The Relationship Between Fee for Services and Couples Therapy Dropout Moderated by Therapeutic Alliance in a Training Environment

by

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Abstract

Dropout in psychotherapy is a common problem associated with a variety of negative outcomes for clients, service providers, and society (Anderson et al., 2019). Although many studies cite inconsistent findings between client demographics and dropout rates (Barrett et al., 2008; Swift & Greenburg, 2012), some research indicates that low-income clients may be at a higher risk of dropout (Anderson et al., 2019; Wierzbicki & Pekarik, 1993). Indeed, a recent study found that the more clients paid in therapy fees (as a percentage of their income), the more likely they were to dropout of therapy (Knizley, 2016). The present study investigated the associations between fee and dropout in a sample of couples at a marriage and family therapy training clinic in the southeast. Results from a hierarchical multiple regression indicated that higher fees were associated with fewer total sessions attended for both males and females. Theoretical and practical implications are discussed.

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Chapter 1: Introduction

Approximately one in five clients terminate therapy prematurely (Fernandez et al., 2015; Swift & Greenburg, 2012; Swift et al., 2017), with community mental health populations reaching rates as high as fifty percent (Klein et al., 2003). This phenomenon not only presents challenges related to the delivery of effective treatment (Barrett et al., 2008) but can negatively impact clients' chances of recovery (Anderson & Lambert, 2001; Warden et al., 2009). Frequent dropouts can also lead to low clinician morale, contributing to burn-out and high turn-over rates (Klein et al., 2003; Masi et al., 2003). Even infrequent dropouts lead to an unproductive use of staff time, contributing to overall revenue loss (Joshi et al., 1986). Moreover, mental health service providers often become limited in their treatment capabilities due to the frequent start/stopping of treatment (Carpenter et al., 1979; Reis & Brown, 1999). These factors limit both the efficacy of treatment and the number of people served, thus contributing to the overall burden on healthcare systems and society due to untreated mental illness and relationship problems (Barrett et al., 2008; Masi et al., 2003). In sum, premature termination contributes to poor client outcomes and inefficient distribution of resources for clients, therapists, and society (Anderson et al., 2019).

To further the issue, meta-analyses have generally found that some demographic variables, such as low socioeconomic status (SES), are associated with an increased risk of premature termination (Wierzbicki & Pekarik, 1993). Swift and Greenburg (2012) found mixed results related to client demographics and premature termination, though they and other authors recognize a critical need to evaluate the inconsistent outcomes in dropout literature (Barrett et al., 2008; Swift & Greenburg, 2012). Indeed, many studies identify low SES as an essential predictor of dropout (Arnow et al., 2007; Davis et al., 2008; Grimes & McElwain, 2008; Mohr et al., 2006;

Roseborough et al., 2016; Snowden & Thomas, 2000; Warden, 2009; Wierzbicki & Pekarik, 1993). These findings illustrate an increased risk of dropout among a population with historically reduced access to services, compounding dropout issues alone.

This increased risk may partially be explained by the financial strain low-income clients face. Indeed, Maslow's theory of human motivation would assert that fulfilling basic needs (e.g., food, shelter) would precede psychological needs (e.g., payment for therapy, regular attendance) if the barriers are too substantial (Maslow, 1943). Some studies support this theory, finding that insufficient therapy funds and higher therapy costs increase dropout (Edlund et al., 2002; Herron & Sitkowski, 1986). However, most research has found no relationship between therapy fees and dropouts (Clark & Kimberly, 2014; Taller, 2001). Many of these studies have been critiqued for methodological issues, often utilizing data with low maximum fees that were below twenty dollars (Herron & Sitkowski, 1986). These low fee structures are generally not representative of community service providers (non-training clinics), making the external validity of these findings meager. Overall, the fee associated with therapy is a highly understudied and mostly outdated research area that presents conflicting evidence (Clark & Kimberly, 2014).

In an attempt to clarify these findings, Knizley (2016) tested the impact of therapy fees on treatment dropout and introduced a novel variable to better understand this relationship—fee as a percentage of income (FPI). This study, conducted at a marriage and family therapy (MFT) training clinic, found that higher FPI predicted dropout after one session and fewer total sessions over the course of couples therapy. This represents one of the few findings linking fee with dropout in MFT and couples research (Knizley, 2016). Very little research has directly investigated dropout outside of individual therapy (Masi et al., 2003; Werner-Wilson & Winter, 2010), neglecting a large percentage of treatment administration and the possible differences in

dropout rates. Furthermore, this study found that FPI was substantially higher for economically disadvantaged clients, even with the implementation of a sliding scale. Although some studies show increased dropout in training environments (Swift & Greenberg, 2012), some research finds no difference (Fernandez et al., 2015). Additionally, training clinics generally provide discounted services, making treatment more accessible to low-income clients. Indeed, Knizley (2016) presents preliminary evidence that FPI may be a more precise measure of the interaction between client income and early termination of therapy services.

While FPI may provide more insight into these processes, the factors contributing to dropout often yield mixed results when evaluating most client and therapist variables. Nonetheless, meta-analyses have identified a robust therapeutic alliance as one of the most consistent predictors of retention (Roos & Werbart, 2013; Sharf et al., 2010), especially in early treatment (Knerr et al., 2011). There is also a broad consensus that a strong therapeutic alliance is related to successful treatment outcomes across treatment modalities (Horvath & Bedi, 2002; Horvath et al., 2011). Although many factors can buffer the likelihood of clients' dropping-out (Werner-Wilson & Winter, 2010), the alliance presents itself as a strong candidate to buffer the widespread negative consequences of dropout among economically disadvantaged clients. Moreover, low-SES clients may present to therapy with a variety of concerns about the long-term costs of treatment; however, if the therapist is able to instill hope and establish an initial therapeutic alliance, it may be enough to buffer the impact of financial strain and lead to subsequent sessions. Indeed, the alliance has been identified as the most crucial determinant in treatment continuance (Beutler & Harwood, 2002).

Some studies suggest there is an increased risk of dropout among economically disadvantaged clients (Arnow et al., 2007; Davis et al., 2008; Grimes & McElwain, 2008; Mohr

et al., 2006; Snowden & Thomas, 2000; Warden, 2009; Wierzbicki & Pekarik, 1993), who often pay the highest percentage of their income in therapy fees (Knizley, 2016). This is concerning, as therapy dropout and financial strain are both linked with myriad negative consequences (Anderson et al., 2019; Triolo et al., 2020). Nonetheless, a strong therapeutic alliance may buffer client dropout (Beutler & Harwood, 2002). Understanding how fee for services and therapeutic alliance influence dropout can help develop interventions and procedures to improve treatment retention in psychotherapy—specifically for economically disadvantaged clients. Indeed, training clinics provide a unique setting for low-income clients to receive cash-pay services at a reasonable entry fee level. Fee for services is a highly understudied topic, and FPI as a unique predictor of therapy dropout requires further study. The intersection between fee for services and dropout has only been analyzed in older studies with mixed results and never with therapeutic alliance as a possible moderator. As such, to fill this gap in the literature, this study aims to examine 1.) if higher FPI predicts the total number of sessions attended in couples therapy; and 2.) if therapeutic alliance moderates the relationship between FPI and total number of sessions attended in couples therapy.

