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# Premature Termination of Outpatient Psychotherapy: Predictors, Reasons, and Outcomes

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PREMATURE TERMINATION OF OUTPATIENT PSYCHOTHERAPY:  
PREDICTORS, REASONS, AND OUTCOMES

by

Kristin N. Anderson

A DISSERTATION

Presented to the Faculty of  
The Graduate College at the University of Nebraska  
In Partial Fulfillment of Requirements  
For the Degree of Doctor of Philosophy

Major: Psychology

Under the Supervision of Professor Debra A. Hope

Lincoln, Nebraska

May, 2015

PREMATURE TERMINATION OF OUTPATIENT PSYCHOTHERAPY:  
PREDICTORS, REASONS, AND OUTCOMES

Kristin N. Anderson, Ph.D.

University of Nebraska, 2015

Advisor: Debra A. Hope

Premature termination is a pervasive barrier to effective implementation of outpatient psychotherapy that frequently results in decreased treatment gains for clients and lowered morale for therapists. Unfortunately, despite its high prevalence and cost, premature termination remains poorly understood. The current study addressed some gaps in the literature using a national online survey design that permitted investigation of a broader range of potential predictors, exploration of more specific reasons for premature termination, and examination of longer term treatment outcomes than has been possible in most previous research. Participants were 278 workers from Amazon.com's Mechanical Turk, an online labor market regularly used for social science research. Participants completed an online survey about their treatment history, their most recent outpatient therapy experience and therapist, termination status, reasons for terminating prematurely (if applicable), treatment satisfaction, therapeutic outcome, and demographics. Over half of the participants reported prematurely terminating their most recent episode of therapy. Results revealed that premature termination of previous therapy episodes, a weak therapeutic alliance, and primary or comorbid depression were the best predictors of premature termination. These predictors were highly accurate in distinguishing premature terminators from treatment completers. Results indicated that

being a woman, identifying as non-heterosexual, seeking treatment from a hospital outpatient psychiatric clinic, and having a therapist low in perceived multicultural competence were also associated with increased risk of premature termination. However, these predictors of premature termination did not remain significant when controlling for other variables. The three most common reasons for premature termination were environmental obstacles, dissatisfaction with services, and lack of motivation for therapy. Finally, with respect to therapeutic outcomes, treatment completers reported greater problem improvement, greater satisfaction with therapy, and less current functional impairment than premature terminators. However, contrary to expectations, no differences in outcomes were found between early premature terminators (five or fewer sessions) and late premature terminators (at least six sessions). Clinical implications, limitations of the study, and recommendations for future research are also discussed.

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#### LIST OF MULTIMEDIA OBJECTS

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## CHAPTER 1: INTRODUCTION

Premature termination, or a client's unilateral termination of services prior to completion of a recommended course of treatment, is a pervasive barrier to effective provision of outpatient psychotherapy. Not isolated to one area of mental health services, premature termination is encountered in nearly all treatment settings (e.g., community mental health centers, hospital psychiatric clinics, private practices, university training clinics, and college counseling centers), modalities (e.g., individual, group, and couples), and orientations (e.g., psychodynamic, humanistic, cognitive behavioral, and family systems). Across settings, modalities, and orientations, research has reliably revealed premature termination rates of at least 20 percent among outpatient psychotherapy clients (Swift & Greenberg, 2012) with some studies finding substantially higher rates around 50 to 70 percent (e.g., Aubuchon-Endsley & Callahan, 2009; Callahan et al., 2014; Pekarik, 1992a; Persons, Burns, & Perloff, 1988; Wierzbicki & Pekarik, 1993).

Consequently, over one fifth of clients who begin outpatient psychotherapy will fail to achieve the full extent of benefits achieved by clients who complete therapy (Cahill et al., 2003; Persons et al., 1988; Saatsi, Hardy, & Cahill, 2007; Westmacott, Hunsley, Best, Rumstein-McKean, & Schindler, 2010). Clients who prematurely terminate after only one session are particularly likely to have poor outcomes with approximately one third of these clients experiencing worse symptoms at follow-up (Pekarik, 1983a; 1992a). In addition to negatively affecting clients, premature termination may lead therapists to feel rejected or angry, resulting in lost morale, job dissatisfaction, or ineffective practice with other clients. Treatment agencies are also negatively impacted by premature termination as they incur the financial cost of missed

appointments, lengthier waiting lists, and potential loss of community support (Ogrodniczuk, Joyce, & Piper, 2005; Pekarik, 1985a).

With the potential for such widespread negative consequences within clinical practice, it is not surprising that therapists have been trying to understand and solve the problem of premature termination for over 50 years (Baekland & Lundwall, 1975). More surprising is the relative lack of understanding gained from over 50 years of research. Very few theoretical explanations for premature termination have been proposed outside of the field of psychoanalysis (e.g., Philips, Wennberg, & Werbart, 2007; Van Denburg & Van Denburg, 1992). The main alternative theoretical explanations for premature termination—the transtheoretical model of change (Prochaska & DiClemente, 1982), the behavioral model (Andersen, 1968; 1995), and social influence theory (Strong, 1968)—rely on application of pre-existing theories from substance abuse, medical treatment utilization, and social psychology, respectively. Even the aforementioned psychoanalytic explanations for premature termination are mostly based on post hoc application of pre-existing theoretical models (e.g., object relations; Van Denburg & Van Denburg, 1992). Novel theoretical models that are specific to premature termination do not seem to exist. Furthermore, the basic research on predictors of premature termination is riddled with inconsistent findings. Methodological issues in the extant literature, including variable operational definitions of premature termination (Hatchett & Park, 2003; Pekarik, 1985b), lack of replication (Harris, 1998), and suboptimal statistical analyses (Corning & Malofeeva, 2004), have made these equivocal results difficult to compare and reconcile across studies. Finally, even though clients are ultimately the ones who decide when to discontinue treatment, relatively little research has examined reasons for premature

termination from the clients' perspective. Thus, while recent advances in psychotherapy might foster expectations for improved treatment retention, little progress has been made toward this end. In one recent meta-analysis examining cognitive-behavioral therapy for anxiety disorders over the past 40 years, premature termination had actually increased (Ost, 2008).

Certainly, several strategies for reducing premature termination have been suggested, including pretreatment preparation techniques (Walitzer, Dermen, & Connors, 1999), motivational enhancement techniques (Walitzer et al., 1999), brief therapy (Pekarik, 1985a), case management (Miranda, Azocar, Organista, Dwyer, & Areane, 2003), and progress monitoring (e.g., Lambert, Harmon, Slade, Whipple, & Hawkins, 2005). One recent meta-analysis even suggested that these interventions may have small-to-medium effects on treatment attendance and retention (Oldham, Kellett, Miles, & Sheeran, 2012). Nevertheless, the overall empirical support for these proposed strategies remains limited. While many researchers have discussed interventions for reducing premature termination, only about 22 empirical studies evaluating such interventions have been conducted within the past 40 years (Oldham et al., 2012; Ogrodniczuk et al., 2005). Furthermore, over 50 percent of these studies examined pretreatment preparation techniques—one of the earliest strategies to be developed (Hoen-Saric, Frank, Imber, Nash, Stone, & Battle, 1964). Yet, despite the mixed support for pretreatment preparation techniques (Ogrodniczuk et al., 2005; Walitzer et al., 1999), relatively few studies have investigated alternative strategies since. Overall, the research on premature termination of outpatient psychotherapy seems to have suffered a premature transition from exploratory,

descriptive research to applied research, which has resulted in an insufficient understanding of the problem and thus, insufficient solutions.

To facilitate development of more effective interventions for reducing premature termination, a better understanding of predictors of premature termination is needed. Thus far, few factors have been found to reliably distinguish premature terminators from treatment completers. Consequently, even identifying clients who might require supplementary interventions to ensure their retention in therapy is a challenge. As will be discussed in more detail later, part of the difficulty in predicting those clients who are most likely to terminate prematurely is that premature terminators do not seem to be a homogenous group, though much of the extant research has treated them as if they were. At the least, clients who terminate prematurely early in the treatment process appear to be different from those who terminate later on, not only in outcome (e.g., Pekarik, 1983a; 1992a), but also in factors that predict their termination status (e.g., Richmond, 1992; Aderka et al., 2011). In addition, clients report vastly different reasons for terminating prematurely (e.g., no longer need services, therapy not helping), which have also been associated with different predictors (Westmacott & Hunsley, 2010) and different outcomes (Pekarik, 1983b; 1992b).

Therefore, it is important not only to better understand predictors of premature termination, but also to better understand clients' reasons for terminating prematurely if therapists hope to make any progress in reducing this problem. If therapists do not know why their clients are terminating prematurely, then they can do little to prevent them from doing so. Unfortunately, research suggests that therapists' perceptions of their clients' reasons for terminating prematurely tend to be inaccurate, with therapists especially

likely to underestimate the role of dissatisfaction with services (Hunsley, Aubry, Verstervelt, & Vito, 1999). Therefore, even though researchers have consistently identified three broad reasons for premature termination (i.e., dissatisfaction with services, problem improvement, and environmental obstacles), a more in depth understanding of the motivating factors behind these reasons is needed in order to determine what interventions might instead motivate clients to remain in treatment.

This dissertation begins with a review of the literature on premature termination of outpatient psychotherapy, including predictors of premature termination, clients' reasons for terminating prematurely, and outcomes of premature terminators. Methodological limitations in each of these areas of the literature are also described. In reviewing this literature, both individual and group psychotherapies from various therapeutic approaches are examined. Although evidence-based therapies are emphasized, research on psychodynamic therapies are also discussed, since much of the research on premature termination originated in this area. However, research on treatments for children, behavioral medicine problems, substance abuse, and forensic populations are excluded due to different issues influencing premature termination in these populations, such as parents (Pekarik & Stephenson, 1988), health problems, and legal consequences, respectively.

### **1.1. Predictors of Premature Termination**

A multitude of variables have been investigated as potential predictors of premature termination over the years. This section focuses first on characteristics of clients that are associated with premature termination, because the initial goal of designing an intervention to reduce premature termination should be to identify a target

population. Next, therapists' characteristics that may be related to premature termination are discussed. Finally, the remainder of the section describes predictors derived from clients' interactions with their therapists and other factors involved in the treatment process, because these are the variables most likely to be changed by an intervention for reducing premature termination.

**Client factors—Sociodemographic and clinical variables.** Overall, the research on client factors as predictors of premature termination is characterized by inconsistent results, which allow for few definitive conclusions. Unfortunately, one relatively well-supported conclusion is that those clients who are already underserved tend to be the most vulnerable to premature termination (i.e., low education, low socioeconomic status, and ethnic minority groups) (Wierzbicki & Pekarik, 1993). Although some research has found no relationship between education level and premature termination (e.g., Edlund, Wang, Berglund, Katz, Lin, & Kessler, 2002; Elbaky, Hay, le Grange, Lacey, Crosby, & Touyz, 2014), lower education typically emerges as associated with greater premature termination (Fenger, Mortensen, Poulsen, & Lau, 2011; Garfield, 1994; Ogrodniczuk et al., 2008; Swift & Greenberg, 2012; Wierzbicki & Pekarik, 1993). This finding is most clearly supported for private practices and other clinics serving populations with higher average levels of education (i.e., at least some college) (e.g., DuBrin & Zastowny, 1988; Fortuna, Alegria, & Gao, 2010; Persons et al., 1988; Richmond, 1992), since the research on community clinics serving clients with lower average levels of education is out-of-date (e.g., Rosenzweig & Folman, 1974; Sue, McKinney, & Allen, 1976). Many studies also support the relationship between ethnic minority group membership and greater premature termination (e.g., Arnow et al., 2007; Greenspan & Kulish, 1985; Richmond,

1992; Sue et al., 1976; Wang, 2007) with relatively few studies finding no relationship (e.g., Brogan, Prochaska, & Prochaska, 1999; Edlund et al., 2002; Sledge, Moras, Hartley, & Levine, 1990). Among ethnic minority clients, African American clients may be particularly likely to terminate prematurely (Garfield, 1994; Greenspan & Kulish, 1985; Harpaz-Rotem & Rosenheck, 2011). In a national sample, African American clients were significantly less likely to be retained in psychological treatment for depression, while Asian American and Latino American clients had retention rates similar to European American clients (Fortuna et al., 2010). Part of this association between ethnic minority group membership and premature termination may be accounted for by the similarly consistent relationship between low SES and increased premature termination (Garfield, 1994; Wierzbicki & Pekarik, 1993). However, while some studies have found both ethnicity and SES to be related to premature termination (Arnow et al., 2007; Sue et al., 1976), other studies have not (e.g., Grilo et al., 1998), suggesting an association between low SES and increased premature termination that is separate from ethnic minority status. Indeed, Berrigan and Garfield (1981) found a clear linear relationship between SES and premature termination such that clients in the lowest socioeconomic class were nearly five times more likely to terminate prematurely than those in the second highest socioeconomic class. (None in the highest socioeconomic class terminated prematurely.)

Nevertheless, there do seem to be interactions among client ethnicity, socioeconomic status, and education. Williams, Ketring, and Salts (2005) found that while low-income clients had higher rates of premature termination than middle-income clients overall, this effect was primarily accounted for by African American clients.

European American clients in the highest income class actually showed higher rates of premature termination than European American clients in the lowest income class. However, this finding may be influenced by the relatively low income level of clients in this study with the highest income individuals earning between \$25,000 and \$50,000. Additionally, while African American clients with a high school education or less demonstrated higher rates of premature termination than those with at least some college, European American clients with at least some college demonstrated higher rates of premature termination than those who were less educated (Williams et al., 2005). Thus, even these relatively consistent predictors of premature termination may be more complex than they initially appear.

Age has sometimes demonstrated a similarly complex relationship with premature termination. One study of psychoanalytic treatment revealed a U-shaped relationship between age and premature termination, with clients who were younger or older more likely to terminate prematurely than middle-aged clients (Greenspan & Kulish, 1985). Furthermore, while clients who prematurely terminated OCD treatment were younger ( $M = 31.3$ ,  $SD = 9.1$ ) than those who completed it ( $M = 36.4$ ,  $SD = 10.9$ ), clients who dropped out early in treatment ( $M = 34.6$ ,  $SD = 9.6$ ) were older than those who prematurely terminated later ( $M = 27.8$ ,  $SD = 7.3$ ; Aderka et al., 2011). Nevertheless, age has recently emerged as another relatively consistent predictor of premature termination. Multiple methodologically rigorous studies have found younger clients to be more likely to terminate prematurely than older clients (e.g., Arnow et al., 2007; Eskildsen et al., 2009; Fenger et al., 2011; Ogrodniczuk et al., 2008; Thormahlen et al., 2003; Werbart, Andersson, & Sandell, 2014; White, Allen, Barlow, Gorman, Shear, & Woods, 2010).

National epidemiological studies in the United States and Canada show clients under 25 are at particular risk of terminating treatment prior to achieving symptom improvement (e.g., Edlund et al., 2002; Wang, 2007). Consistent with these individual studies, a recent meta-analysis of 669 studies found that premature terminators were younger than treatment completers on average (Swift & Greenberg, 2012).

With the exception of the four variables described above, client demographic variables (e.g., gender, relationship status, employment status) are among the most inconsistent predictors of premature termination. Contradictory findings are particularly apparent with regard to gender (Barrett, Chua, Crits-Christoph, Gibbons, & Thompson, 2008; Reis & Brown, 1999). Most research has found no relationship between gender and premature termination (Barrett et al., 2008; Edlund et al., 2002; Garfield, 1994; Hatchett & Park, 2004). Yet, when gender differences emerge, recent research tends to contradict early findings that women were more likely to terminate prematurely from both individual and group treatment than men (Baekland & Lundwall, 1975). Apart from one Australian-based study with an unusually low rate of treatment dropout (10%; Issakidis & Andrews, 2004), results from evidence-based treatments for anxiety (e.g., Harpaz-Rotem & Rosenheck, 2011; White et al., 2010) and mood disorders (Cottone, Drucker, & Javier, 2002) suggest women are more likely to remain in treatment than men. However, the relationship between gender and premature termination may also be complicated by interactions with clinical variables. For example, one study at a university counseling center found that women with higher levels of symptom distress at intake were at higher risk of prematurely terminating therapy than men (Romans et al., 2009).

Like client demographic variables, client clinical variables have generally proven to be unreliable predictors of premature termination (Brandt, 1965; Garfield, 1994). The relationship between psychiatric diagnosis or presenting problem and premature termination remains unclear, since contradictory results are apparent even among studies with similar methodologies. For example, one epidemiological survey of Canada found that having any diagnosable mental disorder was related to greater premature termination than having a presenting problem without a diagnostic label (Wang, 2007). However, another epidemiological survey of the United States and Ontario revealed no association between diagnosis or presenting problem and premature termination (Edlund et al., 2002). A history of substance abuse or dependence has been the only diagnostic category to reliably predict increased premature termination. This finding appears relatively robust, emerging across various research methodologies and treatment settings (Baekland & Lundwall, 1975; Christensen, Valbak, & Weeke, 1991; Fenger et al., 2011; Jensen, Mortensen, & Lotz, 2014; MacNair & Corazzini, 1994; Swett & Noones, 1989; Wang, 2007). In addition, although the relationship between personality disorders and premature termination has less support than that for substance use, there has been some evidence for a relationship between a principle (Connelly, Piper, de Carufel, & Debbane, 1986) or comorbid (Persons et al., 1988; Schindler, Hiller, & Witthoft, 2013) personality disorder diagnosis and increased premature termination. Furthermore, a recent meta-analysis found that specialized treatments for personality disorders and eating disorders both had higher average rates of premature termination than treatments for mood disorders, anxiety disorders, psychotic disorders, or trauma (Swift & Greenberg, 2012). Nevertheless, comorbid depression and anxiety may also increase risk of premature termination in

specialized treatments for either disorder (e.g., Aderka et al., 2011; Arnow et al., 2007; Ledley, Huppert, Foa, Davidson, Keefe, & Potts, 2005).

**Therapist factors.** Although client variables have been more widely studied, the demographic characteristics and training of the therapist may also relate to premature termination. In general, therapist demographic variables do not seem to be useful predictors of clients' termination status. While some research has suggested that female therapists are more likely to retain their clients in treatment than male therapists (Baekland & Lundwall, 1975), other research has found male therapists to have lower rates of premature termination (Epperson, Bushway, & Warman, 1983). Still other research has found no relationship between therapist gender and premature termination (Cottone et al., 2002; Hatchett & Park, 2004; Werbart et al., 2014). With regard to therapist age, one Swedish study found that older therapists tended to experience higher rates of premature termination than younger therapists, but only in outpatient mental health clinics with low organizational stability (Werbart et al., 2014).

A more consistent finding is that less therapist experience and training is usually related to higher rates of premature termination by clients (Baekland & Lundwall, 1975; Reis & Brown, 1999). For example, adult clients of a private clinic were more likely to terminate prematurely when working with a therapist with less than four years of experience (Pekarik & Stephenson, 1988). In addition, community mental health center clients were more likely to terminate after intake when seeing a paraprofessional than when seeing a psychiatrist, psychologist, or social worker (Sue et al., 1976). With respect to psychotherapy-specific training, clients at a psychoanalytic private practice were less

likely to terminate prematurely when seeing a therapist with a Ph.D. than a therapist with a M.S.W. or M.D. (Greenspan & Kulish, 1985).

**Client-therapist interaction factors.** Despite evidence that most client and therapist demographic variables do not effectively predict premature termination separately, several studies have examined whether matching therapists and clients on demographic variables improves treatment retention. However, most recent research finds no relationship between client-therapist gender similarity and treatment retention (Cottone et al., 2002; Garfield, 1994). Furthermore, matching therapists and clients on ethnicity appears to have only very small effects on retaining clients beyond the first session ( $r = .03$ ; Maramba & Nagayama Hall, 2002). One study in a university training clinic actually found higher rates of premature termination among clients who were matched with their therapist on ethnicity (Williams et al., 2005). Thus, perceived multicultural competence of one's therapist seems likely to be a more important client-therapist interaction factor than ethnicity matching.

Also more important than client-therapist match on any demographic variables appears to be client-therapist agreement on the presenting problem. College counseling center clients were more likely to terminate after the initial session when their therapists were inaccurate in recognizing the presenting problem they had identified than clients whose therapists had accurately identified their presenting problems (Epperson et al., 1983). Similarly, greater discrepancy between clients' and therapists' perceptions of the presenting problem severity was related to decreased likelihood of mutual termination in another college counseling center (Corning, Malofeeva, & Bucchianeri, 2007).

Agreement on the presenting problems may also affect the quality of the therapeutic relationship, another important predictor of premature termination. In a recent meta-analysis, Sharf, Primavera, and Diener (2010) reported a moderately strong relationship between a weak therapeutic alliance and greater premature termination. This relationship has emerged across settings, including university training clinics (Westmacott et al., 2010), research clinics (Fluckiger et al., 2011; Saatsi et al., 2007), college counseling centers (Saltzman, Luegert, Roth, Creaser, & Howard., 1976; Tryon & Kane, 1990; Tryon & Kane, 1993), outpatient psychiatric clinics (Kolb, Beutler, Davis, Crago, & Shanfield, 1985), and private practices (Kegel & Fluckinger, 2014; Magnavita, 1994). It has also been found across theoretical orientations, including eclectic (Saltzman et al., 1976), psychodynamic (Tryon & Kane, 1993), interpretive (Piper et al., 1999), and cognitive-behavioral (Arnow et al., 2007; Saatsi et al., 2007). The alliance between therapists and clients who later terminate prematurely has been rated as weaker from the perspective of both clients and therapists (Piper et al., 1999; Saltzman et al., 1976; Tryon & Kane 1990; 1993). Furthermore, this effect has been found throughout the treatment process, whether alliance ratings occur after three sessions (Saltzman et al., 1976; Tryon & Kane, 1993), after eight sessions (Tryon & Kane, 1990), or at the end of treatment (Piper et al., 1999). Thus, a weak therapeutic alliance may be among the most reliable predictors of premature termination.

**Treatment factors.** Nevertheless, several variables may influence whether or not clients are retained in treatment before clients and therapists ever interact. Overall, research suggests that self-referred clients are more likely to attend a scheduled intake appointment (Sherman, Barnum, Nyberg, & Buhman-Wiggs, 2008) and complete

treatment (Pekarik & Stephenson, 1988) than clients referred by outside sources (Baekland & Lundwall, 1975; Barrett et al., 2008; Reis & Brown, 1999). Furthermore, clients seeking treatment at a college counseling center or university training clinic may be more likely to terminate prematurely than those seeking treatment from public clinics, hospitals, private practices, or specialty research clinics (Swift & Greenberg, 2012). In general, less prior therapy experience also appears to be related to increased premature termination (Connelly et al., 1986; Grilo et al., 1998; Hoffman, 1985). However, a couple of studies on psychological treatments for specific disorders have found that clients with previous psychological treatment were more likely to terminate prematurely (Matthieu & Ivanoff, 2006; Westra, Dozois, & Boardman, 2002), particularly those with previous psychiatric hospitalizations (Ogrodniczuk et al., 2008).

Unfortunately, treatment factors affecting premature termination after therapy initiation have not been as thoroughly researched as pretreatment factors. Nevertheless, a few general aspects of the treatment process have been identified as potential predictors of premature termination. First, premature termination seems to be more likely early in the treatment process with the median length of treatment at six sessions and the majority of terminations occurring within eight sessions (Garfield, 1994). Second, time-unlimited treatments and non-manualized treatments demonstrate higher rates of premature termination than time-limited and manualized treatments, respectively (Swift & Greenberg, 2012). In addition, some research suggests premature termination may be less frequent for certain treatment modalities, such as individual therapy (Aderka, 2009; Sue et al., 1976) or combined psychotherapy and pharmacotherapy (e.g., Dodd, 1970; Edlund et al., 2002). However, Swift and Greenberg (2012) found no differences in rate of

premature termination based on treatment modality or therapeutic orientation in their meta-analysis of 669 studies. In another series of meta-analyses, Swift and Greenberg (2014) did not find any differences in rate of premature termination across treatment approaches for most diagnostic categories. Nevertheless, they did find lower rates of premature termination in integrative treatments for depression and PTSD as well as dialectical-behavior therapy for eating disorders.

**Summary.** In summary, although a multitude of factors related to clients, therapists, client-therapist interactions, and treatment itself have been investigated as potential predictors of premature termination, very few reliable predictors have emerged. Within client demographic variables, only socioeconomic status, ethnicity, education, and age show consistent relationships with premature termination, and these relationships are relatively weak (Wierzbicki & Pekarik, 1993; Swift & Greenberg, 2012). Client clinical variables are little better. A history of substance use is the only well-established predictor of greater premature termination within this area (e.g., Wang, 2007), though primary and comorbid personality disorders show some promise of predicting heightened risk of terminating prematurely (e.g., Persons et al., 1988). Therapist characteristics are similarly weak predictors, though some results suggest less therapist experience may be related to greater premature termination (e.g., Reis & Brown, 1999). More complex, client-therapist interaction factors, like multicultural competence and the therapeutic alliance (Sharf et al., 2010), appear to be more powerful predictors of premature termination (Wierzbicki & Pekarik, 1993). Treatment factors, such as referral source (Pekarik & Stephenson, 1988) and treatment modality (Aderka, 2009), may also play a role in predicting premature termination, but these require further research.

