

THE IMPACT OF TRAINEE THERAPIST PERSONAL
CHARACTERISTICS AND TECHNIQUE USAGE ON THE
THERAPEUTIC ALLIANCE AND SESSION DEPTH

By

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ABSTRACT

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The Impact of Trainee Therapist Personal Characteristics and Technique Usage on the Therapeutic Alliance and Session Depth

(Under the direction of DR. JENELLE SLAVIN-MULFORD)

The quality of the therapeutic alliance and the depth of the therapeutic work are thought to be two of the most important contributors to client outcomes. Moreover, it is clear that therapists differ in their ability to form strong working relationships and engage meaningfully with clients. Much less is known with regard to which specific therapist characteristics and techniques are most helpful in forming strong bonds with clients and deepening the work, especially within trainee populations. This study utilizes a multi-trait multi-method assessment of clinical graduate trainees ($N = 65$) prior to training and then matches these scores to process measures collected from their first therapy case. The therapy was video recorded, and observer ratings of exploration, insight, action, and supportive techniques were provided for the third session. Clients also completed the Working Alliance Inventory and the Session Evaluation Questionnaire at the third session. Regression results indicate that therapist characteristics (age, GRE score, interpersonal problems, perspective taking, and emotional investment in relationships) and technique usage (exploration, insight, action, and support) significantly predicted client-rated depth. While the overall two-step regression model was not significant for alliance, there was a significant correlation with a moderate effect for observer-rated usage of support and client-rated alliance scores. Exploratory regression results indicated

technique usage variables independently predict client alliance ratings with support having a positive impact. Implications of the findings as they pertain to selection and training in clinical and counseling training programs are discussed.

KEYWORDS: therapist characteristics, technique, trainee therapists, depth, alliance

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I. INTRODUCTION

A. Statement of the Problem

Differences in therapy outcomes are well documented (Walwyn & Roberts, 2010), and therapist effects are considered to be an important factor in this variability (Owen et al., 2015). The broad definition of therapist effects is the effect of a given therapist on client outcomes. However, there are many ways in which therapists differ. Previous research has suggested that who the therapist is on a personal level (e.g., Delgadillo et al., 2020) and the techniques they use in session (e.g., Ackerman & Hilsenroth, 2003) are both critical in this variability. However, substantially less is known about how these two factors (therapist characteristics and techniques) come together to predict important therapeutic processes such as alliance and depth. Alliance has come to be recognized as one of the most, if not the most, important predictors of therapy outcomes (Fluckiger et al., 2020). Depth, defined as the perception of a session as meaningful, powerful, and valuable (Stiles & Snow, 1984), has been found to have a similar positive relationship with client-rated outcome (e.g., Uluc et al., 2019). Gaining a better understanding of the impact of therapist factors and technique usage on these processes has clear implications for the selection and training of clinical and counselling students.

B. Review of the Literature

1. Selecting Individuals for Clinical/Counseling Training

There is an increasing interest in psychology program candidates who are nontraditional in terms of their age due to the possible advantages they have as a graduate student (Stringer, 2015). The results of Johnson and colleagues' (2016) study comparing traditional (younger) students and nontraditional (older) students indicated that higher levels of self-efficacy, intrinsic motivation, and interest were found in older students when compared to their younger counterparts. Although each of these factors likely contributes to nontraditional students' success in graduate psychology programs, there is limited research on whether candidate age influences clinical ability within a trainee population.

In addition to considering demographic variables such as age, the majority of graduate programs use standard criteria to assess applicants. In particular, the applicants' undergraduate Grade Point Average (GPA) and Graduate Record Exam (GRE) have been used as primary tools to determine if the student is a strong candidate for the program. While these do provide some insight into how well the student may do academically (e.g., Kuncel et al., 2010), research is limited when it comes to whether GPA and GRE are able to predict clinical ability (Educational Testing Services, 2017; Smaby et al., 2005). Furthermore, standard admission considerations such as the GRE are not culturally responsive, nor are they ecologically valid for many non-majority groups (Council of Chairs of Training Councils [CCTC], 2021). Thus, the American Psychological Association has established a work group focused on identifying best practices for a holistic admissions assessment. Logically, an important part of this

assessment is the evaluation of clinical potential. Delgado et al. (2020) claimed, with support of previous research, that there are three factors involved in the makeup of an effective therapist: aptitude for the generation of a positive working alliance, highly developed facilitative interpersonal skills, and willingness to advance their therapeutic skills.

A. Therapist Characteristics and Alliance

The skills related to building an alliance are taught in the majority of clinical and counseling graduate programs, yet therapists are not uniformly able to create strong therapeutic alliances. Evidence of this can be seen in Del Re and colleagues' (2012) investigation of the relationship between therapist effects, alliance, and outcome in which they concluded that therapist variability in the alliance was more influential on the client's outcome than was client variability. When exploring this variability, researchers frequently consider therapist personality traits as factors that might be contributing to the assembly of the alliance.

Reading et al.'s (2019) study, for example, found that therapists demonstrating higher levels of reflective functioning (i.e., the therapists' extent of self-awareness and perspective taking in relation to the other) have greater reported alliance scores. Similarly, in a systematic review of research focusing on therapist personal attributes that relate to alliance, Ackerman and Hilsenroth (2003) found that warmth and understanding were key empathetic attributes associated with high rated alliance. Furthermore, therapists who are interested, confident, and respectful also tend to have stronger alliances (Ackerman & Hilsenroth, 2003). In summary, therapists who are interpersonally

adept, self-reflective, and able to connect with others in an empathetic, respectful, and engaging way, are most likely to form strong alliances.