Chapter 2: Literature Review

This chapter will begin with an individual review of psychotherapy fees, psychotherapy dropout, the therapeutic alliance, and associated phenomena. In conjunction, Maslow's theory of human motivation will be considered as a theoretical lens by which to examine these variables and their significance. After this individual evaluation, a literature review of the variable interactions will be considered, and the associated study presented.

Financial Strain & Psychotherapy Fees

Financial strain is generally defined as "perceived economic stress and lack of economic support" (Adams et al., 2016, pg. 2). Although high-income client systems may also face financial strain, this review and theoretical lens will primarily focus on the impact of financial strain in the context of low-SES. A significant amount of research has linked financial strain with adverse romantic relationships and mental health outcomes. Aniol & Snyder (1997) found that financially strained couples also had higher levels of relational distress and conflict than higher-income couples. Similarly, economic stress has been linked with emotional distress (Conger et al., 1994; Conger et al., 2010), relationship instability (Fein, 2004; Gudmunson et al., 2007; Horin, 2004), and decreased relationship satisfaction (Aseltine & Kessler, 1993; Archuleta, 2011). Furthermore, financial stressors have been associated with depression (Kim et al., 2006) and anxiety (Drentea & Lavrakas, 2000). These findings illustrate many of the risk factors related to financial strain, a chronic stressor that low-income family systems regularly face (Kahn & Pearlin, 2006). They also highlight an inherent double bind—financially strained clients may have a greater need for treatment but have fewer resources to access it. Maslow's theory of human motivation provides a theoretical framework to conceptualize the increased challenges of financial strain and the associated stressors.

According to Maslow (1943), five needs govern human motivation. These needs are organized in a hierarchy wherein progression is contingent upon the general fulfillment of the need with the most power or influence. Ordered from greatest to least fundamental, these needs are physiological, safety, love/belonging, esteem, and self-actualization. Maslow (1943) asserts that the more fundamental or influential the need, the less consciousness and will-power are directed toward its fulfillment. As each need is satisfied and maintained, the subsequent need emerges and organizes human behavior. By necessity, individuals and family systems experiencing financial strain would be more focused on the fulfillment of their basic needs (physiological and safety), possibly leading to the minimization or abandonment of higher-order needs (love/belonging, esteem, or self-actualization) such as relational fulfillment and maintenance (Maslow, 1943).

Despite the similar value placed on maintaining healthy relationships (Trail & Karney, 2012), the increased occurrence of relational and mental health issues among financially strained individuals may pose a significant barrier to fulfilling higher-order needs. Maslow (1943) would assert that attending to regular relationship maintenance or self-care would prove difficult with a primary focus on the acquisition of basic needs like food, shelter, and clothing. Given these challenges, it is unsurprising that financial instability can pose a significant barrier to treatment (Edlund et al., 2002) specifically for couples (Knizley, 2016). Indeed, the successful navigation of finances can be vital to relationship health (Archuleta et al., 2013; Shapiro, 2007)—a difficult task to manage amidst the challenges associated with financial strain. In addition to these difficulties, it is concerning that low-income clients often pay a more significant portion of their total income in therapy fees (Knizley, 2016), yet another barrier to receiving relational or mental health treatment.

Therapy fees have primarily been studied to determine if the fee source or amount impacts treatment outcomes (e.g., dropout, symptom reduction, etc.). The majority of published research is relatively dated and not particularly extensive. Although many studies suggest that fee source and amount do not impact treatment outcomes (Clark & Kimberly, 2014; Taller, 2001; Ward & McCollum, 2005; Yoken & Berman, 1987), some of these studies are not conclusive. Yoken & Berman (1987) found no differences in symptom severity between fee groups but found lower stress levels in the no-fee group. Similarly, Taller (2001) found no difference in client progress but found that paying clients were significantly more vulnerable to dropout following the first session. Indeed, there is enough conflicting evidence to indicate a need for further research (Clark & Kimberly, 2014; Knizley, 2016; Taller, 2001).

Other fee literature is more conceptual and delves into the theoretical underpinnings of charging fees, factors that influence fee setting, and best practices/ethics associated with fees (Koocher & Soibatianm, 2017). A question addressed in this literature is how to make the amount charged reasonably accessible to all SES client groups. It is widely agreed that access to mental health services needs to be improved, especially for low-income clients, but how that is achieved is less clear. Some call for increased government funding (Bradley & Drapeau, 2014), while many providers implement sliding scales (Lien, 1993; Sammons, 2020). Although many clinicians believe the client must pay a fee to value therapy and make progress (Aubry et al. 2000; Jensen & Lowry, 2012), there is little evidence to support this claim (Ward & McCollum, 2005). In sum, fee literature is sparse and has done little to empirically address low-income clients' needs. Fee can be a barrier to treatment specifically for low-income couples (Snowden & Thomas, 2000) and may even lead to premature termination due to lack of resources (Edlund et al., 2002).

Psychotherapy Dropout

Clients' early termination of services is known in the literature by many definitions, such as premature termination (Corning & Malofeeva, 2004), premature discontinuation (Swift & Greenburg, 2012), attrition (Roseborough et al., 2016), and dropout (Masi et al., 2003). These definitions have been operationalized with varying criteria across studies, ultimately measuring similar but inevitably different constructs (Garfield, 1995; Hatchett & Park, 2003; Swift et al., 2009; Wierzbicki & Pekarik, 1993). Swift & Greenberg (2012) identified the five most common criteria used to operationalize dropout: Attendance of a minimum number of sessions, completion of the treatment protocol, number of missed appointments, therapist judgment, and measurement of clinically significant change. This variability has captured essential aspects of the dropout phenomenon but also presents significant methodological issues (Anderson et al., 2019). These inconsistencies in terminology and criteria demonstrate little agreement in the field on what is considered acceptable or premature when it comes to the termination of treatment (Anderson et al., 2019; Hatchett & Park, 2003). Notwithstanding the inconsistencies in terminology and methodology, dropout research as a whole is quite extensive.

Dropout literature has primarily focused on identifying client, therapist, and treatment factors associated with premature termination. Historically, client factors associated with dropout include age, race, education, and SES (Wierzbicki & Pekarik, 1993). However, a more recent meta-analysis found only age and diagnosis as significant predictors (Swift & Greengberg, 2012). Notwithstanding, many individual studies still find ethnic minority status and low SES as significant predictors of dropout (Anderson et al., 2019; Arnow et al., 2007; Wang, 2007). The primary non-demographic client factors associated with dropout are high levels of initial symptom distress (Anderson et al., 2018; Fawcett & Crane, 2013; Sasso & Strunk, 2013;

Tarescavage et al., 2015), and some diagnoses such as mood or anxiety disorders (Hamilton et al., 2011). Therapist factors have received more attention in recent years, with meta-analyses providing evidence for (Swift & Greenberg, 2012) and against (Fernandez et al., 2015) therapist experience being associated with dropout. Both these studies found no other significant therapist factors as reliable predictors of dropout (e.g. clinician race, age, orientation, etc.). The environment in which therapy takes place may also play a role in dropout. Swift and Greenberg (2012) highlight that university-based services were significantly associated with dropout in their meta-analysis. However, whether this finding is driven by therapist experience level or another factor is somewhat unclear.

