84, and Insight and Action were not significantly correlated, r = .13, p = 0.09. Thus, the M-CFA supported the 3-factor structure at the session level of the therapist-rated HSM for use in open-ended psychodynamic psychotherapy.

Measurement Invariance of the Therapist-Rated HSM

See Table 3 for the between client and between time/session variance in the unstandardized factor loadings of the therapist-rated HSM. The variance for the between client loadings of Exploration ranged from ω_λ = .024 to .386 and the variance for the between time/session loadings of Exploration ranged from ω_λ = .008 to .018. Note that the covariance matrix was not positive definite for Exploration, and therefore we cannot report confidence intervals. The variance for the between client loadings of Insight ranged from ω_λ = .162 to .326 and the variance for the between time/session loadings of Insight ranged from ω_λ = .001 to .002. The variance for the between client loadings of Action ranged from ω_λ = .232 to .401 and the variance for the between time/session loadings of Action ranged from ω_λ = .000 to .002. These results indicate that the between client factor loadings were not invariant; there were individual differences in the Exploration, Insight, and Action factors as a function of the client. In contrast, the between time/session factor loadings were invariant, such that the variance was essentially

zero for all item loadings and therefore the loadings were stable across time and reflect the Exploration, Insight, and Action factors to a similar degree across sessions. In other words, the factor structure at the between time (or the within-client) level looked the same at, for example, session 1, session 36, and session 77. Because our DSEM analyses were focused at the within-client level, we were most concerned with the invariance of the between time/session factor loadings.

Factor Structure of the Client-Rated HSM

We were most concerned with the fit at the within-client level because our DSEM analyses were focused at that level. As above, the CFI (.86) and TLI (.82) were below conventional cut-offs for good model fit, but the RMSEA (.04) and the SRMR value for the within model (.05) both indicated that the model was a good fit to the data. The chi square test of model fit was significant, χ^2 (156) = 6498.39, p = 0.0000, likely due to the large number of sessions in the sample.

See Table 4 for descriptive statistics of the items for the 3-factor model (Exploration, Insight, Action) of the client-rated HSM. All items loaded on the identified factor at .34 or higher (range from .34 to .70), all significant at p <.001 (see Table 5). All scales were significantly and positively correlated: Exploration and Insight, r = .81, p = 0.00, Exploration and Action, r = .47, p = 0.00, and Insight and Action, r = .63, p = 0.00. Thus, the M-CFA supported the 3-factor structure of the client-rated HSM at the session level for use in open-ended psychodynamic psychotherapy.

Measurement Invariance of the Client-Rated HSM

See Table 6 for the between client and between time/session variance in the unstandardized factor loadings of the client-rated HSM. The variance for the between client

loadings of Exploration ranged from ω_λ = .035 to .201 and the variance for the between time/session loadings of Exploration ranged from ω_λ = .003 to .019. Similar to the measurement invariance of the therapist-rated HSM, the covariance matrix for the client-rated HSM was not positive definite for Exploration, and therefore we cannot report confidence intervals. The variance for the between client loadings of Insight ranged from ω_λ = .141 to .198 and the variance for the between time/session loadings of Insight ranged from ω_λ = .036 to .048. The variance for the between client loadings of Action ranged from ω_λ = .145 to .362 and the variance for the between time/session loadings of Action ranged from ω_λ = .007 to .015. Similar to the results of the measurement invariance of the therapist-rated HSM, these results also indicate that the between client factor loadings were not invariant, while the between time/session factor loadings were invariant. Again, because our DSEM analyses were focused at the within-client level, we were most concerned with the invariance of the between time/session factor loadings.

Dynamic Structural Equation Model

Preliminary Results

There were no missing data for Anxiety or Avoidance. Means and standard deviations for ECR-S subscales (averaged across sessions for clients) were: Anxiety, *M* = 4.62 (*SD* = 1.10); Avoidance, *M* = 3.86 (*SD* = 1.33). ECR-S scores in the present sample were higher than those reported by Tasca et al. (2018) in a clinical sample of adults diagnosed with eating disorders (*N* = 1,262; Anxiety *M* = 2.4, *d* = 2.36; Avoidance *M* = 1.88, *d* = 1.85), suggesting that our sample had more insecure attachment than Tasca et al.'s sample.

The percentage of missing data was <15% for all therapist-rated HSM items and <5% for all client-rated HSM items. We used all available data (no deletion). Means and standard deviations for therapist-rated HSM subscales were: Exploration, *M* = 4.35 (*SD* = .57); Insight, *M* = 2.72 (*SD* = .79); Action, *M* = 2.08 (*SD* = .88). Therapist-rated Exploration scores in the present sample were higher than those reported by Hill et al. (2008) in a sample of undergraduate helping skills students serving as "helpers" and "clients" (*N* = 85; Exploration *M* = 4.14, *d* = .39). Means and standard deviations for client-rated HSM subscales were: Exploration, *M* = 4.66 (*SD* = .49); Insight, *M* = 4.07 (*SD* = .76); Action, *M* = 3.64 (*SD* = 1.02). Client-rated HSM scores for Exploration and Insight in the present sample were higher than those reported by Hill & Kellems (2002) in a sample of undergraduate volunteer clients (*N* = 204; Exploration, *M* = 4.25, *d* = .54; Insight, *M* = 3.52, *d* = .73) and comparable for Action (*M* = 3.67, *d* = -.03).

Dynamic Structural Equation Model Using Therapist-Rated Helping Skills

Contemporaneous Correlations. See Table 7 for means, standard deviations, and contemporaneous (within the same session) correlations for the model using the therapist-rated HSM. Significant and positive contemporaneous correlations were found between Exploration and Anxiety, *r* = .11, *p* = 0.022, 95% CI [0.003, 0.202]), Exploration and Avoidance, *r* = .16, *p* = 0.002, 95% CI [0.054, 0.262], and Insight and Anxiety, *r* .14, *p* = 0.007, 95% CI [0.038, 0.241]. Therefore, in sessions in which therapists perceived more/fewer exploration skills, clients reported higher/lower attachment anxiety/avoidance. In addition, sessions in which therapists perceived more/fewer insight skills, clients reported higher/lower attachment anxiety.

The contemporaneous correlations between pairs of the HSM scales were all significant and positive: Exploration and Insight *r* = .42, *p* = 0.000, 95% CI [0.332, 0.494]); Exploration and Action, *r* = .14, *p* = 0.006, 95% CI [0.034, 0.244]); and Insight and Action, *r* =.18, *p* = 0.000,

95% CI [0.081, 0.279]). Therefore, sessions in which therapists perceived more/fewer exploration, insight, and action skills, they also perceived more/fewer of the other two sets of skills.

Linear Trends. In the preliminary analysis, we included a linear trend for Anxiety on Session, Avoidance on Session, Exploration on Session, Insight on Session, and Action on Session. Table 8 shows significant linear trends for Exploration on Session, standardized coefficient = .14, p = 0.018, 95% CI [0.010, 0.263], and Insight on Session, standardized coefficient = .16, p = 0.011, 95% CI [0.029, 0.278]. Therefore, the use of exploration and insight skills increased linearly over time, although use of action skills, as well as attachment avoidance and anxiety, remained stable over time. Note that quadratic and cubic trends could not be tested in this DSEM.

Auto- and Cross-Lagged Associations Between Client Attachment and Therapist-Rated Helping Skills. The standardized results for the within-client level of the DSEM model are displayed in Table 9 and the significant results are displayed in Figure 1. Significant standardized coefficients were found for Exploration on Session, β = .14, p = 0.023, 95% CI [0.003, 0.267], and Insight on Session, β =.13, p = 0.023, 95% CI [0.001, 0.257], suggesting that Exploration and Insight increased linearly over time and that the detrending was necessary.

Significant and positive autocorrelations were found for Anxiety, β =.46, p = .000, 95% CI [0.330, 0.566], Avoidance, β =.15, p = .008, 95% CI [0.027, 0.264]), and Action, β = .25, p = .001, 95% CI [0.108, 0.385]. Thus, if anxious attachment/avoidant attachment/action skills in one session were higher/lower than usual for a client, then they were also higher/lower than usual in the following session.

No significant cross-lagged correlations were found with helping skills predicting changes in attachment. In the reverse direction, there was a significant and positive cross-lagged correlation (large effect) between Avoidance and Action, β = .12, p = 0.016, 95% CI [0.010, 0.233], such that if attachment avoidance was higher/lower than usual in one session, use of action skills was higher/lower than usual in the following session.

In summary, therapists perceived themselves as using more exploration and insight skills over the course of therapy. When anxious attachment, avoidant attachment, and action skills were higher than usual in one session, they were also higher than usual in the next session. Furthermore, when avoidant attachment was higher than usual in one session, action skills were higher than usual in the next session.

Dynamic Structural Equation Model Using Client-Rated Helping Skills

Contemporaneous Correlations. See Table 10 for means, standard deviations, and contemporaneous correlations (within the same session) for the model using the client-rated HSM. Significant and negative correlations were found between Insight and Avoidance, r = -.20, p = 0.000, 95% CI [-0.313, -0.098], and Action and Avoidance r = -.14, p = 0.004, 95% CI [-0.249, -0.027]. Therefore, sessions in which clients perceived therapists as using more/fewer insight or action skills, clients reported lower/higher attachment avoidance.

The contemporaneous correlations between pairs of the HSM scales were all significant and positive: Exploration and Insight, r = .55, p = 0.000, 95% CI [0.461, 0.619], Exploration and Action, r = .45, p = 0.000, 95% CI [0.362, 0.534, and Insight and Action, r = .44, p = 0.000, 95% CI [0.341, 0.520]. Therefore, sessions in which clients perceived therapists as using more/fewer exploration, insight, and action skills, clients also perceived therapists as using more/fewer of the other two sets of skills.

Linear Trends. In the preliminary analysis, we included a linear trend for Anxiety on Session, Avoidance on Session, Exploration on Session, Insight on Session, and Action on Session. Table 11 shows a significant linear trend for Action on Session, standardized coefficient = .14, p = 0.024, 95% CI [0.000, 0.276], indicating that clients perceived therapists as using more action skills over time. Client perception of the use of exploration and insight skills, as well as attachment anxiety and avoidance, remained stable over time. Note that quadratic and cubic trends could not be tested in this DSEM.

Auto- and Cross-Lagged Associations Between Client Attachment and Client-Rated Helping Skills. The standardized results for the within-client level of the DSEM model are displayed in Table 12 and the significant results are displayed in Figure 2. The standardized coefficient for Action on Session was β = .10, p = .079, 95% CI [-0.039, 0.230], suggesting that when detrended, the use of action skills did not change linearly over time.

The autocorrelations were significant and positive for Anxiety, β = .44, p = .000, 95% CI [0.312, 0.550], Avoidance, β = .17, p = .001, 95% CI [0.054, 0.303], and Exploration, β = .14, p = .015, 95% CI [0.010, 0.264]), suggesting that when anxious attachment/avoidant attachment/exploration skills in one session were higher/lower than usual for a client, they were also higher/lower than usual in the following session.

There were no significant cross-lagged correlations with helping skills predicting changes in attachment. In the reverse direction, there were two significant negative cross-lagged correlations (both large effects): between Anxiety and Exploration, β = -.16, p = 0.013, 95% CI [-0.309, -0.023], and between Anxiety and Action, β = -.21, p = 0.002, 95% CI [-0.340, -0.067], such that when attachment anxiety was higher/lower than usual in one session, use of exploration and action skills was lower/higher than usual in the following session.