B. Therapist Characteristics and Depth

Uluc and colleagues (2019) concluded that the main indicator of overall session impact for both the clients and the therapists was the depth of the session. When investigating the link between therapist characteristics and session depth, research has indicated empathy (e.g., Duan & Kivlighan, 2003), self-awareness, and perspective-taking ability (e.g., Reading et al., 2019) are at the forefront. Duan and Kivlighan (2003) found that therapist empathic emotion and intellectual empathy were significant contributors to client-rated session depth. Reading and colleagues (2019), in the study discussed earlier, found that therapists' aptitude for reflective functioning was associated with deeper sessions. Taking all of this into consideration, therapists who are empathic, self-aware, and able to interpret others' perspectives are likely to have deeper sessions with their clients.

2. Training

Much of training is centered on teaching trainees theory and technique. Notably, Hill's Helping Skills Model (2009, 2014) is widely used across various clinical training programs and is anchored in empirical findings, theory, and practice (Hill, 2014).

Specifically, this model proposes three main stages involved in therapy: exploration, insight, and action. Exploration primarily encompasses the use of open questions to explore client thoughts and feelings that pertain to the past, present, and future. Insight shifts the focus to assist the client's understanding of why the thoughts and feelings are arising. Action, on the other hand, is the process of facilitating the client toward making

their own decision, as well as teaching the client certain skills (e.g., relaxation techniques) to be practiced both in and out of the therapy room (Hill, 2009, 2014). Support is an additional factor that is ideally involved throughout the implementation of each stage and includes statements of reassurance that are aimed at reducing the client's distress. These stages are not perfectly linear, and the majority of good therapy practice involves at least some of each while catering to the needs of a specific client (Hill, 2014). Techniques that contribute to a strong alliance and deeper sessions are also likely to lead to better outcomes (e.g., Kadur et al., 2020); thus, gaining a better understanding of how beginning therapists' use of techniques facilitates/hinders the alliance and depth of sessions can help inform training.

A. Technique Usage and Alliance

The therapist's ability to form an alliance with their client is essential for therapeutic work (Del Re et al., 2012). In order for personal growth and change to be welcomed by the client, there must be a relationship in which the client feels comfortable and accepted. One of the key factors involved in the construction of this relationship is support (Wachtel, 1993). Wachtel (1993) emphasizes that therapists need to, "Be as supportive as [they] can be so that [they] can be as expressive [as exploratory] as [they] will need to be" (p. 155). Furthermore, this theory is empirically supported by Ackerman and Hilsenroth's (2003) findings in which therapists' usage of support was found to facilitate the development and maintenance of the alliance. Thus, how supportive and attuned therapists are as they progress into other techniques and aspects of the work will be vital.

Like support which is an important component in many theoretical frameworks, Hilsenroth and Cromer's (2007) systematic review found that techniques were also positively associated with alliance across a variety of therapeutic approaches. Specifically, techniques in the following three categories were associated with stronger alliances: treatment frame (in-depth interviews; collaborative approach; emotional, cognitive, and clear word choice), session focus (client-initiated discussions; exploration of presented issues; clarification of distress; identification of patterns; facilitation of client experience and feelings; exploration of difficult feelings), and feedback (offering insight; providing psychoeducation; collaborative development of treatment). Relating these techniques to the helping skills model (Hill, 2009, 2014), there is clear overlap with exploration and insight techniques, indicating that these techniques have a positive relationship with alliance.

B. Technique Usage and Depth

Lingiardi and colleagues (2011) investigated the relationship between psychotherapy process dimensions (e.g., therapist interventions and patient/therapist patterns of interaction) and depth among clinicians of various theoretical orientations. Their results indicated that therapist activities that utilize an exploratory style of intervention had a positive correlation with depth. Furthermore, therapist interventions that focused on the elaboration of affect were also positively related to depth (Lingiardi et al., 2011). Pesale and Hilsenroth's (2009) study of early session processes indicated a positive relationship between psychodynamic-interpersonal (PI) techniques (as coded on the Comparative Psychotherapy Process Scale [CPPS]) and depth ratings. Specifically, the PI technique items included on the CPPS focused on: expression of affect; attention to

recurring patterns in client thoughts, feelings, behaviors, and relationships; attendance to the alliance; and exploration of past and present experiences (Hilsenroth et al., 2005). Interestingly, Pesale and Hilsenroth (2009) found that the relationship between PI techniques and depth was not affected by the alliance, client ratings of distress, and/or client pathology.

More recently, Siegel and Hilsenroth (2013) found a relationship between safety and session depth with safety conceptualized as openness to vulnerability and a perception of trust that facilitates the client tolerating deeper exploration of affect. Siegel and Hilsenroth (2013) also postulated that safety could assist exploration that targets uncomfortable feelings, which in turn leads to the session feeling valuable, productive, and deep. By employing support, the therapist is able to create a welcoming atmosphere, which will likely lead to the client feeling more comfortable, and in turn, feeling open to deeper conversational work (Hill, 2014; Wachtel, 1993). Taken together, these findings suggest that depth is likely to increase when patients feel supported and are able to experience and explore their emotions and gain greater insight into themselves.