Finally, some research has looked at treatment factors such as dropout differences based on therapy modality (i.e., individual, couple, or family therapy) and provider license. Generally, studies have found that MFTs are the least likely to have clients dropout when compared to other mental and physical health providers (Crane & Payne, 2011; Hamilton et al., 2011; Moore et al., 2011), though most research has been conducted within individual professions and has not compared dropout rates across different mental health licensures. Masi et al. (2003) utilized three measures of dropout and found no differences between individual, couple, and family therapy, while other studies show higher dropout rates in family therapy (Hamilton et al., 2011; Stanton & Shadish, 1997). There is little dedicated research comparing dropout rates between modalities and the vast majority of research has been conducted specifically with individual clients (Masi et al., 2003). Indeed, many mental health professionals only work with individuals, which may make studies with other client systems difficult or undesirable. Dropout literature is contradictory on many levels, though recent studies continue to evaluate client, therapist, and

treatment factors that impact client retention. Notwithstanding these inconstancies, the negative impact of dropout is generally agreed upon.

Premature termination of services at any point during treatment significantly impacts client outcomes and poses various challenges for clients, therapists, and society (Anderson et al., 2019). With dropout rates ranging somewhere between 20%-50% and little evidence to suggest these rates are declining (Swift & Greenburg, 2012), further research and relevant intervention appears necessary. Moreover, attendance through the end of a planned termination period is associated with beneficial treatment outcomes (Knox et al., 2011; Sammons, 2020; Swift & Greenberg, 2012). Most research has focused on client factors that are often impossible or very difficult to change, making some therapist and treatment factors more clinically relevant. One such factor is the therapeutic alliance, a measurable phenomenon that can be more readily addressed than static demographic factors. Indeed, Sharf & Primavera (2010) found that the therapeutic alliance has a larger effect size than the demographic variables commonly associated with dropout.

Therapeutic Alliance

The therapeutic alliance is generally defined as an emotional bond and agreement on goals or tasks (Bordin, 1979), a phenomenon strongly correlated with successful treatment outcomes across modalities (Horvath & Bedi, 2002; Horvath et al., 2011; Martin et al., 2000). The alliance has been identified as one of the common factors generally shared in all forms of psychotherapy (Keleher et al., 2019; Garfield, 1995; Imel & Wampold, 2008), factors often cited as more important to treatment outcomes than specific techniques of any single theoretical orientation (Keleher et al., 2019; Martin et al., 2000; Safran & Muran, 2006; Zuroff & Blatt, 2006). Similar to dropout, the quality of the alliance has been correlated with client distress

levels (Anderson et al., 2018; Anderson & Johnson, 2010; Chu et al., 2014) and disorders with more intrusive symptoms (Roos & Werbart, 2013). Therapist experience has also been associated with alliance quality (Anderson et al., 2018; Lorentzen et al., 2012), while other studies find no relationship (Dunkle & Friedlander, 1996). Based on the significant practical effect between the alliance and dropout (Sharf et al., 2010), it is hypothesized that the therapeutic alliance may improve treatment retention among low-income clients who are at a greater risk of dropout. Having reviewed psychotherapy fees, psychotherapy dropout, and the therapeutic alliance, Maslow's theory might also provide insight into these variables' interaction.

The chronic stress of financial strain, the relational/mental health challenges that accompany it, and the disproportionality high therapy fees may present significant challenges to low-income clients' need fulfillment. Nonetheless, Maslow (1943) describes progression within the need hierarchy as a gradual emergence, and not mutually exclusive with the complete fulfillment of the more fundamental need. With this assumption in mind, it is possible that the therapeutic alliance, a significant predictor of treatment success and retention (Horvath & Bedi, 2002; Horvath et al., 2011; Sharf et al., 2010), could buffer some of these adverse outcomes. Indeed, with a significant focus on basic need fulfillment, low-income clients may be skeptical about the benefits of therapy when compared to the financial investment. However, if the therapist is able to establish and maintain a strong alliance from the start of treatment (e.g. trust, an emotional bond, etc.), it may be enough to help clients return to subsequent sessions and receive the necessary treatment dose. Although the therapeutic alliance might be considered a psychological process from this theoretical perspective—unable to alter the reality of financial strain—it may buffer the existing psychological resources available to the client. For example, some clients may cope with the burden of financial strain and relational dissatisfaction through

avoidance (Novak & Johnson, 2017). A strong therapeutic alliance may provide therapists with the necessary influence to help clients engage with their partner and financial situation in a positive manner. Additionally, validation of the client difficulties and the possibility of hope may provide similar results. In all, an investigation of how therapy fees impact dropout, especially among low-income clients, could provide meaningful insight into improving treatment retention via the therapeutic alliance.

Fee For Services & Dropout

Overall, there is a paucity of research on the impact of fees on dropout in psychotherapy. Koocher and Soibatian (2017) note that most clinicians are either uncomfortable or reluctant to discuss fees for various reasons. Fehr (2012) adds that fee discussions can lead to feelings of anger, shame, jealousy, and greed for clinicians and clients alike. Combined with the natural clinical focus of training programs, general practice, and research, it is unsurprising that an uncomfortable matter such as fees can fall to the wayside (Koocher & Soibatian, 2017). Furthermore, there is very little research on best practices in fee setting and policies specific to mental health professions (Sammons, 2020). One of the most recent studies on the topic indicates that fee for services does not impact dropout even when accounting for many demographic differences (Clark & Kimberley, 2014), congruent with older research (Demuth & Karnis, 1980; Greenspan & Kulish, 1985; Taller, 2001).

Although not supported by most statistical analysis, some clients report that fees impacted their dropout decision (Aubry et al., 2000). Interestingly, most fee studies that find no significance between fees and dropout utilize the fee amount and income as separate variables, neglecting the interaction between fees and available financial resources of clients. In contrast with this literature, Knizley (2016) found that the higher the fee as a percentage of income, the

more likely clients were to dropout of treatment. Herron and Sitkowski (1986) highlight other methodological issues in fee research, with most studies utilizing fees below twenty dollars. Most providers that charge fees below twenty dollars likely fall into two categories—training clinics and community mental health providers. These low fee structures are generally not representative of the larger service provider infrastructure (non-training clinics), making the external validity of these findings meager. Although there is relatively little research on fees and dropout, more extensive studies have been conducted in other therapy fields.

Fee research in the substance abuse field suggests some differences may exist between self-pay and insurance-pay clients. Proctor et al. (2019) found that 35.9% of self-pay clients dropped out due to financial reasons, in contrast to only 1.5% of insurance-pay clients. Interestingly, premature termination rates between the two groups remained similar overall. Although some substance abuse research has found a relationship between personal financial cost and premature termination (Proctor et al., 2019), it is uncertain what level this research applies to more general psychotherapy literature. Nonetheless, enough evidence exists associating fee and dropout (Edlund et al., 2002; Herron & Sitkowski, 1986; Knizley, 2016) to warrant further research. One constant in many fields of treatment and the dropout literature is the importance of the therapeutic alliance in treatment retention (Sharf et al., 2010).