In summary, clients perceived therapists as using the helping skills in a stable manner over time. When anxious attachment, avoidant attachment, and exploration skills were higher than usual in one session, they were also higher than usual in the next session. Furthermore, when anxious attachment was higher than usual in one session, exploration and action skills were lower than usual in the next session.

Chapter 4: Discussion

In this study of doctoral student therapists working with adult community clients in individual psychodynamic psychotherapy, we first found support for the original 3-factor structure (Exploration, Insight, and Action) of the HSM at the session level and we found that the factor structure was stable across time. Second, we found a slight increase in the use of exploration and insight skills, as rated by therapists, but no significant change in client attachment over the course of therapy. Third, therapists perceived more exploration skills in sessions in which clients reported higher attachment anxiety and avoidance, and therapists perceived more insight skills in sessions in which clients reported higher attachment anxiety. When clients perceived therapists as using more insight or action skills, clients also reported lower attachment avoidance. When therapists and clients perceived more exploration, insight, and action skills, they also perceived more of the other two sets of skills. Fourth, if attachment anxiety or avoidance in one session was higher than usual for a client, then it was also higher than usual in the following session. Therapists reported that if they used more action skills in one session than usual, than they also used more action skills in the following session; clients reported that if therapists used more exploration skills in one session than usual, than they also used more exploration skills in the following session. Fifth, therapist helping skills in a session did not predict changes in client attachment in the next session, but client attachment in a session did predict some changes in therapist helping skills: when clients reported higher avoidant attachment than usual in one session, therapists indicated that they used more action skills than usual in the next session; when clients reported higher anxious attachment than usual in one session, they also reported that their therapists used fewer exploration and action skills than usual in the next session.

Multilevel-Confirmatory Factor Analysis of the HSM

Factor Structure

As noted above, and as hypothesized (H1 and H2), we found support at the within-client level for both clients and therapists in our sample of doctoral student therapists and adult community clients for the three-factor structure (Exploration, Insight, and Action) that was reported in the original development and validation study of the client-rated Helping Skills Measure with undergraduate helping skills students (Hill & Kellems, 2002). Notably, the item loadings for the therapist and client versions were of a similar magnitude, suggesting that therapists and clients grouped the skills in a similar fashion. These findings thus provide some support for the three sets of skills (exploration, insight, action) posed in Hill's (2020) helping skills model. We note, however, that although two indictors (RMSEA and SRMR) suggested that the three-factor model was a good fit to the data (especially for the within-client level of analysis), two other indicators (CFI and TLI) did not provide support for the three-factor model. The CFI (Bentler, 1990) and TLI (Bentler & Bonett, 1980; Tucker & Lewis, 1973) are incremental fit indexes that compare the fit of the hypothesized model to that of a baseline model that assumes no relationships among the variables in the model. The RMSEA (Steiger, 1990; Steiger & Lind, 1980) and SRMR (Bentler, 1995) are absolute fit indexes that measure the discrepancy between the observed covariance matrix and the predicted covariance matrix based on the model. Thus, the model did not fit well at a global level, but it did fit well at the within-client level.

Comparison of the Therapist-Rated HSM and Client-Rated HSM

Therapists reported using more exploration and insight than action skills, which likely reflects the psychodynamic focus of the clinic. The greater use of exploration than insight or

action skills makes sense in terms of the emphasis in the Helping Skills Model (Hill, 2020) that exploration skills are generally used in all three stages whereas insight and action skills are primarily used within their own stages.

In examining the correlations among the three factors, we found a large and significant positive correlation between Exploration and Insight. It seems reasonable that therapists rated the use of exploration and insight skills together, given that when therapists use insight skills, they often also use exploration skills. For example, after a therapist challenges a client or provides an interpretation (insight skills), they might follow-up by asking an open question or reflecting feelings (exploration skills) to assess client reactions. As Hill (2020) notes, "the goal is still to help clients explore, just at a deeper level" (pg. 40). In addition, at least one of the Insight items ("I helped the client gain a new perspective on their problems") can often be achieved through exploration skills. In other words, therapists may believe that by restating a client's comments, clients can hear their own words delivered back to them in a different way, thus gaining a new perspective. The overlap between exploration and insight skills was also observed in the Hill and Kellems (2002) study, where they noted the difficulty in separating the two sets of skills.

Clients rated all of the skills as occurring more often than did the therapists. Similarly, clients typically rate process variables more highly than do therapists (e.g., helping skills; Hill et al., 2008; working alliance; Kivlighan et al., 2019), indicating that there may be some halo effects. Similar to the therapists, however, they perceived that therapists used exploration skills most, followed by insight skills and then action, again reflecting the psychodynamic focus of the clinic.

We found large and significant positive correlations among all three factors for the client-rated data. Similarly, Hill and Kellems (2002), using client-rated data for undergraduate helpers,

found that the three factors were moderately to highly intercorrelated. Thus, it may be that part of the problem with the factor structure of the measure is the high overlap among the skills from the client perspective. Based on the size of the correlations, it seems that clients saw less differentiation among the helping skills than did the therapists. It is possible that clients view skills in a more holistic way, and may not be as attuned to differences among skills. For example, for a client who feels that they are being helped by their therapist, it may not matter if it is through exploration or action. Clients may have a positive response bias such that they rate all items (across all scales) similarly based on their overall perception of the therapist's helpfulness during the session. It is also possible that therapists truly do not use the skills independently, but rather use all of them to some extent within all sessions, thus making it hard for clients to distinguish among them. For example, it may be that sessions begin with exploration, move to insight, and then end with action, or that all three skill categories are interwoven, but a post-session measure misses the sequencing and nuance of skill use.

Overall, though, it seems that therapists see more distinctions amongst the helping skills than did clients, which may reflect their theoretical understanding of the therapeutic process. In fact, the therapists in this sample may have been particularly attuned to the differences amongst the three factors, given the intensity of the helping skills training in their doctoral program.

Measurement Invariance

According to the measurement invariance analysis, between client factor loadings varied across HSM factors as rated by both therapists and clients. This suggests that there were many individual differences in the HSM factor structure, which may partially explain the poor global model fit. However, the between time/session factor loadings for the therapist-rated and client-rated HSM were stable across time. This suggests stability in the factor structure from session to

session, which provided a strong foundation for conducting the DSEM with a focus on the within-client level.

Of note, for both the therapist- and client-rated models, the analysis of the Exploration scale did not converge. Based on the variance estimates of the item loadings on the Exploration factor, we suspect that the software faced issues attempting to estimate numbers close to zero. For example, the therapist- and client-rated, between time variance estimate for the item – "encouraged to express thoughts or feelings" – was zero. It is not surprising that there was no variance for this item, given that the therapists were working from a psychodynamic orientation, which encourages exploration of the full range of thoughts and emotions (Shedler, 2010). Nevertheless, based on the estimates, Exploration was stable over time (similar to Insight and Action).

Conclusions about the HSM Factor Structures

Although Hill and Kellems (2002) initially intended on creating parallel client and therapist forms of the HSM, the factor structure for the therapist and client versions were not consistent. Therefore, to our knowledge, the present study is the first study to examine the factor structure of the therapist version of the HSM. In addition, it is the first study to examine the HSM factor structure in ongoing psychotherapy as opposed to within helping skills courses. It is also the first time that the HSM has been viewed in a multilevel way, taking into account the nesting of sessions within clients within therapists. Considering the nesting structure of the data is crucial because it provides a more nuanced understanding of the relationships between non-independent observations. In addition, it is the first time the HSM has been subjected to an invariance analysis, which allows interpretation of the results based on change in the factors as opposed to change in the factor structure (Widaman et al., 2010).

Dynamic Structural Equation Model for Client Attachment and Therapist Helping Skills

Contemporaneous Correlations Across the Attachment Dimensions and Helping Skills

Therapist. Contemporaneous correlations between Exploration and Anxiety, as well as between Exploration and Avoidance, were significant and positive. Hence, when therapists reported having used more exploration skills within a given session, clients reported both increased attachment anxiety and avoidance. These findings suggest an association between the use of exploration skills and heightened attachment dynamics. However, because these are correlational data without temporal ordering, we cannot assess whether the use of exploration skills elicited increased attachment dynamics or whether heightened attachment dynamics led therapists to use more exploration skills.

In addition, contemporaneous correlations between Insight and Anxiety were significant and positive, such that when therapists reported having used more insight skills in a given session, clients reported more attachment anxiety. It is possible that when clients were exhibiting higher levels of attachment anxiety, the therapist could more effectively use insight skills. Alternatively, it could be that therapist use of insight stimulated client anxiety attachment because they were being challenged to think in new ways or confront underlying reasons for their issues. Again, we cannot assess directionality within the same session.

Consistent with some of the above findings in the therapist-rated HSM M-CFA, contemporaneous correlations between Exploration and Insight, Exploration and Action, and Insight and Action were also significant and positive. Importantly, the magnitude of the correlations was low (except for the moderate correlation between Exploration and Insight). This finding matches the large and significant positive correlation between Exploration and Insight in the therapist-rated HSM M-CFA. These results suggest that when therapists were able to use

more of any of the skills, they felt more able to use the other skills too, perhaps reflecting their perceptions of clients being more open in general to their interventions.

Client. From the client perspective, contemporaneous correlations between Avoidance and Insight, and between Avoidance and Action, were significant and negative, albeit small. Thus, when clients reported lower attachment avoidance, they also perceived that their therapists used more insight and action skills. Perhaps when clients were more actively engaged in the therapeutic work, they were able to perceive that their therapists were more active and helping them change more, or alternatively, when clients perceived that therapists were using more insight and action skills, clients felt more engaged in the therapy.

Corresponding to some of the above findings in the client-rated HSM M-CFA and similar to the therapist-rated data, contemporaneous correlations between client-rated Exploration and Insight, Exploration and Action, and Insight and Action were also significant and positive. However, unlike the therapist-rated contemporaneous correlations, the client-rated contemporaneous correlations were of relatively equal magnitude. This finding maps on to the seeming lack of differentiation among skills in the client-rated HSM M-CFA. Again, these findings suggest that when clients perceived that therapists use more of any of the skills, they perceived them as using more of all the other skills, too, perhaps reflecting their global assessment of the sessions being helpful.

Linear Trends

Therapist-rated Exploration and Insight increased linearly and significantly over the course of therapy; the linear trend for Action was of similar magnitude but not quite significant. Therefore, we can say that there was a slight increase in the use of all three sets of helping skills (exploration, insight, and action) across time from the therapist perspective. From the helping

skills model (Hill, 2020) and as stated in our hypotheses (H3-H5), we expected exploration skills to be used consistently throughout therapy, with insight and action skills sprinkled in and perhaps receiving more of an emphasis later in therapy. The data, on the other hand, support the notion that therapists used more of all of the skills over the course of therapy, indicating that perhaps therapists are more active with all the skills as the therapy progresses.

In contrast, although we hoped that Anxiety and Avoidance would have decreased over the course of treatment as an indication of clients becoming more securely attached, we found no such changes over time. We initially posed research questions (RQ1 and RQ2) regarding change in attachment because while several studies (e.g., Fonagy et al., 1995; Levy et al., 2006) have demonstrated that attachment styles can indeed change during therapy, others indicate that attachment styles do not change significantly over the course of therapy (e.g., Lawson et al., 2006; Strauss et al., 2011). As Waters et al. (2000) stated, attachment stability is the rule rather than the exception. Given that attachment classifications represent personality structures developed and maintained throughout the lifespan, they likely require extensive time to change. Perhaps a more direct, attachment-informed therapeutic approach (e.g., Holmes & Slade, 2018; Miller-Bottome et al., 2018) would have brought about attachment-related change. Interestingly, from another study in the same clinic, we know that client secure attachment to therapist increased and avoidant-fearful attachment to therapist decreased across the course of psychotherapy (Kline et al., 2023), so it may be that attachment to therapist changes more than general attachment patterns in psychotherapy.

