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To the Graduate Council:

I am submitting herewith a dissertation written by Gahee Choi entitled "Client Attachment as a Predictor of Therapy Outcome and Premature Termination." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.

Brent Mallinckrodt, Major Professor

We have read this dissertation and recommend its acceptance:

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Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

Client Attachment as a Predictor of Therapy Outcome and Premature Termination

A Dissertation Presented for the Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Gahee Choi December 2014

Acknowledgements

I would like to express my gratitude to people who helped this dissertation possible. First, I want to show my appreciation and respect to my advisor and mentor, Dr. Brent Mallinckrodt. I have been privileged to experience his guidance, support, and encouragement. I am very grateful to Brent for creating secure and open space over the past four years. Within this space, I could explore my interests freely and challenge myself further. I also would like to thank my committee members, Dr. Dawn Szymanski, Dr. Joseph Miles, and Dr. Shawn Spurgeon, for their suggestions, encouragement, support and expertise. They helped me so much not only for my dissertation, but also for my professional and personal development in class, supervision, or individual meetings. I would like to express my love and respect to my parents, 對母母 and 召尊环 who unconditionally love me and give me unflagging support. Without their love and support, I cannot imagine how I could go through this doctoral study. Thank you very much for always being there for me.

Abstract

The primary purpose of this study was to examine how clients' self-reported adult attachment pattern and their attachment to the counselor are associated with working alliance and premature termination. A total of 65 clients at a large southeastern university counseling center were included in data analysis. Clients in this study completed survey packets including the Experiences in Close Relationships Scale (Brennan, Clark, & Shaver, 1998), the Working Alliance Inventory (Horvath & Greenberg, 1989), the Client Attachment to Therapist Scale (Mallinckrodt, Gantt, & Coble, 1995), the Outcome Questionnaire 45 and 30 items (Lambert et al. 1996), and the Therapeutic Distance Inventory (Mallinckrodt, 2011) at four different time points: (a) pretest, (b) after the 3rd session, (c) after the 5th session, and (d) at termination. The Therapeutic Distance scale is composed of four dimensions, Too Close, Too Distant, Growing Engagement, and Growing Autonomy. Results suggested that interactions between adult attachment (anxiety or avoidance) and therapeutic distance were not significantly associated with working alliance or premature termination. However, therapeutic distance subscales were correlated as direct effects with working alliance and premature termination. Other findings suggested adult attachment did not change over the course of therapy. The Client Attachment to Therapist (CATS) subscales at session 5 and at termination were significantly correlated with premature termination. In addition, working alliance at termination was significantly negatively associated with premature termination. Finally, the CATS-Avoidant-Fearful subscale at session 3 was associated with an increase in symptoms, and working alliance at session 3 was associated with a

decrease in symptoms. Implications for theory, psychotherapy, and future research are discussed.

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Chapter 1

Introduction

Premature termination of psychotherapy is defined as a client's decision to discontinue treatment before the therapist believes the work should end. In a metaanalysis of 669 studies and approximately 84,000 adult clients, Swift and Greenberg (2012) found that 19.7 % of clients in psychotherapy discontinued treatment without mutual agreement of their therapists. Given that almost one out of five psychotherapy clients prematurely terminate, this negative outcome represents a serious problem for treatment efficacy because many of the clients have not significantly improved at the point they leave (Garfield, 1986; Pekarik, 1985). Thus, premature termination represents an ineffective allocation of often scarce treatment resources. In order to understand premature termination, attention has been paid to exploring factors that differentiate clients who complete treatment and versus those who drop out in terms of demographic variables or clients' previous therapy experiences (Arnow et al., 2007; Bergin & Garfield, 1994; Corning & Malofeeva, 2004). Barrett, Chua, Crits-Cristoph, Gibbons, and Thompson (2008) extended the findings on premature termination by categorizing six broad areas to predict premature termination: (1) Patient characteristics (e.g., social economic status or minority identification), (2) Enabling factors or Barriers (e.g., cost of services, placement on waiting list, finding child care), (3) Factors related to Need (e.g., low tolerance for frustration, poor motivation, severe psychosis), (4) Environmental factors (e.g., staff attitudes, setting of the clinic, treatment option), (5) Perception for mental health (e.g. stigma), and (6) Perceptions of and assumptions about treatment (e.g.

expectations about mental health treatment, concern about emotional disclosure.)

However, premature termination may reflect a more complicated interaction between therapist and client beyond client characteristics. Another line of studies emphasized dynamic variables of clients' change process (Wierzbicki & Pekarik, 1993), match between clients stage of change and therapy intervention (Prochaska & DiClemente, 1992), and interactions between relational factors (e.g., trust, agreement, bond), client factors, and other external factors (Piselli, Halgin, & Macewan, 2011). These studies suggested that further research should focus on finding treatment- and relational-relevant predictors on premature termination.

Adult attachment theory may contribute to understanding clients' decision to leave therapy early, because Bowlby (1988) has described psychotherapy as involving important elements of an attachment relationship. Bowlby (1969) proposed that early experiences of the infant with a caregiver play a significant role in forming quality relationships not only with the caregiver in childhood, but also as the foundation for adult close relationships. For example, a caregiver's stable care helps an infant to develop a positive view of the world whereas unstable and inconsistent care leads to a negative view of the world and other people. This lens to perceive self, others, and relations are called *internal working models* of self and others. Bowbly suggests that working models influence an individual's interpersonal interactions across the lifespan, and determine relatively stable interpersonal patterns. Furthermore, Bowlby (1988) describes that this interpersonal pattern is replicated in the therapeutic relationship between clients and therapists, and emphasized the importance of increasing security of client attachment. In

the therapy process, therapists' role as a *secure base* is important for clients to increase awareness of their attachment pattern. Based on this secure therapeutic relationship, clients may feel comfortable to explore how their past relationship makes an impact on their current situations and become aware of their maladaptive internal working models. Thus, providing a secure environment for client is a key element for successful therapy in that secure space facilitates clients' secure attachment to therapist and helps induce clients' behavioral changes (Dozier, 1993; Mallinckrodt, 2010).

A body of literature has found that adult attachment security is a predictor of positive therapeutic relationships. One early line of studies used the Adult Attachment Scale (AAS; Collins & Read, 1990) to measure adult attachment security. The AAS consists of three subscales: Depend, Anxiety, and Close. The Depend subscale measures how much an individual can trust others whereas the Close subscale refers to an extent an individual discloses emotional topics and feels comfortable with intimacy. The Anxiety subscale measures the degree of an individual's fears of being rejected and abandoned. Satterfield and Lyddon (1995) administered the AAS to 60 clients at a university counseling center and found that the Depend dimension was positively related to stronger working alliance. Kivlighan, Patton, and Foote (1998) showed similar results when they administered the AAS to 40 client-counselor dyads at two university counseling centers. The result showed that AAS Close and Depend subscales were positively associated with working alliance. Goldman and Anderson (2007) investigated the association of attachment style and quality of object relations with early therapeutic alliance formation in two university counseling sites. In this study, the clients rated their working alliance

after the first session, second, and third sessions. To measure attachment security as a single continuous measurement, the authors added the Depend subscale and the Close subscale together and then subtracted the Anxiety subscale. The result shows that clients' AAS security was significantly associated with positive working alliance in first session, and the relation between attachment security and working alliance was not significant at either the second or third session. The authors suggest that clients who are willing to disclose their personal problems and who have less fears of abandonment are more likely to form more positive working alliance in the early phase of therapy.

A relatively more recent line of studies has used the Client Attachment to Therapist Scale (CATS) to explore the relationship between client attachment and working alliance. In the study that developed the CATS, Mallinckrodt, Gantt, and Coble (1995) differentiated client attachment to therapist from working alliance. The authors indicate that although secure attachment and stronger working alliances have commonalities, insecure attachment and weaker working alliance may represent different aspects of the therapeutic relationship, respectively. Sauer, Anderson, Gormley, Richmond, and Preacco (2010) supported this differentiation by suggesting that secure client attachment to therapist and strong working alliance predicts a large portion of client distress reduction over time separately.