## **1.2. Limitations in the Research on Predictors of Premature Termination**

As repeatedly demonstrated throughout the previous section, contradictory results are a major limitation of research on predictors of premature termination. Although nearly all research topics will produce results with some inconsistencies, what makes this such a major limitation of research on premature termination are the methodological issues that impede comparison and explanation of these contradictory results.

First, inconsistent results lack systematic replication by their very definition. While some researchers have cross-validated their results using additional samples from the same setting and population (e.g., Beck et al., 1987; Fraps, McReynolds, Beck, & Heisler, 1982), most have been unable to replicate their findings in different settings or populations (Garfield, 1994). Thus, it has been suggested that differences in study variables, such as setting, client population, and treatment modality, could be responsible for the lack of replicable results (Fiester & Rudestam, 1975; Harris, 1998). Unfortunately, a majority of the research on premature termination has been conducted within a single mental health setting or specialized population (Edlund et al., 2002). Consequently, comparison of these variables within a study or even a program of research is generally not possible. In addition, meta-analyses often cannot thoroughly examine the influence of study variables on other predictors of premature termination due to insufficient information provided by the original studies (Wierzbicki & Pekarik, 1993). In order to address this limitation, this dissertation recruited a broad national sample of adults who have participated in outpatient psychotherapy in a variety of capacities. By directly measuring factors that tend to differ across treatment programs (e.g., setting, modality)

within this single study, it was expected that the impact of these differences on predictors of premature termination could be more directly analyzed as well.

Second, the various operational definitions of premature termination employed across studies are also likely to contribute to inconsistencies in predictors (Barrett et al., 2008; Reis & Brown, 1999). Various researchers have utilized definitions of premature termination based on treatment duration less than a set number of sessions, failure to attend a final session, and therapist judgment. Although these different operational definitions are often treated as interchangeable, they actually demonstrate little agreement in their classification of clients into premature and appropriate terminators (Hatchett & Park, 2003; Swift, Callahan, & Levine, 2009). Each of the aforementioned definitions may misclassify clients for different reasons. Duration-based definitions confound termination status and treatment length, often misclassifying clients who terminate appropriately within a few sessions as “dropouts” (Morrow, Del Gaudio, & Carpenter, 1977; Pekarik, 1986). Conversely, definitions based on a missed final session may misclassify highly symptomatic clients as appropriate terminators simply because the client reported an intention to discontinue treatment in their last session (Pekarik, 1985b; Wierzbicki & Pekarik, 1993). Finally, use of therapist judgment to define premature termination is quite unreliable, since therapists tend to differ in their expectations for treatment both from their clients and from each other (Hatchett & Park, 2003). Unfortunately, if consistent identification of premature terminators cannot be achieved, neither can consistent identification of predictors. In order to address this challenge of identifying premature terminators, this dissertation utilized a single definition of

premature termination based clients' self-judgment of whether or not they completed treatment in agreement with their therapists.

Nevertheless, it is also inappropriate to simply classify clients as premature terminators and treatment completers. The improper treatment of premature terminators as a homogenous group is a third substantial limitation in identifying predictors of premature termination (Mennicke, Lent, & Burgoyne, 1988). Multiple studies have demonstrated that different predictors emerge for clients who prematurely terminate at different points in the treatment process. Clients who terminate after only one or two therapy sessions differ from clients who terminate later in the treatment process on several variables commonly investigated as predictors of premature termination, including demographic variables and clinical variables (Fiester, Mahrer, Giambra, & Ormiston, 1974; Richmond, 1992). Even when early and late premature termination are defined by dropping out of treatment before or after session six, differences in demographic and clinical predictors are found (Aderka et al., 2011). Early and late premature terminators often appear more different from each other than they do from treatment completers (Aderka et al., 2011; Fiester et al., 1974). Clients who terminate at different points in treatment may also differ from each other with respect to their reasons for terminating prematurely (Renk & Dinger, 2002). In turn, predictors of premature termination also vary with clients' reasons (Westmacott & Hunsley, 2010). Overall, these findings clearly demonstrate that premature terminators are not a homogenous group and that treating them as such could impair researchers' ability to predict and identify the different types of premature terminators. Thus, although this dissertation initially classified participants into premature terminators and treatment completers, it also

utilized sub-populations of early and late premature terminators to analyze whether predictors of premature termination vary across the treatment process.

### **1.3. Reasons for Premature Termination**

Compared to predictors of premature termination, far less research has examined clients' reasons for terminating prematurely, particularly from the clients' perspective. The lack of research in this area may be attributable to the difficulty of contacting clients who terminated prematurely (Pekarik, 1992), which is illustrated by multiple studies with a response rate under 60 percent (e.g., Hoffman & Suvak, 2006; Hunsley et al., 1999; Martin et al., 1988; Pekarik, 1983; Pekarik & Finney-Owen, 1987). Nevertheless, it is unfortunate that more research has not been done, especially since evidence suggests that therapists are often inaccurate in their attempts to identify clients' reasons for premature termination (Hunsley et al., 1999; Pekarik & Finney-Owen, 1987; Westmacott et al., 2010). If therapists cannot accurately identify what motivates their clients to leave treatment, then they probably cannot accurately identify what would motivate them to remain in treatment either. Fortunately, there is some hope for discovering clients' motivation for leaving treatment prematurely in that the extant research has already identified three broad reasons reported by clients: environmental obstacles, problem improvement, and dissatisfaction with services (Garfield, 1963; Pekarik 1983b, 1992b).

*Environmental obstacles* has been used to refer to a variety of difficulties external to the therapeutic process which nevertheless interfere with therapy attendance, such as transportation problems, conflict with work schedules, lack of childcare, lack of time, financial difficulties, and moving away. In one of the earliest studies to attempt to categorize, or even examine, clients' reasons for premature termination, the most

commonly reported reasons were *environmental obstacles* (Gafield, 1963). More recent studies have also found the primary reasons for premature termination provided by their samples to be *environmental obstacles* (Beckham, 1992; Hoffman & Suvak, 2006; Martin, McNair, & Hight, 1988; Todd, Deane, & Bragdon, 2003). Although two of these studies had quite small samples due to difficulty contacting clients who terminated prematurely (Beckham, 1992; Hoffman & Suvak, 2006), another study with a large sample of 123 clients and 63 graduate student therapists found that both clients and therapists identified *environmental obstacles* as the most frequent reason for clients to terminate therapy (Todd, Deane, & Bragdon, 2003).

Nevertheless, other studies have found *problem improvement* to be the most common reason for termination reported by both clients and therapists (Hunsley et al., 1999; Westmacott & Hunsley, 2010; Pekarik & Finney-Owen, 1987; Pekarik, 1983b; 1992b), at least when therapists were able to identify a reason (Renk & Dinger, 2002). In one study, an archival file review revealed that therapists of a university training clinic had been unable to identify clients' reasons for terminating in approximately 36 percent of cases; for cases in which therapists could identify a reason, they primarily attributed clients' termination to the clients' satisfaction with treatment progress (Renk & Dinger, 2002). Another study involving both archival file review and telephone interviews with former clients showed that achieving all or many therapy goals was the most prevalent reason for termination identified by clients and therapists (Hunsley et al., 1999). Finally, *problem improvement* also emerged as the most common reason for terminating therapy among the general population of Canada (Westmacott & Hunsley, 2010). Yet, it should be noted that each of the aforementioned studies examined reasons for any termination of

services, including premature and appropriate termination. From these studies, it is unclear whether *problem improvement* is really such a common reason among premature terminators or whether these results might be biased by the inclusion of appropriate terminators. A few studies restricted specifically to examining reasons for premature termination may help to clarify this matter. When Pekarik (1983b; 1992b) surveyed only clients who had prematurely terminated services at a community mental health center, *problem improvement* still emerged as the most prevalent reason for premature termination of services. When Pekarik subsequently surveyed therapists of multiple community mental health centers, they also identified *problem improvement* as the primary reason for premature termination by clients (Pekarik & Finney-Owen, 1987).

Unlike *environmental obstacles* and *problem improvement*, *dissatisfaction with services* is generally not identified by therapists as a reason that clients prematurely terminate therapy (Hunsley et al., 1999). While 30 to 35 percent of interviewed clients rated “therapy was going nowhere,” “therapy did not fit with my ideas,” and “not confident in therapist’s ability” as “somewhat” or “very important” in their reasons for terminating, therapists did not identify “dissatisfied with services” as a reason for termination for any of these clients (Hunsley et al., 1999, p. 384). Ten years later, these results were replicated with a new sample of clients and therapists from the same training clinic. Clients again rated reasons reflecting dissatisfaction with therapy as significantly more important than their therapists, particularly clients who terminated prematurely (Westmacott et al., 2010). Even though therapists often fail to recognize *dissatisfaction with services*, clients have frequently identified dissatisfaction-related reasons as central to their premature termination. Indeed, a negative perception of the therapist and therapy

were the two most frequent reasons for terminating prematurely across European American, African American, and Mexican American clients of a U.S. outpatient psychiatric clinic (Acosta, 1980). Dissatisfaction with treatment or therapist, combined with low motivation, was also the most prevalent reason given for terminating prematurely among clients of a university clinic in Spain (Bados, Balaguer, & Saldana, 2007). Finally, within the general population of Canada, dissatisfaction related to therapy not helping and discomfort with the therapist's approach were the most common reasons for terminating prematurely (Wang, 2007). Thus, *dissatisfaction with services* seems to be an underestimated reason for premature termination throughout the North American mental health system as well as parts of Europe.

In addition to being the class of reasons for premature termination most underestimated by therapists, *dissatisfaction with services* is probably also the most poorly understood category of reasons. Compared to the relatively consistent meanings of *environmental obstacles* and *problem improvement* across studies, the specific meaning of *dissatisfaction with services* seems to differ more depending on the type of treatment under investigation. In general, *dissatisfaction with services* has referred to feeling treatment was ineffective (Acosta, 1980; Hoffman & Suvak, 2006), believing therapy did not meet expectations (Hansen, Hoogduin, Schaap, & De Haan, 1992), feeling the therapist was not understanding (Acosta, 1980; Hansen et al., 1992), and believing the therapist was not skillful (Acosta, 1980). Nevertheless, within cognitive behavioral therapy for social anxiety, *dissatisfaction with services* also seems to include more unique reasons, such as skepticism about the treatment rationale and finding the treatment “difficult to endure” or “too overwhelming” (Lincoln et al., 2005, p. 216; Hoffman &

Suvak, 2006, p. 969). Furthermore, when clients from a variety of group therapies were interviewed about their reasons for premature termination, several reasons that seem to uniquely refer to dissatisfaction with group treatment emerged, including perceiving their referral as simply to fill a group, perceiving other group members as having more serious problems, feeling that insufficient attention was given to their individual difficulties, and experiencing conflict with other group members (Bernard & Drob, 1989).

Despite some variability in the specific meanings of these three broad reasons for terminating prematurely, researchers have been able to identify predictors of premature termination that appear to vary with the reasons. With respect to *dissatisfaction with services*, low global alliance was a significant predictor of premature termination by binge-eating clients who specifically reported “discontentment with therapy,” but was not a significant predictor for any other reasons for premature termination relative to treatment completion (Fluckinger et al., 2011). In addition, mental health clients in Canada were more likely to report terminating due to a belief that treatment was “not helping” if they had a low income and had worked with a psychiatrist than if they had a middle to high income and had worked with another type of psychotherapist (e.g., psychologist, counselor, social worker) (Westmacott & Hunsley, 2010, p. 970). Low income clients who worked with a psychiatrist were also less likely to report terminating due to feeling better (Westmacott & Hunsley, 2010). Relative to not meeting criteria for any diagnoses assessed, meeting criteria for a mood disorder, anxiety disorder, or substance dependence was also associated with a decreased likelihood of attributing termination to *problem improvement* (Westmacott & Hunsley, 2010). Clients who terminated due to *problem improvement* also attended more sessions prior to termination

than clients who terminated with no notice or due to *environmental obstacles* (Renk & Dinger, 2002).

Finally, there is some evidence that the aforementioned reasons for termination may distinguish clients who terminate prematurely from those who terminate appropriately. In a study at a university training clinic, clients who terminated prematurely rated several reasons reflecting *dissatisfaction with services* (e.g., “therapy was going nowhere,” “therapy was making things worse”) and *environmental obstacles* (e.g., “no longer had money”) as more important factors in their termination than clients who terminated mutually (Westmacott et al., 2010, p. 430). Conversely, premature terminators ranked *problem improvement* (i.e., “accomplished what you wanted”) as significantly less important in their decision to terminate therapy than mutual terminators did (Westmacott et al., 2010, p. 429).

Overall, the research on clients’ reasons for premature termination is surprisingly consistent. The primary reasons given by clients for terminating prematurely fit into three broad categories: *environmental obstacles*, *problem improvement*, and *dissatisfaction with services*. Furthermore, although these three categories show some variability in meaning across studies, they are reliable enough to help distinguish premature terminators from appropriate terminators and to allow identification of separate predictors for different reasons. Unfortunately, this broad understanding of clients’ reasons for premature termination is still insufficient for developing a strategy to reduce premature termination, and methodological issues in the extant literature have prevented a more refined understanding.

#### **1.4. Limitations in the Research on Reasons for Premature Termination**

As with predictors of premature termination, the research on clients' reasons for premature termination is limited by an assumption that premature terminators are a homogenous group. While this area of the literature at least inherently recognizes that premature terminators are different in their reasons for terminating, most studies still treat all clients who terminate prematurely throughout the treatment process as members of the same group. In reality, the few studies that have investigated premature termination at different points in the treatment process have revealed different reasons for premature termination. Studies show that clients who terminate later in the treatment process are more likely to attribute their termination to *problem improvement* and less likely to attribute it to *environmental obstacles* or *dissatisfaction with services* than clients who terminate earlier in the treatment process (Hynan, 1990; Renk & Dinger, 2002). Thus, when data from early and late premature terminators are analyzed together, these systematic differences in reasons for premature termination are lost. In addition to failing to distinguish premature termination from different points in the treatment process, several of the studies on reasons for termination fail to even distinguish premature termination from appropriate termination (e.g., Hunsley et al., 1999; Renk & Dinger, 2002; Westmacott & Hunsley, 2010). However, as previously mentioned, Westmacott and colleagues (2010) found that the important reasons for termination substantially differed for premature and mutual terminators. Consequently, results of studies that examined reasons for termination in general are difficult to interpret in terms specific to premature termination. In order to avoid these problems, this dissertation limited the investigation of reasons for termination to only participants who prematurely terminated their most recent therapeutic experience. Furthermore, this dissertation obtained data on

the point at which clients terminated therapy, so that differences in reasons for premature termination could be examined across the treatment process.

Another methodological issue found in research on both predictors of and reasons for premature termination is the tendency for this research to be conducted within a single treatment setting, which may bias results through social desirability. When clients who have prematurely terminated therapy at a clinic are contacted by researchers from the same clinic, they may be hesitant to provide honest reasons for terminating prematurely due to social desirability, particularly since some evidence suggests that clients who terminate prematurely may already possess a higher need for approval than clients who terminate appropriately (Strickland & Crowne, 1963). To address this limitation, this dissertation used a national, web-based survey of people who had previously utilized mental health services in a variety of treatment settings. Based on previous research (e.g., Henderson et al., 2012; Levine, Ancill, & Roberts, 1989), it was expected that clients would be more open in responding to online surveys conducted by researchers unconnected with a particular clinic than they would be in responding to interviews conducted in-person or over the phone by researchers from their former treatment setting.

Finally, one limitation of previous national studies is that the questions used to examine reasons for premature termination are not specific enough, probably because these epidemiological surveys were intended as broad investigations of mental health service utilization and not detailed investigations of premature termination, specifically (e.g., Collaborative Psychiatric Epidemiology Surveys; Wang, 2007; Westmacott & Hunsley, 2010). Thus, although *dissatisfaction with services* is probably the most concerning reason for premature termination, it and the other reasons remain poorly

understood. Even when studies break dissatisfaction with services down into more specific reasons, such as having a negative attitude toward the therapist or believing treatment was not helping, clients' rationale for disliking a therapist or finding treatment ineffective remain unclear. More research is needed to clarify the specific reasons driving clients' *dissatisfaction with services* in general along with their perceived *problem improvement* or *environmental obstacles*. Fortunately, this dissertation focused specifically on premature termination of psychotherapy and thus could ask participants more in-depth questions about their reasons for terminating prematurely.

### **1.5. Outcomes of Premature Terminators**

Additional evidence of the need for further research on clients' reasons for premature termination comes from results showing that the therapeutic outcome and satisfaction of premature terminators vary with their reasons for terminating. In one community mental health center, clients who reported terminating prematurely due to "no need for services" or "environmental constraints" nevertheless showed significant decreases in symptoms at three-month follow-up (Pekarik, 1983b, p. 912). However, clients who reported terminating due to "dislike of services" showed no change in symptoms (Pekarik, 1983b, p. 912). Similarly, clients who completed therapy and those who terminated prematurely due to "problem improvement" both demonstrated fewer symptoms four months after intake than clients who were still in treatment at this time (Pekarik, 1992b, p. 95). With respect to satisfaction with services, those clients who terminated prematurely due to self-perceived problem improvement showed satisfaction equivalent to that of clients who completed treatment or were still in treatment; whereas,

clients who terminated due to *dissatisfaction with services*, of course, gave significantly lower satisfaction ratings than treatment remainers or completers (Pekarik, 1992b).

Reasons for premature termination are not the only factor to affect therapeutic outcome of premature terminators. Supporting the previous assertion that premature terminators are not a homogenous group, studies distinguishing between early and late premature terminators have found substantially different outcomes. Pekarik (1983a) found that clients who terminated prematurely after attending at least three sessions demonstrated symptom improvement similar to clients who terminated appropriately (Pekarik, 1983a). Conversely, nearly one third of clients who terminated prematurely after only one visit showed worsened symptoms at follow-up, while the few clients who terminated appropriately after one session all showed symptom improvement (Pekarik, 1983a). Similarly, in another study by Pekarik (1992a), over 60 percent of clients who terminated prematurely after at least three sessions showed symptom improvement, while only 30 percent of clients who terminated prematurely after one or two sessions did. Another 30 percent of those clients prematurely terminating without attending at least three sessions showed worsened symptoms, while no clients who terminated after at least three sessions grew worse. A similar pattern of symptom improvement has also been found among clients in treatment for OCD (Aderka et al., 2011). Clients who prematurely terminated after at least six sessions of OCD treatment showed symptom improvement similar to that of treatment completers, while early premature terminators remained more symptomatic than both late premature terminators and completers (Aderka et al., 2011).

Overall, premature terminators do seem to experience improvement during therapy, particularly when they terminate late in treatment due to self-perceived problem

improvement; however, treatment completers still tend to demonstrate greater reductions in symptoms than premature terminators (Cahill et al., 2003; Jensen, Mortensen, & Lotz, 2014; Persons et al., 1988; Saatsi et al., 2007; Westmacott et al., 2010). A greater proportion of treatment completers also achieve reliable and clinically significant change compared to premature terminators (Cahill et al., 2003; Saatsi et al., 2007). Thus, there clearly remains a need to improve treatment retention and better understand the outcomes of those clients who are not retained. Although this understanding is relatively good compared to our understanding of predictors and reasons, there are some limitations.

### **1.6. Limitations in the Research on Outcomes of Premature Terminators**

One major limitation of the research on outcomes of premature terminators is that these outcomes are frequently defined by therapists, which may be biased against premature terminators (Chisholm, Crowther, & Ben-Porath, 1997). Therapists consistently give premature terminators lower improvement ratings than treatment completers and treatment remainers (Kolb et al., 1985; Pekarik, 1992a; 1992b). Furthermore, while premature terminators often show substantial improvements on symptom measures and self-evaluations, therapist-rated outcome measures tend to show no improvement for premature terminators (Kolb et al., 1985; Westmacott et al., 2010). Thus, even when the therapeutic outcomes of premature terminators are fairly positive, therapists frequently fail to recognize this and assume that all premature terminators are treatment failures (Pekarik, 1992a; 1992b). In order to avoid this bias, this dissertation assessed therapeutic outcomes of premature terminators from the clients' perspective.

A second limitation in the extant literature on outcomes of premature terminators is that most of the outcomes investigated are fairly short term. Therapeutic outcomes are

generally measured from the last treatment contact prior to premature termination (e.g., Aderka et al, 2011; Cahill et al., 2003) or a few months after intake (e.g., Pekarik, 1983a; 1983b; 1992a; 1992b). The lack of studies assessing longer term outcomes is likely due to the difficulty of contacting clients who have terminated prematurely (Pekarik, 1992). However, because this dissertation involved a national survey of former mental health clients who terminated services at different times in the past, some of the outcomes assessed were long-term. Unfortunately, because the data was retrospective, symptom improvement could not be measured in this dissertation. Therefore, therapeutic outcomes of premature terminators were assessed by self-reported problem improvement, satisfaction with services, and current functional impairment.

## **CHAPTER 2: STATEMENT OF PURPOSE**

Premature termination is a pervasive barrier to effective provision of psychotherapy, frequently resulting in decreased treatment gains for clients and lowered morale for therapists, as well as lost revenue and community support for mental health agencies (Ogrodniczuk et al., 2005). Although some strategies for reducing premature termination have been proposed, little progress has been made since pretreatment preparation techniques emerged 50 years ago (Hoen-Saric et al., 1964). Unfortunately, multiple limitations in the research on factors influencing premature termination have prevented development of an intervention that would effectively address this problem.

First, inconsistent findings on client factors that predict premature termination have made it difficult to distinguish those clients who are likely to terminate prematurely from those who are likely to complete treatment. Thus, it remains unclear which clients are even in need of an intervention to prevent premature termination. Further

investigation of client demographic and clinical variables that may predict premature termination at different points in the treatment process could help to identify multiple target populations for intervention. Broadly speaking, findings on clients' reasons for terminating prematurely have been more consistent than findings on predictors (i.e., *dissatisfaction with services, problem improvement, environmental obstacles*); however, present understanding of these reasons is too general to usefully guide development of strategies for reducing premature termination. Since therapist identification of clients' reasons tends to be inaccurate (e.g., Hunsley et al., 1999), additional research is needed from the clients' perspective to clarify the specific reasons clients have for being dissatisfied with therapy or for deciding they have improved enough to terminate unilaterally. This improved understanding of clients' reasons could suggest separate interventions for clients with different motivations for terminating prematurely along with clients who terminate at different points in the treatment process. Unfortunately, much of the extant research has treated premature terminators as a homogenous group. As a result, there is insufficient data on whether predictors of and reasons for premature termination vary depending on point of termination. Finally, although there is some evidence that short-term therapeutic outcomes vary with the clients' reasons for premature termination and point of termination (Pekarik, 1992a; 1992b), the long-term outcomes of clients who terminate prematurely are unknown due to difficulty contacting clients long after their termination.

Thus, the purpose of this dissertation was to address these limitations with a national survey design that permitted a broad sample of client variables and treatment experiences; specification of reasons for premature termination and reduced social

desirability; analysis of individual differences among those who prematurely terminate at different points in the treatment process; and examination of long-term therapeutic outcomes.

## **CHAPTER 3: HYPOTHESES**

### **3.1. Predictors of Premature Termination**

#### **Client sociodemographic factors**

1. Based on several previous studies and meta-analyses (e.g., Swift & Greenberg, 2012; Wierzbicki & Pekarik, 1993), it was hypothesized that race/ethnicity, level of education, yearly household income, and age would be the only client sociodemographic variables to significantly predict premature termination throughout the treatment process. Specifically, it was hypothesized that participants who identified with a race/ethnicity other than White/European Origin would tend to report having prematurely terminated their most recent therapy experience at a higher rate than participants who identified as White/European Origin. It was also hypothesized that a lower level of education, lower yearly household income, and younger age would be associated with a greater likelihood of premature termination.
2. Based on limited previous research suggesting that late premature terminators are more similar to treatment completers than to early premature terminators (e.g., Aderka et al., 2011; Fiester et al., 1974), it was hypothesized that the effect sizes for race/ethnicity, level of education, yearly household income, and age would be greater when comparing treatment completers to participants who prematurely

terminated prior to session six than to participants who prematurely terminated after at least six sessions.

### **Client clinical factors**

3. Consistent with prior research (e.g., Edlund et al., 2002; Garfield, 1994), it was expected that participants' self-reported presenting problems would not be related to premature termination within the entire sample, except when substance use was identified as one of participants' two main presenting problems (e.g., MacNair & Corazzini, 1994; Swett & Noones, 1989); it was hypothesized that these participants would be more likely to report having prematurely terminated their most recent therapeutic experience than participants identifying other presenting problems, throughout the treatment process.
4. Based on limited prior research which has found higher levels of comorbid depression in early premature terminators than in late premature terminators or treatment completers (Aderka et al., 2011; Issakidis & Andrews, 2004), it was hypothesized that participants who prematurely terminated before session six would be more likely to identify depression as one of their two main presenting problems than participants who prematurely terminated after at least six sessions or those who completed treatment.

### **Therapist factors**

5. Consistent with prior research (e.g., Werbart et al., 2014), it was expected that therapist demographic variables (i.e., gender, age, and ethnicity) would not be significantly related to premature termination.

6. Based on limited prior research (Pekarik & Stephenson, 1988), it was expected that higher rates of premature termination would be reported for therapists with less previous experience. Specifically, it was hypothesized that participants who had therapists who were still in graduate school during their most recent therapy experience would be more likely to report having prematurely terminated than participants who had therapists who were no longer in graduate school.