Autocorrelations for Attachment Dimensions and Helping Skills

Attachment Dimensions. Both the therapist and client models showed stability from one session to the next in terms of client ratings of attachment dynamics. Thus, if attachment anxiety

or avoidance was higher (or lower) than usual in one session, it was also higher (or lower) than usual in the following session.

Helping Skills. In the therapist model, there was stability for the action skills, albeit small in magnitude, such that when action skills were higher (or lower) than usual in one session, they were also higher (or lower) than usual in the following session. This finding may reflect phases within therapy when action is used more (e.g., client is in crisis and needs more direct help; approaching termination) or less often (e.g., client is exploring freely; beginning stages of therapy). Autocorrelations were not significant for exploration or insight skills, suggesting that they varied from one session to the next, perhaps depending on perceived client needs by therapists.

In the client model, there was stability for the exploration skills, albeit small in magnitude, such that when exploration skills were higher (or lower) than usual in one session, they were also higher (or lower) than usual in the following session. Again, these findings may reflect how clients perceive exploration as occurring in phases when they need more (or less) support or direction than usual. Autocorrelations were not significant for insight or action skills, suggesting that they varied from one session to the next.

Overall, given the small magnitude for the significant autocorrelations in helping skills, it seems there is generally little consistency in skills from session to session. This finding could reflect that skill use is based on client needs in a specific session.

Cross-Lagged Correlations Between Helping Skills and Attachment Dimensions

Helping Skills Predicting Subsequent Changes in Attachment Dimensions. In both the therapist and client models, there were no significant cross-lagged correlations in which helping skills in one session predicted changes in either client attachment dimension in the

following session. Therefore, contrary to our hypotheses (H6-H9), frequency of skill usage in one session did not predict client changes in attachment avoidance or anxiety in the following session. This is not completely surprising, given that quantity of skill use is not necessarily related to quality of skill use (e.g., Hill et al., 1988). We suggest that it may be more useful to study quality of skill use in addition to frequency and to look for the effects of helping skills within a given session rather than in the following session because the effects are more immediate than delayed (Hill & Norcross, 2023).

Attachment Dimensions Predicting Subsequent Changes in Helping Skills. In the therapist model, there was a significant and positive cross-lagged correlation between client attachment avoidance and therapist action skills. When clients reported higher than usual avoidance in one session, therapists reported using more action skills than usual in the following session; likewise, when clients reported lower attachment avoidance than usual in one session, therapists reported using fewer action skills than usual in the next session. These results were inconsistent with our hypotheses (H12 and H13) that higher attachment avoidance would predict more exploration skills and fewer action skills. Perhaps recognizing that clients were withdrawing was a signal to therapists to become more active and encourage clients to re-engage in the next session. Of course, it could also be that therapists were acting out of mismanaged countertransference, such that they became frustrated with avoidant clients and thus prematurely utilized action skills.

In the client model, there were significant and negative cross-lagged correlations between client attachment anxiety and therapist exploration and action skills (the correlation between anxiety and insight was of a similar magnitude but not significant). Hence, when clients reported higher than usual attachment anxiety in one session, they perceived therapists as using fewer of

all the skills in the following session. These results were inconsistent with our hypotheses (H10 and H11) that higher attachment anxiety would predict more exploration and action skills. Perhaps clients perceived therapists as pulling back and using fewer of the active skills (possibly just listening and being supportive) in response to clients hyperactivating (e.g., being needy and demanding) and pulling for "too much" from them, whereas they used more of all the skills when clients were less anxiously attached.

Contrary to our hypotheses (H14 and H15) that lower attachment anxiety and avoidance in one session would predict more insight in the next session, we did not find any significant cross-lagged relationships between attachment dimensions and insight skills. In the client model, the cross-lagged correlations between attachment dimensions and insight skills were of similar magnitude and trending in the same direction as the significant cross-lagged correlations (Anxiety predicting Exploration and Action). Interestingly, therapists reported using more insight skills when clients reported higher attachment anxiety (within the same session), and clients perceived therapists as using more insight skills when clients reported lower attachment avoidance (within the same session). Therefore, it seems that there is a relationship between attachment dimensions and insight skills, but we cannot detect a temporal relationship from one session to the next.

Taken together, it seems that therapists are being responsive to client needs (using more helping skills in response to client avoidance and fewer helping skills in response to client anxiety). These findings fit with interpersonal circumplex theory (IPC; Carson, 1969; Kiesler, 1983, 1996), in which interpersonal styles "pull" for predictable responses from others. In particular, client submissiveness (avoidance, deactivation) pulls for therapist dominance (over-

reacting), whereas client dominance (anxiety, hyperactivation) pulls for therapist submissiveness (under-reacting).

Responsiveness includes an awareness of the client's current state and needs within the context of the client's general patterns (Kramer & Stiles, 2015). Based on their prior relational experiences with important others, clients form expectations about the therapist's availability and responsiveness (e.g., Bowlby, 1988; Farber & Metzger, 2009). More avoidantly attached clients expect that the therapist would not be available and responsive, and would likely feel that the therapist is too close (Wiseman & Egozi, 2021). Given that the therapists in this study responded to client avoidance with more action, it seems that therapists could be trying to provide clients with a corrective relational experience. However, these results were averaged across time, and according to Mallinckrodt's therapeutic distancing model (Mallinckrodt, 2000, 2010), it would be important to assess how this played out in different phases of therapy. For example, therapist engagement and closeness during beginning stages of therapy with avoidant clients might be ill advised.

More anxiously attached clients expect that the therapist would be inconsistently available and responsive, and would likely feel that the therapist is too distant (Wiseman & Egozi, 2021). The results of this study fit this conceptualization of anxiously attached clients, given that more anxiously attached clients perceived therapists as using fewer skills (i.e., being less active and engaged). Again, depending on the timing within the course of therapy, this could either be considered a lack of responsiveness (beginning stages) or an effective approach of therapeutic distancing (more advanced stages).

Importantly, though, avoidance seems more "triggering" from the therapist's perspective, whereas anxiety seems more "triggering" from the client's perspective. Therapists may struggle

more with a client who presents as withdrawn and distant compared to a client who is hysterical and out of control. When clients are more anxious than usual, they may be needing more from the therapist, and in turn, they may view the therapist as less involved. There also are likely to be interactions between therapist and client attachment styles (see Teyber & Teyber, 2016), which we could not examine here because of low power.

Limitations

The data were collected from one clinic with doctoral student therapists using a psychodynamic theoretical orientation in their work with majority White and young adult community clients presenting primarily with anxiety, depression, and relational issues. Results may not generalize to other clinical settings, therapists at different developmental levels or using other theoretical orientations, or clients with different demographics and presenting concerns. In particular, the developmental level of the therapists in this study seems relevant given our use of the HSM, which measures therapist skill use. The therapists in this clinic were well-versed in the helping skills model, and not far removed from their helping skills training. Therefore, the results of this study may be more pronounced than the results would be with therapists not directly or recently trained in the helping skills model.

In addition, although both the ECR-S and HSM have strong psychometric properties, they are both self-report measures. Clients may be biased in completing the ECR-S, perhaps responding in a way that over- or under-exaggerates their attachment style due to social desirability bias. They may also be biased in their HSM ratings, based on their general like or dislike of the therapist/therapy and a potential misunderstanding of the use of the data (e.g., perhaps believing that higher scores will lead to better therapist evaluations by supervisors). Clients may have limited insight into their attachment dynamics and the therapists skills, which

could compromise their ratings. Therapists may be biased in their HSM ratings, based on their concepts of how they *should* be using the helping skills (e.g., limited action skills). Furthermore, there was mono-method bias in the client model of the DSEM given that clients rated both attachment and helping skills.

Regarding the measurement of attachment, there is considerable debate about the comparability of self-report measures (e.g., ECR) and interview-based measures (e.g., the Adult Attachment Interview). Although some (e.g., Shaver & Mikulincer, 2004) have argued that the ECR captures unconscious processes, others (e.g., Eagle, 2013) have contended that the ECR involves a conscious evaluation of context-specific feelings regarding current relationships. Furthermore, different results have emerged for self-report and interview-based attachment measures (Roisman et al., 2007). And, it is possible that attachment behaviors may fluctuate within sessions (see Talia et al., 2017), which we could not capture with a post-session rating of attachment.

Regarding the measurement of helping skills, the HSM is a post-session measure, which fails to capture the myriad subtypes of skills and the clinical complexity of how skills are used within sessions (e.g., timing, quality). Further, in the DSEM, we could only look at scale scores (Exploration, Insight, Action) based on the HSM factor analysis, which is limiting in terms of examining the effects of specific skills (e.g., challenges, interpretations).

Although the measures were fairly short and could be completed within less than five minutes, therapists and clients may still have experienced measurement fatigue as a result of completing the measures after every therapy session (i.e., reactivity). Potential frustration and emotional disengagement with this repetitive process could have led to less thoughtful and accurate responses.

A further potential limitation is that data collection for the HSM in the M-CFA sample switched from in-person sessions to telehealth sessions. It is possible that results may have differed had all of the sessions occurred in-person or virtually, rather than a mixture of both. Furthermore, in the M-CFA, we used a two-level model with cluster robust standard errors because the three-level model failed to converge. A three-level model would more closely align with the data structure given the nesting of sessions within clients within therapists. Additionally, the data collection for the DSEM only lasted one year with a small number of therapists and clients, resulting in lower power and lack of ability to generalize across the therapeutic process.

An additional limitation involved our lack of ability to look at change across different phases of therapy because of low power. Instead, we could only look at change from one session to the next or averaged across a year of therapy. We also lacked sufficient numbers of clients with distinct attachment styles (i.e., secure, preoccupied, dismissive, disorganized), which would have allowed us to divide the sample by client attachment style. However, many argue that examining the dimensional scores of anxiety and avoidance is more appropriate than putting clients into the four clusters (e.g., Fraley et al., 2015; Raby et al., 2022).

Implications for Practice

First, it would be helpful for therapists to be knowledgeable about attachment theory and trained in aspects of attachment-informed therapy so that they can recognize manifestations of attachment as they arise and work productively with them in sessions (Eubanks-Carter et al., 2015). A working conceptualization of client attachment origins and awareness of how client attachment manifests in the therapy room, will likely aid the therapist in more directly helping clients work through attachment-related issues. Relatedly, it would probably be important for

therapists to be aware of their own attachment styles and how these influence their therapeutic work.

Given that client attachment remained relatively stable across therapy and helping skills did not predict session-to-session changes in attachment in this study, therapists should set realistic expectations for change in attachment. Clearly, change in attachment is quite complex and likely requires multiple elements. For example, it may be that insight into one's attachment patterns is necessary before change can occur.

The results also suggest the importance of therapist responsiveness, not only tailored to each individual client, but also adapted for each particular moment. How do therapists respond when clients exhibit more or less of an attachment behavior than usual? What does it mean for therapists to be responsive to client attachment? How do therapists manage their own reactions so that they do not act out in a harmful way? How do therapists continue to respond to clients over time, and how does that responsiveness change? The more that therapists can increase their awareness of their emotional reactions and behaviors (e.g., becoming less active in response to an anxiously attached client), the more likely they can help their clients from a place of intentionality. Working through countertransference, in particular, may be especially important for using specific therapeutic skills and for providing effective psychotherapy (e.g., Hayes et al., 2018, 2019; Hill et al., 2020).