Adult attachment theory as applied to the psychotherapy relationship has been used to suggest patterns of optimal match between counselors' and clients' attachment style. Bernier and Dozier (2002) began with the premise that a therapeutic corrective emotional experience occurs when therapists react to the client differently compared to

the habitual maladaptive patterns of important individuals in the client's life. The researchers explained the effect of therapists' different reactions to clients by comparing complementarity and non-complementarity of therapeutic relationship. In the complementarity condition, two individuals interact with each other by confirming each other's self-presentation, whereas in a noncomplementarity interaction, one individual resists another's attempt to pull for certain reactions. In a clinical intervention, therapist's complementary behavior, for example, would be to allow a client with high levels of attachment avoidance to avoid therapeutic intimacy and talk in a superficial level. The complementary approach for clients with high attachment anxiety would be to provide strong reassurance and gratify their need for dependency. On the contrary, in using a non-complementary approach, therapists would encourage clients with attachment avoidance to talk more about intimate subjects, and would encourage clients with attachment anxiety to gain more autonomy.

Dozier (1993) suggested that attachment dissimilarity between therapists and clients encourages non-complementary interactions and therefore is associated with successful outcome. In a study of case manager and patient dyads in a community mental health sites, the researcher reports that preoccupied clients who shows higher tendency toward emotional expression and dependence on others may take more advantages when working with dismissing case managers. Dismissing individuals are characterized by avoidance of close relationship or real feelings. In contrast, dismissing clients get more benefits when working with preoccupied case managers, because therapists' different reactions challenge clients to restructure their interpersonal strategies. Thus, attachment

dissimilarity may help therapists to not lose their perspective in therapeutic relationship, and may help clients to reframe their interpersonal strategies. Dozier and Tyrrell (1998) indicate that therapists should avoid reacting to their clients in a complementary fashion. They suggest that therapists need to gradually challenge clients' avoidance of intimacy by encouraging a gradual approach to their emotional issues instead of spending time to talk about superficial or nonthreatening topics. Tyrrell, Dozier, Teague, and Fallot (1990) investigated attachment mismatch of counseling dyads and client outcome in a study of case managers at a community-based-setting. It was found that clients with a deactivating tendency who make efforts to avoid, escape pain and frustration showed better outcome when working with less deactivating case managers, while less deactivating clients had more benefit from more deactivating case managers. Thus, a body of research suggests that attachment non-complementarity of therapists and clients in certain dimensions are beneficial in facilitating clients' awareness of their maladaptive interpersonal patterns.

Beutler, Clarkin, Crago, and Bergan (1991) suggest that value similarity contributes to building a positive therapeutic relationship, whereas dissimilarity facilitates positive change of clients. According to these researchers, both similarity and dissimilarity of counselors and clients' interpersonal patterns may differently facilitate therapy process at different points of therapy. More specifically, Bernier and Dozier (2002) suggest that a gradual switch between complementary and non-complementary reaction throughout therapy process may help clients to feel secure in therapy and induce client growth because premature intervention to react noncomplementarily to clients may

overwhelm clients (Levy et al. 2006). Thus, therapists' sensitivity and flexibility may be necessary in order to appropriately tune into the clients' interpersonal needs across therapy. Similarly, in a study which interviewed 12 expert therapists, Daly and Mallinckrodt (2009) suggest that adjusting therapeutic distance to optimal level across therapy is important to foster clients' change. The experts in this study regulated therapeutic distance to match client's needs at the beginning of therapy, and then attempted to gradually adjust the distance. For example, they tend to gratify anxious clients' needs for reassurance and a low level of therapeutic distance at the early phase of therapy. However, to promote change in the working phase of therapy this distance is gradually increased if a solid therapeutic relationship has developed. In contrast, when working with clients who have considerable attachment avoidance, therapists initially gratify their need for more therapeutic distance in the early sessions, and then later work to gradually decrease the distance. This gradual switch from complementary nature of relationship into non-complementary relationship helps clients to form a new interpersonal relationship and lead to clients' corrective experience.

While therapists need to be flexible in the process of maintaining optimal therapeutic distance, it is important to recognize that switch from complementary to non-complementary approach may cause tension between therapists and clients and have detrimental effects on therapy process. *Alliance rupture* is a concept defining as a therapeutic impasse in finding difficulty to establish therapeutic alliance or a negative change from establishing working alliance (Samtag, Muran, & Safran, 2004). Safran, Muran, and Eubanks-Carter (2011) suggest that high level of rupture leads to poor

therapy outcome, and failure to address this rupture may be followed by premature termination. Aspland, Llewelyn, Hardy, Barkham, and Stiles (2008) support the negative association between rupture and working alliance. They indicate that unaddressed negative working alliance can cause ruptures, and therapists' intervention to focus on task may lead clients' withdrawal from the therapeutic relationship. Based on these results, it appears that resolving ruptures in alliance as well as flexibility of therapists' intervention is important in the process of balancing between complementarity and noncomplementarity.

Berant, Mikulincer, and Loebel (2008) support the high possibility of attachment insecurity leading to premature termination. The authors report that insecure attachment at intake predicts premature termination before the 10th session. However, this result is not congruent with Goldman and Anderson (2007). In a study of 55 individual counseling clients at two university counseling centers, these authors found that attachment security and object relations were not significantly related to premature termination. A study by Marmarosh et al. (2009) added further complexity in founding that client attachment anxiety was positively associated with likelihood of remaining in therapy. Given the lack of agreement from previous studies, more investigation is required to discover the role of attachment insecurity in premature termination.

Recently, Mallinckrodt (2011) proposed a model based on the concept of therapeutic distance which might explain these seemingly incongruent findings. Clients who do not tend to enjoy secure adult attachments can be characterized by having one of two predominant patterns when faced with life stress. Some clients *hyperactivate* their

attachment behaviors by pulling for the counselors' rescuing interventions in the early sessions. In contrast, other clients *deactivate* their attachment behavior in an attempt to protect themselves by rejecting intimacy and keeping all others (including the therapist) at a distance. The expert therapists in Daly and Mallinckrodt's (2009) study described gratifying hyperactivating client's needs for closeness at first, and then gradually introducing more distance. Mallinckrodt's 2011 model suggests that when this process goes well, hyperactivating clients will have a growing sense of autonomy, but a working alliance rupture can occur if clients sense that the therapist is too distant. In contrast, for deactivating clients expert therapists described gratifying their need for avoidance early in therapy, and then gradually insist on more intimacy. Mallinckrodt's model suggests that when this process goes well deactivating clients will have a growing sense of intimacy, but a rupture can occur if clients believe the therapist is too close and intrusive.

Although previous research has suggested the importance of therapeutic distance and therapists sensitive switch between complementarity and non-complementarity, we could locate very little empirical evidence about these points. Therefore, the first purpose of this study was to test Mallinckrodt's (2011) model which suggests these four hypotheses:

1a. Client attachment avoidance (i.e. deactivation) will interact with perceptions of therapeutic distance as "too close" to predict poor working alliance and premature termination.

1b. Client attachment avoidance will interact with perceptions of growing intimacy to predict positive working alliance and persistence in counseling.

1c. Client attachment anxiety (i.e. hyperactivation) will interact with perceptions of therapeutic distance as "too distant" to predict poor working alliance and premature termination.

1d. Client attachment anxiety will interact with perceptions of growing autonomy to predict positive working alliance the persistence in counseling.

In addition, Berant and Obegi (2009) call for more research which investigates clients' change in attachment over the course of treatment. Therefore, the following additional research questions will be investigated (2) How would client attachment insecurity change over the course of therapy in association with client perceived working alliance, and client attachment to therapist? (3) Which of these variables are the best significant predictors of premature termination: (a) working alliance, (b) general adult attachment anxiety and avoidance, and (c) client attachment to therapist? and (4) How would client-perceived outcome change over the course of therapy in association with client perceived working alliance and client attachment to therapist?

A special note is necessary concerning the types of termination at a university counseling center. In addition to "ended by mutual agreement," and premature termination, there is a third category, termination forced by circumstances. When the academic semester ends and a student counselor will no longer be available, or the student client will not be on campus for the summer, such unwelcome termination may become a challenge for clients (Penn, 1990) compared to natural termination when clients' goal is achieved. Although this type of termination is "premature" in one sense,

it is fundamentally different from situations in which the client could continue but decides not to do so.