C. The Current Study

In examining trainee effects in the prediction of important therapeutic processes like alliance and depth, it is important to explore the impact of trainee characteristics as well as what trainees choose to do in session (e.g., technique usage). Although prior research has examined both (i.e., therapist traits and technique usage), previous studies have largely assessed therapist traits after trainees had received at least some clinical training (e.g., Ackerman & Hilsenroth, 2003; Delgadillo et al., 2020; Reading et al., 2019). Moreover, the majority of studies have assessed technique usage in circumstances

under which trainees would have had differential training experiences (i.e., different supervisors, previous externship placements, etc.; e.g., Hilsenroth & Cromer, 2007; Lingiardi et al., 2011; Pesale & Hilsenroth, 2009). This concurrent/retrospective assessment of trainee traits makes it difficult to determine whether observed therapist variability is due to innate therapist characteristics or the result of differential training. The current study aims to address this gap by utilizing a multimethod assessment of trainees' personal characteristics *prior* to any clinical training and matching these scores with technique usage, alliance, and depth ratings from the trainees' very first therapy case. Importantly, all trainees will have had the same coursework and been supervised by the same supervisor for this first case. This method (prospective assessment and ratings from the first training case) will reduce the impact of training effects. Findings may be used to inform the future selection and training of psychotherapists.

The variables attained from the prospective multi-method assessment included the following: trainee age, total GRE score, self-reported interpersonal problems and ability to take the perspective of others, as well as an implicit measure of the trainee's ability for intimacy and emotional sharing. These characteristics were chosen either because they have historically been considered in the admissions process for graduate school¹ and/or because they are thought to relate to alliance and/or depth. Technique usage was attained by having trained external raters code the degree to which trainees used support, exploration, insight, and action techniques as defined by Hill's three stage model. Due to the nature of the relationship being investigated, regression analyses were utilized. It was

¹ While GPA is often an important factor used in consideration for clinical and counseling training program admission, we chose not to include that as a predictor variable in this study due to a ceiling effect and limited range of GPA scores in this sample.

hypothesized that therapist characteristics and technique usage would predict alliance and depth. Specifically, fewer interpersonal problems, greater perspective taking, and more emotional investment in relationships would contribute to the variability associated with alliance and depth; conversely, more support, exploration, and insight, would contribute to the variability associated with alliance and depth.

II. MATERIALS AND METHODS

A. Participants

This study was approved by the University's Institutional Review Board. The sample included 8 cohorts of graduate trainees ($N = 82$) enrolled in a clinical psychology program. After the first semester, 15.9% ($n = 13$) of the sample either switched out of the clinical track to an experimental track, withdrew from the program, or were asked to leave the program. These participants were excluded from analyses because they did not complete the therapy course. Additionally, trainees who had missing data in any of the predictor variables were excluded ($n = 4$). The remaining participant group ($N = 65$) was 80% female with a mean age of 24.12 years ($SD = 5.04$). The racial composition of the sample was 64.6% European American, 15.4% African American, 9.2% Hispanic, 6.2% Asian American, 1.5% Biracial, 1.5% Multiracial, and 1.5% other. Finally, 38.5% of trainee therapists in the present sample endorsed having received therapy. Trainees reported a mean time spent in therapy of 6.15 months and a range of 1 month to 8.42 years.

Volunteer undergraduate students from the same university served as therapy clients. The undergraduates who consented to participate in the therapy sessions were currently enrolled in a course focused on personal growth and exploration. These students

received course credit for participating in the sessions and writing a reflection essay about their experience. None of these undergraduates knew the researchers in this project, and their professor was not provided any information about the therapy sessions except that the students participated. The client group ($N = 65$) was 73.8% female, 40% European American, 38.5% African American, 9.2% Asian American, 4.6% Hispanic, 6.2% other, and 1.5% did not report their race. The mean age of the group was 20.71 years ($SD = 3.86$).

B. Procedures

1. Assessment of Therapist Characteristics

The consent process of the trainee therapist's participation in this study occurred at the start of the student's first semester and was completely voluntary. At the beginning of their graduate training (2nd day of class of the 1st semester), all trainees completed a multi-method assessment including the Inventory of Interpersonal Problems-32 (IIP-32; Horowitz et al., 2000), Interpersonal Reactivity Index (IRI; Davis, 1980, 1983), and Thematic Apperception Test (TAT; Murray, 1943). All student responses were kept confidential and were not shared with anyone in the program (including the professor of the course). Trainee age and GRE scores were collected from application materials. See *Measures* for a description of the IIP-32, IRI, and TAT.

2. Therapy Sessions

In their second semester, all clinical graduate students took an introductory therapy course. This four-credit course focused on therapeutic technique with curriculum based on Hill's three-stage model of helping as presented in *Helping Skills: Facilitating Exploration, Insight, and Action* (3rd ed. & 4th ed.; Hill, 2009, 2014). Each trainee was

assigned an undergraduate student volunteer with whom they conducted a therapy case. The therapy experience consisted of four non-manualized sessions that took place during the academic semester. The first session was a 90-minute intake, and the remaining three sessions were 45 minutes in length. Clients were informed that sessions could be used to work on anything that felt most important to them at the time. Conversely, clients were instructed not to bring forth topics or concerns that would require the intervention of a licensed professional (e.g., suicidal or homicidal ideation, and child or elder abuse). Common presenting problems included interpersonal relationship troubles, concerns related to school performance, and distress about future career plans.

Each session was video recorded, and every student was supervised by the therapy course instructor (a licensed clinical psychologist with over 10 years of experience). The trainee therapists also attended group supervision following the first, second, and fourth session. The group supervision was 90-minutes in length and comprised of 2-3 trainees per group. Each trainee received individual supervision with the course instructor after the third session. Supervision was focused on clinical intervention and case conceptualization. The session recordings were heavily relied upon for supervision purposes. This was the first training case for all trainees in this study.

3. Post-Session Evaluation

Clients filled out the Session Evaluation Questionnaire (SEQ; Stiles & Snow, 1984) and the Working Alliance Inventory (WAI; Horvath & Greenberg, 1989) at the end of session three. Additionally, two observers trained in using the Helping Skills Measure (HSM; Hill & Kellems, 2002) used the video recordings of the trainees' third session to

rate technique usage. See *SEQ*, *WAI*, and *HSM* for a description of the training and measures used for this evaluation.