#### **Client-therapist interaction factors**

7. Based on some previous research suggesting an association between greater therapist ethnocentricity and increased premature termination (e.g., Baekland & Lundwall, 1975), it was hypothesized that higher levels of perceived multicultural competence in therapists would be related to reduced likelihood of premature termination.
8. Consistent with substantial prior research (e.g., Sharf et al., 2010), it was hypothesized that strength of the therapeutic alliance would be negatively associated with premature termination.
9. Based on limited prior research suggesting that low global alliance is associated with premature termination due to “discontentment with therapy” (Fluckinger et al., 2011), it was hypothesized that participants who prematurely terminated due to *dissatisfaction with therapy, therapist, or agency* would report a significantly weaker therapeutic alliance and less perceived multicultural competence of their therapists than participants who reported prematurely terminating for any of the other broad reasons.

### **Treatment factors**

10. Consistent with most previous research (e.g., Barrett et al., 2008; Pekarik & Stephenson, 1988), it was hypothesized that participants who self-referred for therapy would be less likely to have prematurely terminated their most recent therapeutic experience compared to participants who reported feeling pressured to seek treatment by anyone else.
11. Based on substantial previous research, including Swift and Greenberg's (2012) meta-analysis, it was hypothesized that participants who participated in treatment at a university training clinic or college counseling center would be more likely to report having prematurely terminated their most recent therapeutic experience than participants who participated in treatment at other settings.
12. Based on findings from Swift & Greenberg's (2012) meta-analysis that time-unlimited treatments demonstrated higher rates of premature termination than time-limited treatments, it was hypothesized that participants who reported discussing expectations for treatment duration would be less likely to have prematurely terminated their most recent therapeutic experience than participants who reported no discussion of expectations for treatment duration.

### **3.2. Reasons for Premature Termination**

1. Consistent with previous research, it was hypothesized that *problem improvement* (i.e., "no longer needed therapy/problem improved"), *environmental obstacles* (i.e., "external difficulties/environmental obstacles"), and *dissatisfaction with services* (i.e., "dissatisfaction with therapy, therapist, or agency/therapy wasn't

working or made things worse”) would be the three broad reasons for premature termination endorsed most frequently by the full sample of premature terminators.

2. Based on a couple of previous studies (i.e., Hynan, 1990; Renk & Dinger, 2002; Roe, Dekel, Harel, & Fennig, 2006), it was hypothesized that participants who prematurely terminated after at least six sessions would be more likely to endorse having terminated due to *problem improvement* (i.e., “no longer needed therapy/problem improved”) and less likely to endorse having terminated due to *dissatisfaction with services* (i.e., “dissatisfaction with therapy, therapist, or agency/therapy wasn’t working or made things worse”) or *environmental obstacles* (i.e., “external difficulties/environmental obstacles”) than participants who prematurely terminated before session six.
3. While previous research has established that reasons for premature termination generally fall into these three broad categories (i.e., *problem improvement*, *environmental obstacles*, *dissatisfaction with services*), this study also describes more specific reasons for premature termination within each of these broad categories and other categories (i.e., *embarrassed by therapy*, *unmotivated for therapy*). Differences in specific reasons for premature termination across different points in the treatment process are also described.

### **3.3. Outcomes of Premature Terminators**

1. Consistent with previous research (Pekarik, 1983a, 1992a; Westmacott et al., 2010), it was hypothesized that participants who completed treatment would report significantly greater problem improvement than participants who prematurely terminated after at least six sessions; furthermore, it was

hypothesized that participants who prematurely terminated after at least six sessions would report significantly greater problem improvement than participants who prematurely terminated before six sessions.

2. Similarly, although it has not been specifically examined in prior research, it was hypothesized that this pattern of results would generalize to the other outcome measures in this study, such that participants who completed their most recent therapeutic experience would also report greater satisfaction with services and less current functional impairment than participants who prematurely terminated after at least six sessions; furthermore, participants who prematurely terminated after at least six sessions would report greater satisfaction with services and less current functional impairment than participants who prematurely terminated before six sessions.
3. Based on limited prior research (e.g., Pekarik, 1992b; Roe et al., 2006), it was hypothesized that participants who prematurely terminated because they “no longer needed therapy/problem improved” would report significantly greater problem improvement, greater satisfaction with services, and less current functional impairment than participants who reported prematurely terminating for any of the other broad reasons.

## **CHAPTER 4: METHODS**

### **4.1. Participants**

**Recruitment and eligibility.** Participants were recruited using Mechanical Turk, an online labor market operated by Amazon.com that has been regularly used for social science research (e.g., Burhmester, Kwang, & Gosling, 2011; Paolacci, Chandler, &

Ipeirotis, 2010). Thus, participants were “workers” who were registered for an Amazon Mechanical Turk account. These workers had the opportunity to select from thousands of tasks (e.g., image tagging, audio transcriptions, and survey completion) that they could complete in exchange for monetary compensation. According to the Amazon Mechanical Turk Requester User Interface Guide (Amazon Web Services, Inc., 2013), approximately 500,000 workers from 190 countries are currently registered for Mechanical Turk.

Approximately two thirds (69%) of these workers are United States residents (Buhrmester et al., 2011). Of workers within the United States, over half are female (60.1%) and a majority are White (83.5%) with a mean age of 32.3 ( $SD = 0.5$ ) (Berinsky, Huber, & Lenz, 2012). Within the United States, workers tend to be younger, more educated, less religious, and more liberal than the general population (Berinsky et al., 2012; Paolacci & Chandler, 2014).

Participants were eligible for this study if they were at least 21-years-old, U.S. residents, and had previously participated in outpatient psychotherapy as adults. In order to recruit participants who were U.S. residents, qualifications were embedded in the invitation to participate in this study on Mechanical Turk such that the description of the study was only visible to workers who met this criterion. The description of the study also indicated that workers must be at least 21 years old to participate. Furthermore, it stated that the survey was about “your experience in counseling or psychotherapy.” Finally, workers who elected to participate in this study were asked to respond to three questions at the beginning of the survey to determine their eligibility for completing the remainder of the study (i.e., those with prior outpatient psychotherapy experience).

**Compensation.** Participants were informed that they would be compensated either \$0.05 or \$1.00, depending on the number of questions they were given an opportunity to answer. At the time of this study, one dollar was the maximum typical wage for Mechanical Turk (Paolacci et al., 2010). The only information participants were asked to provide for the purposes of compensation was their Mechanical Turk Worker ID, which is not linked to any identifying information (i.e., name, address, e-mail address, IP address, social security number). Administration of compensation was completed by Amazon.com.

**Valid vs. invalid responses.** A total of 475 survey responses were submitted. However, 87 of these responses appeared to be invalid and were eliminated from analyses in accordance with the following guidelines:

- **Incomplete surveys/missing variables:** A total of 46 survey responses were eliminated because they were missing data on over 20 percent of questions presented for responding. This included no Mechanical Turk Worker ID provided in all 46 responses and no answer to the first screening question about prior therapy experience in 24 of those responses.
- **Duplicate responses:** Workers were informed that they would only be allowed to participate in this survey once. Furthermore, although IP addresses were not collected, the secure server for the survey (Qualtrics) was set to prevent participants from accessing the survey from the same IP address more than once. Nevertheless, nine unique Mechanical Turk Worker IDs each appeared twice among responses. Thus, 18 responses were eliminated under this guideline.

- Inconsistent responses about termination status: As the central focus of the study, participants were asked to answer the same question about whether they prematurely terminated or completed their most recent therapy experience at two separate points in the survey to ensure consistent responding on this critical variable. Fourteen participants were eliminated for inconsistent responses to these items.
- Responses that failed tests of random responding: There were a few items embedded within the survey designed to ensure non-random responding (e.g., “If you are reading this, mark ‘Rarely’ as your response to this question.”) Nine participants were eliminated for failing to respond appropriately to these questions.

**Ineligible participants.** Two participants’ responses were excluded from analyses, because they indicated being under the eligible age of 21. One participant’s responses were excluded, because he wrote in a comment that he “went to therapy as a child” and participation in outpatient psychotherapy as an adult was part of the eligibility criteria. Finally, 107 participants were not eligible to participate in the full survey based on their responses to the screening questions: 66 participants indicated that they had never participated in outpatient psychotherapy as an adult and 41 participants indicated that they were currently participating in outpatient psychotherapy for the first time. The remaining 278 participants (58.5% of the overall sample) were included in analyses.

**Description of the sample.** Participants ranged in age from 21 to 73 with a mean age of 35.2 ( $SD = 11.8$ ). The majority of participants (83.1%) identified as “White/European American,” 6.5% identified as “Black/African American/African

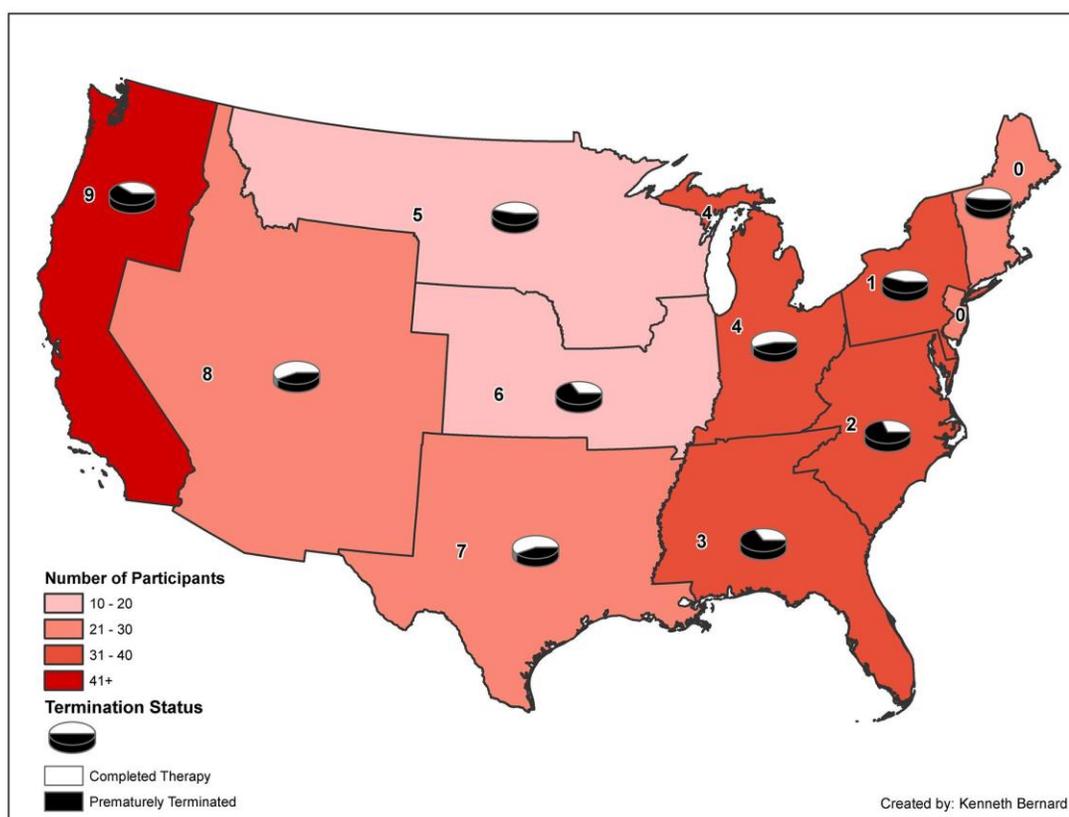
Origin,” 4.0% identified as “Asian American/Asian Origin/Pacific Islander,” 4.0% identified as “Latino-a/Hispanic,” 1.4% identified as “American Indian/Alaska Native/Aboriginal Canadian,” and 1.1% identified as “Bi-racial/Multi-racial.”

Approximately two thirds of participants (66.2%) identified as women, 31.7% identified as men, 1.1% identified as transgender, and 0.7% identified as other (i.e., “agender,” “non-binary”). Most participants (85.3%) identified as heterosexual, 8.6% identified as bisexual, 1.8% identified as gay, 1.4% identified as lesbian, and 2.2% identified as other (i.e., “queer,” “pansexual,” “asexual,” “heteroflexible”). Nearly half of participants (46.4%) indicated they were married or in a “marriage-like relationship,” 25.5% were single, 14.0% were dating, 9.0% were divorced, 4.0% were engaged, one participant indicated “living together,” and one indicated “friend with benefits.” With regard to religious/spiritual beliefs, a large proportion of participants (45.3%) identified as atheist or agnostic, 33.5% identified as Christian, 8.6% identified as Catholic, 2.2% identified as Jewish, 1.4% identified as Buddhist, and 9.0% identified as “Other” (e.g., “spiritual,” “LDS,” “pagan,” “unsure”).

Most participants had at least some higher education; 39.6% had a college degree (Associate’s or Bachelor’s), 34.2% had some college or were in college, 12.2% had an advanced degree (Master’s or doctorate), 9.4% had their high school diploma or GED, and 4.0% had trade school/technical training. As far as current employment, 40.6% of participants were full-time workers, 18.0% were part-time workers, 14.4% were unemployed, 11.5% were students, 10.1% were stay-at-home parents, and 5.0% were disabled. With respect to household income, 37.4% made \$25,000-\$50,000 per year,

28.8% made under \$25,000 per year, 18.3% made \$50,000-\$75,000 per year, 9.4% made \$75,000-\$100,000 per year, and 6.1% made over \$100,000 per year.

Participants were also asked to provide the first two digits of their ZIP codes. Based on this information, 33.5% of participants resided in the South, 23.4% resided in the Northeast, 22.3% resided in the West, and 20.9% resided in the Midwest. Figure 4.1 shows a map of the regional distribution of participants across the United States.



*Figure 4.1.* Map showing regional distribution of participants and their termination status.

The numbers in the map are the first digits of participants' ZIP Codes. Shadings of map indicate the number of participants residing in each region. Pie charts indicate the proportion of participants who completed therapy and prematurely terminated therapy in each region.

In this sample, 56.5% of participants prematurely terminated their most recent outpatient psychological therapy experience (i.e., “I stopped attending on my own without discussing it with my therapist”) and 43.5% mutually terminated/completed their most recent outpatient psychological therapy experience (i.e., “My therapist and I decided together that I was finished”). On average, participants had participated in outpatient psychological therapy 4.8 times as an adult ( $SD = 5.3$ ) and 31.7% were participating in therapy at the time of the study. For nearly half of participants (47.1%), the last time they had participated in outpatient psychotherapy (besides any ongoing treatment) was less than or equal to one year ago; it was 2-5 years ago for 34.5% of participants, 6-10 years ago for 10.0% of participants, and over 10 years ago for 8.3% of participants. A majority of participants (57.6%) attended therapy sessions once per week or once every two weeks (25.5%), most frequently for about three months (11.2%), six months (16.5%), or one year (11.2%). Thus, most participants (61.5%) attended 3-20 sessions, while 29.1% attended over 20 sessions and 8.6% attended 1-2 sessions. For most participants (61.0%), clear expectations for treatment duration were not discussed at the beginning of therapy.

In general, participants either sought treatment for themselves (48.6%) or sought treatment with some encouragement from other people in their lives (32.7%) as opposed to feeling pressured to come by someone else (18.3%). The most frequent primary reasons for seeking therapy identified by participants were depression (32.0%), anxiety (28.1%), and relationship problems (9.4%). Table 4.1 provides frequencies for all primary and secondary presenting problems identified by participants. A majority of participants (83.1%) participated in individual therapy with 1.8% participating in group therapy, 9.4% participating in both individual and group therapy, and 5.8% participating

in couples therapy. Approximately half of participants (52.2%) participated in psychotherapy at a private practice, 18.7% participated at a community mental health center or other non-profit agency, 12.6% participated at a college counseling center, 11.2% participated at a hospital outpatient psychiatric clinic, and 5.3% participated in other treatment settings (e.g., VA, university training clinic, research clinic). Participants mainly described their therapists as 30-60 years old (84.9%), White/European Origin (87.8%), and female (64.9%). Relatively few participants (7.2%) had therapists who were still in graduate school.

Table 4.1

*Frequencies of Primary and Secondary Presenting Problems*

Presenting Problems	Primary <i>N</i> (%)	Secondary <i>N</i> (%)
ADHD	3 (1.1)	5 (1.8)
Adjustment to change in lifestyle or welfare	13 (4.7)	15 (5.4)
Anger management	6 (2.2)	6 (2.2)
Anxiety	78 (28.1)	56 (20.1)
Bipolar disorder	15 (5.4)	3 (1.1)
Cognitive or learning problems	1 (0.4)	0 (0.0)
Depression	89 (32.0)	74 (26.6)
Eating disorder	2 (0.7)	5 (1.8)
Grief	9 (3.2)	6 (2.2)
OCD	2 (0.7)	1 (0.4)
Personality disorder	2 (0.7)	8 (2.9)
Physical health problems	3 (1.1)	1 (0.4)
Relationship problems	26 (9.4)	23 (8.3)
Schizophrenia or psychosis	0 (0.0)	0 (0.0)
Self-improvement or personal growth	1 (0.4)	14 (5.0)
Sexual problems	3 (1.1)	1 (0.4)

Stress management	2 (0.7)	16 (5.8)
Substance use	4 (1.4)	3 (1.1)
Thoughts of hurting or killing myself	5 (1.8)	8 (2.9)
Trauma/PTSD	8 (2.9)	12 (4.3)
Work or school problems	4 (1.4)	4 (1.4)
Other	2 (0.7)	2 (0.7)

*Note.* 15 participants (5.4%) chose not to select a secondary presenting problem. ADHD = Attention Deficit/Hyperactivity Disorder; OCD = Obsessive-Compulsive Disorder; PTSD = Posttraumatic Stress Disorder

## 4.2. Measures

**Survey piloting.** Prototypes of the survey were piloted using think-aloud cognitive interviews (as described by Dillman, 2007) with 10 participants from the Lincoln, Nebraska community. This resulted in several changes to the original survey. The piloting procedures and results are described in Appendix A.

**Survey instrument.** Workers who responded to the Mechanical Turk invitation to participate in the main study for this dissertation on Amazon.com followed a link to complete the survey through Qualtrics, a secure online server. The full survey instrument is included in Appendix B and is described in the paragraphs that follow. In Appendix B, the item numbers were added for ease of reference in this Methods section.

***Outpatient psychological therapy definition and screening questions.*** In order to determine participants' eligibility to complete the full survey, the survey began with a definition of outpatient psychological therapy and three screening questions about participants' past participation in outpatient psychological therapy, current participation in therapy, and termination status for their most recent episode of therapy. The definition of outpatient psychological therapy and the three screening questions were based on

previous epidemiological surveys conducted by the National Institute of Mental Health to investigate the prevalence of mental disorders and their correlates in the United States, including the National Comorbidity Survey Replication (NCS-R), the National Survey of American Life (NSAL), the National Latino and Asian American Study (NLAAS), and the Collaborative Psychiatric Epidemiology Surveys (CPES). However, the definition and screening items were modified to exclude people who only completed inpatient treatment, substance use treatment, or pharmacological treatment along with those who only participated in therapy as children, since it was expected that premature termination would be influenced by very different factors (e.g., legal mandates, parents) in these circumstances than it would be in outpatient psychotherapy for adults. Participants who were currently in outpatient therapy for the first time were also excluded, since this study investigated premature termination versus completion of therapy and it was unknown whether current participants in therapy would prematurely terminate that therapy or complete it. Finally, the third screening question about termination status was modified for clarity based on feedback from participants in the pilot study (see Appendix A).

*Questions to describe the sample.* Participants who were eligible to continue with the full survey then answered several questions about their general experience with outpatient psychological therapy, including number of previous episodes of therapy (item 4) and whether or not they had ever completed (item 5) or prematurely terminated (item 6) a prior course of therapy. Although not all therapy experiences were a focus of this study, it was expected that participants who prematurely terminated their most recent therapeutic experience might respond to the survey differently if they had successfully completed therapy in the past compared to if they had never completed a course of

therapy. Therefore, it was deemed necessary to ask about completion and premature termination of services not only for the most recent therapeutic experience, but for all therapeutic experiences.

Nevertheless, in order to promote consistent responding and minimize error in self-report (Dillman, 2007), the remaining questions about participants' experience with outpatient psychological therapy asked them to consider the most recent time that they participated. As another factor that may affect the accuracy of participants' responses in describing their most recent therapeutic experience, how long ago that experience occurred was also measured in item 7. Three additional descriptive questions assessed the duration of therapy (items 8-10), since substantial evidence suggests that clients who prematurely terminate early versus late in the treatment process are significantly different from each other (e.g., Aderka et al., 2011; Pekarik, 1992a). Treatment expectations (item 11), modality (item 14), and setting (item 15) were also assessed as factors that may have affected predictors of premature termination, reasons for premature termination, and treatment outcomes of premature terminators.

Finally, participant demographic variables were measured at the end of the survey to promote response by having the more salient questions at the beginning of the questionnaire (Dillman, 2007). The demographics portion of the survey included items about age, ZIP code, gender, sexual orientation, race/ethnicity, religion/spirituality, relationship status, level of education, employment status, and yearly household income (items 64-73).

*Questions examining predictors of premature termination.* Some of the questions to describe the sample were also used to test hypotheses about predictors of

premature termination, including the questions about prior therapy experience, therapy expectations, and treatment setting as well as the participant demographic questions. Previous research on predictors of premature termination has suggested that prior therapy experience is related to premature termination. However, results have been contradictory with some finding lack of prior therapy related to increased risk of premature termination (Connelly et al., 1986; Grilo et al., 1988; Hoffman, 1985) and some finding more prior therapy related to increased risk of premature termination (Matthieu & Ivanoff, 2006; Westra et al., 2002). Thus, it was hoped that a continuous measure of number of previous therapy experiences would help to clarify its relationship with premature termination better than a dichotomous measure. Furthermore, it was assessed whether or not expectations for treatment duration were discussed at the beginning of treatment, because some research suggests clients' expectations for therapy duration may predict the actual number of sessions they attend (Callahan et al., 2014). There is also evidence for higher rates of premature termination in certain treatment settings, particularly university training clinics and college counseling centers (Callahan et al., 2014; Swift & Greenberg, 2012). Additionally, although previous research suggests that socioeconomic status, level of education, ethnic minority group membership, and age are the only client demographic variables to predict premature termination consistently, all of the items in the demographics measure were tested as potential predictors of premature termination.

Presenting problem or diagnosis is another client factor that could potentially predict premature termination, which was assessed in the questionnaire. However, because it seemed unlikely that participants would be able to accurately report their official DSM diagnoses, they were simply asked about their main reasons for seeking

treatment. Since previous research suggests that comorbid diagnoses (e.g., substance use, personality disorders) may predict premature termination, participants were given the opportunity to rank up to two reasons for seeking treatment from a list of 20 potential presenting problems (item 12). Furthermore, since not all clients choose to seek treatment for themselves, but may instead be pressured by others to seek treatment—a factor that has been related to premature termination in previous research (Pekarik & Stephenson, 1988)—referral source was also assessed (item 13).

Because some research has suggested that trainee therapists experience higher rates of premature termination (e.g., Swift & Greenbert, 2012), participants were also asked about whether or not their therapist was in graduate school at the time (item 16). Therapist gender, age, and race/ethnicity were also assessed (items 17-19) even though therapist demographic variables were not expected to predict premature termination.

Next, client-therapist interaction variables were assessed as predictors. To measure participants' perceptions of their therapists' multicultural competency, three items were derived from the Client Cultural Competency Inventory (CCCI; Switzer, Scholle, Johnson, & Kelleher, 1998) with some modification (items 20-22 in Appendix B). The CCCI was designed for use with ethnically diverse parents involved in family therapy for children with behavioral problems. Therefore, items were modified for use with clients involved in individual or group therapy for themselves. For example, "The caregiver respects my family's beliefs, customs, and ways that we do things in our family (Switzer et al., 1998, p. 487)" was modified to "My therapist respected my beliefs, customs, and the ways that we do things in my family." Each of the three items selected for use in this study had loaded on the "respect for cultural differences" factor in

psychometric analyses of the CCCI (Switzer et al., 1998). CCCI items that loaded on the “community and family involvement” and “access to care” factors were excluded from this survey for brevity and because they did not seem as relevant to the construct being measured, namely the clients’ perception of their therapists’ respect for their cultural values. Participants rated these three items on a five-point scale using *never*, *rarely*, *sometimes*, *often*, and *always* as anchor points.