Chapter 2

Methods

Participants

Data for this study are part of a larger project in which the data were previously collected at the UT Counseling Center during three semesters, Fall 2010, Spring 2011, and Fall 2011. During that time a total of 76 clients provided pretest data after their intake but before their first session. Of these, two clients completed counseling relationship ratings but not the pretest, and nine clients completed the pretest but had fewer than three subsequent sessions. Only the remaining 65 clients completed the pretest, had three sessions, and completed counseling relationship ratings. These 65 clients were retained for analysis in this study. They included 20 (31%) males, 44 (68%) females, and one client who did not report his/her sex. The clients' mean age was 25.22 years (SD = 7.67, range = 18-53 years). With regard to ethnic identification, 54 (83%) reported Euro American/Caucasian, 4 Multiracial (6.2%), 3 African American (4.6%), 3 Asian American (4.6%), and 1 "other" (1.5%). With regard to current relationship status, 26 (40.0%) reported "Committed", 21 (32.3%) "Not dating", 8 "Married or living with" (12.3%), 6 "Dating, not exclusive" (9.2%), and 4 "Recently broke up" (6.2%). The surveys did not ask clients to indicate the number of years they had completed at UT (e.g., Freshman, Sophomore). Table 1 indicates the distribution of 10 frequently occurring counseling presenting problems, with clients allowed to choose more than one presenting concern by indicating yes/no for each one.

With regard to the number of sessions completed, three clients completed only three sessions; 22 clients completed 4-5 sessions, 17 clients completed 6-8 sessions, 13 clients completed 9-11 sessions, and 10 clients completed 12 or more sessions. Clients were asked to report the name of their counselor. Only 60 clients did so. To protect the confidentiality of the therapists, the names were converted to code numbers by Dr. Mallinckrodt before the data were given to me. The code number also included an indication of the counselors' training level, practicum, graduate assistant or advanced prac., intern, and senior staff. The 65 clients who reported data were seen by 28 different counselors. The most clients seen by any individual were 5 clients (seen by 1 counselor), 2 counselors saw 4 clients each, 7 counselors each saw 3 clients, 8 counselors saw 2 clients, and 10 counselors saw only a single client. In terms of training level, 20 clients were seen by 11 different practicum counselors, 14 clients were seen by 4 graduate assistants or advanced practicum students, 5 clients were seen by 4 interns, and 21 clients were seen by 9 senior staff members or a postdoctoral staff member. Counselors included 44 female (67.7%), 19 male (29.2%), 2 clients who did not report their counselors' sex (3.1%). With regard to counselors' ethnic identification, 45 clients reports their counselors as White (69.2%), 8 international (12.3%), 4 ethnic minority (6.2%), and 8 unknown (12.3%).

Measures

In addition to demographic questions and questions about presenting problems and termination created for this study, surveys included the Experiences in Close Relationships Scale, Therapeutic Distance Scale, Outcome-Questionnaire both 45- and

30- item versions, Working Alliance Inventory, both 36- and 12-item versions and the Client Attachment to Therapist Scale.

Adult Attachment. The Experiences in Close Relationships Scale (ECRS, Brennan, Clark, & Shaver, 1998) was used to measure adult attachment. Participants were asked to evaluate how they experienced romantic relationship generally. ECRS was administered at two different time points: after intake but before the first session and at termination. This ECRS consists of two subscales: attachment Anxiety and attachment Avoidance. Each subscale has 18 items. Respondents use a 7-point fully-anchored Likert-type response scale (1=disagree strongly, 2= disagree, 3= disagree slightly, 4=neutral/mixed, 5=agree slightly, 6=agree, 7=agree strongly). Higher scores indicate more anxiety or avoidance. Factor analysis strongly supports the two subscale structure of Avoidance and Anxiety. A sample item from avoidance subscale is "I prefer not to show a partner how I feel deep down." A sample item from anxious subscale is "I resent it when my partner spends time away from me." According to Brennan et al. (1998), internal consistency of this measure was .91 for Avoidance and .94 for Anxiety in a sample of undergraduates. In the current study, the internal reliability of Avoidance and Anxiety was .97 and .94 respectively for pretest. At termination, the internal reliability for Avoidance and Anxiety was .89 and .95 respectively.

Working Alliance. This part of the psychotherapy relationship was assessed by the Working Alliance Inventory (WAI, Horvath, 1981; Horvath & Greenberg, 1989). WAI was administered just after the third session. The WAI consists of 36 self-report items with three subscales: Agreement on Goals, Agreement on Tasks, and Bond. Each

subscale has 12 items and is scored on a 7-point Likert-type scale (1=never, 2=rarely, 3=occasionally, 4=sometimes, 5=often, 6=very often, 7=always). This measurement assesses emotional bond between counselor and client, agreement over treatment goal, and agreement over the tasks to achieve the goals. A sample item from agreement on goals subscale is "What I am doing in therapy gives me new ways of looking at my problem." A sample item from agreement on tasks subscale is "I feel uncomfortable with my counselor." A sample item from bond subscale is "I am worried about the outcome of these sessions." In a study by Goldman and Anderson (2007), the Cronbach's alpha coefficients for total scores were .92 at Session 1, .92 at Session 2, and .93 at Session 3. In the current study, internal reliabilities for Tasks, Bond, and Goals were .92, .85, and .89, respectively at the third session. After fifth session and termination, Working Alliance Inventory Short form was measured. Tracey and Kokotovic (1989) indicate that the factor structure of this short version is equivalent to the original measurements' factor structure. Internal reliabilities for Working Alliance total score were .96 at Session 3 and .95 at Session 5.

Psychological Symptoms. Outcome Questionnaire 45 and Outcome Questionnaire 30.2 (OQ-30) were used to measure clients' general level of psychological and emotional functioning. Outcome Questionnaire 30.2. is a shortened 30-item version of the Outcome-Questionnaire 45 (OQ-45; Lambert et al. 1996). OQ-45 was used after intake and after termination whereas OQ-30 was used after the third and fifth session. The OQ-45 assesses levels of general distress. Three clusters of items have been identified (individual symptoms, interpersonal relationship difficulties, and performance of social

roles) but these subscales are rarely used by other researchers. Therefore, only the total scale score was used in this study. Respondents use a five point scale (0 = Never, 1 = Rarely, 2 = Sometimes, 3 = Frequently, 4 = Almost Always). Higher scores indicate more psychological distress. A score of 63 has been established as a cutoff separating relatively well functioning respondents from those with more severe levels of distress. Sample items includes "I feel lonely", "I like myself", and "I feel my love relationships are full and complete." The measure has demonstrated high levels of test-retest reliability, in a sample of 157 undergraduate students (r = .84), internal consistency (Cronbach's alpha = .93) and good concurrent validity (Lambert et al., 1996). Expected relationships were found between the OQ-45 and other measures of depression and anxiety and global distress (Lambert et al., 1996). In the current study, the internal reliabilities of OQ-45 are .94 for after intake and .95 after termination. For session 3 and session 5, internal reliabilities for the OQ-30.2 were .94 and .96.

Client Attachment to Therapist. The Client Attachment to Therapist Scale (CATS) was used to measure to clients' perceptions of their relationships with their therapists (Mallinckrodt et al., 1995). This scale was administered at three different time points: after the third session, after the fifth session, and at termination. The CATS contains 36 items and is scored on a 6-point Likert scale (1= strongly disagree, 2=somewhat disagree, 3= slightly disagree, 4=slightly agree, 5=somewhat agree, 6=strongly agree). The CATS consists of three subscales: (1) Secure (14 items), (2) Preoccupied-Merger (10 items), and (3) Avoidant-Fearful (12 items). The secure subscale measures clients' perception of counselors' encouragement to explore troubling

materials in therapy, counselors' sensitivity, and comforting presence in therapy.

Preoccupied-Merger subscale assesses more needs to contact counselors and to be "one' with the counselor. The Avoidant-Fearful subscale measures reluctance to make personal disclosures and feeling threatened or humiliated in the sessions. A sample item from secure subscale is "I didn't get enough emotional support from my counselor." A sample item from preoccupied-merger subscale is "I yearn to be at one with my counselor." A sample item from avoidant-fearful subscale is "I think my counselor disapproves of me." In a study of Mallinckrodt et al. (1995), Cronbach's alpha coefficients were .64 for Secure, .81 for Preoccupied-Merger, and .63 for Avoidant-Fearful. In the current study, Internal reliability of Secure, Avoidant-Fearful, and Preoccupied-Merger was .89, .83, and .85 respectively after the third session. After the fifth session, Internal reliability of Secure, Avoidant-Fearful, and Preoccupied-Merger was .92, .91, and .89 respectively. At termination, Internal reliability of Secure, Avoidant-Fearful, and Preoccupied-Merger was .92, .89, and .90 respectively.

Reason for Termination. The reasons for Termination questionnaire was developed for the present study. The first part of this questionnaire asked clients to address the nature of their termination: premature termination, termination forced by circumstances, and termination by mutual agreement. The second part of the questionnaire asked clients to assess how therapeutic relationship influenced clients' decision to terminate their working together with their counselors. The second part consists of nine items, and is scored on a 6-point Likert scale (1=disagree strongly, 2=

disagree, 3=disagree slightly, 4=agree slightly, 5=agree, 6=agree strongly). In the current study, only the first part was used.