Therapist responsiveness is undoubtedly influenced by client's attachment styles. It may be useful to consider Hardy et al.'s (1999) theory of therapist responsiveness from an attachment perspective: providing security, working at the zone of proximal development, and promoting the integration of client experiences. When clients increasingly use therapists as a secure base, they can explore threats and fears within the confines of a safe environment and gradually develop a

more integrated sense of self. Ultimately, the most responsive approach from an attachment perspective may be a continual moving between different forms (e.g., supportive, interpretive) of relating with the client (Heard & Lake, 1997). We thus suggest that therapists take a nuanced approach to responsiveness, continually adjusting based on client's immediate as well as longer-term needs.

Implications for Research

Continued examination of the relationship between therapist skills and client attachment has the potential to help therapists approach the psychotherapy process more effectively. A significant direction for future research is to connect the associations between therapist skills and client attachment found in this study to client outcome. By doing so, researchers can assess how the ways in which therapists work differently with clients of different attachment styles influence outcome factors such as symptom change, increased internal resources, restructured internal working models, and healthier relationships.

We also need to more closely investigate how clients' attachment styles manifest in the therapy room, the skills therapists are using, how they are using them, and their immediate and delayed outcomes. Researchers might utilize the Patient Attachment Coding System (Talia et al., 2017) and use methods employed in recent case studies of therapist skills (e.g., Hill et al., 2019, 2020, 2022) to more closely analyze in-session therapist and client behaviors. Looking closely at the within session process, by watching and coding therapy sessions, will help bring us closer to a more comprehensive understanding of these processes.

Another area for future research involves updating and improving the HSM. The measure was developed in 2002, but the model on which it was created has continued to evolve (latest version published in 2020). Therefore, researchers may consider aligning the HSM with the

current Helping Skills Model. Relatedly, it will be important to improve the factor structure of the HSM to satisfy all four fit criteria. Conducting a multilevel-exploratory factor analysis on the HSM could lead to a factor structure that is a good fit globally, as well as at the between and within levels.

Additional research implications involve replicating this study with therapists at different developmental levels and with different backgrounds in helping skills training. Further, studies that explore the relationship between therapist skills and client attachment across the entire course of therapy will clarify how changes evolve over the therapeutic arc. For example, researchers could include an interaction term in the model between skills and time, which would allow a better understanding of therapist skill use during different phases of therapy. Studies with more therapists and clients will also allow researchers to study potential differences between matching (e.g., anxiously attached client with anxiously attached therapist) and complementary (e.g., anxiously attached client with avoidantly attached therapist) therapeutic dyads.

Appendix A: Measures

Experiences in Close Relationships Scale-Short Form (ECR-S; Wei et al., 2007)

Instructions: The following statements concern how you generally feel in close relationships (e.g., with romantic partners, close friends, or family members). Respond to each statement by indicating how much you agree or disagree with it. Please read each statement carefully and then indicate your response using the scale provided. (1 = Disagree strongly, 2 = Disagree, 3 = Disagree slightly, 4 = Neutral/mixed, 5 = Agree slightly, 6 = Agree, 7 = Agree strongly)

1. I feel comfortable depending on others. [*reverse score*]
2. I worry that others won't care about me as much as I care about them.
3. I usually discuss my problems and concerns with close others. [*reverse score*]
4. I worry a fair amount about losing my close relationship partners.
5. I tell my close relationship partners just about everything. [*reverse score*]
6. I worry a lot about my relationships.
7. I don't mind asking close others for comfort, advice, or help. [*reverse score*]
8. I worry about being alone.
9. I don't feel comfortable opening up to others.
10. I need a lot of reassurance that close relationship partners really care about me.
11. I feel comfortable sharing my private thoughts and feelings with others. [*reverse score*]
12. If I can't get my partner to show interest in me, I get upset or angry.

Note. Avoidance items: 1, 3, 5, 7, 9, 11; Anxiety items: 2, 4, 6, 8, 10, 12.

Helping Skills Measure-Therapist Form (HSM-T; Hill & Kellems, 2002)

Instructions: Indicate how much each statement reflects your experiences in your most recent therapy session. Please note that all of these things do not occur in every session because helpers do many different things to be helpful. The term helper can refer to a therapist, counselor, or any other person in the helping role. Indicate your response using the following scale: 1 = *Strongly disagree*, 5 = *Strongly agree*.

In this session, I…

1. asked questions to help the client explore what they were thinking or feeling.
2. encouraged the client to challenge their beliefs.
3. did **NOT** help the client think about changes they could make in their life.
4. did **NOT** teach the client specific skills to deal with their problems.
5. did **NOT** encourage the client to express what they were thinking or feeling.
6. helped the client become aware of contradictions in their thoughts, feelings, and/or behaviors.
7. helped my client think about their concerns.
8. did **NOT** help the client identify useful resources (e.g., friends, parents, advisors, schools, clergy).
9. helped the client figure out how to solve a specific problem.
10. helped the client understand the reasons behind their thoughts, feelings, and/or behaviors.
11. did **NOT** encourage the client to experience their feelings.
12. did **NOT** discuss with the client specific things they could do to make change happen.
13. helped the client gain a new perspective on their problems.

Note. 'r' denotes items that need to be reverse scored before totaling subscale scores. Exploration scale items: 1, 5r, 7, 11r; Insight scale items: 2, 6, 10, 13.; Action scale items: 3r, 4r, 8r, 9, 12r.

Helping Skills Measure-Client Form (HSM-C; Hill & Kellems, 2002)

Instructions: Indicate how much each statement reflects your experiences in your most recent therapy session. Please note that all of these things do not occur in every session because helpers do many different things to be helpful. The term helper can refer to a therapist, counselor, or any other person in the helping role. Indicate your response using the following scale: 1 = *Strongly disagree*, 5 = *Strongly agree*.

In this session, my helper…

1. asked questions to help me explore what I was thinking or feeling.
2. encouraged me to challenge my beliefs.
3. did **NOT** help me think about changes I could make in my life.
4. did **NOT** teach me specific skills to deal with my problems.
5. did **NOT** encourage me to express what I was thinking or feeling.
6. helped me become aware of contradictions in my thoughts, feelings, and/or behaviors.
7. helped me think about my concerns.
8. did **NOT** help me identify useful resources (e.g., friends, parents, advisors, schools, clergy).
9. helped me figure out how to solve a specific problem.
10. helped me understand the reasons behind my thoughts, feelings, and/or behaviors.
11. did **NOT** encourage me to experience my feelings.
12. did **NOT** discuss with me specific things I could do to make change happen.
13. helped me gain a new perspective on my problems.

Note. 'r' denotes items that need to be reverse scored before totaling subscale scores. Exploration scale items: 1, 5r, 7, 11r; Insight scale items: 2, 6, 10, 13.; Action scale items: 3r, 4r, 8r, 9, 12r.

Appendix B: Tables & Figures

Table 1

Descriptive Statistics for the HSM-T

HSM-T Item	*M*	*SD*	Skewness/Kurtosis
T_HS1. Asked questions to help the client explore what they were thinking or feeling	4.35	.67	-.88/1.05
T_HS2. Encouraged the client to challenge their beliefs	3.14	1.29	-.23/-1.13
T_HS3. Did **NOT** help the client think about changes they could make in their life	3.09	1.31	-.12/-1.20
T_HS4. Did **NOT** teach the client specific skills to deal with their problems	2.06	1.27	1.10/.06
T_HS5. Did **NOT** encourage the client to express what they were thinking or feeling	4.36	.77	-1.43/2.85
T_HS6. Helped the client become aware of contradictions in their thoughts, feelings, and/or behaviors	2.93	1.25	-.03/-1.13
T_HS7. Helped my client think about their concerns	4.29	.66	-.88/1.82
T_HS8. Did **NOT** help the client identify useful resources (e.g., friends, parents, advisors, schools, clergy)	2.26	1.36	.80/-.69
T_HS9. Helped the client figure out how to solve a specific problem	2.13	1.09	.73/-.34
T_HS10. Helped the client understand the reasons behind their thoughts, feelings, and/or behaviors	3.62	1.05	-.74/.00
T_HS11. Did **NOT** encourage the client to experience their feelings	3.92	1.07	-.94/.16
T_HS12. Did **NOT** discuss with the client specific things they could do to make change happen	2.68	1.34	.34/-1.13
T_HS13. Helped the client gain a new perspective on their problems	3.44	1.00	-.57/-.05

Note. N = 5,830 sessions, 202 clients, 25 therapists. HSM-T = Helping Skills Measure- Therapist Form; M = mean; SD = standard deviation. Means and standard deviations are based on the raw HSM-T item scores; Skewness and kurtosis are based on the within-client centered data.

Table 2

Factor Loadings for the Standardized M-CFA Within-Level Model of the HSM-T

HSM-T Item	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
Factor 1:Exploration				
T_HS1	.51	.06	9.11	.000
T_HS5	.51	.04	12.43	.000
T_HS7	.44	.03	13.20	.000
T_HS11	.52	.04	11.78	.000
Factor 2: Insight				
T_HS2	.43	.04	12.50	.000
T_HS6	.40	.04	9.91	.000
T_HS10	.66	.04	17.78	.000
T_HS13	.76	.03	26.26	.000
Factor 3: Action				
T_HS3	.60	.03	18.14	.000
T_HS4	.55	.04	14.52	.000
T_HS8	.41	.04	10.29	.000
T_HS9	.59	.04	14.65	.000
T_HS12	.71	.03	26.50	.000

Note. N = 5,830 sessions, 202 clients, 25 therapists. M-CFA = Multilevel- Confirmatory Factor Analysis; HSM-T = Helping Skills Measure- Therapist Form; *S.E.* = standard error; *Est./S.E.* = estimate divided by standard error.

Table 3

Measurement Invariance of the HSM-T

Loading Variances	Estimate	95% CI Lower 2.5%	95% CI Upper 2.5%	Estimate	95% CI Lower 2.5%	95% CI Upper 2.5%
	Between Clients			Between Time/Session		
Factor 1: Exploration						
Variance of T_HS1	.025	–	–	.003	–	–
Variance of T_HS5	.386	–	–	.018	–	–
Variance of T_HS7	.024	–	–	.008	–	–
Variance of T_HS11	.098	–	–	.003	–	–
Factor 2: Insight						
Variance of T_HS2	.162	.119	.224	.001	.000	.004
Variance of T_HS6	.163	.120	.221	.001	.000	.004
Variance of T_HS10	.326	.258	.427	.001	.000	.003
Variance of T_HS13	.268	.213	.357	.002	.000	.005
Factor 3: Action						
Variance of T_HS3	.303	.214	.399	.000	.000	.004
Variance of T_HS4	.373	.279	.500	.002	.000	.007
Variance of T_HS8	.232	.182	.316	.002	.000	.006
Variance of T_HS9	.235	.177	.311	.001	.000	.004
Variance of T_HS12	.401	.298	.538	.001	.000	.005

Note. N = 5,830 sessions, 202 clients, 25 therapists. HSM-T = Helping Skills Measure- Therapist Form.