Therapeutic Alliance & Dropout

The therapeutic alliance was initially hypothesized to be critical to treatment retention (Bordin, 1979), an idea which has largely been confirmed by meta-analysis (Sharf et al., 2010). Indeed, Bados et al. (2007) found that almost half of clients who dropout of treatment cite a lack of satisfaction with the therapist—further indicating a poor alliance. This is an important clinical consideration, as early treatment is both when clients are most susceptible to dropout and when

the initial therapeutic relationship is being formed. Between twenty and thirty percent of clients discontinue treatment after only one session (Hamilton et al., 2011; Simon et al., 2012), with at least fifty percent of all clients terminating within the first month (Frayn, 1992). Individual, couple, and family psychotherapy has proven to be an efficacious treatment for a wide variety of mental health and relational issues (Anderson et al., 2018; Lambert & Ogles, 2004; Pinquart et al., 2016; Shadish & Baldwin, 2003), but treatment benefits are contingent upon the reception of an adequate treatment dose (Anderson et al., 2018). Indeed, most clients who dropout within the first month have weaker alliance scores than those who remain in treatment (Frayn, 1992). Many studies also propose that the alliance at first session is crucial to better understand dropout in general (Anderson et al., 2018; Ormhaug & Jensen, 2018; Yoo et al., 2016). These findings implicate the alliance as a critical factor to establish and maintain in early treatment and throughout the course of therapy.

Therapeutic Alliance & Service Fee

In a general literature search of the therapeutic alliance and therapy fees, little to no dedicated research was found. Nonetheless, it is possible to hypothesize how these variables might interact based on relevant studies. Aubry et al. (2000) found that many clients reported fees impacting their dropout decision, though this was not supported by statistical analysis. Given the importance of the alliance in client retention (Sharf et al., 2010), it is possible that these clients' reports were more indicative of their satisfaction with the therapist than the cost of treatment. Based on the alliance and dropout literature, it is reasonable to hypothesize that if a client does not have a sufficient alliance with the treatment provider to justify the financial investment, they may opt to discontinue. Indeed, some clients may be pleased with the cost of

treatment at a training clinic, but if the therapist has not learned to consistently build and maintain a strong alliance, perhaps a larger percentage of clients will dropout.

The Present Study

Despite the almost inescapable role that fees play in therapy's delivery/reception, there is little definitive research on the topic. Although there is a more robust literature on psychotherapy dropout, there is conflicting evidence related to the role of demographic variables such as low SES. Few recent studies have examined the associations between fee and dropout, and to our knowledge, only Knizley (2016) has utilized FPI to capture the interaction between therapy fees and household income. Furthermore, Knizley (2016) found preliminary evidence that higher FPI predicts dropout after one session. The present study seeks to build on these findings by examining the impact of therapy fees at the same training clinic where Knizley (2016) conducted their study. Although the general scope of these studies is similar, the participant samples are completely separate, and some statistical analyses were conducted differently. Understanding how the fee for services and the therapeutic alliance influence dropout may provide insight into what might buffer the adverse outcomes of dropout, especially for low-income clients. This study aims to answer the following research questions.

Research Question 1

Does a higher fee as a percentage of income (FPI) predict the total number of sessions attended in couples therapy? What little research exists generally indicates that fee for services does not impact dropout or the total number of sessions attended (Clark & Kimberley, 2014), though enough contrasting research exists to warrant further inquiry (Edlund et al., 2002; Herron & Sitkowski, 1986). As previously reviewed, some fee studies yield mixed results (Taller, 2001; Yoken & Berman, 1987) and Knizley (2016) found preliminary evidence that higher FPI predicts

dropout after one session and over the course of treatment. FPI is a unique variable that may provide more insight into the relationship between therapy cost and the chronic stress of financial strain. Based on this information, I hypothesize that FPI will predict the total number of sessions attended.

Research Question 2

Does the therapeutic alliance moderate the relationship between FPI and the total number of sessions attended in couples therapy? Research indicates that a weaker therapeutic alliance is associated with an increased risk of dropout (Sharf et al., 2010) and a recent study found that the therapeutic alliance mediated the relationship between therapy format and dropout (Anderson et al., 2018). To our knowledge, no studies have utilized the therapeutic alliance as a possible moderator between fee and dropout. As previously reviewed, it is expected that the alliance could buffer (moderate), but not explain (mediate) the relationship between fee and dropout. Indeed, if clients are experiencing financial strain or are paying a more substantial fee, we expect the fee to play a more significant role than the alliance in their dropout decision. Based on this information, I hypothesize that the therapeutic alliance will moderate the relationship between FPI and the total number of sessions attended.

Chapter 3: Method

This study utilized secondary data collected from an accredited marriage and family therapy program in the southeastern United States. The university clinic regularly collects clients' data for training, clinical, and research purposes and provides services to individuals, couples, and families. The present study was approved by the university institutional review board (IRB) and sought to incorporate best practices in research methods.

Participants

The participants consisted of 152 females and 136 males who attended couples therapy at the MFT Center from 2016 to 2019. The total number of sessions reflects the highest number of sessions attended by either partner after couples therapy began. The primary categories of treatment reported by clients were communication and intimacy, general relationship distress, and depression/anxiety. Of the sample, 84.1% self-reported being married, while 15.8% self-reported as being in a committed relationship. Among these, 57.46% participants attended at least four sessions of therapy, 24.13% dropped out between the second and fourth, and 18.41% dropped out after the first session. These rates are consistent with general dropout numbers (Swift & Greenberg, 2012) and MFT training clinic dropouts (Allgood & Crane, 1991). All participants paid between $10.00 and $70.00 per session depending on income level.

Participants' ages ranged from 19-73, with a mean age of 37.5 (*SD* = 9.86). The majority of female participants identified as White (79%), followed by African American (15.6%), Hispanic (3%), and Asian (1.2%). Similarly, most male participants identified as White (71.6%), followed by African American (20.3%), Hispanic (4.1%), and Asian (0.7%). Reported household income ranged from "*below $5,000*" to *"$100,000 or more*" with a median income of $40,000 to $49,999. Regarding education, about half of the female (51.53%) and male (44.6%) participants

reported receiving a bachelor's degree or higher. Approximately a quarter of females (26.9%) and males (31.8%) reported receiving a high school diploma/GED. Finally, almost one-fifth of female (19.8%) and male (19.6%) participants completed an associate or technical degree.

Procedure

Quantitative data were collected from case files for couples who attended therapy between July 2016 to December 2019. Master's level intern therapists conducted treatment, with most sessions occurring weekly. Before the first session, clients received the same intake packet, including the Informed Consent, Demographic Questionnaire, and Couple Satisfaction Index (CSI-16). Subsequently, clients received regular follow-up assessments, including the Session Rating Scale (SRS) and CSI-16. All questionnaire packets were paper-and-pen and administered by intern therapists or center staff. The MFT Center's informed consent document provides clients information that assessments may be used for "research purposes as conditioned by the University's IRB."

Measures

The questionnaire packets included several scales in addition to the demographic questionnaire. The present study will use data from four of these measures to analyze associations between fee for services, dropout, and the therapeutic alliance.