To measure therapeutic alliance, participants were administered the Working Alliance Inventory-Short version, Revised (WAI-SR; Hatcher & Gillaspay, 2006) with minor modifications (items 23-35). The WAI-SR is a 12-item measure of the strength of the therapeutic alliance based on Bordin’s (1979) theory suggesting that the alliance depends on client and therapist agreement on goals for therapy, the clients’ agreement with the therapist on therapeutic tasks to address presenting problems, and the interpersonal bond between client and therapist (Hatcher & Gillaspay, 2006). Thus, along with directly measuring therapeutic alliance, the WAI-SR also measures agreement on therapeutic goals and treatment plan, additional factors shown to influence premature termination (e.g., Epperson et al., 1983). The wording of items was only slightly modified to reflect past participation in therapy as opposed to current participation. For example, “\_\_\_ and I are working towards mutually agreed upon goals” was modified to “My therapist and I worked toward mutually agreed upon goals.” Anchors were also slightly modified to match the CCCI items, such that participants rated these items on a five-point scale using *never*, *rarely*, *sometimes*, *often*, and *always* as anchor points instead of *seldom*, *sometimes*, *fairly often*, and *always*. Anchors were also modified to always be presented in the same direction rather than reversing order for certain items to reduce

confusion. Similarly, the WAI-SR items were grouped in accordance with Bordin's (1979) three theoretical factors of the alliance (i.e., goal, task, and bond) rather than mixed together for ease of responding. The WAI-SR is highly correlated with the full WAI ( $r = .94-.95$ ), suggesting that the WAI-SR is a sufficient stand-in for the full measure and allowing for reduced completion time for this survey. The WAI-SR has also demonstrated high internal consistency ( $\alpha = .91-.92$ ; Hatcher & Gillaspay, 2006). The WAI-SR also demonstrated high internal consistency in the current study ( $\alpha = .95$ ).

*Questions examining reasons for premature termination.* The next section of the survey instrument contained a series of questions about participants' reasons for terminating prematurely; as such, these items were only displayed to participants who reported prematurely terminating their most recent therapeutic experience. Thus, just prior to this section, participants answered a question about the termination status of their most recent course of therapy for a second time (time 36) as corroboration of the information provided in screening questions.

Because no measure of reasons for premature termination with established psychometrics has been created previously, items for this survey instrument were derived from a review of 22 previous studies on reasons for terminating prematurely (marked with an "\*" in the References section) and participants' feedback in survey piloting (see Appendix A). First, six broad reasons for premature termination were identified. Half of these broad reasons were derived from the three broad reasons described in the introduction: *environmental obstacles*, *problem improvement*, and *dissatisfaction with services*. Next, as suggested by Todd and colleagues (2003), "unmotivated for therapy" was added as another broad reason, since Pekarik and Finney-Owen (1987) found

“resistance” to be one of the reasons for premature termination most commonly cited by therapists. Then, “embarrassed by therapy/lack of support for therapy” was added, because previous epidemiological studies (i.e., NCS-R, NSAL, NLAAS) have included concern with others’ perceptions of therapy as a reason for terminating prematurely. Furthermore, this perceived stigma did not seem to fit into any of the aforementioned broad reasons. Finally, “relapse of mental health or substance use problem” was added based on feedback from participants in the pilot study (see Appendix A). Because previous studies have shown that most clients provide only one reason for terminating prematurely even when allowed to answer an open-ended question or select multiple options (e.g., Todd et al., 2003; Westmacott & Hunsley, 2010), participants were instructed to select only one broad reason from the seven described above (item 37).

In order to gather more detailed information about these reasons for premature termination without overly burdening participants, the survey then branched into a separate set of items for each of the six broad reasons (items 38-49). Thus, based on the broad reason they selected, participants were instructed to rate the importance of several specific motivational factors in their decision to prematurely terminate therapy. All items were rated on a four-point scale from *Not at all important* to *Very important*. Finally, participants were given the opportunity to provide additional comments about their reasons for terminating prematurely and any differences from previous therapy they may have completed in open-ended questions (item 50). For the specific motivational factors measured for each of the six broad reasons for premature termination, please see the full survey instrument in Appendix B.

*Questions examining outcomes of premature terminators.* Next, all participants—both premature terminators and treatment completers—responded to 13 closed-ended questions about their therapeutic outcomes. First, participants' overall satisfaction with services was assessed using a slightly modified version of the Client Satisfaction Questionnaire-8 (CSQ-8; Larsen, Attkisson, Hargreaves, & Nguyen, 1979). The wording of items was slightly modified to reflect the fact that the survey was not being administered by the agency that provided the treatment. For example, "To what extent has our program met your needs?" was modified to say "To what extent did the treatment program meet your needs?" with participants again instructed to consider their most recent experience in therapy. All items were rated on a four-point Likert-type scale; however, the anchors differed across items (see items 51-58 in Appendix B). The CSQ-8 has shown high internal consistency ( $\alpha = .93$ ) and has demonstrated a correlation with premature termination in prior research (Larsen et al., 1979). The CSQ-8 also showed high internal consistency in the current study ( $\alpha = .97$ ).

The next two items assessed problem improvement. Unfortunately, because participants had a variety of presenting problems and no pre-treatment baseline, a standardized symptom measure could not be used to measure therapeutic outcome. Therefore, participants were simply asked about the current state of the problem for which they most recently sought therapy (item 59). They were asked to select one response describing their problem as *much worse*, *slightly worse*, *approximately the same*, *slightly improved*, or *much improved*. Participants were then asked to what they attribute any changes in their problem (i.e., therapy, change in life circumstances, their own efforts, or encouragement by someone else) (item 60).

Finally, impairment in current functioning was assessed with the Sheehan Disability Scale (SDS; Sheehan, 1983). The SDS is a three item self-report measure of treatment outcome that assesses functional impairment in work/school, social life/leisure activities, and family life/home responsibilities due to participants' psychological problems or symptoms (items 61-63). The degree of disruption in these three life areas were rated on a 10-point visual-analog scale from 0 = *not at all* to 10 = *extremely*. The SDS has demonstrated high internal consistency ( $\alpha = .89$ ) in previous research and did in the current study as well ( $\alpha = .89$ ).

### **4.3. Procedures**

The survey was presented in a computer-based format in order to enhance participants' sense of privacy and reduce social desirability in answering questions about their reasons for prematurely terminating therapy (Mash & Hunsley, 1993; Sirey et al., 2001). An online survey was also expected to facilitate recruitment of a large number of participants with a variety of experiences with psychotherapy. Participants accessed the survey via a link to a secure server (Qualtrics) provided when they elected to complete the study on Mechanical Turk. At this point, participants were able to view and complete the informed consent for the study. Mechanical Turk workers can still opt out of participating at any time after selecting the task. Participants who consented to the study, then answered the first three survey questions. Those who indicated that they had never participated in outpatient psychotherapy or were currently participating in psychotherapy for the first time were then shown a screen informing them that they had completed the task. Those who indicated that they had previously participated in outpatient psychotherapy as an adult continued on with the rest of the survey. At the end of the

survey, all participants were presented with a debriefing form and instructed to enter a standard code in order to verify their participation and receive compensation through Mechanical Turk. Participants who only completed the screening questions were compensated \$0.05 and those who completed the full survey were compensated \$1.00. Participants were compensated within 24 hours of submitting their survey responses. All procedures were approved by the University of Nebraska-Lincoln's Institutional Review Board (IRB).

#### **4.4. A Priori Power Analyses**

*A priori* power analyses were conducted to determine the sample size needed to have at least an 80 percent chance of finding the proposed effects, if they existed. Based on meta-analyses of predictors of premature termination, effect sizes for significant client sociodemographic variables ranged from  $d = .16$  to  $d = .37$  (Wierzbicki & Pekarik, 1993; Swift & Greenberg, 2012), while the effect size for the relationship between premature termination and therapeutic alliance was found to be  $d = .55$  (Sharf et al., 2010). In order to find differences between premature terminators and treatment completers on these factors, bivariate power tables recommended a total sample size between about 64 (assuming the largest effect size of  $d = .55$ ) and 783 (assuming the lowest effect size of  $d = .16$ ,  $r = .08$ ). Studies comparing early and late premature terminators (e.g., Aderka et al., 2011; Pekarik, 1992b) on predictors of premature termination and treatment outcome have generally found effect sizes around  $r = .3$ , for which bivariate power tables suggest a sample of approximately 85 premature terminators. Thus, it was determined that a sample of 100 premature terminators and 100 treatment completers should be sufficient

to detect moderate effect sizes. This study's actual sample included 157 premature terminators and 121 treatment completers.

## CHAPTER 5: RESULTS

### 5.1. Preliminary Data Procedures

For a majority of the analyses, all participants who reported prematurely terminating their most recent outpatient therapy experience were grouped together and contrasted with participants who reported completing their most recent therapy experience. However, in order to explore individual differences among those who prematurely terminated at different points in the treatment process, some analyses compared early and late premature terminators with treatment completers.

Three sessions was planned as the cut-off for early versus late premature termination, since Pekarik (1983a; 1992a) found significantly different treatment outcomes between those who prematurely terminated after one or two sessions and those who prematurely terminated after at least three sessions. However, in this study, only 14 premature terminators indicated that they had attended one or two sessions, which would have been insufficient for analyses. Consequently, six sessions was used as the cut-off for early versus late premature termination as suggested in previous research (Aderka et al., 2011; Garlfield, 1994; Hynan, 1990). Because participants were not directly asked whether or not they attended at least six sessions, the number of sessions attended had to be estimated based on self-reported frequency of sessions and duration of therapy. This estimated number of sessions was then compared with participants' selected number of sessions attended (i.e., *1-2 sessions*, *3-20 sessions*, or *over 20 sessions*). Data from 11 premature terminators were treated as missing for this variable due to large discrepancies

between their estimated and selected number of sessions attended (>5 sessions difference). Nevertheless, a six session cut-off still provided sufficiently sized subgroups for analyses with 32 early premature terminators and 114 late premature terminators.

Throughout the remainder of this dissertation, analyses of “termination status” refer to comparisons of the full sample of 121 treatment completers with the full sample of 157 premature terminators unless otherwise specified. The terms “early premature termination/terminators” are used to specify the subgroup of 32 participants who prematurely terminated prior to session six while the terms “late premature termination/terminators” are used to specify the subgroup of 114 participants who prematurely terminated after attending at least six sessions.

## **5.2. Hypothesis-Specific Analyses**

**Predictors of premature termination.** First, a series of bivariate analyses were conducted to test the relationship between the various potential predictors of premature termination and participants’ self-reported termination status for their most recent experience in psychotherapy.

*Client factors—sociodemographic variables.* Separate Pearson’s Chi-square tests were performed to examine the relationship between termination status and the following categorical client variables: race/ethnicity, gender, sexual orientation, relationship status, religion/spirituality, education level, employment status, and yearly household income. Gender and sexual orientation were the only client sociodemographic variables significantly related to termination status. There results were inconsistent with the hypothesis that race/ethnicity, education level, household income, and age would be the only client sociodemographic variables significantly related to premature termination. As

shown in Figure 5.1, results indicated that women tended to prematurely terminate therapy, whereas men tended to complete therapy ( $X^2(1) = 5.738, p = .017, r = .145$ ). Participants who identified as transgender ( $N = 3$ ) or “other” ( $N = 2$ ) were excluded from this analysis due to small sample size. Similarly, cell counts were too small to perform a Chi-square test including each of the sexual orientation categories identified by participants, so the sexual orientation data was re-coded into two categories: heterosexual and LGBQA (i.e., lesbian, gay, bisexual, queer, asexual). Findings demonstrated that participants who identified as LGBQA tended to prematurely terminate therapy more than they completed therapy, whereas participants who identified as heterosexual tended to prematurely terminate therapy or complete therapy at similar rates ( $X^2(1) = 6.110, p = .013, r = .149$ ) as shown in Figure 5.2.

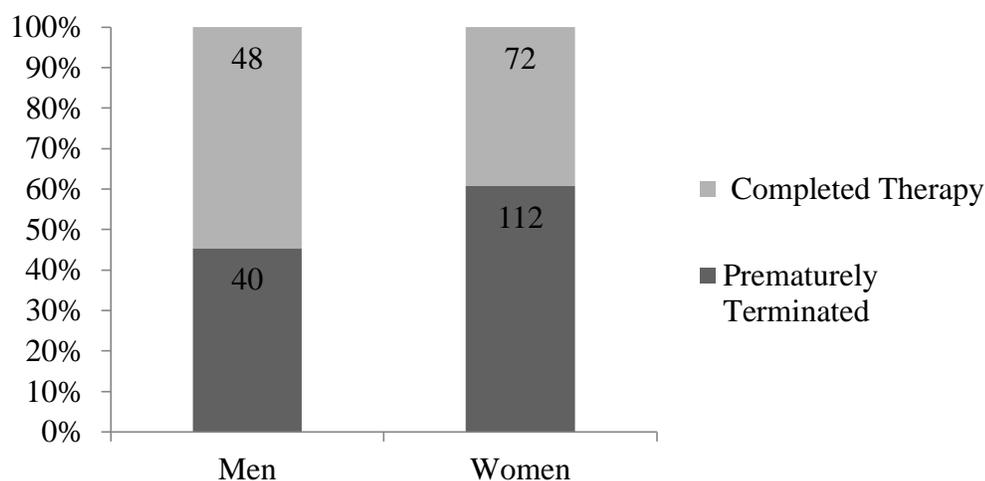


Figure 5.1. Proportion of all participants who prematurely terminated vs. completed therapy by gender

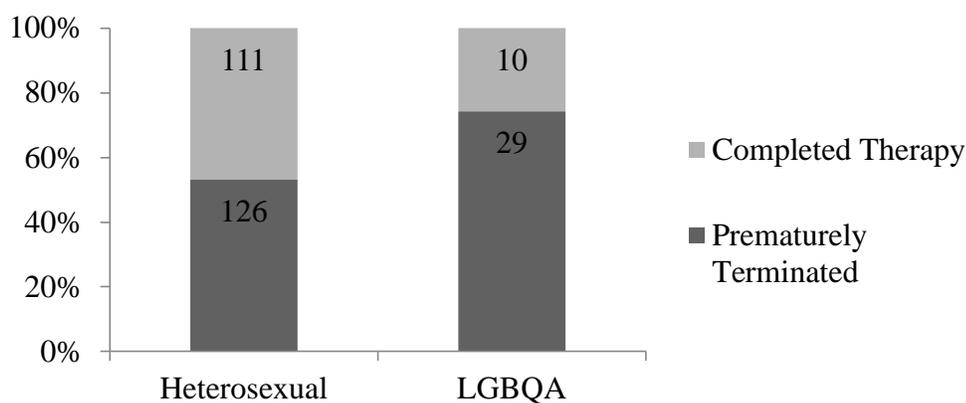


Figure 5.2. Proportion of all participants who prematurely terminated vs. completed therapy by sexual orientation

Because over half of the cell counts were too small to perform a Chi-square test including each of the race/ethnicity categories identified by participants, the race/ethnicity data was also re-coded into two categories: White and Non-White. However, contrary to the hypothesis that participants who identified as Non-White would report having prematurely terminated their most recent therapy at a higher rate than participants who identified as White, race/ethnicity and termination status were not significantly related ( $X^2(1) = 0.082, p = .775$ ). Also inconsistent with hypotheses, education level ( $X^2(4) = 3.599, p = .463$ ) and yearly household income ( $X^2(4) = 8.764, p = .067$ ) were not related to likelihood of premature termination. Consistent with hypotheses, there was no relationship between termination status and employment status ( $X^2(5) = 1.748, p = 0.883$ ), relationship status ( $X^2(2) = 1.757, p = .415$ ), religion/spirituality ( $X^2(1) = 1.776, p = .183$ ), or U.S. region of residence ( $X^2(3) = 3.075, p = .380$ ). Finally, the relationship between client age and termination status was tested using a one-way between-groups ANOVA. Contrary to the hypothesis that younger age would be associated with increased risk of premature termination, premature terminators were not significantly younger ( $M =$

34.03,  $SD = 11.15$ ) than treatment completers ( $M = 36.64$ ,  $SD = 12.43$ ;  $F(1, 276) = 3.395$ ,  $p = 0.066$ ). Table 5.1 shows the  $N$ s for these client sociodemographic variables.

Table 5.1

*Numbers and Percentages of All Premature Terminators and Treatment Completers in Each Category of the Client Sociodemographic Variables*

Client Sociodemographic Variables	All Premature Terminators $N$ (%)	Treatment Completers $N$ (%)	Full Sample $N$ (%)
Gender	<u><math>N = 152</math></u>	<u><math>N = 120</math></u>	<u><math>N = 272</math></u>
Men	40 (26.3)	48 (40.0)	88 (32.4)
Women	112 (73.7)	72 (60.0)	184 (67.6)
Sexual Orientation	<u><math>N = 155</math></u>	<u><math>N = 121</math></u>	<u><math>N = 276</math></u>
Heterosexual	126 (81.3)	111 (91.7)	237 (85.9)
LGBQA	29 (18.7)	10 (8.3)	39 (14.1)
Race/Ethnicity	<u><math>N = 157</math></u>	<u><math>N = 121</math></u>	<u><math>N = 278</math></u>
White	129 (82.2)	101 (83.5)	230 (82.7)
Non-White	28 (17.8)	20 (16.5)	48 (17.3)
Education Level	<u><math>N = 155</math></u>	<u><math>N = 121</math></u>	<u><math>N = 276</math></u>
High school diploma/GED	12 (7.7)	14 (11.6)	26 (2.2)
Some college/in college	60 (38.7)	35 (28.9)	95 (34.4)
College degree	60 (38.7)	50 (41.3)	110 (39.9)
Advanced degree	17 (11.0)	17 (14.0)	34 (12.3)
Trade school/technical training	6 (3.9)	5 (4.1)	11 (4.0)
Yearly Household Income	<u><math>N = 157</math></u>	<u><math>N = 121</math></u>	<u><math>N = 278</math></u>
Below \$25,000	48 (30.6)	32 (26.4)	80 (28.8)
\$25,000-\$50,000	56 (35.7)	48 (39.7)	104 (37.4)
\$50,000-\$75,000	29 (18.4)	22 (18.2)	51 (18.3)
\$75,000-\$100,000	10 (6.4)	16 (9.0)	26 (9.4)
Over \$100,000	14 (8.9)	3 (2.5)	17 (6.1)
Religion/Spirituality	<u><math>N = 155</math></u>	<u><math>N = 119</math></u>	<u><math>N = 274</math></u>

Atheist/agnostic	79 (51.0)	51 (42.9)	130 (47.4)
Religious/spiritual	76 (49.0)	68 (57.1)	144 (52.6)
Relationship Status	<u>N = 156</u>	<u>N = 121</u>	<u>N = 277</u>
Single	38 (24.4)	34 (28.1)	72 (26.0)
Relationship	101 (64.7)	79 (65.3)	180 (65.0)
Divorced	17 (10.9)	8 (6.6)	25 (9.0)
Employment Status	<u>N = 156</u>	<u>N = 121</u>	<u>N = 277</u>
Full-time worker	60 (38.5)	53 (43.8)	113 (40.8)
Part-time worker	31 (19.9)	19 (15.7)	50 (18.1)
Stay-at-home parent	15 (9.6)	13 (10.7)	28 (10.1)
Student	20 (12.8)	12 (9.9)	32 (11.6)
Unemployed	22 (14.1)	18 (14.9)	40 (14.4)
Disabled	8 (5.1)	6 (5.0)	14 (5.1)
U.S. Region of Residence	<u>N = 157</u>	<u>N = 121</u>	<u>N = 278</u>
Northeast	35 (22.3)	30 (24.8)	65 (23.4)
South	59 (37.6)	34 (28.1)	93 (33.5)
Midwest	29 (18.5)	29 (24.0)	58 (20.9)
West	34 (21.7)	28 (23.1)	62 (22.3)

In order to examine differences in predictors of premature termination across different stages of treatment, participants were then divided into three independent groups: early premature terminators, late premature terminators, and treatment completers. Then, the aforementioned Pearson's Chi-square tests were each repeated twice: first, comparing early premature terminators to treatment completers and second, comparing late premature terminators to treatment completers. However, like the original analyses contrasting all premature terminators with treatment completers, race/ethnicity ( $X^2 (1) = 0.311, p = .577$ ), education level ( $X^2 (2) = 1.646, p = .200$ ), and yearly

household income ( $X^2(2) = 1.833, p = .400$ ) did not significantly differentiate between early premature terminators and treatment completers. Similarly, race/ethnicity ( $X^2(1) = 0.043, p = .836$ ), education level ( $X^2(1) = 0.603, p = .437$ ), and yearly household income ( $X^2(2) = 0.751, p = .687$ ) did not significantly differentiate between late premature terminators and treatment completers either. Furthermore, a one-way 3-between groups ANOVA showed age was still not significantly related to termination status using the three groups ( $F(2, 264) = 2.857, p = 0.059$ ). Early premature terminators ( $M = 31.13, SD = 9.78$ ) were not significantly younger than late premature terminators ( $M = 34.91, SD = 11.57$ ) or treatment completers ( $M = 36.64, SD = 12.43$ ). These results were inconsistent with the hypothesis that the effect sizes for race/ethnicity, level of education, yearly household income, and age would be greater when comparing treatment completers to participants who prematurely terminated prior to session six than to those who prematurely terminated after at least six sessions.

No hypotheses were made about the differences in predictors of premature termination across different stages of treatment for the remaining client sociodemographic variables. Nevertheless, based on limited previous research suggesting that late premature terminators are more similar to treatment completers than to early premature terminators (e.g., Aderka et al., 2011; Fiester et al., 1974), it might be expected that the effect sizes for those demographic variables that were significantly related to termination status across the treatment process (i.e., gender and sexual orientation) would be greater for participants who prematurely terminated prior to session six than those who prematurely terminated after session six. Surprisingly, gender ( $X^2(1) = 0.624, p = .429$ ) and sexual orientation ( $X^2(1) = 2.971, p = .085$ ) did not significantly differ between early

premature terminators and treatment completers, but they did significantly differ between late premature terminators and treatment completers. Specifically, women tended to prematurely terminate after at least six sessions, whereas men tended to complete therapy ( $X^2(1) = 6.462, p = .011, r = .167$ ) as shown in Figure 5.3. In addition, participants who identified as LGBQA tended to prematurely terminate after at least six sessions, whereas those who identified as heterosexual tended to complete treatment ( $X^2(1) = 5.544, p = .019, r = .154$ ) as shown in Figure 5.4.

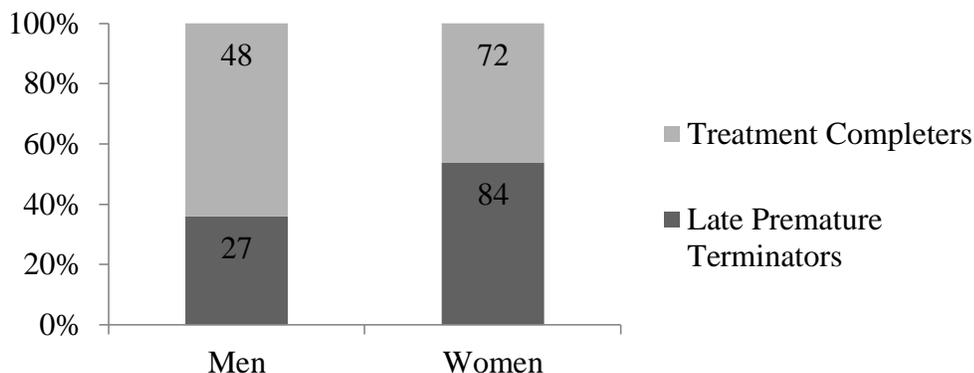


Figure 5.3. Proportion of participants who completed therapy vs. prematurely terminated therapy after at least six sessions by gender

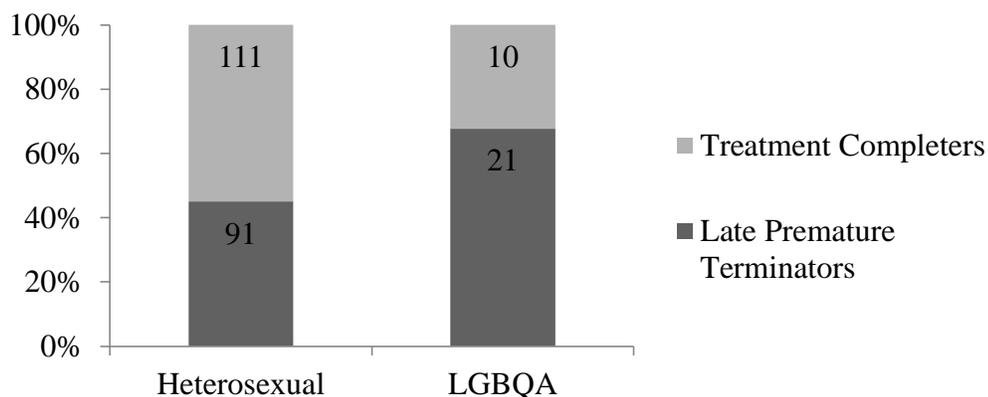


Figure 5.4. Proportion of participants who completed therapy vs. prematurely terminated therapy after at least six sessions by sexual orientation

Finally, even when termination status was broken down into early premature terminators, late premature terminators, and treatment completers, there was still no relationship between termination status and the other client sociodemographic variables. Religion ( $X^2 (1) = 3.357, p = .067$ ), relationship status ( $X^2 (2) = 0.536, p = .765$ ), employment status ( $X^2 (4) = 1.838, p = .766$ ), and region of U.S. residence ( $X^2 (3) = 5.181, p = .159$ ) did not significantly differentiate between early premature terminators and treatment completers nor between late premature terminators and treatment completers (religion:  $X^2 (1) = 1.047, p = .306$ ; relationship status:  $X^2 (2) = 2.494, p = .287$ ; employment status:  $X^2 (4) = 1.869, p = .760$ ; region of U.S. residence:  $X^2 (3) = 1.947, p = .584$ ). The  $N$ s for these sociodemographic variables are shown in Table 5.2.