Therapeutic Distance. The Therapeutic Distance Inventory (TDI) was developed by Mallinckrodt (2011) to evaluate client's perception of therapeutic distance between counselor and client. The TDI consists of 28 items arranged in four subscales, Too Distant (8 items), Too Close (7 items), Growing Autonomy (6 items), and Growing Engagement (7 items). This inventory is scored on a 6-point Likert scale (1= strongly disagree, 2=somewhat disagree, 3= slightly disagree, 4=slightly agree, 5=somewhat agree, 6=strongly agree). A sample item from too distant subscale is "My counselor is not nearly as helpful as she/he could be." A sample item from too close subscale is "My counselor is pushing me way too hard." A sample item from growing autonomy subscale is "As a result of counseling, I am able to handle situations more often without help from others." A sample item from growing engagement subscale is "My counseling sessions are not as stressful as I thought they would be." In a preliminary analysis of partial data based on 33 clients' responses, Mallinckrodt (2011) reported that the Cronbach's alpha coefficients were .94 for Too Distant, .78 for Too Close, .81 for Growing Autonomy, and .83 for Growing Engagement. In this study, internal reliabilities of Too Distant, Too Close, Autonomy, and Engagement were .94, .79, .79, and .82 respectively after the fifth session. At termination, internal reliabilities of Too Distant, Too Close, Autonomy, and Engagement were .94, .76, .78, and .85 respectively

Procedure

Data were collected from clients who were working with counselors in a

University counseling center. Participants volunteered to participate after seeing flyers in
the waiting room of a counseling center. When they decided to take part in this research,
they sent an email to the research coordinator. All data collection was conducted by
using online surveys. Participants completed surveys at four time points: (1) pretest after
intake, (2) after the third session, (3) after the fifth session, and (4) after termination.

Participants received \$10 gift cards for each completed surveys. Clients were prompted
when to complete a particular survey via an email prompt sent by the project graduate
student coordinator who was also a staff member of the Counseling Center, with access
to scheduling data for clients who agreed to participate in the study.

Chapter 3

Results

The first hypothesis involved interactions between adult attachment and therapeutic distance as predictors of working alliance at the fifth session, and at termination. Specifically, interactions between avoidance and "Too Close" therapeutic distance and between anxiety and "Too Distant" therapeutic distance were expected to predict poor working alliance; whereas interactions between avoidance and "Growing Engagement" distance and between anxiety and "Growing Autonomy" distance were expected to predict strong working alliance. To test these four predictions, at two points in time, eight Hierarchical Multiple Regressions were conducted. In these analyses, client adult attachment and client-perceived therapeutic distance were entered as a block of two variables in Step1, followed by the interaction between attachment and therapeutic distance in Step2. The interaction term was created by centering the two component variables and multiplying them together. For example, in order to examine the interaction between attachment avoidance and Too Close at Session 5 on working alliance at Session 5, attachment avoidance and Too Close at Session 5 were entered in the first step of the analysis, followed by the interaction term in the second step. A significant interaction is indicated by the change in R^2 in the second step of the analysis. For this particular interaction, the Step 2 change in \mathbb{R}^2 .was .035, but this increment was not significant (p>.10). Results from each of these analyses are shown in Table 2.

Note that although none of the eight interaction terms resulted in a significant increase in \mathbb{R}^2 at the second step, some of the therapeutic distance variables were

significant predictors of alliance as direct effects (e.g. not as an interaction.) For example, Table 2, Analysis 1 shows that Too Close and Too Distant subscales were negatively associated with working alliance both at fifth session and at termination, whereas Growing Engagement and Growing Autonomy subscales were positively associated with working alliance both at fifth session and at termination

In addition to working alliance, it was analyzed how the interaction between adult attachment and therapeutic distance predicts premature termination. Premature termination was represented as a binary variable (premature termination v. mutual termination.) The post-test survey asked clients about how their counseling had ended. Because repeated email messages were sent asking clients to continue in this project once they had begun, the 17 clients who completed at least three sessions but did not complete a posttest were assigned to the premature termination group for the purposes of these analyses, assuming that they had stopped both participation in this study and counseling. Of the 48 clients who did complete a posttest survey, 5 clients indicated that they had prematurely terminated. They were grouped with the prevision 17, for a total of 22 clients who composed the "premature termination" group. Of the remaining 43 clients who completed a posttest survey, 24 indicated they had ended counseling by mutual agreement with their counselor. They composed the "mutual termination" group. The remaining 19 clients who completed a post-test indicated that their counseling had not actually ended yet. They were excluded from analysis of premature vs. mutual termination. When we asked the counseling center staff about this, we found that the most likely reason was that these 19 clients expected to continue therapy either (a) for

more than 12 sessions and/or (b) continue working, but with a different counselor over the summer.

Logistic Regression was conducted with termination (premature v. mutual termination) as a binary variable. As in Hierarchical Multiple Regression, attachment scores, therapeutic distance scores, and an interaction term composed of the product of centered scores of attachment and therapeutic distance were used as the predictor variables. For example, in order to examine interaction between attachment avoidance and Session 5 Too Close on termination, centered scores of ECRS avoidance and centered scores of Too Close at Session 5 were entered in Step 1. At Step 2, the variables were centered, multiplied together and entered as a single variable. No significant interaction effect was found. Results are shown in Table 3. Although none of the eight interaction terms showed significant effects, some of the therapeutic distance variables were significant predictors of premature termination as direct effects (e.g. not as an interaction.) For example, Table 3, Analysis 1 shows that Growing Engagement subscale both at Session 5 and termination and Growing Autonomy subscale at session 5 were negatively associated with premature termination. In addition, Too Close subscale at termination was positively associated with premature termination.

The second research question involved predictors of how client attachment Avoidance or Anxiety changed over the course of therapy. T-test repeated measures analyses were conducted to examine whether attachment changed between intake and termination. The result showed no statistically significant change of attachment avoidance and anxiety. Therefore, no further analysis was conducted to examine the

effect of working alliance and client attachment to therapist on adult attachment change over the course of therapy, because adult attachment did not change. Results are shown in Table 4.

The third research question was to examine the significant predictors of premature termination, such as (a) working alliance, (b) general adult attachment anxiety and avoidance, and (c) client attachment to therapist. To test the predictive ability of working alliance, adult attachment anxiety and avoidance, and client attachment to therapist on premature termination, point-biserial correlation analysis was performed. The result shown in Table 5 indicates no significant association between adult attachment (avoidance and anxiety) at intake and premature termination, whereas adult attachment anxiety at termination was significantly positively associated with premature termination. No association was found between Client Attachment to Therapist (CATS) at Session3, but at Session 5, CATS-Avoidant-Fearful subscale and CATS-Preoccupied-Merger subscale were associated with premature termination. All three subscales of CATS at termination showed significant association with premature termination. Whereas working alliance at Session 3 and 5 had no significant correlation with premature termination, every subscale of working alliance at termination were significantly negatively associated with premature termination.

The fourth research question explored how client-reported positive change in symptoms over the course of therapy might be predicted by working alliance and client attachment to therapist. To begin exploring this question, repeated measures T-test analysis was conducted to examine whether client-reported outcome changed between

intake and termination. The result showed statistically significant change of client-reported outcome. Results are shown in Table 6. To examine the effect of working alliance and client attachment to therapist on outcome change, partial correlation was conducted. The result showed significant negative partial correlation between CATS-Security at session 3 as well as session 5, and posttest symptoms after controlling for pretest symptoms. A negative partial correlation indicates a predictor of reduction in symptoms from pretest to posttest, whereas a positive partial correlation indicates a predictor of increased symptoms. Thus, CATS-Avoidant-Fearful subscale at session 3 was associated with an increase in symptoms (positive partial correlation), and Working alliance at session 3 was associated with a decrease in symptoms (negative partial correlation). Results are shown in Table 7.