– Reflects the lack of confidence intervals due to the covariance matrix being not positive definite

Table 4

Descriptive Statistics for the HSM-C

HSM-C Item	*M*	*SD*	Skewness/Kurtosis
C_HS1. Asked questions to help me explore what I was thinking or feeling	4.74	.55	-2.57/9.05
C_HS2. Encouraged me to challenge my beliefs	4.36	.90	-1.42/1.67
C_HS3. Did **NOT** help me think about changes I could make in my life	4.48	.85	-1.81/3.01
C_HS4. Did **NOT** teach me specific skills to deal with my problems	4.09	1.11	-1.01/.03
C_HS5. Did **NOT** encourage me to express what I was thinking or feeling	4.81	.52	-3.60/17.11
C_HS6. Helped me become aware of contradictions in my thoughts, feelings, and/or behaviors	4.38	.81	-1.35/1.88
C_HS7. Helped me think about my concerns	4.64	.62	-2.22/7.31
C_HS8. Did **NOT** help me identify useful resources (e.g., friends, parents, advisors, schools, clergy)	4.10	1.11	-1.03/.10
C_HS9. Helped me figure out how to solve a specific problem	3.81	1.09	-.60/-.46
C_HS10. Helped me understand the reasons behind my thoughts, feelings, and/or behaviors	4.41	.80	-1.51/2.63
C_HS11. Did **NOT** encourage me to experience my feelings	4.78	.53	-3.25/14.37
C_HS12. Did **NOT** discuss with me specific things I could do to make change happen	4.26	1.03	-1.34/.96
C_HS13. Helped me gain a new perspective on my problems	4.44	.76	-1.48/2.70

Note. N = 5,830 sessions, 202 clients, 25 therapists. HSM-C = Helping Skills Measure- Client Form; M = mean; SD = standard deviation. Means and standard deviations are based on the raw HSM-T item scores; Skewness and kurtosis are based on the within-client centered data.

Table 5

Factor Loadings for the Standardized M-CFA Within-Level Model of the HSM-C

HSM-C Item	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
Factor 1:Exploration				
C_HS1	.59	.06	9.79	.000
C_HS5	.34	.08	4.52	.000
C_HS7	.57	.06	10.42	.000
C_HS11	.38	.09	4.37	.000
Factor 2: Insight				
C_HS2	.61	.03	21.51	.000
C_HS6	.67	.03	26.19	.000
C_HS10	.62	.02	26.63	.000
C_HS13	.65	.03	25.80	.000
Factor 3: Action				
C_HS3	.63	.02	27.15	.000
C_HS4	.70	.02	28.87	.000
C_HS8	.47	.03	14.13	.000
C_HS9	.60	.02	26.86	.000
C_HS12	.64	.02	28.52	.000

Note. N = 5,830 sessions, 202 clients, 25 therapists. M-CFA = Multilevel- Confirmatory Factor Analysis; HSM-C = Helping Skills Measure- Client Form; *S.E.* = standard error; *Est./S.E.* = estimate divided by standard error.

Table 6

Measurement Invariance of the HSM-C

Loading Variances	Estimate	95% CI Lower 2.5%	95% CI Upper 2.5%	Estimate	95% CI Lower 2.5%	95% CI Upper 2.5%
	Between Client			Between Time/Session		
Factor 1: Exploration						
Variance of C_HS1	.035	–	–	.004	–	–
Variance of C_HS5	.201	–	–	.009	–	–
Variance of C_HS7	.036	–	–	.003	–	–
Variance of C_HS11	.082	–	–	.019	–	–
Factor 2: Insight						
Variance of C_HS2	.198	.154	.262	.045	.027	.071
Variance of C_HS6	.176	.126	.240	.048	.026	.086
Variance of C_HS10	.141	.113	.186	.042	.025	.074
Variance of C_HS13	.154	.112	.218	.036	.021	.062
Factor 3: Action						
Variance of C_HS3	.260	.209	.331	.007	.002	.019
Variance of C_HS4	.362	.272	.452	.014	.003	.031
Variance of C_HS8	.145	.101	.193	.015	.004	.030
Variance of C_HS9	.176	.135	.235	.010	.004	.018
Variance of C_HS12	.235	.169	.311	.014	.005	.029

Note. N = 5,830 sessions, 202 clients, 25 therapists. HSM-C = Helping Skills Measure- Client Form.

– Reflects the lack of confidence intervals due to the covariance matrix being not positive definite

Table 7

Means, Standard Deviations, and Contemporaneous Correlations for ECR-S and HSM-T

Measure	M	SD	1	2	3	4	5	6
1. ECR-S_Anxiety	4.619	1.103						
2. ECR-S_Avoidance	3.861	1.326	0.016					
3. HSM-T_Exploration	4.346	0.567	0.107**	0.160**				
4. HSM-T_Insight	2.720	0.794	0.138**	-0.001	0.419**			
5. HSM-T_Action	2.076	0.878	-0.013	0.043	0.144**	0.183**	-	
6. Session	15.774	14.206	-	-	-	-	-	-

Note. Clients = 37; Therapists = 6; ECR-S = Experiences in Close Relationships Scale- Short Form; HSM-T = Helping Skills Measure- Therapist Form.

** $p < .001$

Table 8

Linear Effects, Autocorrelations, and Cross-Lagged Correlations for Within-Level Standardized Estimates in a Preliminary Analysis for HSM-T

Effects	Estimate	SD	One-Tailed P-Value	95% CI Lower 2.5%	95% CI Upper 2.5%	Significance
Linear Effects						
Anxiety on Session	0.006	0.053	0.454	-0.098	0.106	
Avoidance on Session	-0.044	0.061	0.225	-0.160	0.068	
Exploration on Session	0.135	0.065	0.018	0.010	0.263	*
Insight on Session	0.159	0.065	0.011	0.029	0.278	*
Action on Session	0.103	0.069	0.072	-0.038	0.229	
Autocorrelations						
Anxiety T on Anxiety T-1	0.312	0.059	0.000	0.194	0.419	*
Avoidance T on Avoidance T-1	0.086	0.058	0.060	-0.021	0.203	
Exploration T on Exploration T-1	0.044	0.065	0.259	-0.081	0.173	
Insight T on Insight T-1	0.092	0.054	0.043	-0.010	0.203	
Action T on Action T-1	0.030	0.072	0.345	-0.114	0.180	

Cross-Lagged Correlations: Attachment on Helping Skills					
Anxiety T on Exploration T-1	-0.072	0.057	0.102	-0.179	0.032
Anxiety T on Insight T-1	0.057	0.061	0.185	-0.063	0.171
Anxiety T on Action T-1	0.088	0.055	0.046	-0.014	0.199
Avoidance T on Exploration T-1	0.086	0.058	0.060	-0.021	0.203
Avoidance T on Insight T-1	0.088	0.063	0.088	-0.043	0.202
Avoidance T on Action T-1	-0.013	0.062	0.420	-0.134	0.109
Cross-Lagged Correlations: Helping Skills on Attachment					
Exploration T on Anxiety T-1	-0.021	0.068	0.366	-0.149	0.124
Exploration T on Avoidance T-1	0.042	0.065	0.250	-0.080	0.172
Insight T on Anxiety T-1	-0.045	0.069	0.259	-0.186	0.086
Insight T on Avoidance T-1	0.046	0.065	0.231	-0.094	0.178
Action T on	-0.011	0.055	0.433	-0.116	0.092

Anxiety T-1					
Action T on Avoidance T-1	0.111	0.060	0.025	0.000	0.233

Note. Clients = 37; Therapists = 6; HSM-T = Helping Skills Measure- Therapist Form.

* $p < .001$

Table 9

Linear Effects, Autocorrelations, and Cross-Lagged Correlations for Within-Level Standardized Estimates After Controlling for Significant Linear Effects for HSM-T

				95% CI		
Effects	Estimate	SD	One-Tailed P-Value	Lower 2.5%	Upper 2.5%	Significance
Linear Effects						
Exploration on Session	0.135	0.067	0.023	0.003	0.267	*
Insight on Session	0.134	0.065	0.023	0.001	0.257	*
Autocorrelations						
Anxiety T on Anxiety T-1	0.455	0.061	0.000	0.330	0.566	*
Avoidance T on Avoidance T-1	0.146	0.061	0.008	0.027	0.264	*
Exploration T on Exploration T-1	0.024	0.062	0.336	-0.094	0.158	
Insight T on Insight T-1	0.096	0.056	0.049	-0.016	0.202	
Action T on Action T-1	0.252	0.069	0.001	0.108	0.385	*
Cross-Lagged Correlations: Attachment on Helping Skills						
Anxiety T on Exploration T-1	-0.065	0.051	0.107	-0.169	0.033	

Anxiety T on Insight T-1	0.044	0.053	0.199	-0.058	0.148	
Anxiety T on Action T-1	0.064	0.053	0.132	-0.066	0.153	
Avoidance T on Exploration T-1	0.005	0.060	0.466	-0.111	0.121	
Avoidance T on Insight T-1	0.100	0.064	0.060	-0.023	0.229	
Avoidance T on Action T-1	0.001	0.059	0.495	-0.120	0.114	
Cross-Lagged Correlations: Helping Skills on Attachment						
Exploration T on Anxiety T-1	-0.002	0.073	0.492	-0.146	0.139	
Exploration T on Avoidance T-1	0.064	0.059	0.149	-0.047	0.177	
Insight T on Anxiety T-1	-0.036	0.068	0.283	-0.153	0.112	
Insight T on Avoidance T-1	0.054	0.063	0.184	-0.045	0.193	
Action T on Anxiety T-1	0.006	0.063	0.469	-0.118	0.130	
Action T on Avoidance T-1	0.119	0.056	0.016	0.010	0.233	*

Note. Clients = 37; Therapists = 6; HSM-T = Helping Skills Measure- Therapist Form.

* $p < .001$

Table 10

Means, Standard Deviations, and Contemporaneous Correlations for ECR-S and HSM-C

Measure	M	SD	1	2	3	4	5	6
1. ECR-S_Anxiety	4.619	1.103						
2. ECR-S_Avoidance	3.861	1.326	0.011					
3. HSM-C_Exploration	4.661	0.486	0.068	-0.073				
4. HSM-C_Insight	4.066	0.764	-0.013	-0.204**	0.545**			
5. HSM-C_Action	3.636	1.022	-0.043	-0.141**	0.452**	0.438**	-	-
6. Session	15.774	14.206	-	-	-	-	-	-

Note. Clients = 37; Therapists = 6; ECR-S = Experiences in Close Relationships Scale- Short Form; HSM-C = Helping Skills Measure- Client Form.

** $p < .001$

Table 11

Linear Effects, Autocorrelations, and Cross-Lagged Correlations for Within-Level Standardized Estimates in a Preliminary Analysis for HSM-C

				95% CI		
Effects	Estimate	SD	One-Tailed P-Value	Lower 2.5%	Upper 2.5%	Significance
Linear Effects						
Anxiety on Session	0.026	0.056	0.327	-0.081	0.139	
Avoidance on Session	-0.067	0.069	0.132	-0.203	0.060	
Exploration on Session	0.101	0.072	0.063	-0.026	0.247	
Insight on Session	0.125	0.068	0.031	-0.006	0.258	
Action on Session	0.140	0.071	0.024	0.000	0.276	*
Autocorrelations						
Anxiety T on Anxiety T-1	0.300	0.057	0.000	0.193	0.408	*
Avoidance T on Avoidance T-1	0.105	0.056	0.028	-0.006	0.215	
Exploration T on Exploration T-1	0.060	0.063	0.170	-0.057	0.191	
Insight T on Insight T-1	0.066	0.062	0.156	-0.059	0.171	
Action T on Action T-1	0.033	0.055	0.272	-0.075	0.142	

Cross-Lagged Correlations: Attachment on Helping Skills						
Anxiety T on Exploration T-1	-0.023	0.064	0.379	-0.145	0.102	
Anxiety T on Insight T-1	0.039	0.068	0.264	-0.104	0.174	
Anxiety T on Action T-1	-0.022	0.057	0.337	-0.128	0.102	
Avoidance T on Exploration T-1	-0.089	0.061	0.081	-0.198	0.035	
Avoidance T on Insight T-1	0.085	0.070	0.100	-0.049	0.215	
Avoidance T on Action T-1	0.084	0.063	0.089	-0.037	0.211	
Cross-Lagged Correlations: Helping Skills on Attachment						
Exploration T on Anxiety T-1	-0.128	0.076	0.043	-0.274	0.012	
Exploration T on Avoidance T-1	-0.032	0.077	0.340	-0.182	0.199	
Insight T on Anxiety T-1	-0.148	0.075	0.024	-0.287	-0.001	*
Insight T on Avoidance T-1	-0.024	0.075	0.350	-0.176	0.123	
Action T on	-0.194	0.069	0.004	-0.318	-0.053	*

Anxiety T-1					
Action T on	0.097	0.071	0.084	-0.050	0.240
Avoidance T-1					

Note. Clients = 37; Therapists = 6; HSM-C = Helping Skills Measure- Client Form.