Table 5.2

*Numbers and Percentages of Early Premature Terminators, Late Premature Terminators, and Treatment Completers Endorsing Each Client Demographic Variable*

Client Demographic Variables	Early Premature Terminators <i>N</i> (%)	Late Premature Terminators <i>N</i> (%)	Treatment Completers <i>N</i> (%)	Full Sample <i>N</i> (%)
Gender	<u><i>N</i> = 31</u>	<u><i>N</i> = 111</u>	<u><i>N</i> = 120</u>	<u><i>N</i> = 262</u>
Men	10 (32.2)	27 (24.3)	48 (40.0)	85 (32.4)
Women	21 (67.7)	84 (75.7)	72 (60.0)	177 (67.6)
Sexual Orientation	<u><i>N</i> = 32</u>	<u><i>N</i> = 112</u>	<u><i>N</i> = 121</u>	<u><i>N</i> = 265</u>
Heterosexual	26 (81.3)	91 (81.3)	111 (91.7)	228 (86.0)
LGBQA	6 (18.8)	21 (18.3)	10 (8.3)	37 (14.0)
Race/Ethnicity	<u><i>N</i> = 32</u>	<u><i>N</i> = 114</u>	<u><i>N</i> = 121</u>	<u><i>N</i> = 267</u>
White	28 (87.5)	94 (82.5)	101 (83.5)	223 (83.5)
Non-White	4 (12.5)	20 (17.5)	20 (16.5)	44 (16.5)
Education Level	<u><i>N</i> = 32</u>	<u><i>N</i> = 112</u>	<u><i>N</i> = 121</u>	<u><i>N</i> = 265</u>

Less than college/trade school degree	17 (53.1)	51 (45.5)	49 (40.5)	117 (44.2)
Trade school/college/advanced degree	15 (46.9)	61 (54.5)	72 (59.5)	148 (55.8)
Yearly Household Income	<u>N = 32</u>	<u>N = 114</u>	<u>N = 121</u>	<u>N = 267</u>
Below \$25,000	11 (34.4)	33 (28.9)	32 (26.4)	76 (28.5)
\$25,000-\$50,000	14 (43.8)	39 (34.2)	48 (39.7)	101 (37.8)
Over \$50,000	7 (21.9)	42 (36.8)	41 (33.9)	90 (33.7)
Religion/Spirituality	<u>N = 31</u>	<u>N = 113</u>	<u>N = 119</u>	<u>N = 263</u>
Atheist/agnostic	19 (61.3)	56 (49.6)	51 (42.9)	126 (47.9)
Religious/spiritual	12 (38.7)	57 (50.4)	68 (57.1)	137 (52.1)
Relationship Status	<u>N = 32</u>	<u>N = 113</u>	<u>N = 121</u>	<u>N = 266</u>
Single	7 (21.9)	27 (24.0)	34 (28.1)	68 (25.6)
Relationship	23 (71.9)	72 (63.7)	79 (65.3)	174 (65.5)
Divorced	2 (6.3)	14 (12.4)	8 (6.6)	24 (9.0)
Employment Status	<u>N = 32</u>	<u>N = 113</u>	<u>N = 121</u>	<u>N = 266</u>
Full-time worker	10 (31.3)	44 (38.9)	53 (43.8)	107 (40.2)
Part-time worker	6 (18.8)	23 (20.4)	19 (15.7)	48 (18.0)
Stay-at-home parent	5 (15.6)	10 (8.8)	13 (10.7)	28 (10.5)
Student	4 (12.5)	15 (13.3)	12 (9.9)	31 (11.7)
Unemployed/disabled	7 (21.9)	21 (18.6)	24 (19.8)	52 (19.5)
U.S. Region of Residence	<u>N = 32</u>	<u>N = 114</u>	<u>N = 121</u>	<u>N = 267</u>
Northeast	4 (12.5)	27 (23.7)	30 (24.8)	61 (22.8)
South	15 (46.9)	39 (34.2)	34 (28.1)	88 (33.0)
Midwest	8 (25.0)	20 (17.5)	29 (24.0)	57 (21.3)
West	5 (15.6)	28 (24.6)	28 (23.1)	61 (22.8)

*Client factors—clinical variables.* In order to examine whether participants' self-reported presenting problems would be related to termination status within the entire sample, it was necessary to recode the 20 potential reasons for seeking treatment into four

categories based on the three most frequently reported primary presenting problems: depression, anxiety, relationship problems, and other. Then, a Pearson's Chi-square test was performed using participants' primary presenting problem as the independent variable and termination status as the dependent variable. As shown in Figure 5.5, results demonstrated that participants who identified depression as their primary reason for seeking treatment were more likely to report prematurely terminating therapy than participants who identified relationship problems ( $X^2(1) = 7.706, p = .006, r = .259$ ) or other presenting problems ( $X^2(1) = 5.827, p = .016, r = .183$ ) as their primary reasons for seeking treatment; however, rates of premature termination did not significantly differ from these other groups for those who identified anxiety as their primary reason for seeking treatment ( $X^2(1) = 3.182, p = .074, r = .138$ ). A second Pearson's Chi-square test revealed that participants who identified depression as either one of their two main reasons for seeking treatment tended to prematurely terminate therapy, whereas participants who did not identify depression as one of their main reasons for seeking treatment tended to complete therapy ( $X^2(1) = 15.342, p < .001, r = .235$ ) as shown in Figure 5.6. These results were inconsistent with the hypothesis that participants' self-reported presenting problems would not be related to premature termination within the entire sample, except when substance use was identified as one of participants' two main presenting problems. Unfortunately, too few participants ( $N = 7$ ) identified substance use as one of their primary reasons for seeking treatment to test the hypothesis that these participants would be more likely to terminate prematurely than participants who identified other presenting problems.

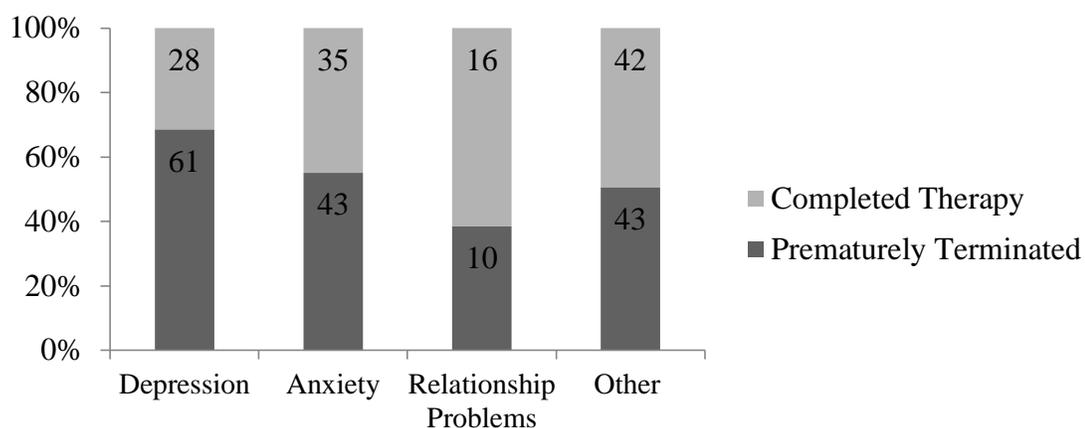


Figure 5.5. Proportion of all participants who prematurely terminated vs. completed therapy by primary presenting problem

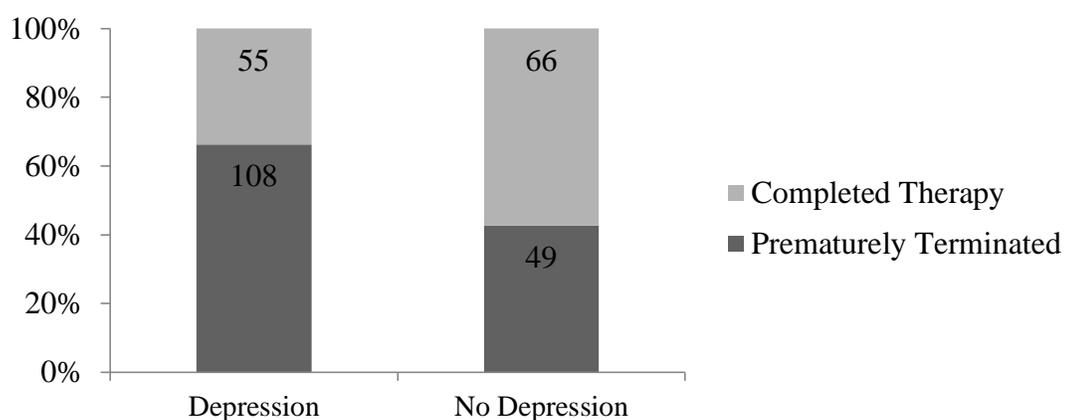


Figure 5.6. Proportion of all participants who prematurely terminated vs. completed therapy by whether or not they identified depression as a reason for seeking treatment

Finally, in order to test the hypothesis that early premature terminators would be more likely to identify depression as one of their two main presenting problems than late premature terminators or treatment completers, participants were divided into three independent groups instead of two. Then, a Pearson's Chi-square test was completed comparing participants' endorsement of depression as a primary reason for seeking treatment across these three groups. Contrary to this hypothesis, late premature

terminators were actually more likely to endorse depression as one of their main reasons for seeking treatment than either early premature terminators ( $X^2(1) = 4.048, p = .044, r = .166$ ) or treatment completers ( $X^2(1) = 14.804, p < .001, r = .254$ ). These results are shown in Figure 5.7.

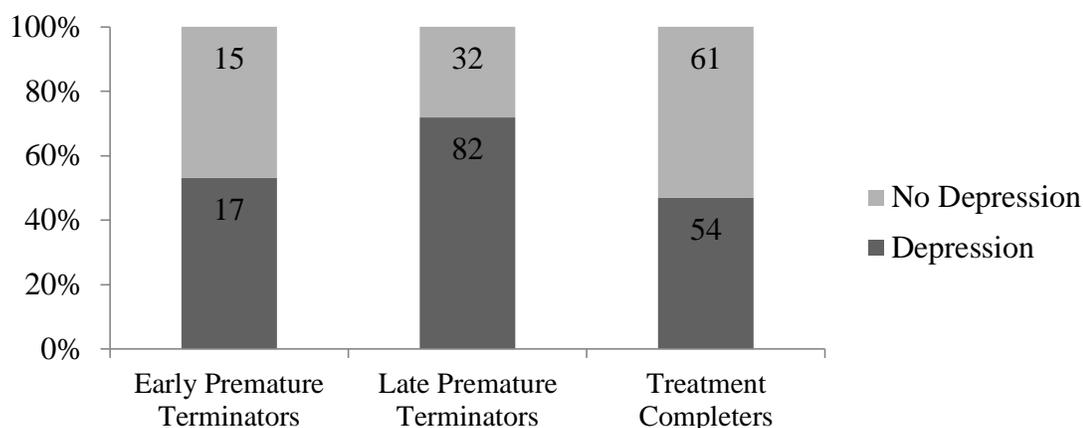


Figure 5.7. Proportion of participants who identified depression as a reason for seeking treatment by termination status

**Therapist factors.** Three separate Pearson's Chi-square tests were performed to examine the relationship between participants' termination status and the following demographic characteristics they ascribed to their most recent therapist. As with client demographics, therapist race/ethnicity data was re-coded into two categories (i.e., White and Non-White) to provide sufficient cell sizes. Consistent with expectations, therapist gender ( $X^2(1) = 1.507, p = .220$ ), age ( $X^2(2) = 3.527, p = .171$ ), and race/ethnicity ( $X^2(1) = 1.397, p = .237$ ) were not significantly related to premature termination.

To investigate whether higher rates of premature termination would be reported for therapists with less previous experience, a Pearson's Chi-square test was conducted with participants' termination status as the dependent variable and therapists' level of

experience as the independent variable. Contrary to the hypothesis that participants with therapists who were still in graduate school during their most recent therapy episode would be more likely to report having prematurely terminated than participants with therapists who were no longer in graduate school, therapist experience was not significantly related to premature termination ( $X^2(2) = 2.558, p = .278$ ). The  $N$ s for these therapist variables are summarized in Table 5.3.

Table 5.3

*Numbers and Percentages of All Premature Terminators and Treatment Completers Endorsing Each Therapist Variable*

Therapist Variables	All Premature Terminators <i>N</i> (%)	Treatment Completers <i>N</i> (%)	Full Sample <i>N</i> (%)
Gender	<u><i>N</i> = 156</u>	<u><i>N</i> = 120</u>	<u><i>N</i> = 276</u>
Men	50 (32.1)	47 (39.2)	97 (35.1)
Women	106 (67.9)	73 (60.8)	179 (64.9)
Race/Ethnicity	<u><i>N</i> = 157</u>	<u><i>N</i> = 121</u>	<u><i>N</i> = 278</u>
White	141 (89.8)	103 (85.1)	244 (87.8)
Non-White	16 (10.2)	18 (14.9)	34 (12.2)
Age	<u><i>N</i> = 156</u>	<u><i>N</i> = 118</u>	<u><i>N</i> = 274</u>
Under 30 years old	10 (6.4)	14 (11.9)	24 (8.8)
30 to 60 years old	136 (87.2)	100 (84.7)	236 (86.1)
Over 30 years old	10 (6.4)	4 (3.4)	14 (5.1)
Experience Level/Student Status	<u><i>N</i> = 155</u>	<u><i>N</i> = 121</u>	<u><i>N</i> = 276</u>
In graduate school	8 (5.2)	12 (9.9)	20 (7.2)
No longer in graduate school	119 (76.8)	91 (75.2)	210 (76.1)
Unknown	28 (18.1)	18 (14.9)	46 (16.7)

***Client-therapist interaction factors.*** The relationships between termination status and the client-therapist interaction factors, multicultural competence and therapeutic alliance, were tested using point-biserial correlations, since these variables were operationalized as continuous scores on the Client Cultural Competence Inventory (CCCI; Switzer et al., 1998) and the Working Alliance Inventory-Short Version-Revised (WAI-SR; Hatcher & Gillaspay, 2006), respectively. Consistent with hypotheses, higher levels of perceived multicultural competence ( $r = -.138, p = .021$ ) and a stronger therapeutic alliance ( $r = -.353, p < .001$ ) were both related to a lower likelihood of premature termination within the full sample.

Two one-way 4-between-groups ANOVAs were performed to test the hypothesis that participants who prematurely terminated due to *dissatisfaction with services* would report a significantly weaker therapeutic alliance and less perceived multicultural competence of their therapist than participants who reported prematurely terminating for any of the other broad reasons. For each ANOVA, the grouping variable was reason for premature termination (i.e., *external difficulties/environmental obstacles; dissatisfaction with therapy, therapist, or agency, unmotivated for therapy, and no longer needed therapy/problem improved*). Participants who identified *embarrassed by therapy or relapse of mental health or substance use problem* as their reasons for prematurely terminating therapy were excluded from these analyses due to small sample sizes. The dependent variables for these ANOVAs were strength of the therapeutic alliance and perceived multicultural competence of the therapist as operationalized by total scores on the WAI-SR (Hatcher & Gillaspay, 2006) and the three items of the CCCI (Switzer et al., 1998), respectively. Consistent with the hypothesis, participants who selected

*dissatisfaction with therapy, therapist, or agency* as their main reason for premature termination reported a significantly weaker therapeutic alliance ( $M = 33.41, SD = 10.63$ ) than participants who selected *no longer needed therapy/problem improved* ( $M = 48.05, SD = 7.31$ ), *external difficulties/environmental obstacles* ( $M = 46.14, SD = 7.79$ ), or *unmotivated for therapy* ( $M = 41.00, SD = 9.07$ ) (HSD minimum mean difference = 5.41;  $F(3, 143) = 21.556, MSE = 79.475, p < .001$ ). Partially consistent with the hypothesis, participants who selected *dissatisfaction with therapy, therapist, or agency* as their reason for premature termination reported significantly less perceived multicultural competence of their therapist ( $M = 12.375, SD = 2.48$ ) than participants who selected *external difficulties/environmental obstacles* ( $M = 13.89, SD = 1.16$ ), but not participants who selected *no longer needed therapy/problem improved* ( $M = 13.25, SD = 1.41$ ) or *unmotivated for therapy* ( $M = 13.04, SD = 1.85$ ) (HSD minimum mean difference = 1.11;  $F(3, 145) = 6.103, MSE = 3.319, p = .001$ ).

**Treatment factors.** Separate Pearson's Chi-square tests were performed to examine the relationships between termination status and the following categorical treatment factors: referral source, treatment setting, and expectations for treatment duration. Contrary to the hypothesis that participants who self-referred for therapy would be less likely to have prematurely terminated their most recent therapeutic experience compared to participants who reported feeling pressured to seek treatment by anyone else, referral source was not significantly related to termination status ( $X^2(2) = 0.297, p = .862$ ). With respect to treatment setting, it was found that participants who sought treatment from hospital outpatient psychiatric clinics were more likely to prematurely terminate therapy than participants who sought treatment from college counseling centers

( $X^2(1) = 7.308, p = .007, r = .333$ ), community mental health centers ( $X^2(1) = 3.913, p = .048, r = .217$ ), private practices ( $X^2(1) = 6.886, p = .009, r = .198$ ), or other treatment settings ( $X^2(1) = 12.642, p < .001, r = .524$ ). These results are shown in Figure 5.8 below. They are inconsistent with the hypothesis that participants who participated in treatment at a university training clinic or college counseling center would be more likely to report having prematurely terminated their most recent therapeutic experience than participants who participated in treatment at other settings.

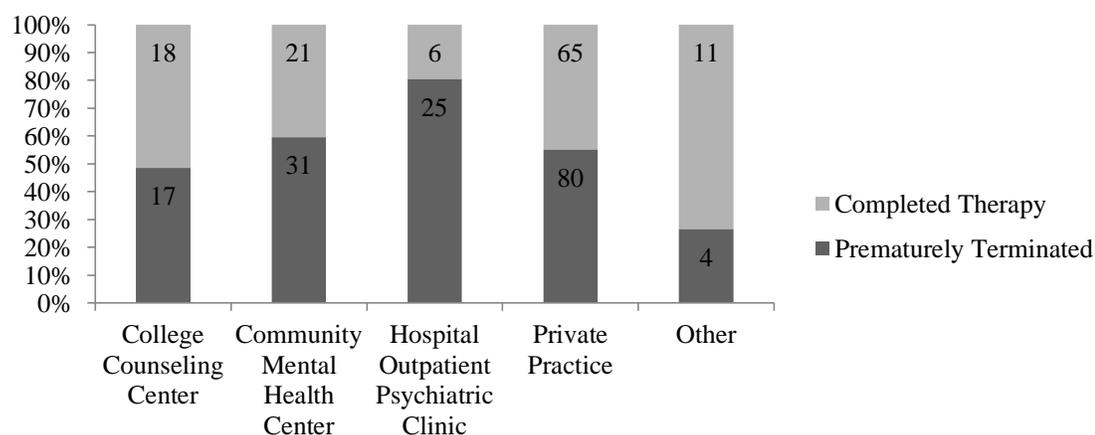


Figure 5.8. Proportion of participants who prematurely terminated vs. completed therapy by treatment setting

Contrary to the hypothesis that participants who reported discussing expectations for treatment duration would be less likely to prematurely terminate compared to participants who reported no discussion of expectations for treatment duration, there was not a significant relationship between termination status and expectations for treatment duration ( $X^2(2) = 2.615, p = .271$ ).

Finally, exploratory Pearson's Chi-square tests were performed to examine the relationship between participants' termination status for their most recent experience in

therapy and participants' history of prematurely terminating or completing any previous episode of outpatient psychotherapy. As might be expected, participants who reported that they had ever prematurely terminated therapy in the past tended to report also prematurely terminating their most recent episode of psychotherapy, while participants who reported never prematurely terminating therapy before tended to report completing their most recent episode of psychotherapy ( $X^2(1) = 162.506, p < .001, r = .765$ ).

Similarly, participants who reported that they had ever completed therapy in the past tended to report also completing their most recent episode of psychotherapy, while participants who reported never completing therapy before tended to report prematurely terminating their most recent episode of psychotherapy ( $X^2(1) = 147.547, p < .001, r = .729$ ). These results are shown in Figures 5.9 and 5.10 and the *N*s for all treatment variables are summarized in Table 5.3.

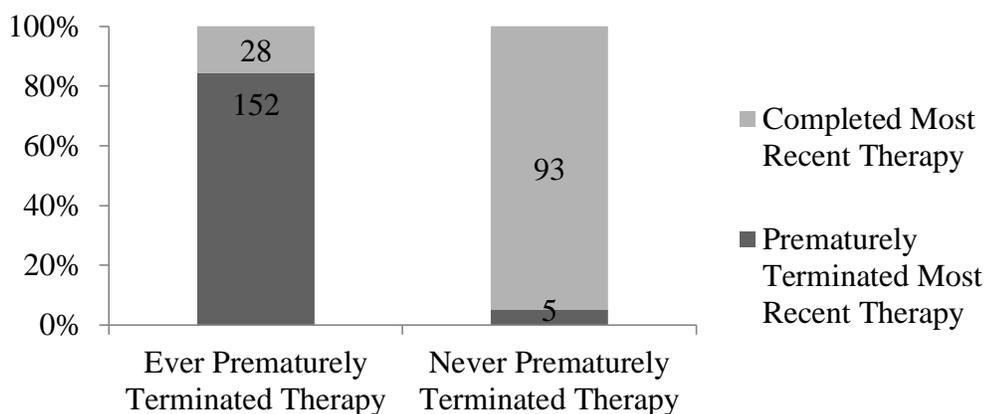


Figure 5.9. Proportion of participants who completed their most recent therapy vs. prematurely terminated their most recent therapy by history of premature termination

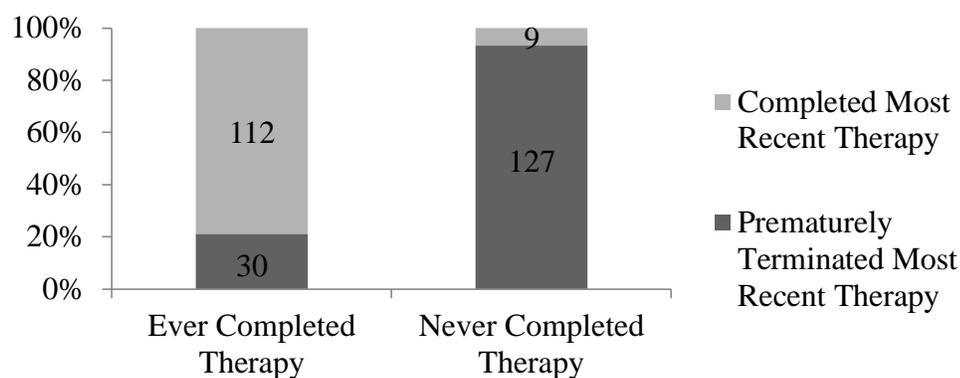


Figure 5.10. Proportion of participants who completed their most recent therapy vs. prematurely terminated their most recent therapy by history of therapy completion

Table 5.4

*Numbers and Percentages of All Premature Terminators and Treatment Completers Endorsing Each Treatment Variable*

Treatment Variables	All Premature Terminators <i>N</i> (%)	Treatment Completers <i>N</i> (%)	Full Sample <i>N</i> (%)
Referral Source	<i>N</i> = 157	<i>N</i> = 121	<i>N</i> = 278
Self-referred	76 (48.4)	59 (48.8)	135 (48.6)
Self-referred with encouragement	50 (31.8)	41 (33.9)	91 (32.7)
Other-referred/External pressure	31 (19.7)	21 (17.4)	52 (18.7)
Treatment Setting	<i>N</i> = 157	<i>N</i> = 121	<i>N</i> = 278
College counseling center	17 (10.8)	18 (14.9)	35 (12.6)
Community mental health center	31 (19.7)	21 (17.4)	52 (18.7)
Hospital outpatient psychiatric clinic	25 (15.9)	6 (5.0)	31 (11.2)
Private practice	80 (51.0)	65 (53.7)	145 (52.2)
Other setting	4 (2.5)	11 (9.1)	15 (5.4)
Expectations for Therapy Duration	<i>N</i> = 156	<i>N</i> = 121	<i>N</i> = 277
Discussed	55 (35.3)	53 (43.8)	108 (39.0)
Not discussed	86 (55.1)	55 (45.5)	141 (50.9)
Uncertain if discussed	15 (9.6)	13 (10.7)	28 (10.1)

Ever Prematurely Terminate Therapy	<u>N = 157</u>	<u>N = 121</u>	<u>N = 278</u>
Yes	152 (96.8)	28 (23.1)	180 (64.7)
No	5 (3.2)	93 (76.9)	98 (35.3)
Ever Complete Therapy	<u>N = 157</u>	<u>N = 121</u>	<u>N = 278</u>
Yes	30 (19.1)	112 (92.6)	142 (51.1)
No	127 (80.9)	9 (7.4)	136 (48.9)

**Multivariate analyses.** Variables that demonstrated a significant relationship with termination status at the bivariate level were then entered into a binary logistic regression to examine their potential for predicting termination status at the multivariate level. Thus, a binary logistic regression was conducted with termination status as the dependent variable (i.e., prematurely terminated vs. completed treatment) and client gender, client sexual orientation, presenting problem (i.e., depression or not), perceived multicultural competence (i.e., CCCI three item total), therapeutic alliance (i.e., WAI-SR total), treatment setting, history of treatment completion, and history of premature termination entered as predictors. Results suggested the full model reliably distinguished between premature terminators and treatment completers ( $X^2(12) = 269.035, p < .001$ ). Prediction success was 91.8% overall (93.1% for treatment completers; 90.7% for premature terminators). Based on the Wald criterion, presenting problem ( $p = .048$ ), therapeutic alliance ( $p = .049$ ), history of treatment completion ( $p < .001$ ), and history of premature termination ( $p < .001$ ) each significantly contributed to the model. Participants who identified depression as a main reason for seeking therapy were 3.064 times as likely to have prematurely terminated their most recent episode of therapy as participants who identified other reasons for seeking therapy. Furthermore, for each one unit increase in participants' scores on the WAI-SR, premature termination was 0.932 times as likely to

occur. In addition, participants who had never completed therapy in the past were 63.570 times as likely to have prematurely terminated their most recent episode of therapy as participants who had ever completed therapy before. Finally, participants who had ever prematurely terminated therapy in the past were 172.515 times as likely to have prematurely terminated their most recent episode of therapy as participants who had never prematurely terminated therapy. Table 5.5 summarizes the results of this binary logistic regression.