Demographic Questions

Demographic information was collected via the intake packet, including questions of gender, race/ethnicity, employment, income, family size, etc. Clients reported a range of earnings from "*Under $5,000*" to "*$100,000 or more*" (with a range of $5,000 to $10,000 between each level). Presenting proof of income, such as a pay stub or tax return, was required for sliding scale

eligibility. The maximum fee in this study is $50, which was exceeded in some first sessions with the addition of an intake fee.

Fee as a Percent of Income

The fee percentage was calculated based on reported income, family size, and fee amount. The fee amount was based on a sliding scale determined by reported income and family size. For example, a client that reports an annual household income of $40,000 with a family size of two would be assigned the fee amount of $50/session and a subsequent fee percent of 13. The following equations were used to calculate the fee percentage.

(1) Weekly Income = Reported Annual Income / 52 weeks

(2) Weekly Household Income = Weekly Income / Reported Family Size

(3) Fee-Income Interaction = Fee for Services / Weekly Household Income

(4) Fee Percentage = Fee-Income Interaction x 10

Total Sessions Attended & Single Session Dropout

Total Sessions Attended was used to measure premature termination. For the purposes of this study, the session count started when both partners attended a session together and ended when both partners terminated treatment. Client attendance was documented on the billing and case note record. Often working from a systemic theoretical orientation, it is common for MFTs to see clients individually and together to address the unique needs of the system. Thus, it was decided to include individual sessions in the total count of sessions attended once couples therapy began. The number of sessions completed in this study ranged from 1 to 43 (M = 6.25, SD = 6.186). Although psychotherapy literature outlines a variety of different criteria for therapy completion and/or dropout, Knizley (2016) utilized five sessions or less as a cut-off, with six or more sessions indicating therapy completion (Crane & Christenson, 2012). They also constrained

their total sessions attended measure, recoding all data above six to "6." For purposed of this analysis, the data will not be constrained. However, following the initial analysis, a dichotomous measure of single-session dropout will be run as the dependent variable with the best fitting model. This measure of dropout was added to capture other important aspects of the dropout phenomenon (Masi et al., 2003) and to contrast Knizley's (2016) findings of single-session dropout. This measure was dummy coded to create a dichotomous variable indicating the attendance of only one session, or more than one.

Therapeutic alliance

The therapeutic alliance was assessed using the Session Rating Scale (SRS, Duncan, et al., 2003). The SRS is a well-established, four-item measure of the therapeutic alliance with excellent reliability and satisfactory concurrent and predictive validity (Anderson et al., 2018; Duncan et al., 2003). The SRS has also has a high level of internal consistency, especially for a four-item measure, with an alpha of .88 for the total score (Duncan et al., 2003). Overall, these factors make the SRS a good global measure of the alliance. The SRS is a paper-and-pen assessment administered after every session where the client places a line between zero and one hundred based on the associated questions (e.g. "please rate today's session by placing a mark on the line nearest to the description that best fits your experience; I did not feel heard, understood, and respected; I felt heard understood and respected"). Results provide feedback on clients' perceptions of therapist empathy, treatment goals, and overall approach. The SRS was calculated in the present study by taking an average of each partners score from the first four sessions to provide an "early alliance score." This measure was used as the moderating variable in the present study.

Covariates

Several covariates were controlled for during the analyses. Although Swift and Greenberg (2012) found age as the only demographic predictor of dropout, some studies also find ethnic minority status as a significant predictor (Wierzbicki & Pekarik, 1993). Thus, age and race were controlled for in the analysis. Age was left as a continuous variable, though due to the high percentage of white participants in our sample, race was dummy coded. This was done by coding all white participants as 0's, and all other participants as 1's. Additionally, high initial symptom distress levels have been associated with dropout (Anderson et al., 2018; Fawcett & Crane, 2013; Sasso & Strunk, 2013; Tarescavage et al., 2015). Given the nature of couples therapy, two of the top three presenting problems were centered around relationship issues; thus, the couple satisfaction index was used to control for high levels of initial symptom distress. As with every variable in the present study, symptom distress was measured on an individual (not couple) basis.

Demographics. These analyses included participants' age, ethnicity, and income as covariates. The Demographic Questionnaire asked, *"Your age:_____," "Your Racial/Ethnic Group____,"* and *"What is your combined gross income (before taxes) in the current year. Circle the best answer."* This was followed by *"Under $5,000"* to *"Over $100,000"* with a range of $5,000 to $10,000 between each level.

Symptom Distress. Symptom distress was measured using the Couple Satisfaction Index (CSI-16, Funk & Rogge, 2007). This 16-tem self-report scale assesses overall relationship satisfaction (e.g. "please indicate the degree of happiness, all things considered, of your relationship") using a 7-point Likert scale (0 = *Extremely Unhappy,* 1 = *Fairly Unhappy,* 2 = *A Little Unhappy,* 3 = *Happy,* 4 = *Very Happy,* 5 = *Extremely Happy,* 6 = *Perfect*). Participants' total scores range from 0 to 81, with higher scores indicating higher relationship satisfaction

levels. A score of 51.5 or lower suggests notable relationship dissatisfaction (Funk & Rogge, 2007). Two recent studies found good internal consistency with an alpha of .95 (Bruner et al., 2015) and .96 (Resch & Alderson, 2014). The original study also found high correlation coefficients between .85 and .98 with all the measures, indicating good concurrent validity (Funk & Rogge, 2007). In the present study, only the first session score was utilized in order to measure initial symptom distress, not relationship satisfaction over the course of treatment.

Analytic Strategy

The analyses began by running the descriptive statistics (see Table 1), after which data normality was assessed. Missing data was managed using Newman's (2014) guidelines. That is, all available data was used to maintain statistical power and a representative sample size. To investigate and describe missing data patterns, I conducted a Missing Value Analysis (MVA) using the expectation maximization (EM) technique in SPSS (version 21.0). Working with couple data, the male and female scores were fit independently to avoid interdependence, maintaining the independent observations assumption (Kenny & Hoyt, 2009). Bivariate correlations were examined, and a 4-stage hierarchical multiple regression was run. This began by centering the predictor (FPI) and moderator (therapeutic alliance) variables. For Model 1, I regressed total sessions attended onto FPI. For Model 2, the covariates were added into the regression. For Model 3, I regressed total sessions attended onto FPI and the therapeutic alliance. For Model 4, an interaction term between FPI and the therapeutic alliance was created to test for a moderation effect. Following the initial regression, a dichotomous measure of single-session dropout was run as the dependent variable with the best fitting model to contrast Knizley's (2016) findings.

Chapter 4: Results

Preliminary Analyses

To begin the analysis, bivariate correlations were examined separately for female and male scores (see Table 2). The first notable finding was that fee was significantly negatively correlated with total sessions attended for females (r = -.21, p < .01) and males (r = -.18, p < .05). With little research finding an association between fee and dropout (Clark & Kimberly, 2014), this finding was somewhat unexpected but not unfounded. Interestingly, symptom severity (measured by relationship satisfaction) was significantly negatively correlated with income for males (r = -.22, p < .01), but not for females. Data were only collected on household income, not individual earnings or responsibilities, but this finding may reflect some of the perceived differences of financial strain between partners. Low-income clients are at a higher risk of many adverse outcomes as a result of financial strain (Archuleta et al., 2011; Fein, 2004; Gudmunson et al., 2007; Horin, 2004), a factor that may play a role for males in this sample. Another notable finding was that income was significantly negatively correlated with the therapeutic alliance for females (r = -.21, p < .05), but not males. Similarly, symptom severity was significantly correlated with the therapeutic alliance for males (r = .23 , p < .05), but not for females. These findings illustrate some gender differences in factors that might influence the therapeutic alliance.