C. Measures

1. Graduate Record Examination (GRE)

The trainees' GRE scores were obtained from their admission materials. The Quantitative and Verbal scores were added to create one total Quantitative-Verbal GRE score. Per admissions standards, only applicants with a minimum Quantitative-Verbal GRE of 290 were generally considered for admission. In the current sample, there were five students who did not meet this threshold but were admitted due to other positive aspects of their application.

2. Inventory of Interpersonal Problems-32 (IIP-32)

The IIP-32 (Horowitz et al., 2000) measures distress related to various domains of problematic interpersonal behavior. There are eight domains included in this assessment: Domineering/Controlling, Vindictive/Self-Centered, Cold/Distant, Socially Inhibited, Nonassertive, Overly Accommodating, Self-Sacrificing, and Intrusive/Needy. There are 32 first-person statements included in this measure. Each item represents either a behavior that is viewed as difficult to perform with others (e.g., "It is hard for me to tell a person to stop bothering me") or a behavior that is perceived as too frequent in the respondent's interpersonal relationships (e.g., "I want to be noticed too much"). The individuals responded on a 4-point scale that is anchored 1 (*not at all*) to 4 (*extremely*). The IIP is normed on a national standardization sample representative of the U.S. population that includes 800 adults (aged 18-89; Horowitz et al., 2000). The measured domains yield eight subscale scores, with responses reported in T scores. The total IIP-32

score was used in this study and was calculated by adding each of the T scores from all eight domains. The IIP-32 is an internally consistent measure, having a Cronbach's alpha of .93 for the total score when given in a nonclinical population ($N = 800$; Gold & Hess, 2003).

3. Interpersonal Reactivity Index (IRI)

The IRI (Davis, 1980, 1983) is a self-report measure consisting of 28 items. Each item is rated on a 5-point scale ranging from *does not describe me well* to *describes me very well*. The IRI assesses four aspects of empathy with items separated into 7-item subscales. The present study focuses on the Perspective Taking (PT) subscale. PT represents the respondent's tendency to view situations from another person's perspective (Davis, 1983). Davis (1980) reported an internal reliability for PT of .75 for males and .78 for females. Research has provided evidence of convergent and discriminant validity of the IRI (Davis, 1983).

4. Thematic Apperception Test (TAT)

The TAT (Murray, 1943) is a set of black-and-white stimulus cards with images that depict ambiguous scenes. After being shown the TAT cards, individuals are asked to create a story or description of the image in response to each card. Then, the responses are examined in an effort to deduce information about the inner world of the individual. The participants in this study were presented with the cards (1, 2, 3BM, 4, 13MF, 12M, and 14) in a group format. A screen was used to project the card images, and participants were asked to use a notebook to write their responses. After the administration, transcription, and de-identification of the TAT, two expert raters (blind to participant identity) scored the responses individually using the Social Cognition and Object

Relations Scale – Global scoring method (SCORS-G; Stein & Slavin-Mulford, 2018; Westen, 1995).

The SCORS-G is a clinician-rated measure containing eight dimensions that assess various aspects of cognitive and affective processes that mediate interpersonal functioning (Westen, 1995). A 7-point Likert scale is used to assess each dimension. Lower scores indicate greater pathology (i.e., problematic patterns of thoughts, feelings, and motivation that underlie interpersonal functioning in intimate relationships), and higher scores suggest more maturity and greater adaptive functioning. The Emotional Investment in Relationships (EIR) dimension of the TAT-SCORS-G assessment was utilized in this study. Specifically, EIR assesses an individual's depicted level of intimacy and emotional sharing. EIR has demonstrated good to excellent interrater reliability and validity across studies despite considerable differences in the samples studied and levels of psychiatric distress (Stein & Slavin-Mulford, 2018).

The coding of the TAT narratives was done by two expert raters who previously completed manualized training on the SCORS-G (Stein & Slavin-Mulford, 2018) and used the scale for at least 11 years. The average of the two raters' scores were used in this study. Shrout and Fleiss (1979) reported that the magnitude for interpreting intraclass correlation coefficient (ICC) values were 'poor' < .40, 'fair' = .40 – .59, 'good' = .60 – .74, and 'excellent' > .74. The Spearman-Brown Model (2,2) ICC-corrected values for the EIR SCORS-G variable (.89) fell within the excellent range for this sample.

5. Helping Skills Measure (HSM)/Session Process and Outcome Measures (SPOM)

The HSM (Hill & Kellems, 2002) captures basic therapy skills using 13 Likert-type items anchored 1 (*strongly disagree*) to 5 (*strongly agree*). There are three subscales in this measure: exploration, insight, and action. The exploration subscale has 4 items and is categorized by the goals of helping a client to tell their story and explore their thoughts (skills: open questions and restatements) and feelings (skills: open questions, reflections of feelings, and disclosures of feelings). The insight subscale has 4 items and is categorized by the goals of facilitating awareness (skills: challenges) and promoting insight (skills: open questions, interpretation, and disclosure of insight). The action subscale has 5 items and is categorized by the goals of helping the client change through the use of open questions, information, and direct guidance. There are four components that are combined to create the action subscale: relaxation, behavior change, behavioral rehearsal, and decision-making. Each subscale score was calculated by averaging all items that comprise the subscale. One additional item was added to the assessment by the researchers of this study to measure the use of support through the application of supportive statements, reinforcement, or encouragement.