Table 5.5

*Binary Logistic Regression Analysis for Premature Termination versus Treatment Completion*

Variable	Odds Ratio	95% CI	<i>p</i>
Client Gender			
Men	1.00	(Reference)	
Women	0.76	[0.20, 2.83]	.683
Client Sexual Orientation			
Heterosexual	1.00	(Reference)	
LGBQA	1.89	[0.34, 10.39]	.463
Presenting Problem			
Depression	3.06	[1.01, 9.30]	.048*
Other Problem (No Depression)	1.00	(Reference)	
Multicultural Competence (CCCI Total Score)			
	1.17	[0.82, 1.67]	.393
Therapeutic Alliance (WAI-SR Total Score)			
	0.93	[0.87, 1.00]	.049*
Treatment Setting			
College Counseling Center	1.00	(Reference)	
Community Mental Health Center	2.38	[0.24, 23.26]	.455
Hospital Outpatient Psychiatric Clinic	4.05	[0.22, 75.51]	.349
Private Practice	0.988	[0.13, 7.37]	.991

Other Setting	0.996	[0.08, 11.25]	.998
Ever Complete Therapy			
Yes	1.00	(Reference)	
No	63.57	[13.65, 296.07]	<.001**
Ever Prematurely Terminate Therapy			
Yes	172.52	[29.63, 1004.58]	<.001**
No	1.00	(Reference)	

Note. \**p* significant at .05 level, \*\**p* significant at .001 level

**Reasons for premature termination.** Since only those participants who reported prematurely terminating their most recent therapy experience were asked to respond to the questions about reasons for premature termination, only these participants were included in the following analyses.

First, descriptive analyses were performed to determine the frequencies of each of the following broad reasons for premature termination: *no longer needed therapy/problem improved; dissatisfaction with therapy, therapist, or agency/therapy wasn't working or made things worse; embarrassed by therapy/lack of support for therapy; external difficulties/environmental obstacles; and unmotivated for therapy*. As shown in Table 5.6 below, the hypothesis that *problem improvement* (i.e., “no longer needed therapy/problem improved”), *environmental obstacles* (i.e., “external difficulties/environmental obstacles”), and *dissatisfaction with services* (i.e., “dissatisfaction with therapy, therapist, or agency/therapy wasn't working or made things worse”) would be the three broad reasons for premature termination endorsed most frequently by the full sample of premature terminators was only partially supported.

Table 5.6

*Frequencies of Reported Reasons for Premature Termination as Percentage of Sample*

Reason for Premature Termination	N (%)
External difficulties/environmental obstacles (e.g., insurance/financial issues, transportation problems)	57 (36.3)
Dissatisfaction with therapy, therapist, or agency/ Therapy wasn't working or made things worse	48 (30.6)
Unmotivated for therapy	24 (15.3)
No longer needed therapy/Problem improved	21 (13.4)
Relapse of mental health or substance use problem	4 (2.5)
Embarrassed by therapy/Lack of support for therapy	3 (1.9)

Next, in order to test the hypothesis that participants who prematurely terminated after at least six sessions would be more likely to endorse having terminated due to *problem improvement* and less likely to endorse having terminated due to *dissatisfaction with services* or *environmental obstacles* than participants who terminated after attending fewer than six sessions, a 2 x 3 Pearson's Chi-square test was conducted. The grouping variable was reason for premature termination (i.e., *problem improvement*, *dissatisfaction with services*, or *environmental obstacles*) and the dependent variable was point of premature termination (i.e., before six sessions, after at least six sessions). Contrary to the hypothesis, there were no significant differences in the reasons for premature termination endorsed by early premature terminators and late premature terminators ( $X^2(2) = 4.735, p = .094$ ). Nevertheless, as shown in Table 5.7, there appear to be some differences in the reasons for premature termination endorsed by early premature terminators and late premature terminators, since the most common reason for premature termination among early premature terminators was *dissatisfaction with services*, while the most common reason for premature termination among late premature terminators was *environmental*

*obstacles*. Thus, the lack of significant differences may be due to the relatively small sample size of early premature terminators.

Table 5.7

*Frequencies of Reasons for Premature Termination Endorsed by Early and Late Premature Terminators*

Reason for Premature Termination	Early Premature Terminators <i>N</i> (%)	Late Premature Terminators <i>N</i> (%)
External difficulties/environmental obstacles	7 (21.9)	45 (39.5)
Dissatisfaction with therapy, therapist, or agency/ Therapy wasn't working or made things worse	10 (31.3)	36 (31.6)
Unmotivated for therapy	6 (18.8)	16 (14.0)
No longer needed therapy/Problem improved	7 (21.9)	12 (10.5)
Relapse of mental health or substance use problem	1 (3.1)	3 (2.6)
Embarrassed by therapy/Lack of support for therapy	1 (3.1)	2 (1.8)

Finally, in order to describe the more specific factors motivating these reasons for premature termination, descriptive analyses were conducted examining the mean importance ratings provided by participants for each of the specific factors that may have contributed to their selected reason for premature termination. Table 5.8 presents the specific factors rated as most important in participants' selection of each broad reason for premature termination within the full sample of premature terminators as well as among early premature terminators and late premature terminators.

Table 5.8

*Mean Importance Ratings of Specific Factors Contributing to Each Broad Reason for Premature Termination*

Factors Contributing to Broad Reasons for Premature Termination	All Premature Terminators <i>M</i> ( <i>SD</i> )	Early Premature Terminators <i>M</i> ( <i>SD</i> )	Late Premature Terminators <i>M</i> ( <i>SD</i> )

<i>Dissatisfaction with services</i>	<u><i>N</i> = 48</u>	<u><i>N</i> = 10</u>	<u><i>N</i> = 36</u>
I found it difficult to relate to my therapist.	2.87 (1.21)	3.30 (1.25)	2.69 (1.19)
I could not communicate with my therapist.	2.77 (1.12)	3.00 (0.94)	2.64 (1.15)
Therapy did not address my problems or goals.	2.73 (1.03)	2.80 (1.40)	2.67 (0.93)
My therapist did not understand my problems.	2.67 (1.12)	3.40 (0.97)	2.44 (1.08)
As I got further in therapy, I did not think my therapist could help anymore.	2.64 (1.19)	2.20 (1.32)	2.69 (1.13)
<i>Embarrassed by therapy</i>	<u><i>N</i> = 3</u>	<u><i>N</i> = 1</u>	<u><i>N</i> = 2</u>
I felt that seeking therapy was a sign of personal failure or weakness.	4.00 (0.00)	4.00 (0.00)	4.00 (0.00)
I was concerned about what other people would think if they found out I was in therapy.	3.67 (0.58)	4.00 (0.00)	3.50 (0.71)
I was embarrassed to talk to the therapist about my problems.	3.00 (1.00)	4.00 (0.00)	2.50 (0.71)
I felt out of place in therapy.	3.00 (1.00)	3.00 (0.00)	3.00 (1.41)
<i>Environmental obstacles</i>	<i>N</i> = 57	<i>N</i> = 7	<i>N</i> = 45
I could not afford to pay for more therapy.	2.91 (1.24)	3.86 (0.38)	2.73 (1.27)
My health insurance would not pay for more therapy.	2.32 (1.33)	2.57 (1.27)	2.18 (1.32)
I moved.	1.91 (1.31)	1.71 (1.25)	1.98 (1.34)
I did not have transportation.	1.84 (1.22)	2.29 (1.38)	1.73 (1.16)
I did not have time for therapy.	1.75 (0.92)	1.86 (1.22)	1.77 (0.89)
<i>Problem improved</i>	<i>N</i> = 21	<i>N</i> = 7	<i>N</i> = 12
My negative or distressing thoughts decreased.	3.43 (0.60)	3.57 (0.54)	3.42 (0.67)
I experienced a decrease in my negative emotions.	3.43 (0.60)	3.43 (0.79)	3.50 (0.52)
I experienced an increase in my positive emotions.	3.38 (0.59)	3.43 (0.54)	3.33 (0.65)
My problems were not interfering with my life as much.	3.19 (0.87)	3.57 (0.79)	3.00 (0.95)
I felt better able to manage life difficulties, stress, and emotions.	3.33 (0.66)	3.29 (0.95)	3.42 (0.52)

<i>Relapse</i>	<u><i>N</i> = 4</u>	<u><i>N</i> = 1</u>	<u><i>N</i> = 3</u>
My mental health symptoms got worse so that they interfered with my therapy attendance.	3.00 (1.16)	4.00 (0.00)	2.67 (1.16)
I had a relapse in my substance use.	2.50 (1.73)	1.00 (0.00)	3.00 (1.73)
I felt too embarrassed by my relapse to go back to therapy.	2.50 (1.29)	1.00 (0.00)	3.00 (1.00)
<i>Unmotivated for therapy</i>	<u><i>N</i> = 24</u>	<u><i>N</i> = 6</u>	<u><i>N</i> = 16</u>
I lost interest in therapy.	2.88 (0.90)	2.33 (1.03)	3.19 (0.75)
I felt I did not have the time or energy to devote to therapy.	2.79 (0.93)	3.00 (0.89)	2.69 (1.01)
I was never very interested in therapy, but someone else pressured me to try it.	1.92 (1.32)	2.50 (1.38)	1.56 (1.21)

*Note.* Each specific factor was rated from 1 = *Not at all important* to 4 = *Very important*.

**Outcomes of premature terminators.** The analyses testing treatment outcomes again included the full sample of participants who completed treatment and those who terminated prematurely. In order to test the hypothesis that participants who completed treatment would report the most problem improvement, followed by late premature terminators, and then early premature terminators, a one-way 3-between-groups ANOVA was conducted. The grouping variable was termination status (i.e., prematurely terminated prior to six sessions, prematurely terminated after at least six sessions, and completed treatment) and the dependent variable was change in problem, which was rated from 1 = *much worse* to 5 = *much improved*. There were significant mean differences in amount of problem improvement reported by early premature terminators, late premature terminators, and treatment completers,  $F(2, 263) = 9.125$ ,  $MSE = 1.058$ ,  $p < .001$ . Follow-up pairwise comparisons using HSD (with a minimum mean difference = 0.368) revealed that treatment completers reported greater problem improvement ( $M =$

4.34,  $SD = 0.96$ ) than early premature terminators ( $M = 3.84$ ,  $SD = 1.14$ ) and late premature terminators ( $M = 3.79$ ,  $SD = 1.07$ ), which was consistent with the hypothesis. However, contrary to the hypothesis, there was not a significant difference in problem improvement between early and late premature terminators.

Then, in order to test the hypothesis that participants who completed treatment would also report the greatest treatment satisfaction and least current functional impairment, followed by late premature terminators and then early premature terminators, two one-way 3-between-groups ANOVAs were performed. For both ANOVAs, the grouping variable was termination status (i.e., prematurely terminated before six sessions, prematurely terminated after at least six sessions, and completed treatment). The dependent variables were satisfaction with services and current functional impairment, operationalized as participants' scores on the Client Satisfaction Questionnaire-8 and Sheehan Disability Scale, respectively. There were significant mean differences in treatment satisfaction among early premature terminators, late premature terminators, and treatment completers,  $F(2, 252) = 23.516$ ,  $MSE = 42.308$ ,  $p < .001$ . Follow-up pairwise comparisons using HSD (with a minimum mean difference = 2.37) revealed that treatment completers reported greater satisfaction with services ( $M = 26.32$ ,  $SD = 5.85$ ) than early premature terminators ( $M = 20.94$ ,  $SD = 7.99$ ) and late premature terminators ( $M = 20.65$ ,  $SD = 6.69$ ), which was consistent with the hypothesis. However, contrary to the hypothesis, there was not a significant difference in treatment satisfaction between early and late premature terminators. Similarly, consistent with the hypothesis, treatment completers reported less current functional impairment ( $M = 11.23$ ,  $SD = 8.70$ ) than late premature terminators ( $M = 15.31$ ,  $SD = 8.34$ ),  $F(2, 251) = 6.241$ ,  $MSE = 74.306$ ,  $p =$

.002. However, contrary to the hypothesis, there was not a significant difference in functional impairment between treatment completers and early premature terminators ( $M = 13.23$ ,  $SD = 9.29$ ) or between early and late premature terminators (HSD minimum mean difference = 3.14).

Finally, three one-way 4-between-groups ANOVAs were performed to test the hypothesis that participants who prematurely terminated because they *no longer needed therapy/problem improved* would report significantly greater problem improvement, greater satisfaction with services, and less current functional impairment than participants who reported prematurely terminating for any of the other broad reasons. For each ANOVA, the grouping variable was reason for premature termination (i.e., *environmental obstacles*, *dissatisfaction with services*, *unmotivated for therapy*, and *problem improvement*). Participants who identified *embarrassed by therapy* or *relapse of mental health or substance use problem* as their reasons for prematurely terminating therapy were excluded from these analyses due to small sample sizes. The dependent variables for these ANOVAs were change in problem, satisfaction with services, and current functional impairment. Partially consistent with the hypothesis, participants who selected *no longer needed therapy/problem improved* as their reason for premature termination reported significantly greater problem improvement ( $M = 4.52$ ,  $SD = 0.51$ ) than participants who selected *dissatisfaction with services* ( $M = 3.42$ ,  $SD = 1.27$ ) or *unmotivated for therapy* ( $M = 3.79$ ,  $SD = 0.98$ ), but not participants who selected *environmental obstacles* ( $M = 3.95$ ,  $SD = 0.95$ ) (HSD minimum mean difference = 0.62),  $F(3, 146) = 6.056$ ,  $MSE = 1.053$ ,  $p = .001$ . Similarly, participants who selected *no longer needed therapy/problem improved* as their reason for premature termination reported

significantly greater satisfaction with services ( $M = 26.84, SD = 3.91$ ) than participants who selected *dissatisfaction with services* ( $M = 13.76, SD = 3.89$ ) or *unmotivated for therapy* ( $M = 20.30, SD = 5.73$ ), but not participants who selected *environmental obstacles* ( $M = 24.65, SD = 5.11$ ) (HSD minimum mean difference = 2.92),  $F(3, 138) = 56.630, MSE = 22.232, p < .001$ . However, contrary to the hypothesis, there were no mean differences in functional impairment among participants who reported different reasons for premature termination,  $F(3, 142) = 2.241, MSE = 72.527, p = .086$ .

## CHAPTER 6: DISCUSSION

The purpose of the current study was to address some inconsistencies and gaps in the literature on premature termination of outpatient psychotherapy through use of a national online survey design that permitted investigation of a broader range of potential predictors, exploration of more specific reasons for premature termination, and examination of longer term treatment outcomes than has been possible in most previous research with narrower or broader focuses (e.g., examining premature termination within a sample from a single treatment setting or within a national sample as one part of an epidemiological survey of mental health). Specific research hypotheses were designed to examine 1) the client, therapist, client-therapist interaction, and treatment factors that could predict premature termination, 2) the broad reasons for premature termination most frequently endorsed by clients, and 3) the therapeutic outcomes of treatment completers compared to early and late premature terminators. Data analyses also explored questions about 1) individual differences among clients who prematurely terminated at different points in the treatment process as well as 2) specific factors motivating clients to prematurely terminate therapy for different reasons. Study results related to each of the

aforementioned areas of interest are described below. Clinical implications, study limitations, and suggestions for future research are also discussed.

### **6.1. Predictors of Premature Termination**

Although relatively few of the variables examined ultimately emerged as significant predictors of premature termination, the variables that did were highly successful in distinguishing between premature terminators and treatment completers. Using the client's history of premature termination, history of treatment completion, therapeutic alliance, and presenting problem to predict termination status correctly classified 92 percent of participants overall (91 percent of premature terminators and 93 percent of treatment completers).

Self-reported history of premature termination was the best predictor of premature termination followed by self-reported lack of previous treatment completion. Specifically, those participants who had prematurely terminated any past episode of therapy were 173 times more likely to have prematurely terminated their most recent therapy experience than participants who had never prematurely terminated therapy before. Similarly, participants who had never completed a previous episode of therapy were 64 times more likely to have prematurely terminated their most recent therapy experience than participants who had completed therapy in the past. While no prior research has examined whether the termination status of past therapy affects the termination status of future therapy to my knowledge, previous research has examined whether amount of prior therapy experience could be used to predict premature termination with inconsistent results (e.g., Connelly et al., 1986; Grilo et al., 1998; Hoffman, 1985; Matthieu & Ivanoff, 2006; Westra et al., 2002). One explanation for

these inconsistent results may be that the amount of one's previous therapy experience is irrelevant compared to the way these previous therapy experiences ended. Indeed, when past behavior in terminating therapy was removed from the binary logistic regression model in this study, the prediction success rate for termination status was reduced to 70 percent. These results are consistent with research from social psychology finding some support for the common maxim that "past behavior is [one of] the best predictor[s] of future behavior" (Albarracin & Wyer, 2000; Ouellette & Wood, 1998).

After history of premature termination and therapy completion, the strength of the therapeutic alliance was the next best predictor of termination status with a weaker therapeutic alliance related to a greater likelihood of premature termination. These findings are consistent with previous literature suggesting that more complex, client-therapist interaction variables would more accurately predict termination status than any client demographic or clinical variables (e.g., Wierzbicki & Pekarik, 1993). The results of this study also provide additional support to the substantial previous research that shows a weaker therapeutic alliance is one of the most reliable predictors of increased premature termination (Arnold et al., 2007; Kegel & Fluckinger, 2014; Kolb et al., 1985; Magnativa, 1994; Piper et al., 1999; Saatsi et al., 2007; Saltzman et al., 1976; Sharf et al., 2010; Tryon & Kane, 1993; Westmacott et al., 2010).

Finally, identifying depression as a main reason for seeking treatment predicted increased likelihood of premature termination over identifying other presenting problems. Specifically, participants who identified depression as one of their main reasons for seeking treatment were three times more likely to have prematurely terminated therapy than participants who did not identify depression as one of their main reasons. Although

this association between depression and premature termination was not expected within the full sample, it was hypothesized that depression may be related to premature termination before session six. However, it was actually found that late premature terminators were more likely to endorse depression as one of their main reasons for seeking treatment than either early premature terminators or treatment completers in this study. While depression did not emerge as a predictor of premature termination in a recent meta-analysis by Swift and Greenberg (2012), more severe depressive symptoms have been associated with premature termination in several other studies (e.g., Aderka et al., 2011; Issakidis & Andrews, 2004; Ledley et al., 2006; Lincoln et al., 2005; Persons, Burns, & Perloff, 1988; Wang 2007). Many of these researchers suggested that depression may be a risk factor for premature termination, because the lack of motivation and hopelessness that characterize this disorder may make it difficult for clients with depressive symptoms to fully engage in therapy (e.g., complete homework assignments) or persist when progress is slow (Aderka et al., 2011; Ledley et al., 2006; Lincoln et al., 2005; Persons et al., 1988).

**Client factors.** Among the many inconsistencies in previous research on predictors of premature termination, race/ethnicity, level of education, yearly household income, and age emerged as relatively consistent predictors (e.g., Wierzbicki & Pekarik, 1993). Thus, it was hypothesized that these would be the only client sociodemographic variables to predict termination status in this study, too. However, this hypothesis was not supported by the data for either the full sample of premature terminators or the subsamples of early and late premature terminators. Interestingly, female gender and minority sexual orientation were the only client demographic variables related to

increased likelihood of premature termination within this study. However, these demographic variables did not remain significant predictors of termination status at the multivariate level when controlling for the contribution of other predictors.

It is possible that these results reflect a change in attitudes toward racial minority groups and individuals of lower socioeconomic status among the general public as well as therapists over the past 20 years. In Wierzbicki and Pekarik's (1993) meta-analysis of 125 studies published between 1974 and 1990, increased premature termination was significantly related to racial minority group status, lower education, and lower SES. However, in Swift and Greenberg's (2012) meta-analysis of 669 studies published between 1990 and 2010, racial minority group status no longer emerged as a predictor of premature termination, though lower education level still did. Between these two meta-analyses, Palma (1996) found that counseling psychology trainees' attitudes toward ethnic minority clients were growing more positive than they had been in earlier decades. However, these psychology trainees still endorsed somewhat negative attitudes toward gay and lesbian clients (Palma, 1996), which suggests that therapists' attitudes toward minority sexual orientations may be changing more slowly than therapists' attitudes toward other minority groups. In support of this explanation, there was a trend for LGBQA participants to rate the multicultural competence of their therapists lower than heterosexual participants did in this study ( $F(1, 272) = 3.470, p = .06$ ), whereas no other differences in perceived multicultural competence among cultural groups based on race, gender, education, or income level even approached significance ( $p > .10$ ). As such, if therapists are perceived as less multiculturally competent by LGBQA clients and still hold more negative attitudes toward sexual orientation minorities than other previously

denigrated minority groups, this could explain why LGBQA individuals tended to prematurely terminate outpatient therapy at a higher rate than heterosexual individuals.

Unfortunately, this still does not provide a clear explanation for why women tended to prematurely terminate at a higher rate than men in this study. Nevertheless, this higher rate of premature termination among women may be attributable to the substantially higher prevalence of depression in women compared to men. The DSM-5 (American Psychiatric Association, 2013) indicates major depressive disorder is 1.5 to 3 times more common in women than men. In this study, identifying depression as a main reason for seeking treatment was related to higher risk of premature termination and women tended to endorse depression as a presenting problem more than men did ( $X^2(1) = 3.83, p = .05$ ). Furthermore, after controlling for presenting problem and other variables, gender was no longer a significant predictor of termination status in this study. Finally, while most prior research has found no relationship between gender and premature termination (Barrett et al., 2008; Edlund et al., 2002; Garfield, 1994; Hatchett & Park, 2004), the one recent study that did find a higher rate of premature termination among women than men also found that more severe depression was associated with increased premature termination, though gender remained a significant predictor even when they controlled for clinical variables in that study (Issakidis & Andrew, 2004).

**Therapist factors.** Most previous research has not demonstrated an association between therapist demographic variables and clients' termination status (e.g., Werbart et al., 2014). Thus, it was expected there would not be a significant relationship between premature termination and therapist age, gender, or race in this study either. This expectation was upheld by results. Indeed, the only therapist factor that has shown any

promise in predicting premature termination in previous research is a lower level of therapist experience (e.g., Pekarik & Stephenson, 1988; Stein & Lambert, 1995). For instance, some studies have found higher rates of premature termination when services were provided by trainees (e.g., Swift & Greenberg, 2012). Thus, it was hypothesized that individuals who reported working with therapists who were still in graduate school would be more likely to report having prematurely terminated therapy than individuals who reported working with therapists who were not graduate students. However, no relationship was found between therapist experience and termination status in this study. Nevertheless, this result is not wholly inconsistent with other research, since many studies have found equivalent treatment outcomes for licensed professionals and psychology trainees with various levels of experience (e.g., Nyman, Nafziger, & Smith, 2010). With regard to premature termination specifically, a recent study found no relationship between clients' premature termination of a transdiagnostic cognitive-behavioral group for anxiety and either trainee therapists' overall years of experience or therapists' amount of previous experience specifically with that protocol (Norton, Little, & Wetterneck, 2014).

**Client-therapist interaction factors.** As expected, greater perceived multicultural competence of the therapist was associated with an increased likelihood of therapy completion. This is likely due to the role of multicultural competence in the strength of the therapeutic alliance as well as overall treatment satisfaction. In support of this likelihood, Constantine (2002) found that ethnic minority clients' perceptions of their therapists' multicultural competence significantly predicted satisfaction with services. Similarly, Fuertes and colleagues (2006) demonstrated that client ratings of therapist

multicultural competence were positively related to both treatment satisfaction and strength of the therapeutic alliance. Perceived multicultural competence of therapists was also positively related to treatment satisfaction ( $r = .471, p < .01$ ) and therapeutic alliance strength ( $r = .595, p < .01$ ) in the current study.

Since the therapeutic alliance and multicultural competence both seem to be related to satisfaction with services (e.g., Fluckinger et al., 2011; Fueters et al., 2006), it was expected that a weak therapeutic alliance and low multicultural competence would be an especially prominent factor in premature termination due to dissatisfaction with services. Consistent with expectations, clients who selected *dissatisfaction with services* as their main reason for premature termination reported a weaker therapeutic alliance than participants who selected any other reason; however, they only reported significantly lower perceived multicultural competence than those who selected *environmental obstacles*, not other reasons. Nevertheless, this may simply be due to the weaker relationship between treatment satisfaction and multicultural competence ( $r = .471, p < .01$ ) compared to the therapeutic alliance ( $r = .841, p < .01$ ). This may also help explain why multicultural competence did not remain a significant predictor of termination status when controlling for therapeutic alliance in this study, whereas the strength of the therapeutic alliance still did significantly predict termination status when controlling for other variables.