* $p < .001$

Table 12

Linear Effects, Autocorrelations, and Cross-Lagged Correlations for Within-Level Standardized Estimates After Controlling for Significant Linear Effects for HSM-C

Effects	Estimate	SD	One-Tailed P-Value	95% CI Lower 2.5%	95% CI Upper 2.5%	Significance
Linear Effects						
Action on Session	0.095	0.069	0.079	-0.039	0.230	
Autocorrelations						
Anxiety T on Anxiety T-1	0.438	0.062	0.000	0.312	0.550	*
Avoidance T on Avoidance T-1	0.174	0.063	0.001	0.054	0.303	*
Exploration T on Exploration T-1	0.135	0.063	0.015	0.010	0.264	*
Insight T on Insight T-1	0.091	0.062	0.066	-0.026	0.209	
Action T on Action T-1	0.030	0.058	0.289	-0.084	0.148	
Cross-Lagged Correlations: Attachment on Helping Skills						
Anxiety T on Exploration T-1	-0.014	0.059	0.390	-0.154	0.093	
Anxiety T on	0.023	0.055	0.328	-0.083	0.136	

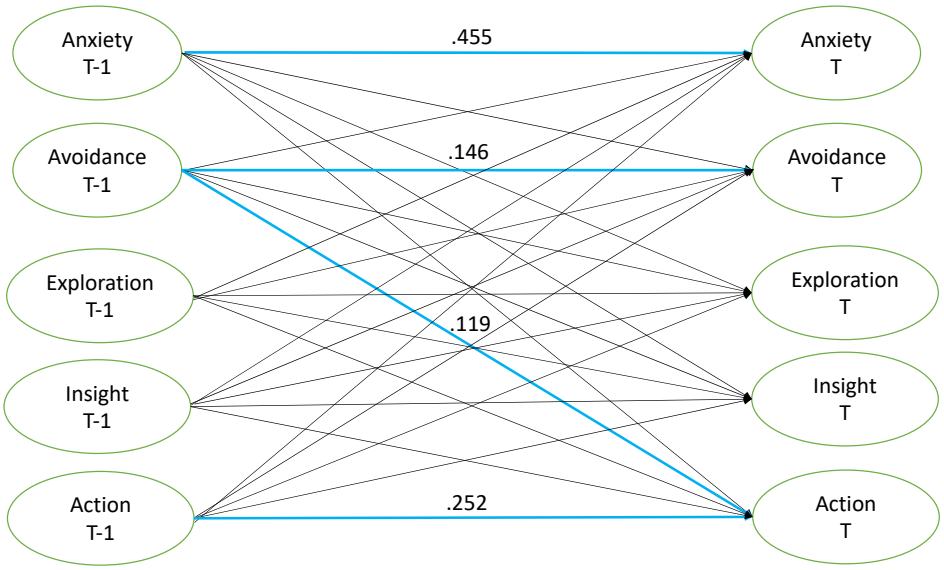
Insight T-1						
Anxiety T on	-0.045	0.056	0.226	-0.154	0.061	
Action T-1						
Avoidance T on	-0.084	0.071	0.105	-0.235	0.049	
Exploration T-1						
Avoidance T on	0.096	0.066	0.074	-0.034	0.230	
Insight T-1						
Avoidance T on	0.060	0.064	0.174	-0.068	0.180	
Action T-1						
Cross-Lagged Correlations: Helping Skills on Attachment						
Exploration T on	-0.159	0.072	0.013	-0.309	-0.023	*
Anxiety T-1						
Exploration T on	-0.033	0.070	0.327	-0.173	0.099	
Avoidance T-1						
Insight T on	-0.136	0.078	0.047	-0.291	0.018	
Anxiety T-1						
Insight T on	-0.042	0.072	0.294	-0.188	0.082	
Avoidance T-1						
Action T on	-0.213	0.069	0.002	-0.340	-0.067	*
Anxiety T-1						
Action T on	0.088	0.063	0.083	-0.028	0.223	
Avoidance T-1						

Note. Clients = 37; Therapists = 6; HSM-C = Helping Skills Measure- Client Form.

* $p < .001$

Figure 1

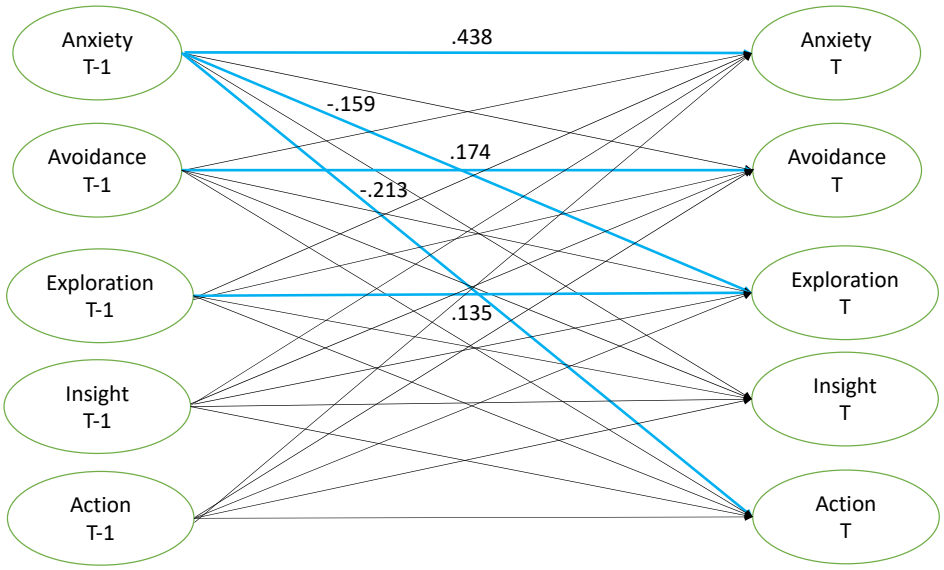
Significant Effects of Within-Level Standardized Estimates After Controlling for Significant Linear Effects for HSM-T



Note. This figure shows the significant autocorrelations and cross-lagged correlations, after controlling for significant linear effects, in the HSM-T; HSM-T = Helping Skills Measure-Therapist Form. T = scores from the current session; T-1 = scores from the previous session.

Figure 2

Significant Effects of Within-Level Standardized Estimates After Controlling for Significant Linear Effects for HSM-C



Note. This figure shows the significant autocorrelations and cross-lagged correlations, after controlling for significant linear effects, in the HSM-C; HSM-C = Helping Skills Measure-Client Form. T = scores from the current session; T-1 = scores from the previous session.

Appendix C: Extended Literature Review

John Bowlby, the famed psychiatrist and developmental psychologist, laid the foundation of attachment theory (Bowlby, 1969/1982, 1973, 1980) and wrote extensively about its therapeutic implications (e.g., Bowlby, 1988). In particular, Bowlby (1988) described the therapeutic relationship as an attachment relationship, in which the therapist's role is to provide a secure base for their client to deeply explore their experiences, develop greater understanding, better regulate their emotions, revise their internal working models, and consider new ways of engaging in intra- and inter-personal relationships. Bowlby encouraged therapists to tailor the therapeutic relationship and process to the individual client based on the client's attachment style.

Although many scholars provide theoretically-based recommendations for working with clients of differing attachment styles (e.g., Holmes, 2001; Holmes & Slade, 2018; Wallin, 2007), the field lacks sufficient empirically-based evidence on how therapists might intervene differentially. Thus, the primary purpose of the present study was to bolster the empirical evidence by examining the relationship between client attachment dimensions and therapist skills over time in psychotherapy. A more nuanced understanding of the relationship between dynamic changes in client attachment and therapist interventions can enable therapists to help clients experience their thoughts and emotions, gain insight into their patterns and defenses, and make enduring, meaningful changes.

To provide a more comprehensive context for the present study, I will expand on relevant theoretical and empirical literature. After briefly reviewing the development and basis of attachment theory, I will discuss measurement of adult attachment, the connection between

attachment and psychotherapy, adaptation of psychotherapy based on client attachment style, and the Hill Helping Skills Model and training.

Attachment Theory Overview

Origins and Development

Psychoanalytic and social learning theorists proposed that an infant's relationship with the mother develops as a result of her feeding the infant (e.g., Freud, 1910/1957; Sears et al., 1957). The infant seeks the mother as it learns that the mother can gratify the infant's physiological needs. However, evidence from animal studies contested these secondary-drive theories. Notably, after separating infant rhesus monkeys from their mothers at birth, Harlow (1958) observed that the monkeys preferred the cloth "mother" that provided comfort over the wire "mother" that provided food during times of stress. Bowlby observed a similar pattern in hospitalized and institutionalized children separated from their mothers, who experienced intense distress even if they were fed by others (Bowlby, 1944; Holmes, 1993). Through empirical evidence from animal studies and observational data from human infants, Bowlby (1969/1982) theorized that infants have an instinctual, biologically-based behavior system that drives them to attach to their primary caregiver(s) for the evolutionary purpose of survival. This attachment behavioral system protects the infant and enhances its reproductive fitness by ensuring that it stays in close proximity to an adult who will care for the infant and keep it alive.

The attachment system thus serves to maintain the attachment of an infant toward its caregiver. Attachment is a type of affectional bond, defined by the following six characteristics: (1) stable across time, (2) directed toward a specific person, (3) emotionally salient, (4) involving a wish to maintain proximity or contact, (5) distress at involuntary separation, and (6) desire for security from the other person (Ainsworth, 1989). It is this final feature, security seeking, that

delineates the attachment bond from all other affectional bonds. The infant uses one or more adaptive attachment behaviors, such as vocalizing, crying, reaching, or signaling, to obtain or maintain proximity or contact to the caregiver. By using whichever behavior(s) they find most useful at that moment, the infant responds flexibly and adaptively to environmental changes (Cassidy, 2016). The infant uses internal (e.g., fatigue, pain) and external (e.g., threatening stimulus, absence of an attachment figure) cues to determine whether their goal is met (e.g., to be picked up and held by the mother), and their attachment behaviors will remain active until the goal is achieved. For example, an infant who sees its mother leaving the room may first start to cry. If this does not work, the infant may try to reach for the mother or even crawl after her. The attachment behavior will likely terminate shortly after the infant achieves proximity or contact with the mother. In safe situations, infants can explore the world with their attachment system minimally activated (i.e., on reserve). During times of perceived and actual threat, the system increases its activation and the infant will attempt to draw closer to the caregiver. Thus, the caregiver(s) provide(s) a "secure base" from which the infant can explore the world and a "safe haven" to which the infant can return during times of distress.