Two external raters, the instructor and a licensed professional counselor with a master's degree in clinical psychology, trained on the HSM by reading Hill (2009, 2014) and Hill and Kellems (2002). As an additional part of training, the raters practiced coding 17 recorded sessions and discussed the rating categories as a team. After training was completed, the two raters viewed the entire third session recording of each trainee and immediately rated the session independently using the HSM. The raters were blind to the

participants' initial assessment. Regular reliability meetings were held during the coding process to prevent rater drift.

For the majority of sessions, both coders were available to rate the sessions and their average score was used. However, for a minority of sessions, only one coder was available and in this case that coder's scores were used individually. ICC two-way random-effect models with Spearman-Brown corrections were calculated for the exploration (ICC [2,2] = .91), insight (ICC [2,2] = .86), and action (ICC [2,2] = .86) subscales on the HSM, as well as for the support item (ICC [2,2] = .84). According to Shrout and Fleiss's (1979) standards, all of the ICC values reported for the HSM subscales and support item fall within the excellent range for this sample.

6. Session Evaluation Questionnaire (SEQ)

Clients completed the SEQ (Stiles & Snow, 1984) immediately after each session. The SEQ consists of 24 bipolar adjective pairs that are each rated on a 1 to 7 semantic differential rating scale. The depth index was utilized in this study. This index is comprised of five items that reflect on how powerful or effective the client perceived the session to be. Each item of the depth index was averaged together to create one summary depth score for each session. In a sample of outpatients at a university-based community clinic, Cronbach's alpha for depth was .86 (Ackerman et al., 2000). The Cronbach's alpha for depth in this sample was .83.

7. Working Alliance Inventory (WAI)

At the end of the third session, clients completed the WAI (Horvath & Greenberg, 1989) to assess the client's perspective of the therapeutic alliance. The WAI assesses this relationship in a three-part framework (i.e, Goal, Task, and Bond) established by Bordin

(1979). The Goal domain assesses the agreement between client and therapist in terms of the goals of the therapy. The Task domain assesses the client's agreement with the therapist that the tasks incorporated in the therapy will address the problems the client brings to treatment. The Bond domain assesses the quality of the interpersonal bond between the client and the therapist. Each domain has 12 items, making for a total of 36 items on the WAI. Respondents use a 7-point scale anchored 1 (*Never*) to 7 (*Always*) to respond to each item. The total alliance score is calculated by adding each of the three domains and has a potential score range of 36 to 252. In a reliability generalization study of the WAI, the client version of this measure was found to have internal consistency estimates ranging from .83 to .97 ($M = .93$, $SD = .04$, $n = 13$) for the total score (Hanson et al., 2002). The Cronbach's alpha for the total WAI score in this sample was .80.

D. Analysis

We conducted a power analysis to determine how many predictor variables were acceptable with the sample size ($N = 65$) while maintaining a power of .80. The result indicated all nine predictors could be used. Regression analyses were then used to test the hypothesis that therapist characteristics and technique usage can predict client ratings of alliance and session depth. One hierarchical multiple linear regression was conducted to predict client-rated alliance, and another was conducted to predict client-rated depth. Specifically, therapist characteristics (age, GRE, IIP total, IRI-PT, and TAT EIR) were entered in the first step and techniques (exploration, insight, action, and support) were entered in the second step.

III. RESULTS

Descriptive statistics of the predictors and outcome variables can be found in Table 1. Correlations of all predictor variables and outcome variables indicated a range of .00 to .52. Results showed trainee therapist age and observer-rated support to be positively correlated, $r(63) = .24, p = .049$. Additionally, GRE score was found to have a moderate positive correlation with observer-rated action, $r(63) = .32, p = .009$, and a moderate negative correlation with depth, $r(63) = -.40, p = .001$. For correlations between technique usage variables, exploration had a moderate positive correlation with insight, $r(63) = .47, p < .001$, and a large positive correlation with support, $r(63) = .52, p < .001$. Action had a moderate negative correlation with depth, $r(63) = -.45, p < .001$. Alliance and depth were found to have a moderate positive relationship, $r(63) = .38, p = .002$.

Table 1: Descriptive Statistics and Correlations for Therapist Characteristics, Technique Usage, Alliance, and Depth

Variables	<i>M</i>	<i>SD</i>	Therapist Characteristics					Technique Usage			Outcome	
			1	2	3	4	5	6	7	8	9	10
Therapist Characteristics												
1. Age	24.12	5.04	–									
2. GRE	300.54	9.08	-.04	–								
3. IIP	54.85	9.04	-.02	.24	–							
4. IRI-PT	21.54	4.05	-.03	-.24	-.19	–						
5. TAT EIR	3.61	0.77	.06	-.09	-.17	.13	–					
Technique Usage												
6. O Exp	3.08	0.57	.04	.02	.08	-.05	.007	–				
7. O Ins	2.22	0.65	.12	.14	-.02	.09	-.05	.47***	–			
8. O Act	1.79	0.65	-.09	.32**	.23	-.23	-.03	-.03	-.06	–		
9. O Sup	3.73	1.05	.25*	.10	.04	-.03	-.02	.52***	.24	.21	–	
Outcome												
10. Alliance	222.08	20.57	.21	-.17	-.07	.02	.10	-.07	-.07	.00	.31*	–
11. Depth	5.98	.80	-.02	-.40**	-.23	.24	-.01	.13	.03	-.45***	.14	.38**

Note. $N = 65$. GRE = combined Quantitative and Verbal GRE score; IIP = Inventory of Interpersonal Problems total score; IRI-PT = Interpersonal Reactivity Index – Perspective Taking subscale total score; TAT EIR = TAT-SCORS-G Emotional Investment in Relationships domain total score; O = Observer-rated; Exp = Exploration; Ins = Insight; Act = Action; Sup = Support. All technique usage data were obtained from session three using the HSM. Outcome data were client-rated following session three.