**Treatment factors.** Except for history of premature termination and treatment completion, treatment setting was the only treatment factor to demonstrate a significant relationship with termination status in this study. Specifically, clients of hospital outpatient psychiatric clinics were more likely to prematurely terminate therapy than

clients of other treatment settings. These results were inconsistent with a relatively consistent finding in previous research that there is a higher rate of premature termination in college counseling centers and university training clinics than other treatment settings (e.g., Callahan et al., 2014; Swift & Greenberg, 2012). Thus, it remains unclear why rates of premature termination were higher in hospital outpatient psychiatric clinics than other treatment settings. Unfortunately, this association cannot be explained by any measured differences in the other treatment factors across settings, because these other treatment factors were not associated with termination status in this study. Specifically, despite some previous research suggesting that self-referred clients tend to be more likely to complete therapy than clients referred by outside sources (e.g., Barrett et al., 2008; Pekarik & Stephenson, 1988), the data showed no relationship between referral source and termination status in this study. Furthermore, while Smith and Greenberg (2012) found higher rates of premature termination for time-unlimited therapies than time-limited therapies, there was no relationship between termination status and expectations for treatment duration in this study. Finally, though this was consistent with Swift and Greenberg's (2012) meta-analysis, there was also no relationship between termination status and treatment modality (i.e., individual therapy, couples therapy, or combined individual and group therapy). Thus, further research will be needed to determine whether this higher rate of premature termination in hospital outpatient psychiatric clinics will replicate in other studies and why that is the case if so.

## **6.2. Reasons for Premature Termination**

While previous research on clients' reasons for premature termination is limited relative to research on predictors of premature termination, the results of this prior

research are surprisingly consistent in showing that the primary reasons provided by clients for terminating prematurely fit into three broad categories: environmental obstacles, problem improvement, and dissatisfaction with services (Acosta, 1980; Garfield, 1963; Pekarik, 1983b; 1992b). Therefore, it was expected that these would be the most frequently endorsed reasons for premature termination in this study as well. This hypothesis was only partially supported. *Environmental obstacles* was the most commonly identified reason for premature termination within this sample, closely followed by *dissatisfaction with services*. However, the more distant third most commonly reported reason for premature termination was *unmotivated for therapy*, not *problem improvement*. Each of these reasons are discussed in turn below. The other two broad reasons for premature termination—*embarrassed by therapy* and *relapse of mental health or substance use problem*—were each endorsed by less than five percent of premature terminators, so these reasons are not discussed further.

First, over one third of premature terminators identified *environmental obstacles* as their main reason for leaving therapy without discussing it with their therapist. Specifically, participants rated issues related to lack of sufficient finances for therapy and lack of health insurance coverage as the most important obstacles to their continued participation in therapy. A move, lack of transportation, and lack of time were also rated as substantial barriers. These *environmental obstacles* have emerged as the most common reason for premature termination in several studies besides this one (e.g., Beckham, 1992; Garfield, 1963; Hoffman & Suvak, 2006; Hynan, 1990; Manthei, 1995; Todd et al., 2003). One reason for this consistency in the literature may be that *environmental*

*obstacles* is a reason for premature termination that is generally agreed upon by both clients and therapists (Pekarik & Finney-Owen, 1997; Todd et al., 2003).

On the other hand, research has shown that therapists regularly underestimate the second most frequently reported reason for premature termination in this study, *dissatisfaction with services* (Hunsley et al., 1999; Pekarik & Finney-Owen, 1987; Westmacott et al., 2010). Some research has suggested that therapists demonstrate a self-serving bias in attributing the cause of clients' premature termination to the environment or the client rather than their own ineptitudes in establishing rapport, building empathy, or using techniques (Murdock, Edwards, & Murdock, 2010). Such a self-serving bias is likely to interfere with recognition and redress of problems in the therapeutic relationship, which is subsequently likely to increase clients' risk of premature termination due to *dissatisfaction with services*. Indeed, participants who selected *dissatisfaction with services* as their main reason for premature termination reported a weaker therapeutic alliance and lower perceived multicultural competence of their therapist than participants who selected other reasons, like *environmental obstacles*. In addition, a weak therapeutic alliance was one of the best predictors of premature termination in this study. Supporting this supposition that problems in the therapeutic relationship are a driving factor in premature termination due to *dissatisfaction with services*, premature terminators in this study rated difficulty relating to their therapists, difficulty communicating with their therapists, feeling as though their therapists did not understand their problems, and doubt that their therapists could help among the most important factors in their dissatisfaction. Specific comments included "[I] didn't feel I was being truly listened to," "[the therapist] was rude and condescending and made

judgments about my character,” and “[I] did not feel comfortable.” Another client specifically referred to poor multicultural competence, noting “the therapist that I stopped seeing was clearly anti LGBT and attributed my depression/anxiety to my lifestyle.” This qualitative data clearly supports the quantitative relationship found between multicultural competence, therapeutic alliance, and likelihood of premature termination in this study.

Pekarik and Finney-Owen (1987) also suggested that a self-serving bias may be operating in therapists’ underestimation of clients’ dissatisfaction with services, stating therapists may identify clients’ “resistance” as a reason for premature termination when it should actually be attributed to clients’ dissatisfaction. Nevertheless, because therapists in their study identified “resistance” as the third most important reason for premature termination (Pekarik & Finney-Owen, 1987), *unmotivated for therapy* was added as a potential reason for premature termination in this study, too. Somewhat surprisingly, in this study, clients also identified *unmotivated for therapy* as the third most common reason for premature termination. However, even though *unmotivated for therapy* was added as a way to reflect potential client “resistance” identified by therapists in previous studies, the specific factors participants rated as important in their lack of motivation for therapy did not appear to reflect “resistance.” Overall, clients rated loss of interest in therapy and lack of time or energy for therapy as the most important factors in their lack of motivation. Furthermore, participants’ comments about their specific reasons for being unmotivated for therapy suggest that this lack of motivation might really reflect dissatisfaction with services. For example, participants commented that they “felt like [therapy] did nothing,” “felt like it wasn’t doing any good,” “felt like I was getting nowhere,” and “thought it was pointless.”

Finally, while clients seem to be more likely to identify *dissatisfaction with services* as a reason for premature termination than therapists are, therapists seem to be more likely than clients are to identify *problem improvement* as a reason for termination (Todd et al., 2003). Thus, it is possible that *problem improvement* was not found to be as frequently reported in this study as it was in previous studies, because this study focused specifically on exploring reasons for premature termination from the clients' perspective. These clients selected *environmental obstacles*, *dissatisfaction with services*, and *unmotivated for therapy* as their main reason for premature termination more frequently than they selected *problem improvement*. Nevertheless, the thirteen percent of premature terminators who did select *problem improvement* rated a decrease in negative thoughts and emotions, an increase in positive emotions, a decrease in problem interference, and increased self-efficacy in managing stress as the most important factors in their self-determination that they no longer needed to attend therapy.

Contrary to hypotheses, participants who prematurely terminated after at least six sessions were not more likely to select *problem improvement* as their reason for terminating prematurely than participants who prematurely terminated before six sessions. Nor were early premature terminators more likely to endorse *dissatisfaction with services* or *environmental obstacles* than late premature terminators. Overall, there were no significant differences in the reasons for premature termination selected by early and late premature terminators. This may be due to the small sample of early premature terminators. However, another explanation for the lack of differences between early and late premature terminators' endorsement of *problem improvement* may be the perceived source of problem improvement. Hynan (1990) found that late premature terminators

were more likely to report terminating due to problem improvement attributed to therapy compared to early premature terminators, but found no differences between early and late premature terminators reportedly terminating due to problem improvement not attributed to therapy. In this study, premature terminators were more likely to attribute any changes in their problems to factors outside of therapy ( $N = 125$ ) than to therapy itself ( $N = 32$ ). With respect to *environmental obstacles*, late premature terminators actually appeared more likely to endorse this reason for premature termination than early premature terminators. This makes sense because financial issues were rated as the most important factors in premature termination due to environmental obstacles in this study and health insurance is probably more likely to stop paying for therapy after six sessions were attended than before six sessions were attended. Finally, although *dissatisfaction with services* was endorsed by an equal proportion of early and late premature terminators (31% each), *dissatisfaction with services* was the most common reason for premature termination among early premature terminators, but not late premature terminators. These results provide partial support for the hypothesis as well as prior research (Hynan, 1990).

### **6.3. Outcomes of Premature Terminators and Treatment Completers**

Previous research also suggests that therapeutic outcomes of clients who terminate prematurely vary with their reasons for premature termination. Specifically, previous studies have found that clients who prematurely terminated therapy due to “no need for services” or “problem improvement” demonstrated a greater decrease in symptoms than clients who prematurely terminated due to “dislike of services” (Pekarik, 1983b) or clients who remained in treatment after four months (Pekarik, 1992b). Consistent with this previous research and hypotheses, participants who prematurely

terminated due to *problem improvement* reported significantly greater improvement in their problems and greater satisfaction with services than participants who reported prematurely terminating due to *dissatisfaction with services* or being *unmotivated for treatment*. However, participants who prematurely terminated due to *environmental obstacles* showed no differences in problem improvement or satisfaction with services from those who prematurely terminated due to *problem improvement*. These results are supported by some previous research showing a significant decrease in symptoms experienced by those who prematurely terminated due to “environmental constraints” as well as those who prematurely terminated due to “no need for services” (Pekarik, 1983b). However, it was expected that the relationship between self-perceived problem improvement and better therapeutic outcome among premature terminators might have been related to time in treatment and that clients who prematurely terminated due to *problem improvement* would have attended more sessions than those who terminated due to *environmental obstacles* based on a study by Renk and Dinger (2002). As previously described, that was not the case in this study, so it makes sense that the outcomes of those who prematurely terminated due to *problem improvement* and *environmental obstacles* would be basically equivalent in this study.

Indeed, contrary to expectations, there were no differences in treatment outcomes of early premature terminators and late premature terminators in this study. In addition to failing to support hypotheses, these results are also contradictory to substantial previous research suggesting that the outcomes of early premature terminators are usually significantly worse than the outcomes of late premature terminators (Aderka et al., 2011; Hynan, 1990; Pekarik, 1983a; 1992a). One explanation for these contradictory results

may be the six session cutoff for early versus late premature termination used in this study. Although some previous research (e.g., Aderka et al., 2011) has utilized a six session cutoff, most of the previous research comparing early and late premature terminators has used an earlier cutoff, such as three sessions (e.g., Pekarik, 1983a; 1992a; Richmond, 1992). Unfortunately, too few premature terminators reported attending only one or two sessions in this study for three sessions to be used as the cutoff. However, a six session cutoff may have allowed for sufficient improvement in the early premature terminators to obscure differences in treatment outcomes compared to late premature terminators. Indeed, some dose-response effect research suggests that 48-58 percent of clients significantly improve within four to seven sessions of therapy (Howard, Kopta, Krause, & Orlinsky, 1986). Thus, although this dose-response effect appears to decline after six sessions (Delgadillo et al., 2014), premature terminators who attended four or five sessions of therapy may have achieved outcomes similar to late premature terminators who attended at least six sessions.

Nevertheless, both early premature terminators and late premature terminators demonstrated poorer treatment outcomes than treatment completers. Specifically, treatment completers reported greater problem improvement and greater satisfaction with services than all premature terminators. Treatment completers also reported less current functional impairment than late premature terminators, but not early premature terminators, which may be due to the relatively small sample size of early premature terminators and relatively small differences between groups. Indeed, all participants reported relatively good treatment outcomes overall. Although treatment completers reported the problems for which they sought treatment were “slightly” to “much

improved” on average, early and late premature terminators still reported slight improvement. Similarly, participants’ average satisfaction with services was above the midpoint of the Client Satisfaction Questionnaire (Larsen et al., 1979) and their average current functional impairment was around the midpoint or lower of the Sheehan Disability Scale (Sheehan, 1983) for early premature terminators, late premature terminators, and treatment completers. Therefore, the overall results are consistent with substantial previous research suggesting that while both treatment completers and premature terminators experience benefit from therapy, treatment completers tend to experience more benefit than premature terminators (Cahill et al., 2003; Persons et al., 1988; Saatsi et al., 2007; Westmacott et al., 2010).

#### **6.4. Clinical Implications**

Several strategies for reducing premature termination have been suggested in previous research (e.g., Ogradniczuk et al., 2005; Swift et al., 2012); however, these interventions appear to have only small-to-medium effects on reducing premature termination (Oldham et al., 2012). The results of the current study have implications for developing interventions that could be more effective in improving treatment retention.

First, the current study found that a client’s personal history of prematurely terminating any episode of past therapy was the best predictor that that client had also prematurely terminated their most recent episode of therapy. Psychological treatment history is a topic that is regularly assessed in intake sessions at a general level with inquiries about the client’s number of previous treatment episodes and types of treatment completed. However, the results of this study suggest that the amount and type of prior therapy experience have little to no impact on likelihood of premature termination

compared to the ways in which these prior therapy experiences were terminated. Yet, therapists rarely ask about the termination status of prior therapy episodes. Therapists implementing dialectical behavior therapy (DBT; Linehan, 1993) may be an exception. At the start of DBT, therapists are encouraged to ask specifically about “past treatment failures,” including premature termination, and to assess therapy-interfering behaviors by both the client and previous therapists that may have contributed to these treatment failures (Koerner, 2012, p. 36). Often DBT therapists will also ask clients to rate their urge to quit therapy at each session (Koerner, 2012). This type of open inquiry about clients’ history of prematurely terminating therapy as well as their current thoughts about prematurely terminating may be one reason that DBT demonstrated the lowest rates of premature termination among treatments for eating disorders (Swift & Greenberg, 2014). Thus, based on the results of the current study, it is recommended that therapists place greater emphasis on assessing clients’ prior experience with premature termination of therapy and the factors contributing to this premature termination early in treatment in order to prevent these same factors from leading to a repetition of past behavior.

Depression as a primary or comorbid presenting problem was also identified as a risk factor for premature termination of outpatient psychotherapy in this study. As a starting point, these results suggest the importance of assessing depressive symptoms throughout treatment even when depression is not the principal focus of therapy.

Assessing overall progress throughout treatment and providing clients with regular feedback about their progress may also help reduce premature termination (Swift et al., 2012), especially among clients with depression, since they might tend to feel hopeless and underestimate their own progress (Aderka et al., 2011; Ledley et al., 2005; Lincoln et

al., 2006). Furthermore, some research suggests integrative approaches to psychotherapy for depression may result in lower rates of premature termination, possibly because clients with depression may find it easier to engage with a more flexible approach (Swift & Greenberg, 2014). Clients with depression often struggle to complete homework assignments involved in more orientation-specific treatments (e.g, cognitive-behavioral therapy; Ledley et al., 2006; Persons et al., 1988) and poor homework compliance has also been associated with premature termination (Persons et al., 1988).

Both clients' history of premature termination and diagnosis with depression primarily help to identify a target population for interventions to reduce premature termination, since these are the client populations that appear to be at the highest risk. When it comes to the actual interventions to reduce premature termination, the current study most strongly informs the need for strategies that measure and repair the therapeutic alliance. A weaker therapeutic alliance was one of the best predictors of premature termination in this study. Furthermore, *dissatisfaction with services* was the second most common reason for premature termination. *Environmental obstacles* was the most common reason for premature termination in this study, but therapists have little control over such external difficulties. In addition, therapists at least tend to recognize when clients prematurely terminate due to environmental obstacles (Todd et al., 2003), so they can intervene in these matters when possible, such as advocating for a client's need for additional therapy sessions to their insurance company. On the other hand, therapists tend to underestimate the role of *dissatisfaction with services* in premature termination (Hunsley et al., 1999), even though this is an area in which therapists have more power to intervene. In the current study, premature termination due to *dissatisfaction with services*

appeared to be largely driven by problems in the therapeutic relationship. Thus, in order to enhance therapist awareness of problems in the therapeutic relationship, it is recommended that therapists regularly administer a measure of the therapeutic alliance, such as the Working Alliance Inventory, Short Form, Revised (Hatcher & Gillaspay, 2006), throughout treatment. Once therapists are able to recognize problems in the therapeutic relationship, this should put them in a position to repair ruptures in the alliance and thereby prevent premature termination due to dissatisfaction with the relationship. In order to more effectively repair such ruptures in the therapeutic alliance, therapists may benefit from Alliance-Focused Training (Eubanks-Carter, Christopher Muran, & Safran, 2014; Safran & Kraus, 2014; Safran, Christopher Muran, & Eubanks-Carter, 2011). Finally, it is suggested that therapists might also benefit from additional multicultural competence training, since perceived multicultural competence showed a strong relationship with the strength of the therapeutic alliance as well as satisfaction with services in the current study. Extra training in working with clients from minority groups that are often neglected in standard clinical training (e.g., sexual orientation minority groups; Sue et al., 2006) might be especially beneficial, since LGBTQA individuals perceived their therapists as less multiculturally competent and were more likely to prematurely terminate than heterosexual individuals in this study.

### **6.5. Limitations**

The results of the current study should be interpreted in light of the study's limitations. Potential limitations of the current study include the use of retrospective self-report data, the relative homogeneity of the sample, and the small sample sizes of certain subgroups examined in this study.

The decision to use self-report data in this study was intended to address some limitations in the previous research on reasons for premature termination that has been conducted from the therapists' perspective (e.g., Pekarik & Finney-Owen, 1987) or from file review (e.g., Renk & Dinger, 2002) by gathering data specifically from the clients' perspective. However, self-report data has some inherent limitations, including the potential for bias from recall errors (Ayhan & Isiksal, 2004) and social desirability. Although an online survey was expected to reduce the potential for social desirability (Henderson et al., 2012; Levine et al., 1989), the potential for recall errors may have been heightened by the relatively large reference period for retrospection by some participants (Ayhan & Isiksal, 2004), since the average participant had participated in therapy five times and approximately half of the participants had last participated in therapy over two years ago. In addition to these inherent limitations of self-report data, the use of retrospective self-report also prohibited the collection of certain data in this study. For example, specific information about clients' diagnoses, therapists' professions, and treatment approaches/orientations could not be ascertained, because the typical client would not have enough psychological knowledge to accurately report on these variables. The retrospective nature of the data also prevented the assessment of symptom change as a measure of therapeutic outcome, since no pretreatment data were available.

Although a national survey design was employed to permit a broad sample of client and treatment variables that would allow for analyses of individual differences among premature terminators, the current study's sample was more homogeneous than expected in some ways. In terms of demographics, the sample was predominantly White and mostly women with an unusually high proportion of non-religious participants. With

regard to treatment variables, a vast majority of participants attended at least three sessions of individual therapy and over half sought treatment from a private practice. Besides probably not being as truly representative of the segment of the U.S. population that has participated in outpatient psychotherapy as desired, the relative homogeneity of this sample also limited the analyses of individual differences among premature terminators that could be conducted. For instance, the small sample sizes for certain demographic variables (e.g., race/ethnicity, sexual orientation) necessitated the combination of different specific subgroups into broader subgroups (e.g., heterosexual versus LGBQA). Furthermore, the small sample size for premature terminators who had attended fewer than three sessions required the adjustment of the cutoff between early and late premature termination from three to six sessions. Then, even with the six session cutoff, the subsample of early premature terminators may still have been too small for analyses to detect differences between early and late premature terminators. Finally, some treatment variables, like treatment setting and modality, were too homogenous to conduct almost any analyses of individual differences among premature terminators based on these variables. Nevertheless, the current study still managed to explore more individual differences among premature terminators than much of the previous research, which has generally treated premature terminators as an entirely homogenous group.

## **6.6. Future Research**

The results of this dissertation highlight the need for continuing research in the area of premature termination of outpatient psychotherapy. While the current study attempted to examine individual differences in premature terminators based on their point of termination within the treatment process and reasons for premature termination,

extensive analyses based on these variables were not possible due to the sample size and relative homogeneity of the sample. However, the treatment of premature terminators as a homogenous group has been a substantial limitation to progress in previous research. Future research with larger, more diverse samples may benefit from using cluster analyses to identify different subgroups of premature terminators and the variables that define them. This would likely provide a better understanding of the individual differences among premature terminators than analyses based on previously established cutoffs between early and late premature terminators.

Longitudinal research studies would also help to extend the literature on premature termination of outpatient psychotherapy. Such research could investigate whether the more consistent predictors of premature termination identified in the literature thus far can be used at the beginning of treatment to accurately identify those clients who will later prematurely terminate therapy. Longitudinal data would also allow for a retrospective comparison of changes in relevant variables (e.g., symptom levels, strength of the therapeutic alliance) throughout the treatment process for premature terminators and treatment completers. Most importantly, researchers should continue to develop interventions for reducing premature termination and test the empirical efficacy of these strategies. The results of this study suggest that interventions to address problems in the therapeutic alliance would be one promising area for future research.

## **6.7. Conclusion**

The current dissertation explored the predictors of, reasons for, and outcomes related to premature termination of outpatient psychotherapy. Termination status of previous therapy episodes, a weak therapeutic alliance, and depression as a main reason

for seeking treatment emerged as the best predictors of premature termination in this study. Although these results were only partially consistent with expectations in that several previously established predictors were unrelated to termination status, the significant predictors were highly accurate in distinguishing premature terminators from treatment completers. Consistent with hypotheses, environmental obstacles and dissatisfaction with services were the most commonly reported reasons for premature termination. However, problem improvement was not identified as a reason for premature termination of therapy as frequently as expected, possibly because this research was conducted from the clients' perspective rather than the therapists'. Finally, it was expected that treatment completers would demonstrate better therapeutic outcomes than late premature terminators who would show better outcomes than early premature terminators. Treatment completers did report more problem improvement, greater satisfaction with services, and less current functional impairment than premature terminators, as hypothesized. However, the expected differences between clients who prematurely terminated before attending six sessions versus after attending at least six sessions were not found. Thus, future research into individual differences among premature terminators is needed in addition to further research into strategies for reducing premature termination.

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## APPENDIX A: SURVEY PILOTING

### Rationale

Because a majority of the survey items were derived from combinations of questions from previous studies with the wording of some items either modified or freely composed by the researcher, it was necessary to conduct a pilot study to assess respondents' understanding of the survey items. For this dissertation, piloting of the survey was also needed to determine if any important reasons for premature termination of therapy had been overlooked. Finally, piloting the survey allowed for optimization of the online user interface.

### Participants

Participants were eligible for the pilot study if they were at least 19 years old and had previously participated in outpatient psychotherapy as adults. Participants were recruited through flyers posted at Lincoln businesses (e.g., coffee shops, grocery stores, fitness centers), an advertisement on the Lincoln Craigslist, an advertisement on the University of Nebraska-Lincoln Anxiety Disorders Clinic website, and an advertisement in *The Scarlet*, a monthly newspaper for University of Nebraska-Lincoln staff. Ten community members participated. Their average age was 36.4 (range 22-59). Most (90.0%) identified as "White/European American," while one identified as "Latino-a/Hispanic." Five participants identified as men, three identified as women, one identified as "queer," and one identified as "genderfluid." A majority of participants (70%) identified as heterosexual. One participant identified as bisexual, one as "queer," and one as "pansexual." Most participants (80%) had at least some college education, including three with a college degree and one with an advanced degree. Two had a high school

diploma or GED. Most participants were low income with 70% of their households earning under \$25,000 per year. These participants were compensated \$10.

### **Procedures**

Participants individually completed the prototype survey on a desktop computer in a lab in the presence of the primary investigator. While completing the survey, participants were instructed to voice everything they were thinking as part of a think-aloud cognitive interview (Dillman, 2007). Prompts were provided by the primary investigator as needed and a few specific questions were asked to ascertain whether or not participants were interpreting the survey items in the way intended. Written notes were taken on participants' comments about question clarity and the survey interface. The interviews were also audio-recorded to allow further review of salient comments.

### **Results**

The think-aloud cognitive interviews resulted in several changes to the survey instrument.

**Clarifying item wording.** Multiple participants commented that the wording of one of the main screening questions about termination status was unclear. In the prototype survey, this item read, "For the most recent time that you participated in outpatient psychological therapy (besides any ongoing treatment), did you complete the full recommended course of treatment or did you stop attending treatment before your therapist wanted you to stop?" Participants expressed being particularly confused by the phrases "recommended course of treatment" and "before your therapist wanted you to stop." Thus, approximately half way through pilot testing, the wording of this item was changed to the following: "For the most recent time that you participated in outpatient

psychological therapy (besides any ongoing treatment), did you and your therapist agree together that you had finished treatment or did you stop attending on your own without discussing it with your therapist?” The four participants in the second half of pilot testing were asked specifically about this item and they stated that the new wording was clear. Therefore, the response choices for this screening item and the wording of additional items about termination status were also changed to match this new wording.