Chapter 4

Discussion

Since Bowlby (1988) introduced the concept of secure base, a growing number of studies suggested that attachment provides an important lens to understand clients' difficulties and how client change is facilitated (Dozier, 1993; Mallinckrodt, 2010; Meyer & Pilkonis, 2001). Some studies suggested that complementary match between counselors' and clients' adult attachment styles predict quality of working alliance as well as clients' better functioning (Dozier, Cue, & Barnett, 1994; Tyrrell et al., 1990). "Complementary" in this research means matching a counselor with moderate attachment anxiety with a client who has attachment avoidance, and vice versa. However, Mallinckrodt (2011) speculated that therapeutic attachment between clients and counselors can be fluid rather than constant and stable. Mallinckrodt described a model which suggested that counselors should recognize this dynamic nature of therapeutic attachment and deliberately regulate therapeutic distance as the therapy process requires. However, there is yet no study to directly examine the model. Thus, the primary purpose of this study was to examine how clients' attachment dynamic changes in psychotherapy as well as to examine the association between attachment and premature termination. This chapter will review each hypothesis and exploratory research questions with the connection of these findings to the current literature. After this, the next subsection of this chapter will discuss the study's limitations. Finally, implications for theory, research and practice will be discussed.

The first set of hypotheses was that interactions between adult attachment and therapeutic distance predict working alliance and termination type (i.e. premature vs. agreed termination). Testing the hypotheses involved sixteen different tests of interactions between (a) attachment avoidance and (1) Too Close, or (2) Growing Engagement; as well as (b) attachment anxiety and (3) Too Distant or (4) Growing Autonomy – all to predict either (I) working alliance or (II) premature termination. The hypothesis was not supported in that none of these sixteen interactions were significant. However, in examinations of the direct effects apart from interactions, therapeutic distance Too Close and Too Distant subscales were negatively associated with working alliance, whereas Growing Engagement and Growing Autonomy subscales were positively associated with working alliance. These results indicate that all four aspects of therapeutic distance are associated with working alliance in the direction that Mallinckrodt (2011) predicted. In other words, no matter what adult attachment pattern clients possess, perceptions of the Counselor as Too Distant or Too Close seem harmful to the alliance, and perceptions of Growing Engagement or Growing Autonomy in the relationship seem beneficial. Although the direct effects are consistent with Mallinckrodt's (2011) model, the lack of interactions diverges from Mallinckrodt's suggestion that therapists' should regulate therapeutic distance differently based on clients' attachment style.

Likewise, whereas none of the interaction between clients adult attachment and therapeutic distance predicted premature termination, therapeutic distance Too Close subscale was positively associated with premature termination, and Growing Engagement

and Growing Autonomy subscales were negatively associated with premature termination. These findings suggest that regardless clients' attachment style, perception of the counselor as Too Close may relate to clients' decision to leave therapy early, and perceptions of the counselor as facilitating engagement or autonomy in the relationship may help prevent premature termination.

It is surprising that adult attachment did not have any direct effects on working alliance because previous studies indicate positive association between attachment security and stronger therapeutic alliances and between attachment insecurity and poor therapeutic alliance (Diener, Hilsenroth, & Weinberger, 2009; Diener & Monroe, 2011; Goldman & Anderson, 2007; Levy et al., 2011; Satterfield & Lyddon, 1995). In a metaanalysis, Diener and Monroe (2011) generally supported the strong correlation between attachment security and positive working alliance. However, they also suggested that clients with insecure attachment styles may develop strong working alliance in therapy. The authors indicated that clients' general attachment style is not always mirrored in therapeutic relationship, and clients with insecure adult attachment may develop strong and positive therapeutic alliance with therapists because of the unique cooperative and flexible nature of therapy. Similarly, in a systematic review study, Smith, Msefti, and Golding (2010) suggested that relationships between adult attachment anxiety and alliance and between adult attachment avoidance and alliance are inconsistent. Thus, it has been controversial whether attachment insecurity is negatively associated with working alliance, and future research should further examine how clients' general adult

attachment is represented in therapeutic relationship and influences working alliance across therapy.

The enduring and persistent nature of Internal Working Models (IWM) may explain the finding of no association between attachment and alliance in this study. IWM involves belief and expectation of self and other important attachment figures. Although Bowlby suggested that attachment change is one of the important goals of therapy, it is doubtful whether internal working models change in a time-limited therapy, and it is unknown how many sessions are required to change attachment pattern (Cobb & Davila, 2009). Given that Crits-Cristoph and Connolly (1999) indicated that working alliance can be developed in a very brief timeline, general adult attachment and working alliance seem to have differences in persistency and flexibility, and this different nature of the two concepts may contribute to a lack of significant interaction effects between attachment and therapeutic distance in influencing working alliance.

A noteworthy finding in this study is that Growing Engagement, as an aspect of therapeutic distance, was negatively correlated with premature termination. Tryon (1990) suggested that high engagement between clients and therapists in an initial interview increases the possibility of clients returning for the following sessions, and for helping clients to perceive the session as more deep, valuable, powerful, and special.

Considering that Kokotovic and Tracey (1987) indicated that a significant number of clients who prematurely terminate never come back after the intake session, perhaps perceiving the counselor as highly engaging at the beginning may protect clients from leaving early therapy. Such a conclusion is supported by the present study's finding.

Although the present study was not successful to prove Mallinckrodt's (2011) model, a number of studies still suggest that counselors should recognize clients' attachment style and adjust the therapeutic relationship adaptively in order to avoid recreating clients' maladaptive interpersonal patterns, and to encourage clients' engagement in therapy (Bachelor, Muenier, Laverdiére, & Gamache 2010; Dozier, Cue, & Barnett, 1994; Levy et al., 2011; Owen, 2011). Owen (2011) suggested that attending to clients' attachment style and working with clients' attachment dynamic will help therapists handle clients' resistance and transference, and therapists' intervention should reflect clients' attachment dynamic.

The second exploratory research question was whether client attachment avoidance or anxiety changes over the course of therapy in association with working alliance and client attachment to therapist. The finding of the present study did not support the change of clients' adult attachment across therapy. This may indicate that adult attachment is such a resistant concept to easily change. Although, previous research suggested that attachment style may be modified over the course of therapy, and changing attachment style can be one of the important goals in therapy (Levy et al., 2006; Levy et al., 2011; Travis, Binder, Bliwise, & Horne-Moyer, 2001), Cobb and Davila (2009) recognized difficulties to conceptualize, observe, or evaluate client's IWM change. It has been unclear how to define IWM or how much change is desirable. Attachment change involves shifts at different levels as well as dimensions, such as behavioral, emotional, and cognitive, and the Experiences in Close Relationship Scale the present study used may include parts of those dimensions. Also, intimate relationship

may be influenced by other factors than attachment system. Thus, future research should set clear definition of attachment change and use different measurements including various dimensions of attachment change.

The third research question examined the significant predictors of premature termination, such as (1) working alliance, (2) adult attachment anxiety or avoidance, and (3) client attachment to therapist. No significant correlation was found between adult attachment avoidance and premature termination, but a positive association between adult attachment anxiety at termination and premature termination was found. This result is partially consistent with a finding of this study in connection with the first hypotheses, no significant association between attachment avoidance and anxiety and premature termination. It appears that clients with attachment anxiety are more likely to prematurely terminate treatment when their anxious attachment style does not change at all across the therapy. Previous literature showed controversial conclusions about the role of adult attachment on clients' premature termination. Whereas Berant, Mikulincer, and Loebel (2008) found a significant association between attachment insecurity and premature termination, some other studies supported no association between attachment insecurity and premature termination (Goldman & Anderson, 2007; Marmarosh et al., 2009). The current study's finding supports the notion that clients' established attachment style before treatment does not always predict early dropout.

In addition, a strong association was found between Client Attachment to

Therapist (CATS) Preoccupied-Merger and Avoidant-Fearful subscales and premature
termination. However, it is very interesting that CATS-Preoccupied-Merger subscale

was negatively associated with premature termination, whereas CATS-Avoidant-Fearful subscale was positively associated with premature termination. Previous studies found strong relation of avoidant therapeutic attachment to therapist with poor working alliance or rough session evaluation, but no relation of Preoccupied-Merger attachment to therapist with working alliance, which is partially consistent with the present study's finding (Bachelor et al., 2010; Mallinckrodt, Porter, & Kivlighan, 2005; Mikulincer, Shaver, Cassidy, & Berant, 2009). Perhaps clients' preoccupied-merger attachment to therapist pushes their engagement in therapy and prevents early dropout, even though the "engagement" may be heavily based on the clients' dependency.