Individual Differences in Attachment

Nearly all children become attached, but the quality of their attachment differs. Ainsworth's Strange Situation, a research paradigm that creates reunions between caregivers and infants following a stressful experience, provides empirical evidence for different attachment classifications (Ainsworth et al., 1971; Ainsworth et al., 1978). Initially, Ainsworth et al. (1978) identified three primary attachment patterns: secure, insecure-ambivalent/resistant, and insecure-avoidant. Each pattern reflects a different adaptive strategy depending on the infant's rearing environment (Belsky, 1997).

Secure infants have caregivers who are available and responsive to their needs. When the mother was present, the infants freely explored the playroom. They protested when the mother left the room, and upon reunion, they used her to regulate their distress and then easily resumed their exploratory play. In contrast, ambivalent/resistant infants have caregivers who are inconsistently responsive. Compared to the secure infants, they engaged in less exploratory behavior in the presence of the mother. Upon reunion, these infants displayed considerable distress and angry resistance (e.g., clinging, kicking, hitting) toward their caregiver. They maximized their emotions and behaviors by hyperactivating in an attempt to encourage their caregiver to pay attention to them and provide better care. Unlike caregivers of secure infants who are generally available and responsive and caregivers of ambivalent/resistant infants who are occasionally responsive, caregivers of avoidant infants consistently reject them. These infants paid minimal attention to the mother. Upon reunion, they avoided their caregiver and minimized their displays of negative emotion. They deactivated by suppressing or inhibiting the tendency to seek support from their caregiver. When Main and Solomon (1990) later reexamined the initial data from Ainsworth's Strange Situation studies, they identified a fourth pattern: insecure-disorganized. These infants have caregivers who themselves are the source of threat, which creates an unresolvable dilemma for the infants. The caregivers exhibit atypical behavior that is frightening, frightened, dissociated, or sexualized, and often contradictory and confusing to the infant. Upon reunion, these infants displayed fearful, odd, or conflicted behaviors, in which they often started and subsequently inhibited their attachment behavioral sequence. This paradigm and initial attachment categorization provided a foundational understanding of attachment theory and continue to play a significant role in attachment research.

These different attachment behavioral patterns reflect different adaptive emotion regulation strategies (Cassidy, 1994). Caregivers co-regulate their infant's emotions, working to understand their meaning by mirroring (i.e., re-presenting infants to themselves through facial expressions and language) and mentalizing (i.e., interpreting behavior in terms of intentional mental states). In this way, caregivers contain the infant's distress by both demonstrating that they understand the cause and impact of the distress and showing that they can cope with and alleviate the distress (Fonagy et al., 2002). Children gradually internalize this emotion regulation process, decreasing co-regulation and increasing self-regulation (Holmes & Slade, 2018). Based on their caregivers' repeated responses to their emotional needs, children learn which emotions can be tolerated and which need to be adjusted (Beebe & Lachmann, 2013; Tronick, 2007). Secure children can express a range of emotion, learning that all emotions are tolerable and amenable to regulation. Anxious children maximize their emotional expression to call the attention of inconsistent caregivers. In contrast, avoidant children minimize their emotional expression in order to avoid rejection or aggression from their caregivers. Lastly, as the name implies, disorganized children do not have an organized emotion regulation strategy. This can lead them to resort to ineffective, or even harmful, forms of self-soothing (e.g., dissociation, self-harm).

As children develop and accumulate more experiences with attachment figures, their attachment system becomes more complex (Shaver et al, 1988). They continue to seek assistance with emotion regulation from attachment figures throughout the lifespan, and their attachment system interacts with their caregiving and sexual systems in multifaceted ways. Attachment relationships are thus significant throughout the lifespan, "from the cradle to the grave" (Bowlby, 1979, p. 129). Importantly, while attachment styles tend to show developmental continuity and

moderate stability (Hamilton, 2000; Waters et al., 2000), they are based on a range of dynamic, interpersonal processes which provide the possibility of change (Slade, 2016).

Attachment Internal Working Models

Children internalize experiences with their caregivers and store these experiences as cognitive structures. In particular, they store information about the extent to which they are likely to receive care and affection. Simultaneously, they store information about the degree to which they can use their caregiver as a secure base and the degree to which their caregiver provides a secure base. These cognitive structures, or mental scripts, contain a sequence of causally-linked events occurring in a specific situation (e.g., Nelson & Gruendel, 1986) and are the building blocks of complex representational models (Bretherton, 1991). Through repeated interactions with their caregivers, children develop scripts for attachment-related events (e.g., If I fall, my mother will comfort me). When presented with an attachment-related situation, children will use the script to predict both how their caregiver will act and how they should act. Children who can use their caregivers as a secure base develop secure representational models of their caregivers, viewing their caregivers as people who will consistently and reliably respond to their needs. These children will also develop a secure representational model of self, viewing themselves as someone who is likely and worthy of receiving care.

Thus, attachment styles reflect one's cumulative experiences with attachment figures, stored as a cognitive structure called an internal working model (IWM). Bowlby conceptualized IWMs as "organized, multilayered, partially hierarchical network[s]" (Bretherton & Munholland, 2016, p. 67). IWMs specific to attachment are "a set of conscious and/or unconscious rules for the organization of information relevant to attachment and for obtaining or limiting access to that information" (Main et al., 1985, p. 92). These guidelines dictate how information about

relationships is encoded, processed, and interpreted. Bowlby proposed that we have inter-related IWMs of ourselves, our attachment figures, and our relationships, which are based in the history of our actions, our interactions with our caregivers, and the fate of our attempts. IWMs allow us to perceive and interpret information, regulate emotions, and predict interactional structures in relationships (Bowlby, 1988; Nelson, 1996). Over time, IWMs become habitual and generalized, operating both within and outside conscious awareness. IWMs are relatively enduring and stable, yet, as implied by part of the name (i.e., working), IWMs are continually updated based on experience and social and cognitive abilities, especially during major life events (e.g., death of a caregiver, therapy). Indeed, Bowlby (1988) suggested that one of the therapist's primary tasks is to assist the client in appraising and restructuring dysfunctional IWMs.

Measuring Adult Attachment

Two independent lines of research emerged in the measurement of adult attachment. Developmental psychologists used the Adult Attachment Interview (AAI; George et al., 1984, 1985, 1996), which "surprise[s] the unconscious" in order to assess one's "current state of mind with respect to attachment." During this interview, participants describe their attachment-related childhood experiences and evaluate the influence of these experiences on their development and functioning. Based primarily on the process rather than the content of the interviews (e.g., to what extent is the interviewee able to describe a coherent narrative understanding of their relationships with attachment figures), Main and her colleagues found that interview responses could be systematically placed into one of three categories: secure-autonomous, dismissing, and preoccupied (Main, 1985; Main & Goldwyn, 1984; Main et al., 1985). Further, Main et al. (1985) demonstrated that a parent's AAI classification predicted the child's attachment quality toward that particular parent, and vice versa. For example, a parent's responses with a dismissing

AAI classification were associated with their child's insecure-avoidant pattern in the Strange Situation paradigm. The AAI thus provides empirical evidence for Bowlby's theory of IWMs and the intergenerational transmission of attachment patterns.

In the second line of adult attachment research, social and personality psychologists developed self-report measures to assess adult attachment. Hazan and Shaver (1987) constructed a measure of Romantic Attachment Categories: secure, anxious, and avoidant. Bartholomew and Horowitz (1991) created a classification system based on two underlying dimensions: attachment anxiety (e.g., fear of separation and abandonment) and attachment avoidance (e.g., discomfort with intimacy). Brennan et al. (1998) administered 323 items from 60 subscales of the existing measures, including from the measures developed by Hazan and Shaver and Bartholomew and Horowitz, to a large sample of undergraduate students (Frías et al., 2015). A factor-analysis yielded two higher-level, orthogonal factors (similar to Bartholomew and Horowitz's system): attachment anxiety and attachment avoidance. Brennan et al. selected 18 items that best represented each factor, leading to the creation of the gold standard of adult attachment self-report measures, the Experiences in Close Relationships Scale (ECR; Brennan et al., 1988). The 36 items are rated on a 7-point Likert scale, with lower scores on both scales reflecting more secure attachment. Attachment security indicates comfort with intimacy and autonomy. Attachment anxiety often involves hyperactivation in order to attain or maintain proximity. Those with high attachment anxiety typically expect separation and rejection. Attachment avoidance often involves deactivating strategies, dismissing the value of relationships. Those with high attachment avoidance typically have a negative perception of others.

Importantly, both lines of research stem from Bowlby's (1969/1982) theory, and as such, many scholars argue that they should predict the same kinds of outcomes (Shaver & Mikulincer,

2002). However, these two lines of research have remained relatively separate due to differences in discipline (developmental vs. social/personality), method (coded interview transcripts vs. self-report questionnaire), focus (properties of a person's attachment narrative vs. content of a person's attachment perceptions), and target audience (initially parent-child vs. adult-adult relationships) (Shaver & Mikulincer, 2004).

Some studies show that AAI classifications are not significantly associated with self-report attachment measures (e.g., Simpson et al., 2002; Waters et al., 2002), while others show significant associations between the two (e.g., Shaver et al., 2000). Problematically, as noted by Roisman et al. (2007), those reviewing the same data (Shaver et al., 2000) have also reached quite different conclusions (e.g., social psychologists interpreting findings as "robust," Bartholomew & Moretti, 2002, p. 163, and developmental psychologists interpreting findings as "modest," Jacobvitz et al., 2002, p. 208). In an attempt to measure the extent of convergence between AAI and self-report measures of attachment, Roisman et al. conducted a meta-analysis and found "trivial to small" overlap (r = .09, range = .02 to .17) between AAI security and self-reported attachment style dimensions (p. 693). Self-report attachment anxiety did not discriminate between preoccupied and dismissing states of mind on the AAI (r = .06, trivial effect). However, self-report attachment avoidance was associated with dismissing states of mind on the AAI (r = .15, small effect). It appears that "although the AAI and ECR cannot be viewed as tapping the same components of internal working models of attachment . . . both are linked to what have been proposed as the building blocks of these models: secure base scripts" (Dykas et al., 2006). The measures are not interchangeable, though, and it is still unclear which tradition captures the fundamental constructs of attachment theory in the best way (Roisman et al., 2007).

It seems that both methodological traditions have utility and can uniquely inform our understanding of attachment (Roisman et al., 2007). Shaver and Mikulincer (2004) argued that self-report measures, such as the ECR, can indeed tap implicit, unconscious processes, are accurate indicators of dismissing and preoccupied information processing strategies, are associated with observable interpersonal behavior, and are predicted by relevant childhood experiences.

Attachment and Psychotherapy

All attachment styles start out as adaptive, with insecure attachment behavior representing a way of coping with a suboptimal caregiving environment. However, attachment styles may later have an adverse effect and actually increase vulnerability to psychopathology (Goodwin, 2003). Those with psychological disorders, including depression (Bifulco et al., 2002), anxiety (Muller et al., 2001), eating disorders (Fonagy et al., 1996), borderline personality disorder (Fonagy et al., 1996), and schizophrenia (Dozier, 1990) typically have high levels of insecure attachment. Indeed, most clients who seek therapy have insecure attachment styles (Holmes & Slade, 2018). Their insecure attachment style and strategies can be readily observed in most salient relationships, including the therapeutic relationship (Daniel, 2015). Given the deep content, emotional salience, potential for an intimate relationship, and possible crisis situations that emerge in a therapy context (e.g., loss, illness, major life transition, suicidal ideation), therapy naturally activates the client's attachment system. Psychodynamic psychotherapy in particular, with its emphasis on both the therapeutic relationship and the influence of the past on the present, provides a unique opportunity to observe, explore, and change attachment patterns (Slade, 2016).