* $p < .05$. ** $p < .01$. *** $p < .001$.

A. Alliance Regression

Assumption checks indicated that the data were adequate for a regression. The test for the collinearity assumption indicated multicollinearity was not an issue.

Exploration had the lowest Tolerance value, .55, and the highest VIF, 1.82. Similarly, there were no issues with outliers, normality, linearity, homoscedasticity, or independence of errors. Table 2 depicts the results of the alliance regression.

Table 2: Hierarchical Multiple Linear Regression Analysis for Alliance

Variable	<i>B</i>	95% CI for <i>B</i>		<i>SE B</i>	β	<i>R</i> ²	ΔR^2
		<i>LL</i>	<i>UL</i>				
Step 1						.08	.08
Age	.79	-.24	1.82	.51	.19		
GRE	-.35	-.95	.25	.30	-.15		
IIP	-.05	-.65	.55	.30	-.02		
IRI-PT	-.12	-1.45	1.22	.67	-.02		
TAT EIR	2.05	-4.78	8.87	3.41	.08		
Step 2						.23	.16*
Age	.33	-.70	1.37	.52	.08		
GRE	-.44	-1.04	.16	.30	-.19		
IIP	.00	-.57	.58	.29	.00		
IRI-PT	-.23	-1.53	1.07	.65	-.05		
TAT EIR	2.53	-3.97	9.02	3.24	.10		
O Exploration	-11.49	-23.06	.09	5.78	-.32		
O Insight	-.29	-9.22	8.65	4.46	-.01		
O Action	-1.53	-10.09	7.03	4.27	-.05		
O Support	9.49**	3.59	15.40	2.95	.49**		

Note. *N* = 65; *CI* = confidence interval; *LL* = lower limit; *UL* = upper limit; GRE = combined Quantitative and Verbal GRE score; IIP = Inventory of Interpersonal Problems total score; IRI-PT = Interpersonal Reactivity Index – Perspective Taking subscale total score; TAT EIR = TAT-SCORS-G Emotional Investment in Relationships domain total score; O = observer-rated. All technique usage data were obtained from session three using the HSM. Outcome data were client-rated following session three.

* *p* < .05. ** *p* < .01. *** *p* < .001.

Results of the multiple linear regression for alliance indicated that the first model, including only therapist characteristic variables, was not significant, $R^2 = .08$, $F(5, 59) = 0.96$, $p = .45$. Additionally, the second model, which included both therapist characteristics and technique usage variables, was not significant overall, $F(9, 55) = 1.84$, $p = .082$. However, the addition of the technique usage variables to the model resulted in the second model being a significant improvement over the first, $F(4, 55) = 2.79$, $p = .035$. Moreover, support was a significant individual predictor, $t(64) = 3.22$, $p = .002$. Since the overall model was not significant, this result regarding support is not entirely reliable as it may be due to chance. In order to investigate this further, an exploratory regression analysis was conducted with only techniques entered into the model with alliance as the outcome variable.

B. Exploratory Alliance Regression

All assumptions checks indicated the data were adequate for the regression. Results of this exploratory multiple regression are displayed in Table 3 and indicated that technique usage variables were able to predict alliance, $F(4, 62) = 2.53$, $p = .049$, with a medium effect size ($f^2 = .16$). According to the guidelines presented by Cohen (1988), effect sizes are categorized as small ($f^2 \geq .02$), medium ($f^2 \geq .15$), and large ($f^2 \geq .35$). The techniques only model explained 14% of the variance associated with alliance. Observer-rated support was a significant individual contributor, $t(64) = 3.16$, $p = .002$, had the largest unique contribution toward alliance ($\beta = .45$), and accounted for 13.84% of the variance associated with alliance. A one unit increase in support was associated with a 9 unit increase in alliance.

Table 3: Exploratory Multiple Linear Regression Analysis for Alliance

Variable	<i>B</i>	95% CI for <i>B</i>		<i>SE B</i>	β	<i>R</i> ²	ΔR^2
		<i>LL</i>	<i>UL</i>				
Step 1						.14*	.14*
O Exploration	-8.68	-19.97	2.60	5.65	-.23		
O Insight	-1.36	-10.03	7.31	4.34	-.04		
O Action	-2.70	-10.70	5.30	4.00	-.08		
O Support	9.00**	3.30	14.71	2.85	.45**		

Note. *N* = 65; *CI* = confidence interval; *LL* = lower limit; *UL* = upper limit; O = observer-rated. All technique usage data were obtained from session three using the HSM. Outcome data were client-rated following session three.

p* < .05. *p* < .01. ****p* < .001.

C. Depth Regression

All assumption checks indicated the data were adequate for the chosen analysis. There were no issues with multicollinearity. Observer-rated exploration had the lowest Tolerance value, .55, and the highest VIF, 1.82. Additionally, there were no concerns regarding outliers, normality, linearity, homoscedasticity, or independence of errors. Table 4 depicts the results of the depth regression.

Results of the multiple linear regression indicated that therapist characteristics significantly predicted depth, $F(5, 59) = 3.02, p = .017$. This first model accounted for 20.4% of the variance associated with depth and had a medium effect size ($f^2 = .26$). Within this model, the quantitative and verbal GRE total score was the only statistically significant predictor, $t(64) = -2.80, p = .007$. The GRE score individually accounted for 10.56% of the variance associated with depth scores and was found to have a small effect size ($f^2 = .12$).