It is also important to note that working alliance showed significant association with premature termination only at termination. The finding partially supports previous research indicating negative association between working alliance and psychotherapy dropout (Barrett et al, 2008; Diener & Monroe, 2011, Knox et al., 2011; Sharf, Primavera, & Diener, 2010). This result indicates that early working alliance may not predict premature termination, but if weak working alliance persists over course of therapy, this can lead to premature termination. Unaddressed poor working alliance may indicate ruptures that are followed by premature termination (Aspland et al., 2008; Pekarik, 1983; Safran et al., 2011; Swift, Greenberg, Whipple, & Kominiak, 2012). Attention to precarious moments and creating spaces to express and process them facilitates clients' involvement in treatment and decreases dropout.

The fourth research question examined how clients' positive symptom changes are predicted by client attachment to therapist and working alliance. The present study

found significant change of client-perceived symptom change, and CATS-Security and CATS-Avoidant-Fearful subscales indicated negative and positive associations with symptom change, respectively. Securely attached clients to therapists from the early phase of treatment found positive outcome at termination whereas insecurely attached clients to therapists from the early phase lead to poor outcome. Given that secure attachment to therapist was negatively associated with premature termination, this finding supports that therapeutic relationship plays an important role not only during therapy process, but also in how clients end therapy (Knox et al., 2011). Also, the negative association of outcome change with working alliance at session 3, but not at session 5, is consistent with what Tryon (1990) concluded about how very early engagement facilitates clients' further help-seeking. A strong relation between therapeutic alliance and treatment outcome has been consistent in psychotherapy research (Baldwin, Wampold, &Imel, 2007; Horvath & Symonds, 1991; Horvath, Del Re, Flückiger, & Symonds, 2011). In a Meta-analysis, Horvath et al. (2011) strongly supported the positive association between working alliance and outcome and emphasized the importance of developing early "good enough' working alliance. The authors suggested that the quality of alliance are fundamental in therapy, and therapists attention to alliance may differ on two levels: In the short term, therapists should be aware of the importance of proper intervention to reflect clients' needs and expectations; whereas in the long term, therapists should help clients to be an active participants in therapy and encourage their collaboration in therapy.

Limitations

There are several important limitations in this study. First, the small sample size of this study can be misleading in conducting this study and interpreting the results. This small sample size leads to weak statistical power and to increased likelihood of Type II error (the failure to detect a true effect when an effect exists). For example, although this study found no significant interactions between adult attachment and therapeutic distance on working alliance and termination types, it is possible to find significant interactions between those two variables with a larger sample size. Aiken and West (1991) suggested that a minimum of 200-300 subjects are needed to provide reasonable statistical power for testing regression interactions. Thus, future study should replicate this study with large participants.

The difficulty to collect larger sample size may be due to the repeated nature of data collection process. In this study, the data was collected at four different time points. Although participants received \$10 for each survey (\$40 in total when they completed all four surveys), inconvenience of taking time and energy for each survey may outweigh the reward, and some participants may decide to stop completing survey because of the inconvenience. For college students, frequent surveys can be overwhelming, and it can lead to reluctance to participation. Relatedly, it may threaten validity of this study if participants share similar reasons to take part in this study or to drop out of the participation.

In addition to the small sample size, generalizability of the result can be another limitation of this study. The data was collected from a single University counseling

center, and the result may not generalize to other college students in different regions, to other clients in different mental health institutions, and to clients with different age groups (e.g. child). Also, given that the large portion of the participants in this study was European American, it is premature to apply this result to clients with different ethnic identity. Future study should invite more diverse clients at more heterogeneous mental health care settings.

Implications

Despite the limitations noted in the previous section, nevertheless there as some noteworthy implications. These will become even more important if the findings are confirmed with other studies.

Theory. First of all, the results suggest that clients' general adult attachment is relatively resistant to change over brief therapy at the counseling center we studied. Although changing clients' attachment pattern is an ultimate goal of some approaches to psychotherapy, the finding reminds us of how many different aspects of an individual's interpersonal pattern adult attachment involves, and how difficult these interlocking pieces can be to change in only a few sessions of counseling. Lopez (2009) described adult attachment organization across developmental, cognitive-affective, and relational domains. Those domains reflect what family history an individual has, how this is related to one's personality orientation, coping strategies resulting from personal experiences, memory pattern, affect, degree of self-disclosure, and support seeking behavior. Because adult attachment is not only an interpersonal pattern, but also a pervasive filter of

perception to largely influence one's cognitive, emotional, and relational aspects, changing basic adult attachment organization is expected to be a slow process.

Also, the research findings suggest that clients' general adult attachment and clients' therapeutic attachment to therapist should be differentiated. According to the findings of the present study, clients' general attachment does not predict working alliance whereas clients' therapeutic attachment was stronger predictor of working alliance and premature termination. This finding suggests that clients' therapeutic attachment to therapist taps therapeutic dynamics which general adult attachment does not touch. Future research should illustrate how these two constructs sharing commonalities and dissimilarities create different therapeutic dynamic and facilitate clients' change.

Psychotherapy. The results of the present study also provide some important clinical implications. When utilizing adult attachment organization in psychotherapy, counseling psychologists need to evaluate how clients' interpersonal pattern is depicted in the therapeutic relationship in order to prevent premature termination. The present study found that clients' preoccupied-merger attachment to therapist is negatively associated with premature termination whereas clients' avoidant-fearful attachment to therapist is significantly positively related to premature termination. Previous attachment literature suggested that clients with preoccupied attachment may present more challenge in psychotherapy by needing excessive reassurance and soothing from therapists and by causing therapists to feel frustrated because of the repetitive assurance and test of clients' dependability (Lopez, 2009.) Although these aspects need to be replaced by adaptive

dependency and appropriate interpersonal boundary, these preoccupied characteristics can be helpful for clients to stay in therapy, and counseling psychologists hold hands with those aspects of clients tentatively. Compared to preoccupied-merger attachment, avoidant-fearful attachment was found to predict premature termination as expected by other studies (Bachelor et al., 2010; Mallinckrodt, Porter, & Kivlighan, 2005; Mikulincer, Shaver, Cassidy, & Berant, 2008). Clients with avoidant-fearful therapeutic attachment normally show distance from therapist and hesitant to disclose themselves. These clients' attempt to deny or fail to recall important life events will make the conversation in therapy superficial, and is likely to lead to premature termination. Thus, facilitating selfdisclosure can be one of the important goals when working with clients of avoidantfearful attachment dynamic, and counseling psychologists should carefully listen to and observe clients' verbal and nonverbal behaviors to find clues to go deeper. It is very important that counseling psychologists should adaptively adjust the balance between challenge and support because clients are likely to stop psychotherapy when they perceive counselors as Too Close. Given this, Mallinckrodt's 2011 model appears to have practical implication, and future research is needed to replicate with study.

It is noteworthy that Growing Engagement and Growing Autonomy positively related to stronger working alliance across therapy process and are negatively associated with premature termination. Considering this finding, counseling psychologists should pay attention to help clients to feel comfortable and respected in terms of topics or depth of conversation. This may relate to how counseling psychologists set boundary with clients and introduced clients' and therapists' role in psychotherapy. Ogrodniczuk,

Joyce, and Piper (2005) suggested that education on psychotherapy and agreement on focus of treatment are one of the important predictors of premature termination. When clients recognize role they take in therapy and set realistic expectation about therapy, this increases their comfort level in the therapy room and help them become more active participants.

Another clinical implication of these findings is that early attachment of clients to their therapist are stronger predictors of premature termination compared to working alliance, whereas early positive working alliance, compared to attachment to therapist is a stronger predictor of positive outcome. Thus, it seems that therapeutic attachment is important in the early phase of therapy, and solid working alliance is more critical in later phase of therapy. Helping clients to feel comfortable to therapists and developing secure therapeutic attachment should be the primary task of counseling psychologists at the beginning of therapy. It seems that agreement on tasks and goals are more important as therapy progresses. Clients who developed secure attachment to therapist may forgive therapists and stay in therapy even when they could not negotiate regarding goals and tasks (Knox et al., 2011). However, if this difficulty negotiating persists, it will be difficult for the client to benefit from therapy. What matters here will be how long and how much clients can endure ruptures. Addressing therapeutic rupture and encouraging clients express their frustration and mistrust are essential to help clients benefit from therapy. Struggling is an essential part of both human relationship and therapeutic relationship. Wallin (2007) suggested that willingness to struggle provides clients with a secure room to express clients' anger or aggressiveness. A sense of connection is created

when one can maintain positive relationship with another while permitting each part to be authentic. Thus, counseling psychologists should be sensitive about cues of clients' dissatisfaction, mistrust, or complaints on treatment, and encourage them to disclose those issues.