To identify and describe missing data patterns, I ran a Missing Value Analysis with the expectation maximization (EM) technique. Most variables had just over 5% missingness, with FPI ranging up to 9.7%. Furthermore, Little's MCAR test yielded a significant chi-square [$\chi^2(42) = 60.169$, p = .034], indicating that data are not missing completely at random. Thus, no cases were deleted listwise or imputed individually. However, when a missing values analysis was run

after dropping non-significant control variables, Little's MCAR test yielded a non-significant chi-square [$\chi^2(4) = 1.670$, $p = .769$], indicating that data were missing completely at random for variables used in the subsequent analyses. Additionally, the predictor (e.g. FPI) and moderator (e.g. therapeutic alliance) variables were centered for the regression analyses to reduce potential multicollinearity (Dawson, 2014). None of the variables in the present study had a skewness statistic of +/- three standard errors, which indicates that the data is normally distributed. Similarly, a visual inspection of the residual scatterplot also appeared normally distributed, meeting the assumption of homoscedasticity. Data were checked for multicollinearity, with no independent variables retained in the analysis displaying strong correlations. Thus, data appeared to meet the assumptions of multiple regression.

Hypothesis Testing using Hierarchical Multiple Regression

A 4-stage hierarchical multiple regression with total sessions attended as the dependent variable was used to test both research questions for males and females (see Table 3). Models 1 and 2 tested research question 1 by regressing total sessions attended onto FPI while controlling for age and race. Initially, age, race, symptom distress, income, and education were included as control variables in Models 2 – 4. Race was the only significant control variable for females. Similarly, only race and age were significant for males. Consequently, all other control variables were excluded, and the most parsimonious model was chosen.

The regression equation for Model 1 was not statistically significant for females [$F(1, 150) = 1.478$, $p = .226$, $R^2 = .010$] or males [$F(1, 134) = .84$, $p = .361$, $R^2 = .006$]. Model 2 yielded a significant result for females [$F(2, 148) = 4.223$, $p = .016$, $R^2 = .054$], with a statistically significant main effect between race and total sessions attended ($\beta = .218$, $p = .009$). Model 2 was also significant for males [$F(3, 129) = 4.271$, $p = .007$, $R^2 = .09$], with main effects

detected for race (β = .220, p = .01) and age (β = .192, p = .024). No main effects were detected between FPI and total session attended for females (β = -.042, p = .610) or males (β = -.062, p = .464). This suggests that FPI did not influence total sessions attended. Adding the control variables to the respective models accounted for 4.4% (females) and 8.4% (males) of the variation in total sessions attended.

Models 3 and 4 tested research question 2 by regressing total sessions attended onto FPI, the therapeutic alliance, and the aforementioned control variables for each group. The regression equation for Model 3 was statistically significant for females, with only a minute increase in the R^2 value [F(3, 140) = 2.721, p = .047, R^2 = .055]. Model 3 was also significant for males, with similar results [F(4, 123) = 3.106, p = .018, R^2 = .092]. The change in R^2 between Model 2 and Model 3 indicated that the therapeutic alliance accounted for 0.1% (females) and 0.2% (males) of the variance in total sessions attended. For Model 4, an interaction term (FPI × therapeutic alliance) was added to test for a moderation effect. Like previous models, the regression equation was statistically significant for females [F(4, 139) = 2.034, p = .093, R^2 = .055] and males [F(5, 122) = 2.894, p = .017, R^2 = .106]. However, no main effect was detected between the interaction term and total sessions attended for females (β = .015, p = .865) or males (β = .131, p = .165). Thus, the therapeutic alliance did not moderate the relationship between FPI and total sessions attended. In sum, Model 2 best fit the data for females, with a statistically significant main effect between race and total sessions attended. Model 2 also best fit the data for males, with a statistically significant main effect for race and age. To contrast Knizley's (2016) findings, a final regression was run with single-session dropout as the dependent variable using the same control variables as Model 2. The regression equation was not significant for females [F(2, 148)

= 2.563, p = .08, R^2 = .033], and approached significance for males [F(3, 129) = 2.662, p = .051, R^2 = .058]. These findings suggest that FPI did not influence total sessions attended.

Exploratory Analyses

I also conducted an exploratory analysis to examine the two research questions based on other tenants of Maslow's theory of human motivation and relevant contextual factors of the present study. I started by conducting a 2-stage hierarchical multiple regression but replaced the original predictor (FPI) with the centered therapy fee (see Table 4). Fee was calculated by taking the average fee paid over the course of all sessions attended. Maslow's theory of human motivation suggests that if most of the client's basic needs (e.g. food, shelter, clothing) are not met—or only met with difficulty—income may not impact dropout until a certain earnings threshold is met. For example, whether a client makes $10,000 or $30,000 a year, therapy fees still represent a higher order need that low-income clients may have difficulty obtaining with their current level of resources. Furthermore, given the relatively broad range of fees in this study (i.e. $10 to $50) compared to most training clinic research (Herron & Sitkowski, 1986), the fee itself may be a more potent predictor of dropout if the quality of services from therapists in training does not match the client's expectations of a moderate fee range.

In Model 1, total sessions attended was regressed onto therapy fee, which yielded a significant regression equation for females [F(1, 161) = 7.133, p = .008, R^2 = .042] and males [F(1, 142) = 4.747, p = .031, R^2 = .032]. This suggests that the more clients paid in therapy fees, the more likely they were to attend fewer sessions. In Model 2, the original control variables of age, race, symptom distress, income, and education were included. As before, only race was significant for females, along with age and race for males. All other control variables were dropped to make the model more parsimonious. The regression equation for Model 2 was also

significant for both females [$F(2, 158) = 8.087$, $p = .000$, $R^2 = .093$] and males [$F(3, 137) = 7.753$, $p = .000$, $R^2 = .145$]. These models yielded the best fit of any model run in the study, with main effects for all variables at a significance level of less than .01. To conclude the exploratory analyses, the single-session dropout measure was introduced. A final regression was run with the same control variables as the previous analysis, using single-session dropout as the dependent variable. Interestingly, this resulted in a regression equation that achieved significance for females [$F(2, 158) = 6.158$, $p = .003$, $R^2 = .072$] and males [$F(3, 137) = 3.512$, $p = .017$, $R^2 = .071$], but no main effect was detected between fee and single-session dropout for males ($\beta = .156$, $p = .067$). In sum, the exploratory analysis yielded significant findings between fee for services and total sessions attended for females and males, but single-session dropout was only significant for females.