Table 4: Hierarchical Multiple Linear Regression Analysis for Depth

Variable	<i>B</i>	95% CI for <i>B</i>		<i>SE B</i>	β	<i>R</i> ²	ΔR^2
		<i>LL</i>	<i>UL</i>				
Step 1						.20*	.20*
Age	-.01	-.04	.03	.02	-.03		
GRE	-.03**	-.05	-.01	.01	-.34**		
IIP	-.01	-.03	.01	.01	-.14		
IRI-PT	.03	-.02	.08	.02	.14		
TAT EIR	-.08	-.33	.17	.12	-.08		
Step 2						.37*	.17*
Age	-.02	-.06	.02	.02	-.14		
GRE	-.02*	-.05	-.00	.01	-.27*		
IIP	-.01	-.03	.01	.01	-.08		
IRI-PT	.02	-.03	.06	.02	.08		
TAT EIR	-.06	-.29	.17	.11	-.06		
O Exploration	-.01	-.42	.40	.20	-.01		
O Insight	-.02	-.34	.29	.16	-.02		
O Action	-.49**	-.79	-.19	.15	-.40**		
O Support	.23*	.02	.43	.10	.30*		

Note. *N* = 65; *CI* = confidence interval; *LL* = lower limit; *UL* = upper limit; GRE = combined Quantitative and Verbal GRE score; IIP = Inventory of Interpersonal Problems total score; IRI-PT = Interpersonal Reactivity Index – Perspective Taking subscale total score; TAT EIR = TAT-SCORS-G Emotional Investment in Relationships domain total score; O = observer-rated. All technique usage data were obtained from session three using the HSM. Outcome data were client-rated following session three.

* *p* < .05. ** *p* < .01. *** *p* < .001.

The second model was a significant improvement over the first model, $F(4, 55) = 3.63, p = .011$. The inclusion of techniques in the second model accounted for an additional 16.6% of the variance associated with depth scores; technique usage variables were found to have a medium effect size ($f^2 = .20$). The second model as a whole explained a total of 37% of the variance of depth scores and had a large effect size ($f^2 = .59$). The results of the regression indicated that there was a collective significant effect

of therapist characteristics and technique usage in terms of session depth, $F(9, 55) = 3.59$, $p = .001$. The strongest unique contribution to the outcome variable was observer-rated action, $\beta = -.40$, which explained 12.32% of depth score variance. Moreover, action was a significant individual contributor, $t(64) = -3.28$, $p = .002$. Support was also a significant individual contributor, $t(64) = 2.18$, $p = .034$, and accounted for 5.42% of the variance associated with depth scores. Additionally, GRE remained a significant individual contributor in the second model, $t(64) = -2.26$, $p = .028$, explaining 5.81% of the variance associated with depth.

IV. DISCUSSION

The goal of this study was to examine the predictive ability of therapist characteristics (age, GRE, interpersonal problems, perspective taking empathy, and depicted level of intimacy and emotional sharing) and technique usage (exploration, insight, action, and support) on alliance and depth. A multimethod approach was used to assess therapist characteristics prospectively (prior to any clinical training). All therapy process variables, including observer-rated technique usage and client-rated alliance and depth, were obtained from the third session of the trainees' very first case. Since all trainees had the same clinical coursework and supervisor, the impact of differential training effects is limited to provide a clearer view of differences more inherent in the trainee. Our results showed that client-rated alliance was predicted solely by technique usage whereas depth was predicted by the combination of therapist characteristics and technique usage.

A. Therapist Characteristics

A multimethod prospective assessment of trainees prior to training was able to predict client depth ratings in the trainees' very first clinical case. Of all the personal and admissions variables included, GRE was the only statistically significant independent predictor of depth scores. Moreover, GRE score was found to have a negative influence on depth scores, implying that trainees with higher GRE scores had shallower sessions than trainees with lower GRE scores. Though only speculative, one explanation for this finding may be related to admissions. For individuals with higher GRE scores, other indicators of personal qualities as expressed in personal statements, letters of recommendation, and the applicant interview may be viewed less stringently resulting in the admission of individuals who will do well in the classroom, but may be less adept, at least initially, of connecting with clients on a deeper level. Conversely, for applicants with lower GRE scores, these indicators may have been stronger. Indeed, the overall finding indicated depth was able to be predicted by including multiple trainee characteristics (e.g., perspective taking, interpersonal problems, etc.). These findings extend prior research which has suggested that the GRE is not helpful in predicting clinical potential (e.g., Smaby et al., 2005; Sternberg & Williams, 1997). It is possible that accepting individuals into clinical and counseling programs based on the GRE's measure of academic aptitude (e.g., having a high GRE score) excludes candidates who have high potential to be effective therapists. Additionally, the GRE potentially excludes qualified underrepresented minority candidates from admission to psychology graduate programs (e.g., Gómez et al., 2021). The current findings are especially relevant as the field debates whether the GRE should continue to be used as a standard admission

consideration given evidence of bias against certain cultural groups and students with less financial means (CCTC, 2021).

B. Technique Usage

The addition of technique usage variables (observer-rated exploration, insight, action, and support) to the depth regression model resulted in a significant improvement in the fit of the model. These results imply that trainees' use of techniques strongly impacted client ratings of depth. Specifically, action exhibited a negative influence on depth scores, indicating that more use of action techniques was associated with lower client ratings of depth. Hill's (2014) discussion of implementing action techniques includes the caution that when action is implemented at the wrong time, it can have negative effects on clients' perception of sessions. A common mistake that some therapists, especially new therapists, make is pushing their client into the action stage before the client is ready. Furthermore, new therapists might attempt to offer solutions to 'fix' the client (McWilliams, 2004). When this happens, clients might become resistant or feel out of tune with their therapist (Hill, 2014), which in turn could lead the client to perceiving the session as less valuable. Since these technique ratings were taken after session three, clients may have felt this was too soon for action. These findings support cautioning trainees about the use of action techniques too early in therapy.