Research. The findings of this study extended previous literature on premature termination by focusing specifically on clients' attachment dynamic at different time points. Future studies can extend this research by examining how early dropout and later dropout differs in terms of therapeutic attachment and working alliance. Qualitative research will be useful in deepening clients' dropout experiences and in differentiating early terminator v. later terminator.

Therapeutic Distance is a relatively new concept, but the findings of the present study suggest it may play an important role in predicting working alliance and premature termination. More research is needed to confirm how it influences therapeutic relationship and outcome. Also, future research should conduct to differentiate between therapeutic distance v. client attachment to therapist or therapeutic distance v. working alliance.

The present study focused on clients' experiences regarding therapeutic distance, therapeutic attachment, and working alliance, but looking at therapists' perspective is important. Handling emotional rupture or working with clients' insecure dynamic can be stressful for the therapists. Future research can focus on therapists' fatigue, burnout, countertransference, countertransference management and dealing with mistakes in

relation to therapeutic dynamic. Relatedly, it would be helpful to examine how therapists respond to and process their clients' premature termination (Piselli et al., 2011).

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Appendix

Table1

Presenting Problems of Participants

| Presenting Problems | Frequency of Yes | Percentage (%) |
|-----------------------------|------------------|----------------|
| Academic | 24 | 36.9 |
| Career | 11 | 16.9 |
| Romantic relationship | 22 | 33.8 |
| Family of origin | 29 | 44.36 |
| Peer relationship | 8 | 12 |
| Depression or loneliness | 41 | 63.1 |
| Anxiety or chronic worries | 45 | 69.5 |
| Eating | 9 | 13.8 |
| Alcohol or other substances | 4 | 6.2 |
| Other concerns | 15 | 23.1 |

Table 2

Interactions between Attachment and Therapeutic Distance as Predictors of Working

Alliance

| | | Change | \overline{F} | | | Step (| Coefficie | ents |
|--|--------------|-----------|----------------|---------|--------|--------|-----------|------|
| Step/Variable entered | R^2 | R^2 | Change | df | p | Beta | t | p |
| Analyses 1-4, predicting Working Alliance at Fifth Session | | | | | | | | |
| 1. Avoidance | .256 | .256 | 8.964 (2 | 2,52) | .000 | .076 | 0.634 | .529 |
| Too Close | | | | | | 509 | -4.231 | .000 |
| 2. interaction | .292 | .035 | ` | 1,51) | .118 | .190 | 1.591 | .118 |
| 1. Avoidance | .596 | .596 | 38.39 (2 | 2,52) | .000 | 124 | -1.379 | .174 |
| Grow Eng. | | | | | | .785 | 8.760 | .000 |
| 2. interaction | .598 | .001 | .173 (1 | 1,51) | .680 | .041 | .415 | .680 |
| 1. Anxiety | .692 | .692 | 58.525 (2 | 2,52) | .000 | .012 | .144 | .886 |
| Too Distant | | | | | | 836 | -10.364 | .000 |
| 2. interaction | .694 | .002 | .334 (1 | 1,51) | .566 | .045 | .578 | .566 |
| 1. Anxiety | .550 | .550 | 31.791 (2 | 2,52) | .000 | 056 | 587 | .560 |
| Grow Auto. | | | | | | .726 | 7.550 | .000 |
| 2. interaction | .550 | .000 | .029 (1 | 1,51) | .866 | 017 | 170 | .866 |
| Analy | ses 5-8, pre | dicting V | Vorking Allia | ance at | Termin | nation | | |
| 1. Avoidance | .341 | .341 | 11.146 (2 | 2,43) | .000 | .051 | .410 | .684 |
| Too Close | | | | | | 587 | -4.721 | .000 |
| 2. interaction | .344 | .003 | .182 (1 | 1,42) | .672 | 055 | 427 | .672 |
| 1. Avoidance | .693 | .693 | 48.473 (2 | 2,43) | .000 | 081 | 953 | .346 |
| Grow Eng | | | | | | .836 | 9.846 | .000 |
| 2. interaction | .694 | .001 | .125 (1 | 1,42) | .725 | 030 | 354 | .725 |
| 1. Anxiety | .753 | .753 | 68.707 (2 | 2,45) | .000 | .007 | .084 | .933 |
| Too Distant | | | | | | 871 | -10.694 | .000 |
| 2. interaction | .761 | .008 | 1.423 (1 | 1,44) | .239 | 096 | -1.193 | .239 |
| 1. Anxiety | .759 | .759 | 67.629 (2 | 2,43) | .000 | 069 | 880 | .384 |
| Grow Auto. | | | ` | . , | | .848 | 10.807 | .000 |
| 2. interaction | .773 | .015 | 2.714 (1 | 1.42) | .107 | .130 | 1.647 | .107 |

Note. N for Fifth session analyses=55; N for Posttest Analyses = 48 for analysis 7, and 46 for analysis 5, 6, and 8 due to missing data. Grow Eng. = Growing engagement, Grow Auto. = Growing Autonomy. Beta values for attachment anxiety attachment avoidance and therapeutic distance variables are from Step 1. Analyses 1-4 used fifth session therapeutic distance, Analyses 5-8 used posttest therapeutic distance.

Table 3

Logistic Regression Analyses Predicting Premature Termination

| Step/Variable entered | Beta | SE | P | OR | 95% CI | |
|-----------------------|---|------------------|------------|------------------|----------------------|--|
| | Analyses 1-4, predicting Premature Termination at Fifth Session | | | | | |
| 1. Avoidance | .287 | .236 | .224 | 1.332 | [0.839, .2.114] | |
| Too Close | .741 | .418 | .077 | 2.097 | [0.923, 4.762] | |
| 2. interaction | .162 | .285 | .570 | 1.176 | [0.672, 2.055] | |
| 1. Avoidance | .437 | .253 | .085 | 1.547 | [0.942, 2.541] | |
| Grow Eng. | -1.050 | .488 | .031 | .350 | [0.135, 0.910] | |
| 2. interaction | .152 | .355 | .669 | 1.164 | [0.581, 2.334] | |
| 1. Anxiety | .041 | .275 | .881 | 1.042 | [0.608, 1.785] | |
| Too Distant | .257 | .305 | .399 | 1.293 | [0.712, 2.349] | |
| 2. interaction | .083 | .274 | .763 | 1.086 | [0.635, 1.857] | |
| 1. Anxiety | 075 | .290 | .796 | .928 | [0.526, 1.638] | |
| Grow Auto. | -1.303 | .560 | .020 | .272 | [0.091, 0.814] | |
| 2. interaction | 407 | .493 | .409 | .666 | [0.253, 1.750] | |
| | Analyses 5-8, p | oredicting Prema | iture Term | ination at Termi | nation | |
| 1. Avoidance | .100 | .497 | .841 | 1.105 | [0.417, 2.925] | |
| Too Close | 2.083 | .957 | .030 | 8.028 | [1.230, 52.385] | |
| 2. interaction | 439 | .569 | .441 | .645 | [0.211, 1.968] | |
| 1. Avoidance | .315 | .471 | .504 | 1.370 | [0.545, 3.445] | |
| Grow Eng. | -1.763 | .838 | .035 | .172 | [0.033, 0.887] | |
| 2. interaction | .335 | .516 | .517 | 1.398 | [0.508, 3.845] | |
| 1. Anxiety | 8.146 | 5.942 | .170 | 3447.837 | [0.030, 349059155.5] | |
| Too Distant | 6.546 | 4.826 | .175 | 696.281 | [0.054, 8927010.055] | |
| 2. interaction | -151.509 | 7060.925 | .983 | .000 | [.000,] | |
| 1. Anxiety | 181.802 | 8297.121 | .983 | 9.025E+078 | [.000,] | |
| Grow Auto. | -216.022 | 10181.674 | .983 | .000 | [.000,] | |
| 2. interaction | 85.012 | 42823.429 | .998 | 8.323E+036 | [.000,] | |

Note. N for Fifth session analyses=46; N for Posttest Analyses=46. Grow Eng. = Growing engagement, Grow Auto. = Growing Autonomy. Beta values for attachment anxiety attachment avoidance and therapeutic distance variables are from Step 1. Analyses 1-4 used fifth session therapeutic distance, Analyses 5-8 used posttest therapeutic distance.

Table 4

Change in Client Adult Attachment over the Course of Counseling

| | Pre-test | Post-test | | |
|-----------|-------------|-------------|------|------|
| Variable | M SD | M SD | t | p |
| Avoidance | 3.002 1.386 | 2.970 1.245 | .277 | .783 |
| Anxiety | 4.314 1.170 | 4.248 1.455 | .541 | .591 |

Note. N = 48.