Chapter 5: Discussion

Psychotherapy dropout is a widespread phenomenon associated with a variety of negative outcomes for clients, therapy providers, and society (Anderson et al., 2019). Indeed, clients may not experience the benefits of therapy without receiving an adequate treatment dose (Anderson et al., 2018), and dropout can present financial, practical, and psychological challenges for providers (Barrett et al., 2008; Klein et al., 2003; Masi et al., 2003). Additionally, some studies have found that low-income clients are at a higher risk of dropout (Anderson et al., 2019; Wierzbicki & Pekarik, 1993) and they pay a higher percentage of their income in therapy fees (Knizley, 2016). Some literature does not find an increased risk of dropout among low-income clients (Barrett et al., 2008; Swift & Greenberg, 2012), but many scholars call for further research to clarify the mixed results that often accompany dropout studies (Barrett et al., 2008; Swift & Greenberg, 2012). Furthermore, the impact that fee for services may have on dropout is somewhat unclear due to sparse and generally outdated literature. Results from this study contribute to the dropout and fee for service literature in several ways.

Although the initial 4-step regression did not yield a statistically significant result between fee as a percentage of income (FPI) and dropout, significant results were found for age (males) and race (females and males) in all analyses. The most recent meta-analysis on dropout found client age as one of the few reliable demographic factors associated with dropout, with mixed results on client gender (Swift & Greenberg, 2012). One possible explanation for the gendered difference in age is that female partners may be the primary participants in the initiation of therapy. Regardless of age, females may be more invested in the outcome of treatment where younger males could be less committed to the treatment process or the relationship. Age was chosen as a control variable in this study due to its reliable association

with dropout (Swift & Greenberg, 2012), though length of relationship, commitment level, and readiness for change were not analyzed. Relationship satisfaction was used as a control, but no significant association was found. In future dropout research, length of relationship, relationship commitment, and/or individual readiness for change may be an important factor to consider in order to tease apart these gendered differences in age.

On the other hand, client race was a statistically significant control variable for females and males. An older meta-analysis found client race as a significant predictor of dropout (Wierzbicki & Pekarik, 1993), with other studies finding similar results (Arnow et al., 2007; Warden et al., 2009). These findings have been validated within this sample of couples at a training clinic in the southeast. Swift & Greenberg (2012) did not find an association between client race and dropout, though they cite these demographic inconsistencies as fitting with previous studies (Barrett et al., 2008; Garfield, 1995; Reis & Brown, 1999). Anderson et al. (2019) also found no association between race and dropout, though they gathered data online which was not exclusive to a specific therapy setting or environment. In the present study, race was dummy coded for analysis due to the large percentage of white participants. When analyzed, all models indicated that non-majority clients were at a greater risk of dropping out than their white counterparts. Some research indicates that the racial differences in health are largely related to SES differences (Davey et al., 1998; Williams et al., 1995). However, the present study controlled for income—a non-significant variable—in all analyses. This finding may be explained, at least in part, by other variables such as therapist race or gender. Although most research does not find a relationship between therapist demographic factors and dropout (Swift & Greenberg, 2012), one study found that certain pairings of therapist and client variables had a

significant impact on dropout rates (Williams et al., 2005). Therapist variables were not accounted for in this study, a factor that may be important for future training clinic research.

It was originally hypothesized that FPI would predict dropout and the therapeutic alliance would moderate this relationship. Indeed, Knizley (2016) found compelling evidence for FPI, a new predictor of dropout. Additionally, a strong alliance is one of the most robust predictors of treatment retention (Roos & Werbart, 2013; Sharf et al., 2010) and therapy success (Horvath & Bedi, 2002; Horvath et al., 2011). Nonetheless, FPI and the moderator (FPI × therapeutic alliance) were not significant in any model. This finding seems to further suggest that if low-income clients are facing the realities of financial strain, even a strong initial therapeutic alliance may not be enough to overcome the associated pressure to attend to more influential needs (Maslow, 1943). Another possible explanation for the lack of significant findings with FPI could be the change in clinic fee structure between Knizley's (2016) study and the present. Following Knizley's (2016) finding that low-income clients pay a much higher percentage of their income in therapy fees, the clinic adjusted the sliding fee scale to make treatment more accessible. It is possible that fees were significant when FPI was in the present study not due to this adjustment. On the other hand, it is possible the income aspect of FPI is not as important as previously hypothesized. Indeed, it is important to reiterate that this study is rooted in the context of two factors associated with increased dropout rates—low provider experience level and university-based service (Swift & Greenberg, 2012).

It is possible that some clients perceive therapists in training as less competent than bonafide professionals, thus, a higher fee might reasonably lead clients to earlier termination. Jordan et al., (2017) found that treatment credibility predicted premature termination, a factor that may play a role in training clinics. Regardless of income level, if a client does not think a

return on their investment is likely, they could opt to discontinue services. Furthermore, discounted university-based services likely do little to contribute to an environment that instills long-term commitment from clientele due to therapist turnover and the educational setting. Swift & Greenberg (2012) suggest that the increased dropout rates among less experienced therapists may be due to their lack of responsiveness to changes in the therapeutic alliance, a skill more experienced clinicians have often refined. This hypothesis was not supported in the present study, though this may be due to how the alliance was calculated. The therapeutic alliance was averaged over the course of the first four sessions to provide an aggregate "early alliance score." This calculation likely does not capture nuanced changes in the alliance that could have led clients to early termination. Furthermore, the SRS is considered a good global measure of the alliance, where other measures may provide better insight into more specific aspects of the construct. In sum, although the alliance is a highly studied and important predictor of treatment success and retention, no associations were found in this study. Likewise, the income aspect of FPI did not provide any meaningful contribution to the current statistical analyses.

A number of differences should be noted between the present study and that conducted at the same clinic by Knizley (2016). Although Knizley (2016) had similar research questions related to the impact of fees and dropout with low-income clients, their study measured relationship quality (RDAS, Busby et al., 1995), adverse childhood experiences (ACES; Felitti, 1998) and individual symptoms (OQ 45.2, Lambert et al., 1996). The present study also measured relationship quality but utilized a different measure (CSI-16, Funk & Rogge, 2007). Furthermore, although Knizley (2016) used the same measure of total sessions attended, their study constrained the total number of sessions to six regardless of the actual total number of sessions attended. This present study used the unconstrained number of total sessions attended as

the primary dependent variable, with a follow-up analysis investigating single-session dropout. FPI was calculated using the same equation and the demographic questions were also the same. The samples in question were from completely separate years, though it is possible some clients from Knizley's sample returned to treatment for the present study. Both studies utilized hierarchical regressions for primary analyses, but post-hoc and exploratory analyses were run differently. The present study builds on Knizley's (2016) findings but did not seek to validate them with an exact replica of the methodological procedures.

Exploratory Analysis

Due to the present study's initial results that appeared contrary to Knizley's (2016) findings, exploratory analyses were conducted to assess the basic impact of fees on client dropout. In contrast with the non-significant results of FPI, fee proved to be significantly associated with total sessions attended and single-session dropout for females in most models. Clark & Kimberly (2014) also conducted a study on the impact of fees at a training clinic but found no significant association. However, they duly noted that "there are some studies that did find a relationship… These mixed results, coupled with the sparseness and age of existing literature, indicate a clear need for further research" (Clark & Kimberly, 2014, pg. 367). Although the present study found an association between fee and dropout, when Clark and Kimberly did not, this study contributes to the sparse body of literature that reviews and investigates the impact of fees on client outcomes. With little dedicated research, few interventions or changes can be made to fees in the context of evidence—an unnecessary and/or unethical path to take. Indeed, the results of the present study add to Clark and Kimberly's (2014) indication that further research should be conducted in this area in order to make informed decisions on fees and fee structures.