Several other items were also modified to improve their clarity based on participants’ feedback. These wording changes are described below:

- In the definition of outpatient psychological therapy provided at the beginning of the survey, inpatient treatment is excluded. The original description “inpatient treatment, which is treatment for which you stayed overnight at the treatment center” was changed to “treatment that involved staying overnight at the treatment center (i.e., inpatient treatment.)”
- “Is this the first time that you have participated in outpatient psychological therapy?” was changed to “Is this the first *and only* time that you have participated in outpatient psychological therapy?”
- Parenthetical text was added to the question about prior treatment as follows: “Since age 18, how many separate times have you participated in a course of outpatient psychological therapy (i.e., at a different time period or with a different therapist)?”
- The instructions for ranking one’s main reason(s) for seeking therapy from the list of presenting problems were clarified to say: “Rank up to two

reasons from the list below where ‘1’ is the most important and ‘2’ is the second most important. Leave the other boxes blank.”

- For the question about self-referral to therapy versus external referral source, the phrase “I probably would not have gone, but...” was added to the start of each response choice indicating external pressure to seek treatment and the phrase “strongly encouraged” was removed. Thus, these choices read, “I probably would not have gone, but \_\_\_\_\_ pressured me to seek treatment” instead of “\_\_\_\_\_ strongly encouraged or pressured me to seek treatment.”
- Because a couple of participants mentioned that they participated in a couples or family session on occasion while in individual therapy, the phrase “for the majority of time you were in treatment” was added to the question “What type of psychological therapy did you do?”
- “Was your therapist a graduate student?” was changed to “Was your therapist in graduate school at the time you were in therapy?”
- “What is your religion?” was changed to “What is your religious/spiritual identification?” In addition, the response choices for this question were changed from “Protestant” to “Christian” and from “None” to “Atheist or Agnostic.”

**Repeating definition and instructions.** Through their questions and comments during the think-aloud cognitive interviews, participants demonstrated difficulty remembering the definition of *outpatient psychological therapy* that was provided at the beginning of the survey, particularly what was not included under that term for this study.

Thus, the portion of the definition that described what was excluded from this study (i.e., “treatment that involved only discussing prescribed medications, treatment that involved staying overnight at the treatment center, treatment that was only for alcohol or drug use, or treatment that was legally required”) was repeated prior to the treatment history items.

Some participants also appeared to forget the instructions to consider the most recent time they had participated in outpatient psychological therapy when responding to the questions. Therefore, reminders of these instructions were added periodically throughout the survey instrument.

**Providing comprehensive response choices.** Participants suggested that the available response choices for certain items were not comprehensive. Thus, additional options were incorporated for several items. These additions are outlined below:

- Because participants indicated difficulty choosing among the options for self-referral versus external pressure to attend therapy, an option was added that said: “I sought treatment for myself with some encouragement from other people in my life.”
- “Both individual therapy and group therapy” was added as a response choice for the question about type of treatment.
- In the question about treatment setting, the option of community mental health center was modified to say “or other non-profit agency” to be more inclusive.
- “Transgender” and “I don’t know” were added as options for therapist’s gender. (“Transgender” and “other” were already options for participants’ gender.)

- For the questions about race/ethnicity of both participants and their therapists, “Arab American/Middle Eastern,” “Bi-racial/Multiracial,” and “Other. Please specify:” were added.
- “Trade school/Technical training” was added as an option for participants’ level of education.
- “Disabled/On disability” was added as an option for participants’ current employment status.
- Parenthetical instructions were added that participants could just type “N/A” if the questions about past premature termination or treatment completion were not applicable to them.

**Adding and clarifying reasons for premature termination.** Finally, a primary purpose of the cognitive interviews was to determine whether the survey items effectively captured the various reasons that clients prematurely terminate outpatient psychotherapy. Participants provided valuable feedback on this section of the questionnaire which resulted in several changes.

First, a few participants commented that it was difficult to distinguish between the three broad reasons for premature termination involving dissatisfaction with therapy in the survey prototype: “dissatisfaction with therapy/therapy made things worse,” “dissatisfaction with therapist,” and “dissatisfaction with agency.” Thus, these three options were combined into one: “Dissatisfaction with therapy, therapist, or agency/Therapy wasn’t working or made things worse.” The sections containing follow-up questions about factors that were important in participants’ dissatisfaction with therapy, the therapist, or the agency were also combined into one section of follow-up

questions. However, it seemed like this combination would have made the follow-up section for those participants who selected the dissatisfaction with services reason for premature termination excessively lengthy at 48 items. Thus, this section was reduced to 40 items by combining certain items from the survey prototype and eliminating items that seemed redundant.

Next, one participant inquired about which broad reason for premature termination would encompass an unsupportive attitude for her therapy attendance within her social network. Therefore, the option “embarrassed by therapy” was modified to read “embarrassed by therapy/lack of support for therapy” to incorporate this additional reason for premature termination. In response to this participant’s description of her experience, an item was also added to the follow-up section for this broad reason, which said, “The people close to me knew I was in therapy and were not supportive of it.”

A few participants commented that the “external difficulties/environmental obstacles” reason for premature termination was ambiguous. Thus, parenthetical examples were added for clarity as follows: (e.g., insurance/financial issues, transportation problems). “My insurance became too confusing or challenging to deal with any longer” was also added as a factor in the follow-up section for this reason at the suggestion of one participant.

Most importantly, one participant pointed out a reason for premature termination that had been completely overlooked: a relapse of mental health or substance abuse problems which interfered with therapy attendance. Thus, “relapse of mental health or substance use problem” was added to the response choices for broad reasons for premature termination approximately half way through survey piloting. Two participants

in the second half of the pilot study subsequently chose this as their primary reason for prematurely terminating therapy, thereby demonstrating the importance of its addition.

These three participants also helped to generate the items for the follow-up section about important factors in their relapse and decision to stop attending therapy. These items are listed below:

- I had a relapse in my substance use.
- My mental health symptoms got worse so that they interfered with my therapy attendance.
- I felt too hopeless or helpless to continue in therapy.
- I felt too embarrassed by my relapse to go back to therapy.
- I stopped taking my prescribed psychiatric medication(s).

## APPENDIX B: SURVEY INSTRUMENT

The following questions are about your experience with outpatient psychological therapy. **Outpatient psychological therapy** refers to any counseling or treatment for problems with your emotions, nerves, or other mental health issues (e.g., anxiety, depression, stress, general life difficulties). It involves one or more sessions lasting 20 minutes or longer in which you talked about your problems with a counselor, psychiatrist, psychologist, social worker, or other mental health professional. **Outpatient psychological therapy** does NOT include treatment that involved ONLY discussing prescribed medications or treatment that involved staying overnight at the treatment center (i.e., inpatient treatment). For the purposes of this survey, **outpatient psychological therapy** also does NOT include treatment that was ONLY for alcohol or drug use or treatment that was legally required.

1. Based on the definition above, since age 18, have you ever participated in a session of **outpatient psychological therapy**?

- Yes
- No

2a. Are you currently participating in **outpatient psychological therapy**?

- Yes
- No

2b. Is this the first and only time that you have participated in **outpatient psychological therapy**? (*Displayed if participant selected "Yes" for item 2a.*)

- Yes
- No

3. For the most recent time that you participated in **outpatient psychological therapy** (besides any ongoing treatment), did you and your therapist agree together that you had finished treatment or did you stop attending on your own without discussing it with your therapist?

- My therapist and I decided together that I was finished.
- I stopped attending on my own without discussing it with my therapist.

The following questions are about your overall experience with **outpatient psychological therapy**. Remember that for the purposes of this survey, **outpatient psychological therapy** does NOT include treatment that involved ONLY discussing prescribed medications, treatment that involved staying overnight at the treatment center, treatment that was ONLY for alcohol or drug use, or treatment that was legally required.

4. Since age 18, how many separate times have you participated in a course of outpatient psychological therapy (i.e., at a different time period or with a different therapist/agency)?

[Pull down box: Choices range from *1* to *20 or more*]

5. For *any* of these times that you participated in outpatient psychological therapy, did you *ever* agree with your therapist that you had finished treatment?

- Yes
- No

6. For *any* of these times that you participated in outpatient psychological therapy, did you *ever* stop attending therapy on your own without discussing it with your therapist?

- Yes
- No

For the following questions, please consider the most recent time that you participated in **outpatient psychological therapy** (besides any ongoing treatment) when responding.

7. When was the last time that you participated in **outpatient psychological therapy**?

[Pull down box: Choices range from *Less than 1 month ago* to *Over 10 years ago*]

8. How long did you participate in outpatient psychological therapy?

[Pull down box: Choices range from *1 week* to *More than 5 years*]

9. How often did you usually attend therapy sessions for the majority of the time that you were in treatment?

- More than once per week
- Once per week
- Once every two weeks
- Once per month
- Less than once per month

10. How many sessions of therapy did you attend?

- 1-2 sessions

- 3-20 sessions
- More than 20 sessions

11. At the beginning of therapy, were any expectations for treatment course or length discussed?

- Yes
- No
- I don't know

12. For what main reason(s) did you seek therapy? Rank up to two reasons from the list below where "1" is the most important reason and "2" is the second most important reason. Leave the other boxes blank.

<input type="text"/>	ADHD/ADD
<input type="text"/>	Adjustment to change in lifestyle or welfare
<input type="text"/>	Anger management
<input type="text"/>	Anxiety
<input type="text"/>	Bipolar Disorder
<input type="text"/>	Cognitive or learning problems
<input type="text"/>	Depression
<input type="text"/>	Eating disorder
<input type="text"/>	Grief
<input type="text"/>	Personality disorder
<input type="text"/>	Physical health problems
<input type="text"/>	Relationship problems
<input type="text"/>	Schizophrenia or psychosis
<input type="text"/>	Self-improvement or personal growth
<input type="text"/>	Sexual problems
<input type="text"/>	Stress management
<input type="text"/>	Substance use
<input type="text"/>	Thoughts of hurting or killing myself
<input type="text"/>	Trauma
<input type="text"/>	Work or school problems

Other. Please specify:

13. Did you seek therapy for yourself or did someone else pressure you to seek treatment?

- I sought treatment for myself.
- I sought treatment for myself with some encouragement from other people in my life.
- I probably would not have gone, but my family pressured me to seek treatment.
- I probably would not have gone, but my partner/significant other pressured me to seek treatment.
- I probably would not have gone, but my employer pressured me to seek treatment.
- I probably would not have gone, but my lawyer or a member of law enforcement pressured me to seek treatment.
- I probably would not have gone, but someone else pressured me to seek treatment.  
Please specify:

*As a reminder, for the following questions, please consider the most recent time that you participated in outpatient psychological therapy (besides any ongoing treatment) when responding.*

14. What type of outpatient psychological therapy did you do for the majority of the time you were in treatment?

- Individual therapy
- Group therapy
- Both individual therapy and group therapy
- Couples therapy

15. Where did you participate in outpatient psychological therapy?

- College counseling center
- Community mental health center or other non-profit agency
- Hospital outpatient psychiatric clinic
- Private practice
- Research clinic
- University training clinic
- VA
- Other. Please specify:

16. Was your therapist in graduate school at the time you were in therapy?

- Yes
- No
- I don't know

17. What gender was your therapist?

- Male
- Female
- Transgender
- I don't know

18. Approximately how old was your therapist?

- Under 30 years old
- 30 to 60 years old
- Over 60 years old
- I don't know

19. What race/ethnicity was your therapist?

- White/European Origin
- Black/African American/African Origin
- Asian American/Asian Origin/Pacific Islander
- Latino-a/Hispanic
- American Indian/Alaska Native/Aboriginal Canadian
- Arab American/Middle Eastern
- Bi-racial/Multi-racial
- Other. Please specify:
- I don't know

*For the following questions, please consider the most recent time that you participated in outpatient psychological therapy (besides any ongoing treatment) when responding.*

Please use the scale below to indicate the extent to which the following descriptions apply to your relationship with your therapist and your experience in treatment:

	Never	Rarely	Sometimes	Often	Always
20. My therapist respected my beliefs, customs, and the ways that we do things in my family.	<input type="radio"/>				
21. My therapist made negative judgments about me because of the ways that I was different from him/her (such as race, income level, job, or religion).	<input type="radio"/>				
22. My therapist used everyday language that I could understand.	<input type="radio"/>				
23. My therapist and I worked toward mutually agreed upon goals.	<input type="radio"/>				
24. My therapist and I agreed on what was important for me to work on.	<input type="radio"/>				
25. My therapist and I collaborated on setting goals for my therapy.	<input type="radio"/>				
	Never	Rarely	Sometimes	Often	Always
26. My therapist and I established a good understanding of the kind of changes that would be good for me.	<input type="radio"/>				
27. If you are reading this, mark "Rarely" as your response to this question.	<input type="radio"/>				
28. What I did in therapy gave me new ways of looking at my problem.	<input type="radio"/>				
29. I felt that the things I did in therapy helped me to accomplish the changes that I wanted.	<input type="radio"/>				
30. As a result of my sessions, I was clearer as to how I could change.	<input type="radio"/>				
31. I believed the way my therapist and I were working with my problem was correct.	<input type="radio"/>				

	Never	Rarely	Sometimes	Often	Always
32. I believed my therapist liked me.	<input type="radio"/>				
33. My therapist and I respected each other.	<input type="radio"/>				
34. I felt that my therapist appreciated me.	<input type="radio"/>				
35. I felt my therapist cared about me even when I did things that my therapist did not approve of.	<input type="radio"/>				

36. For the most recent time that you participated in outpatient psychological therapy (besides any ongoing treatment), did you and your therapist agree together that you had finished treatment or did you stop attending on your own without discussing it with your therapist?

- My therapist and I decided together that I was finished.
- I stopped attending on my own without discussing it with my therapist.

37. You indicated that you stopped attending your most recent therapy without discussing it with your therapist. Please select the answer below that *best* describes your reason for stopping therapy. You will be given an opportunity to provide more specific information about your selected reason. (*Displayed if participant selected "I stopped attending on my own without discussing it with my therapist" for item 36.*)

- No longer needed therapy/Problem improved
- Dissatisfaction with therapy, therapist, or agency/Therapy wasn't working or made things worse
- Embarrassed by therapy/Lack of support for therapy
- External difficulties/Environmental obstacles (e.g., insurance/financial issues, transportation problems)
- Relapse of mental health or substance use problem
- Unmotivated for therapy

38. You indicated that you stopped attending therapy because you felt that you no longer needed therapy and/or your problem improved. Please rate the importance of the following factors in your problem improvement/decision that therapy was no longer

needed. (Displayed if participant selected "No longer needed therapy/Problem improved" for item 37.)

	Not at all important	Slightly important	Moderately important	Very important
I accomplished all or most of my goals for therapy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My problem improved due to therapy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My physical symptoms decreased.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My negative or distressing thoughts decreased.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I experienced a decrease in my negative emotions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Not at all important	Slightly important	Moderately important	Very important
I experienced an increase in my positive emotions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My problems were not interfering with my life as much.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt better able to manage life difficulties, stress, and emotions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If you are reading this, mark "Moderately Important" as your response to this question.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I adopted an accepting attitude toward difficult emotions and situations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Not at all important	Slightly important	Moderately important	Very important
I wanted to handle the problem on my own.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I thought my problems would get better without more professional help.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Not at all important	Slightly important	Moderately important	Very important
Circumstances changed so that my problems improved on their own.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I decided to go elsewhere for services.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

39. Please include any additional comments about the reasons you no longer needed therapy and your decision to stop attending therapy here: *(Displayed if participant selected "No longer needed therapy/Problem improved" for item 37.)*

[Free comment box]

40. You indicated that you stopped attending therapy because you were dissatisfied with therapy, your therapist, or the treatment agency. Please rate the importance of the following factors in your dissatisfaction and decision to stop attending therapy. *(Displayed if participant selected "Dissatisfaction with therapy, therapist, or agency/Therapy wasn't working or made things worse" for item 37.)*

	Not at all important	Slightly important	Moderately important	Very important
Therapy was not helpful from the beginning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Therapy was initially helpful, but progress slowed or stopped.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Therapy made my problems worse.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The goals for therapy were not clear.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Therapy did not address my problem or goals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The things that we were doing in therapy did not make sense.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I could not apply the skills learned in therapy to my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Not at all important	Slightly important	Moderately important	Very important

	Not at all important	Slightly important	Moderately important	Very important
I wanted a different type of treatment than what I was getting (e.g., individual therapy, group therapy, medication).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If you are reading this, mark "Slightly Important" as your response to this question.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There was too little attention to my past in therapy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There was too much attention to my past in therapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Therapy moved more slowly than I expected.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Therapy moved more quickly than I expected.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Homework was too difficult or time consuming.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Not at all important	Slightly important	Moderately important	Very important
Therapy made me anxious, nervous, or uncomfortable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My therapist was rude to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I could not communicate with my therapist.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My therapist did not understand my problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt treated poorly or unfairly, because of my race, ethnicity, sexual orientation, gender, religion, etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was not comfortable with my therapist's approach.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My therapist was too personal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Not at all important	Slightly important	Moderately important	Very important

	Not at all important	Slightly important	Moderately important	Very important
My therapist was too impersonal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My therapist talked too much.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My therapist talked too little.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My therapist did not give me enough direction.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My therapist made too many requests/demands.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I did not like my therapist's personality.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I found it difficult to relate to my therapist.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Not at all important	Slightly important	Moderately important	Very important
My therapist was too young.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My therapist was too inexperienced.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My therapist did not seem knowledgeable about my problems or the treatment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was not confident in my therapist's ability to help from the beginning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
As I got further in therapy, I did not think my therapist could help anymore.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt that my therapist did not like me or thought negatively of me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My therapist did not seem interested in my problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Not at all important	Slightly important	Moderately important	Very important
I felt that my therapist betrayed my trust.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Not at all important	Slightly important	Moderately important	Very important
I felt like my therapist was using me (e.g., for money, research, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I did not like the treatment agency staff (other than my therapist).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The agency policies were a hassle.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The agency hours were inconvenient.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The agency was too far away from where I lived.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

41. Please include any additional comments about the reasons for your dissatisfaction and your decision to stop attending therapy here: *(Displayed if participant selected "Dissatisfaction with therapy, therapist, or agency/Therapy wasn't working or made things worse" for item 37.)*

[Free comment box]

42. You indicated that you stopped attending therapy because you felt embarrassed by therapy or lacked support for therapy. Please rate the importance of the following factors in your embarrassment and decision to stop attending therapy. *(Displayed if participant selected "Embarrassed by therapy/Lack of support for therapy" for item 37.)*

	Not at all important	Slightly important	Moderately important	Very important
I was concerned about what other people would think if they found out I was in therapy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The people close to me knew I was in therapy and were not supportive of it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt that seeking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Not at all important	Slightly important	Moderately important	Very important
therapy was a sign of personal failure or weakness.				
I was embarrassed to talk to the therapist about my problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information discussed in therapy was too personal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt out of place in therapy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I was doing things wrong in therapy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

43. Please include any additional comments about the reasons for your embarrassment and decision to stop attending therapy here: *(Displayed if participant selected “Embarrassed by therapy/Lack of support for therapy” for item 37.)*

[Free comment box]

44. You indicated that you stopped attending therapy because of external difficulties. Please rate the importance of the following external difficulties in your decision to stop attending therapy. *(Displayed if participant selected “External difficulties/Environmental obstacles (e.g., insurance/financial issues, transportation problems)” for item 37.)*

	Not at all important	Slightly important	Moderately important	Very important
I did not have time for therapy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My schedule changed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Therapy conflicted with my work schedule.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I did not have transportation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Not at all important	Slightly important	Moderately important	Very important
I moved.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I could not afford to pay for more therapy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My health insurance would not pay for more therapy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My insurance became too confusing or challenging to deal with any longer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had medical problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My partner or family wanted me to stop.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I did not have childcare.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The therapist was no longer available (e.g., left agency, graduated).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

45. Please include any additional comments about the external difficulties and your decision to stop attending therapy here: *(Displayed if participant selected “External difficulties/Environmental obstacles (e.g., insurance/financial issues, transportation problems)” for item 37.)*

[Free comment box]

46. You indicated that you stopped attending therapy because you experienced a relapse of your mental health or substance use problem. Please rate the importance of the following factors in your relapse and decision to stop attending therapy. *(Displayed if participant selected “Relapse of mental health or substance use problem” for item 37.)*

	Not at all important	Slightly important	Moderately important	Very important
I had a relapse in my substance use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Not at all important	Slightly important	Moderately important	Very important
My mental health symptoms got worse so that they interfered with my therapy attendance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt too hopeless or helpless to continue in therapy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt too embarrassed by my relapse to go back to therapy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I stopped taking my prescribed psychiatric medication(s).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

47. Please include any additional comments about the reasons for your relapse and decision to stop attending therapy here: *(Displayed if participant selected "Relapse of mental health or substance use problem" for item 37.)*

[Free comment box]

48. You indicated that you stopped attending therapy because you were unmotivated for therapy. Please rate the importance of the following factors in your lack of motivation and decision to stop attending therapy. *(Displayed if participant selected "Unmotivated for therapy" for item 37.)*

	Not at all important	Slightly important	Moderately important	Very important
I did not feel emotionally ready for therapy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt I did not have the time or energy to devote to therapy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I lost interest in therapy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was never very interested in therapy,	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Not at all important	Slightly important	Moderately important	Very important
but someone else pressured me to try it.				

49. Please include any additional comments about the reasons for your lack of motivation and decision to stop attending therapy here: *(Displayed if participant selected "Unmotivated for therapy" for item 37)*

[Free comment box]

50a. If you ever agreed with your therapist that you had finished therapy in the past, what was different about that therapy compared to this therapy that you stopped attending on your own? (If not applicable, just type "N/A.") *(Displayed if participant selected "I stopped attending on my own without discussing it with my therapist" for item 36.)*

[Free comment box]

50b. If you ever stopped attending treatment on your own in the past, what was different about that therapy compared to this therapy that you finished in agreement with your therapist? (If not applicable, just type "N/A.") *(Displayed if participant selected "My therapist and I decided together that I was finished" for item 36.)*

[Free comment box]

For the following items, please provide your honest opinions of the services you received during your most recent experience with outpatient psychological therapy (besides any ongoing treatment), whether they are positive or negative.

51. How would you rate the quality of service you received?

Excellent

Good

Fair

Poor

52. Did you get the kind of service you wanted?

No, definitely not

No, not really

Yes, generally

Yes, definitely

53. To what extent did the treatment program meet your needs?

Almost all of my needs were met

Most of my needs were met

Only a few of my needs were met

None of my needs were met

54. If a friend were in need of similar help, would you recommend your most recent treatment program to them?

- No, definitely not       No, I don't think so       Yes, I think so       Yes, definitely
55. How satisfied are you with the amount of help you received?  
 Quite dissatisfied       Indifferent or mildly dissatisfied       Mostly satisfied       Very satisfied
56. Did the services you received help you to deal more effectively with your problems?  
 Yes, they helped a great deal       Yes, they helped somewhat       No, they really didn't help       No, they seemed to make things worse
57. In an overall, general sense, how satisfied are you with the service you received?  
 Very satisfied       Mostly satisfied       Indifferent or mildly dissatisfied       Quite dissatisfied
58. If you were to seek help again, would you come back to your most recent treatment program?  
 No, definitely not       No, I don't think so       Yes, I think so       Yes, definitely
59. Please consider the main problem for which you most recently sought outpatient psychological therapy. How is that problem now compared to how it was before your most recent experience with outpatient psychological therapy?  
 Much worse       Slightly worse       Approximately the same       Slightly improved       Much improved
60. What do you think is the main reason for any change in that problem?  
 Psychological therapy  
 Change in life circumstances  
 Changes I made on my own  
 Changes encouraged by someone other than my therapist  
 Other. Please specify:

For the following items, please choose the number that best describes how the problem for which you most recently sought therapy affects you NOW.

	Not at all		Mildly		Moderately		Markedly		Extremely		
	0	1	2	3	4	5	6	7	8	9	10
61. The problem disrupts my work/school work:											
62. The problem disrupts my social life/leisure activities:											
63. The problem disrupts my family life/home responsibilities :											

64. What is your age?

[Free text box]

65. What are the first two digits of your zip code?

[Free text box]

66. What is your gender?

- Male
- Female
- Transgender
- Other. Please specify:

67. What is your sexual orientation?

- Bisexual
- Gay
- Heterosexual/Straight
- Lesbian
- Other. Please specify:

68. What is your race/ethnicity?

- White/European Origin
- Black/African American/African Origin
- Asian American/Asian Origin/Pacific Islander
- Latino-a/Hispanic
- American Indian/Alaska Native/Aboriginal Canadian
- Arab American/Middle Eastern
- Bi-racial/Multi-racial
- Other. Please specify:

69. What is your religious/spiritual identification?

- Catholic
- Christian
- Jewish
- Muslim
- Hindu
- Buddhist
- Atheist or Agnostic
- Other. Please specify:

70. What is your relationship status?

- Single
- Dating
- Engaged
- Married or marriage-like relationship
- Divorced

- Other. Please specify:
71. Which of the following best describes your highest obtained level of education?
- Did not finish high school
  - High school diploma or GED
  - Some college/In college
  - Trade school/Technical training
  - College degree (Associate's or Bachelor's)
  - Advanced degree (Master's or Doctorate)
72. Which of the following best describes your current employment?
- Full-time worker
  - Part-time worker
  - Stay-at-home parent
  - Student
  - Unemployed
  - Disabled/On disability
73. What is your yearly household income?
- Under \$25,000
  - \$25,000 to \$50,000
  - \$50,000 to \$75,000
  - \$75,000 to \$100,000
  - Over \$100,000