Therapist as a Secure Base

Bowlby (1988) theorized that therapists can provide clients with corrective experiences by serving as a secure base for them. Alexander and French (1946) originally defined corrective emotional experiences (CEE) as "reexperiencing the old, unsettled conflict *but with a new ending*" (p. 338). Castonguay and Hill (2012), among others (e.g., Goldfried, 1980), have identified CEEs as a central change mechanism of psychotherapy, a healing experience that modifies the past maladaptive learning in a healthier relationship context. An important element in becoming more securely attached involves the cultivation of secure relationships, and according to Bowlby (1988), the therapist must aid the client in developing a secure attachment to them by empathically listening to them and assisting them in emotion regulation and thought exploration. Much like a responsive and sensitive parent, the therapist becomes a secure base from which the client can explore their inner and outer worlds, and a safe haven, from which the client can derive protection and support (Daniel, 2015). When a therapist is attuned to a client's attachment and relational patterns, they can recognize the enactment of those patterns in the therapeutic relationship.

Adapting Psychotherapy Based on Client Attachment Style

Evidence suggests that clients benefit from therapy tailored to their attachment style. We can conceptualize adult attachment on two orthogonal dimensions of insecure attachment anxiety and avoidance (Brennan et al., 1998; Fraley & Waller, 1998), as opposed to distinct, qualitative categories. At elevated levels, the anxiety dimension appears to reflect a hyperactivation response system and the avoidance dimension appears to reflect a deactivation response system. These adaptive responsive strategies serve to regulate emotional proximity in relationships, just as the child serves to regulate physical proximity to the caregiver.

Mallinckrodt (2000) proposed the therapeutic gratification, relief, anxiety, frustration (T-GRAF) model to demonstrate the implications of these adaptive attachment strategies in therapy. Two client wishes for the therapist (provide and do not provide) are crossed with two therapist actions (provide/pursue and withhold/avoid) resulting in four combinations: (1) gratification (therapist meets client's need and client is satisfied), (2) anxiety (therapist goes against client's wish and client refuses or resists), (3) frustration (therapist refuses to provide client's wish and client either protests or withdraws), and (4) relief (therapist does not provide or pursue what client fears and client feels relief). Mallinckrodt (2000) postulated that gratification and relief may be most important in the early phase of therapy when attempting to build the alliance. In this way, therapists match the client's attachment strategy. But during the working phase of therapy, therapists might move to a complementary role to encourage clients to move toward a healthier, more moderate level of therapeutic distance. Anxiety and frustration can be helpful in the middle phase of therapy when attempting to work through and promote change. Thus, it is possible that therapists attuned to clients' attachment styles may increase or decrease their use of interventions that lead to therapeutic distance as the work progresses.

The most effective interventions, however, may be more responsive to the nuanced attachment style of the particular client. Facilitating a corrective emotional experience may require therapists to employ *counter-complimentary attachment proximity strategies* (CCAPS; Mallinckrodt, 2000). In other words, the therapist responds to the client in opposition to the client's maladaptive patterns and expectations. For example, clients with a deactivating strategy prefer distance and avoidance, and thus, therapists using a CCAPS response might gradually increase proximity by deepening the interpersonal emotional engagement. This also requires careful monitoring of the client's tolerance for anxiety.

Initially, researchers believed that therapists typically respond with more cognitive interventions (e.g., interpretations) to dismissing/deactivating clients and with more affective interventions (e.g., reflections of feeling) to preoccupied/hyperactivating clients (Rubino et al., 2000). However, these general trends are not stable when considering the role of therapist attachment style. In comparison to insecure therapists, secure therapists seem better able to respond to clients in a non-complementary way. For example, in a study of 27 patients with severe psychopathology working with 18 case managers, the secure case managers were less likely to become enmeshed with hyperactivating patients or withdrawn with deactivating patients (Dozier et al., 1994). Tyrrell et al. (1999) also found that therapists who were less dismissing/deactivating formed stronger alliances with patients who were more dismissing/deactivating.

Based on data from interviews with experienced therapists, Daly and Mallinckrodt (2009) proposed that experienced therapists can move "in" and "out" of a client's attachment style throughout the therapeutic process. In the beginning stages, therapists are likely to respond in line with their clients. This helps establish the alliance and makes the client feel mirrored and understood. As therapy continues, therapists move toward responding "out of style" to their clients (e.g., challenging a dismissing client to be more engaged in the therapeutic relationship).

Avoidant clients may be inclined to minimize their pain and shy away from communicating their discomfort to others. Some suggest that a focus on skills and problem-solving for avoidant clients may lessen the threat of intimacy (McBride & Atkinson, 2009), but many recommend that interventions aimed at helping avoidant clients actually feel and understand their emotions are more beneficial (Cobb & Davila, 2009; Gormley, 2004; Purnell, 2010; Slade, 2008; Wallin, 2007). Therapists may reflect feelings (Berry & Danquah, 2016) or

self-disclose their own thoughts and feelings (Wallin, 2007) as a way of modeling mentalizing and vulnerability. Because delving into emotions may be new and scary for avoidantly-attached clients, therapists can help them by gently inquiring about their non-verbal behavior ("I wonder what that deep sigh meant"), offering a range of possible suggestions (e.g., "perhaps you feel angry", "could you be feeling hurt?"), or even suggesting how others might react to similar situations ("others might feel disrespected in that situation"). The purpose of these types of interventions is to bring the client closer to their own experience of suffering (Daniel, 2015).

At the opposite extreme, anxious clients may be inclined to dramatize their narratives, sometimes derailing the treatment with their intense emotional display. With anxious clients, therapists can help clients "down-regulate" their emotional reactions (Daniel, 2015; Slade, 2008; Wallin, 2007). For example, Purnell (2010) suggested that therapists help anxiously-attached clients develop skills in cognitive reflection, as opposed to intensifying emotional exploration. These clients may benefit from more focus and structure, even through simple open questions like, "How does this relate to what you brought up earlier?" (Daniel, 2015; Holmes, 2001). Interpretations or assessments of the situation can help provide frameworks and structures for understanding. Furthermore, establishing boundaries and clear guidelines with these types of clients may be particularly important.

Both avoidant and anxiously attached clients can benefit from the therapist providing a felt sense of security through the feeling of a secure relationship and being understood by another person. It is hypothesized that therapist interpretations that are attuned to clients' internal states would strengthen clients' self-reflection, thus leading to more coherent narratives of attachment-related experiences and healthier IWMs (Bateman & Fonagy, 2004; Bennett, 2006; Cobb & Davila, 2009; Wallin, 2007). Evidence suggests that patients with borderline personality

disorder improved in narrative coherence as a function of transference-focused therapy (Levy et al., 2006), an approach that helps clients understand how they may incorrectly relate to the therapist based on past psychological structures.

Helping Skills Model and Training

Many psychotherapy theorists have suggested various skills to use when working with clients who have different attachment styles, but the skills can be difficult to implement because of the many contextual and specific factors affecting therapy sessions (e.g., therapeutic relationship, timing, client dynamics, unconscious processes). Drawing on components of Human Relations Training (Carkhuff, 1969), Microcounseling (Ivey, 1971), and Interpersonal Process Recall (Kagan, 1984), Hill (2020) developed a helping skills model focused on exploration, insight, and action skills. Broadly, exploration stage skills help clients explore their thoughts and feelings, insight stage skills help clients gain a deeper understanding of themselves, and action stage skills help clients change their behavior. While it may be fairly straightforward to teach the skills in discreet ways, implementing the skills can be more challenging due to the complexity of therapy. Hill (2020) suggested that therapists consider their intentions for using specific skills, observe client reactions, and re-evaluate their future skill choices based on these reactions. It is likely that therapists use different amounts of skills based on the status of the therapeutic relationship, the timing of the session within the greater context of the entire therapeutic process, therapist factors, and client factors. Ridley et al. (2011) concluded that the Hill helping skills model is the most effective training model in terms of skill coverage; culture; theory; cognition and affect; integration of skills, cognition, and affect; and relationship between skills and therapeutic change.

Helping skills training typically involves structured programs that educate trainees in verbal interventions. Several studies (e.g., Keum et al., 2018) demonstrate the effectiveness of the Hill helping skills model on trainee outcomes, including increases in self-efficacy and in the use of exploration, insight, and action stage skills (Hill & Knox, 2023). These programs use instruction, modeling, practice, and feedback, based on social cognitive theory's (Bandura, 1969, 1997) core components of the learning process. In three studies examining the effectiveness of using these four components in a Hill helping skills training program for undergraduate students, Chui et al. (2014), Jackson et al. (2014), and Spangler et al. (2014) found that students favored practice as the most helpful method.

Measuring Therapist Skills

Initially, skills-based research in ongoing psychotherapy focused on correlating intervention frequency with session and treatment outcome (e.g., Barkham & Shapiro, 1986). Following efforts to shift the focus to the effects of therapist interventions on immediate, within-session outcomes (e.g., Hill et al., 1988; Stiles, 1988), researchers have coded therapists' skills (sometimes referred to as verbal response modes) within each speaking turn (e.g., Goates-Jones et al., 2009; Hill et al., 1988) or consensually identified and coded interventions (e.g., Hill et al., 2019; Hill et al., 2020). Researchers have used many measures of judge-rated therapist interventions, including molecular methods (examining therapist techniques on a phrase, sentence, or speaking turn level) like the Hill Counselor Verbal Response Category System (e.g., Hill, 1978) and molar methods (examining techniques across a session) like the Psychotherapy Process Q-Set (e.g., Jones, 1985).

Another approach is using a therapist- and client-rated, session-level, self-report assessment of therapist interventions. Although several such measures have been developed

(e.g., the Comparative Psychotherapy Process Scale, CPPS; Hilsenroth et al., 2005), we focus here on the Helping Skills Measure (HSM; Hill & Kellems, 2002), developed to assess client perceptions of the frequency of helping skills used by therapists-in-training. The HSM specifically assesses the helper's use of exploration, insight, and action stage skills described in the Hill (2020) helping skills model.

Each item is rated on a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). To construct the HSM, judges familiar with the helping skills model attempted to place each of the initial 27 items into one of the three hypothesized scales and provided feedback about the clarity of wording and comprehensive coverage of the stages. This process was repeated seven times until items were placed correctly by at least 80% of the judges. This led to a 19-item measure, completed by 30 undergraduate volunteer clients in a helping skills course. After further revisions, Hill and Kellems administered the measure to an additional 68 undergraduate volunteer clients in a helping skills course and then chose the items with the highest item-total correlation, ultimately yielding a 12-item measure. After the initial development, Hill and Kellems conducted two studies to evaluate the psychometric properties of the HSM. Across both studies, the majority of helpers were undergraduate students (89.67%) working with volunteer clients. In Study 1, the exploratory factor analysis revealed three factors for the client-rated HSM, with exploration and action items loading as predicted. The three-factor structure for the client-rated HSM was replicated in a confirmatory factor analysis, with all items loading greater than .50 on the relevant factors (including the insight items). The researchers revised the measure to include 15 items. In Study 2, the exploratory factor analysis initially revealed four factors. Two insight items were then dropped (one item loaded on all three factors and one item was the

only item that loaded on one factor). They conducted a second factor analysis on the 13 items, yielding three factors. In addition, a confirmatory factor analysis also yielded an adequate fit.

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