Table 5

Point-biserial Correlations of Counseling Relationship with Premature Termination

| Variables | Correlation ^a |
|-------------------------|--------------------------|
| Pre-test | |
| Attachment Anxiety | .072 |
| Attachment Avoidance | .235 |
| Fifth Session | |
| Working Alliance Bond | 246 |
| Working Alliance Goal | 185 |
| Working Alliance Task | 227 |
| CATS Secure | 313 |
| CATS Preoccupied-Merger | 553** |
| CATS Avoidant-Fearful | .400* |
| Post-test | |
| Attachment Anxiety | .445* |
| Attachment Avoidance | .161 |
| Working Alliance Bond | 579** |
| Working Alliance Goal | 560** |
| Working Alliance Task | 505** |
| CATS Secure | 561** |
| CATS Preoccupied-Merger | 557** |
| CATS Avoidant-Fearful | .639** |

^a Premature termination coded so that positive coefficients indicate a positive association with premature association. * p<.05, *** p<.01

Table 6

Change in Client Symptoms over the Course of Counseling

| | Pre-test | Pre-test (OQ-45) | | Post-test (OQ-30) | | |
|----------|----------|------------------|--------|-------------------|-------|------|
| Variable | M | SD | M | SD | t | P |
| OQ | 80.423 | 26.083 | 72.752 | 29.841 | 3.121 | .003 |

Note. N = 48

Table 7

Predictors of Symptom Change Over the Course of Counseling

| Independent Variable | Partial |
|-------------------------|-------------|
| | Correlation |
| Third Session | |
| Working Alliance Total | 400** |
| CATS Secure | 422** |
| CATS Preoccupied-Merger | .188 |
| CATS Avoidant-Fearful | .450** |
| Fifth Session | |
| Working Alliance Total | 192 |
| CATS Secure | 326* |
| CATS Preoccupied-Merger | .167 |
| CATS Avoidant-Fearful | .281 |
| | |

Note. These analyses used a "residual gain" approach to change. Partial correlations are between the independent variable of interest and post-test OQ-45 symptoms, controlling for pre-test level of OQ symptoms. This coding results in negative partial correlation coefficients indicating a reduction in symptoms.

^{*} *p*<.05, ** *p*<.01

INFORMED CONSENT STATEMENT

Counseling Repeated Measures Study

<u>Purpose</u>. You are invited to participate in a research study. Its purpose is to survey counseling clients to periodically assess their progress and measure changes over time in the working relationship with their counselor.

<u>Eligibility</u>. To participate in this study you must be over the age of 18, currently in individual counseling (i.e. not assigned to a counseling group), and you must have had no more than one session with your counselor so far. (However, the last requirement does not count your very first "intake interview" with a counselor at the Counseling Center, if this counselor also happens to be the person you were assigned to work with on a regular basis.)

Procedures. If you agree to participate you must complete this first survey before you have the second meeting with your counselor. Three weeks after you begin counseling, and every two weeks after that, you will be sent a new web link for the next "mid-counseling" online survey. You are asked to complete your survey within three days of receiving the notification email. If your counseling lasts for 15 weeks, you will be asked to complete the initial survey plus six mid-counseling surveys (after session 3, 5, 7, 9, 11, and 13). You will receive a \$10 gift card for each of these surveys. However, six is the maximum number of mid-counseling surveys you can receive, even if your counseling lasts beyond 15 weeks. The final survey is a bit longer than the mid-counseling version. When you have finished counseling, we ask you to notify us by email so that we can send you the final survey. On average it takes about 45 minutes to complete the first survey, 30 minutes to complete each mid-counseling survey, and about 45 minutes to complete the final survey.

If for any reason you decide you cannot complete a particular survey, or you can not complete it within three days -- that's OK, you can continue to participate if you wish. You can still earn the \$10 gift card if you complete the survey within one week of receiving the notification email. However, you can earn an additional \$20 gift certificate for completing all surveys within three days of receiving the email notice.

There are no other procedures besides completing the surveys and communicating with us by email.

<u>Risks</u>. There are two types of risk involved in participating in this research. First, you may become fatigued completing a particular survey, and it can be frustrating to answer the same questions every two weeks. A question about symptoms or relationships may be stressful to answer. This risk is not expected to be greater than people experience occasionally in everyday life. However, to minimize this risk we have kept the surveys to

well under one hour and spaced them every two weeks. You may skip any question you do not want to answer. Skipping some of the questions will not affect the gift card you receive. The second risk is the loss of confidentiality that could result if your survey answers could be identified with your name. We have reduced this risk to nearly zero with the procedures described in the next section.

Protecting your confidentiality. In order to connect surveys completed by the same person at different times we ask you to invent a code label and use it when you complete each survey online. The surveys never ask for your real name, email address, or any other information that could be used to identify you personally. However, we do need a way to send you the \$10 gift cards and to know when it is time to send the link for the final survey. To do this, after you finish the first survey we ask you to send an email message to the project address that you used to receive this message (Counselingresearch@utk.edu). This will be the only time you are asked to provide your real name and the code label you have created. Only one member of the three-person research team will have the password for this email account. The account is used only for this project. This person, Marci, is a graduate student counselor at the counseling center. Marci will never have the password for the online data. The third member of our team, Destin, is also a graduate student counselor at the counseling center. She and Dr. Mallinckrodt will have access to the data and code labels but not the list or real names that Marci keeps. Two times each week Destin will check the surveys that have come in online and send a list of these code labels to Marci. Marci will then use this list to send out gift cards. When you send an email to the project address to let Marci know your counseling has ended, she will send you the link to the final survey. Although Marci knows the links to the online surveys, she does not know the passwords that would allow her to actually see the data. Within one month after data collection is completed and we have checked the surveys to be sure they are properly matched, Marci's list will be shredded, thus destroying the only way to match real names with code labels.

Your counselor will never be given access to the data files. The data will be removed from the online storage site in August, 2010 and stored only on computer files and burned CDs. After Marci's list is destroyed, it will be impossible for anyone to identify the data you have provided. We hope to publish the findings of this study in a scientific journal and at professional conferences. When this happens, we will never single out individual cases (even anonymously).

Benefits. Because projects like this one are time-consuming and expensive, very few repeated measures studies of counseling center clients have ever been conducted. We hope the results of this study will provide information about the types of counseling relationships that produce the best results for clients with a particular combination of initial concerns and personality traits. We hope this information can be used to improve the effectiveness of counseling, and therefore benefit society generally. Thus, it is

possible that your participation in this project will benefit other counseling center clients like yourself.

<u>Incentives</u>. Within a week of completing each survey you will receive a \$10 gift card that can be used for purchases from Amazon.com. A final bonus of a \$20 gift card will be awarded for completing all surveys within the three day time limit. Example: Client A completes five sessions and then counseling ends. She or he could receive three \$10 gift cards for completing the first survey, the last survey, and the week 3 survey; plus the \$20 bonus for completing all three, for a total of \$50 in incentives. Client B completes 15 sessions before counseling ends. She or he could receive one \$10 gift card for the first survey, the last survey at week 15, and six mid-counseling surveys at weeks 3, 5, 7, 9, 11, and 13. With the \$20 bonus this client would receive a total incentive of \$100. You can use the gift cards as you receive them, or save them up for a single purchase.

Contact information. If you have questions at any time about the study or the procedures, you may contact the primary researcher, Dr. Brent Mallinckrodt, 412 Austin Peay, (865) 974-8696; bmallinc@utk.edu. If you have questions about your rights as a participant, contact the Office of Research Compliance Officer at (865) 974-3466.

<u>Participation</u>. Your participation in this study is voluntary; you may decide not to participate without penalty. If you decide to participate, you may withdraw from the study at anytime without penalty and without loss of benefits to which you are otherwise entitled as a client at the UT Counseling Center. If you withdraw from the study, you will receive all the incentives you have earned up to that point and, if you make a request, the data you have provided up to that point will be not used in the research and will be destroyed.

Vita

Gahee Choi was born in Seoul, South Korea. She graduated from Catholic University of Korea with B. A. in Psychology in 2000, and with a M. A. in Counseling and Clinical Psychology in 2002. From 2003 to 2006, she worked as a counselor at Sogang University Student Counseling Center and Mokdong Youth Counseling Center in Seoul. In the fall of 2009, she entered the University of Tennessee Counseling Psychology doctoral program. Starting from this August, she will be doing her predoctoral internship at the University of Texas at Austin Counseling and Mental Health Center.