Support was also a significant predictor of depth scores, indicating that greater usage of support is predictive of higher client ratings of session depth. It is evident that conveying support to a client in session leads to the client perceiving the session as more valuable, meaningful, and deep. These findings fit with Wachtel's (1993) notion that being supportive in sessions generates the feeling of safety, which in turn, allows the

client to go deeper. Similarly, Siegel and Hilsenroth (2013) found that clients' feelings of safety are positively related to session depth, and they further postulate that safety itself is the influencing factor that allows the therapeutic work to reach a deeper place.

Observer-rated support was also positively related to client-rated alliance. Although our original regression model with both therapist characteristics and technique was not significant, the exploratory analysis for alliance indicated that technique usage variables alone are able to predict alliance, with support having a substantial positive influence on alliance scores. Wachtel (1993) explains that support is the groundwork upon which the relationship between the therapist and the client is built, and this relationship is what allows deeper exploration to transpire. Our findings are in line with this concept as they suggest that support techniques (e.g., supportive statements and reassurance) are a vital part of establishing a strong therapeutic relationship and having deep, meaningful sessions with clients. Finally, our findings indicate there is a moderate positive correlation between alliance and depth. As Wachtel (1993) describes, it is possible that having a stronger alliance allows for deeper conversational work. Whether it is that a greater alliance leads to deeper sessions or that deeper sessions lead to a greater alliance, the two processes are intertwined.

Neither an implicit measure of therapist emotional investment of others (TAT-EIR), nor therapist self-reported empathy (PT) or emotional problems (IIP) were significant predictors of alliance or depth. Given that the overall model, which included these variables, was significant for depth, it is possible that one or more of these variables would have been statistically significant with a larger sample size. The significant effect of support techniques on both alliance and depth suggests that prospective measures of

personality traits related to these constructs may be less important than measures that actively assess the ability to communicate support and empathy. For example, a therapist may generally have a high degree of empathy or care for others, but struggle to communicate this effectively via supportive statements. Indeed, Hill (2014) notes that while having an innate inclination towards empathy is ideal, what matters most is that within each session, an effective therapist is actively striving to implement a facilitative attitude (i.e., have an empathetic, genuine, and nonjudgmental approach).

C. Implications for Training

The findings regarding GRE, as well as those regarding usage of support and action in sessions, have implications for both the admissions process and clinical training. From an admission consideration standpoint, it seems that moving away from GRE and towards an assessment of ability to communicate empathy and avoid pushing people to action may be more helpful in predicting clinical ability. Yet, it is uncertain what an assessment such as this would look like. It is possible that having applicants participate in mock client interactions using an online program, such as Theravue, would allow for this type of evaluation. Scores from this assessment could be used to determine applicants' pre-training ability to effectively convey support, as well as allowing a view into the applicants' tendency to jump into action. Furthermore, Theravue, or similar programs that allow students to participate in mock client interactions, could be a useful addition to clinical training. Within this type of program, trainees would have the opportunity to practice making empathic statements that meet clients where they are in their readiness for change. Specifically, Theravue works by showing students brief video clips of client scenarios and allowing the students to respond with their own video recording (Theravue,

n.d.). The program has potential for providing a method of assessing clinical ability as well as a way to facilitate training without the pressure of practicing with real clients. Theravue might not be the perfect answer, but similar methods that facilitate observations of clinical ability have the potential to be a versatile addition to admissions processes and training.

D. Strengths, Limitations, and Future Directions

The small sample size ($N = 65$) is the primary study limitation. This impacted the number of predictor variables we were able to include in regression models and variables that were associated with alliance and depth in previous studies were not statistically significant here. Future studies should continue to investigate these personality measures, as well as other possible predictors of alliance and depth with a larger sample size.

The study was also limited to trainees from a single university. While this limited differential experiences of trainees (same coursework, same supervisor), it also limits the generalizability of the findings. Continuing the investigation of the impact of techniques and therapist characteristics on therapy process measures within similar trainee populations is needed to confirm the findings of this study.

Two additional limitations include: 1) outcome data is from one client, during one very brief therapy case; and 2) only therapist characteristics were assessed. Future studies should follow therapists long term to see how therapist characteristics and technique usage might effect multiple clients with different lengths of therapy. Likewise, future research might also include an assessment of client characteristics to assess the fit between the client and the therapist.

V. SUMMARY

Our findings indicated that a prospective assessment of beginning therapists prior to training was able to predict their first therapy client's perception of depth in the third session. Moreover, their use of techniques in this session further improved the prediction of depth and independently predicted alliance. When looking at both the cumulative effects of the variables and the variables that had the strongest unique contribution, several implications for graduate admissions criteria and training emerged. First, with regards to admissions procedures, our findings suggest that a multimethod assessment of applicants is helpful in predicting therapeutic ability. That said, our results shine considerable concern on the use of GRE scores as the GRE showed the strongest unique contribution to depth with higher GRE scores predictive of lower session depth. Moreover, while none of the other therapist characteristics uniquely impacted alliance or depth ratings, the therapists use of support uniquely contributed to both alliance and depth while higher use of action techniques negatively contributed to depth. Thus, future research should explore whether having applicants respond to therapy video clips (e.g., using Theravue) during the admissions process can predict clinical ability especially in terms of the applicant's natural inclination to support versus attempting to fix or solve the client's problem. Similarly, with regards to training, our results support Wachtel's adage to help trainees be as supportive as they can be so that they will be able to do the exploratory work they will need to. Finally, our results highlight the importance of encouraging trainees to avoid the temptation to push client's too quickly into change.

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