Research & Clinical Implications

First, although Knizley (2016) found significant associations between FPI and two measures of dropout, the present study did not. This may have been related to differences in samples or statistical analyses, but this discrepancy places the usefulness of FPI as a predictor of dropout in question. To my knowledge, few therapy studies have used fee as a percentage of income as a predictor of dropout, and the present study found little evidence to suggest it has significant or immediate value in this pursuit. However, given Knizley's (2016) results, future training clinic studies may consider further investigation of how FPI impacts treatment outcomes such as dropout. Fee studies in general are relatively sparse, but the present study found a significant association between fees and dropout, indicating a need for future research.

Second, due to the significant impact that dropout has on the individual and societal scale (Anderson et al., 2019), it remains crucial that academics and clinicians identify ways to improve client retention. In the present study, higher fees were associated with fewer total sessions attended over the course of treatment for females and males. Higher fees were also associated with single-session dropout for females. The mechanism behind this association is unclear, but an appropriate starting place may be as simple as a conversation with clients about the exchange of money for therapeutic services. Conversations about fees are often unintentionally overlooked or intentionally avoided in the field due to the associated discomfort (Fehr, 2012; Koocher & Soibatian, 2017). Perhaps a greater integration of fee topics and best practices could provide some applied benefit in the therapy room. Especially in training environments, discussions around money and fees may be particularly important with female clients who, at least in this sample, were at a much higher risk of single-session dropout than their male partners.

Additionally, these findings may be of interest to training clinic directors and psychotherapy programs who must make decisions about fee structures and training.

Lastly, this study revealed a significant association between race and total sessions attended; there was also a significant association between race and single-session dropout for females. These findings are concerning given the variety of health disparities and related challenges minorities already face. A significant association between race and dropout is consistent with some research (Arnow et al., 2007; Warden et al., 2009), but in stark contrast with others (Anderson et al., 2019; Swift & Greenberg, 2012). These mixed findings suggest that studies must begin/continue to differentiate between the different operational forms of dropout and investigate what factors might be driving the incongruence. Similarly, females reported lower total incomes on average than their male counterparts. Although uncertain, it is possible this difference was driven by a simple tendency to over/under report by each gender. It could also speak to the differences in financial practices or power between partners, a possibility that should be investigated in future research. This difference has a variety of implications for couples therapy and data collection practices.

Limitations and Future Directions

The present study has several limitations. First, services were provided by therapists in training at a university clinic. As previously reviewed, inexperienced therapists and university settings generally have higher dropout rates than seasoned professionals in the community (Swift & Greenberg, 2012). Additionally, this particular clinic only accepted cash payments, charging more than most training clinics but much less than most cash-only community providers. Indeed, cash-only payments in this range likely represent a very small percent of the fee structures utilized by service providers. Fee structures vary significantly based on setting, with some

community providers primarily billing Medicaid, representing little cost to the client, while some private practitioners only accept cash payments or private insurance, often charging well over $100. This puts training clinics in a unique fee position when compared to more common models. Thus, the generalizability of these findings to more established providers is unclear. In the future, a dropout study conducted in a community mental health or well-established private practice setting may provide more readily generalizable findings.

Second, many of the measures utilized in the present study were self-report. Although the measures in question are generally well established and accepted in the field, this does not free them from the issues associated with self-report—possible exaggeration, social desirability bias, etc. Additionally, this sample was majority white with only a small percentage of clients reporting as racial minorities. Although race was dummy coded for analysis, this measure does not provide specific results on dropout behavior within groups. Similarly, single-session dropout was dummy-coded, and total sessions attended was continuous and unrestrained. This leaves a wide range of possibilities for possible interpretation of these results. To remedy this issue, Masi et al. (2003) used three measure of dropout. Future studies might consider identifying the most theoretically relevant/practical definitions of dropout and conducting a study with several.

Third, the definitions of dropout utilized in the present study are only two of many that inevitably measure similar but different constructs (Garfield, 1994; Hatchett & Park, 2003; Swift et al., 2009; Wierzbicki & Pekarik, 1993). Thus, the interpretation of these results should be made in the context of this limitation. Although we reviewed many of the common definitions of dropout, no attempt was made to theoretically unify or differentiate them. In an attempt to remain consistent with Knizley (2016), we measured total sessions attend and single-session dropout. Future researchers across professional licensure boundaries should consider making a

collaborative effort to formulate and adopt consistent terminology as it relates to clients leaving treatment early. It is not out of the question to hypothesize that the inconsistent and mixed results in the dropout literature may, at least in part, stem from the issues surrounding the differences in theoretical and operational definitions. Furthermore, the present study only used quantitative means to investigate dropout. The majority of dropout literature uses this method, mostly neglecting the value of qualitative procedures. Future research may also consider the utilization of qualitative interviews, an addition that may provide much needed insight into the mixed findings associated with some demographic variables.

Another important consideration is the limitation of the FPI measure and sliding scale interaction. Due to the variance in income within individual fee brackets, two clients could be paying the same fee, but the percent of income could be substantially higher for clients on the lower end. It is possible that some power was lost in the analysis because of this innate limitation. FPI takes family size into account, but likely does not capture other contextual factors that impact financial circumstance. For example, a client's FPI could be relatively low, but they may be experiencing a significant amount of financial strain related to external pressures. Indeed, no data was collected on debts (student loans, medical bills, etc.), community resources (non-profits, religious organizations, etc.) or other financial commitments (child support, etc.). Additionally, it is possible the sliding fee scale is well suited for those who are salaried or have a stable income, but it may not be as functional for those who work seasonal jobs or have an unstable income stream. These limitations introduce important considerations for sliding scales that generally only take one financial variable (i.e. total gross income) into account.

Finally, future studies may consider a more detailed approach in the measurement of time between sessions and consistency of client attendance. If clients came every week, the average

time spent in therapy would only total about one and a half months. Depending on the theoretical orientation, this is a relatively short period of time to address some couple issues (e.g. infidelity, sexual dysfunction, etc.) or create a strong therapeutic alliance with both partners. Similarly, if clients came on a less consistent basis, would that be enough to create a therapeutic alliance with the necessary strength to promote positive treatment outcomes? These factors could have influenced the present study and may be important considerations for future research with couples and therapy dropout.

Conclusion

This study adds to a relatively sparse fee literature while further investigating FPI as a unique construct. This study shows that fees may have important implications for client outcomes in couples therapy and training clinics. Indeed, these results highlight opportunities for clinical directors to further their understanding of how fees impact their work with clients and those they supervise. Furthermore, this study highlights the role that race, and age may play in client dropout, demographic variables that therapists should be aware of when seeking to meet their individual clients' needs.

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Table 1

Female Continuous Descriptive Statistics (N = 152)

Variables	*M*	*SD*	Range
Fee as a percent of income (FPI)	20.642	28.464	0 – 236.36
Income	54,474.684	32,674.07	5,500 – 100,0000
SRS Mean	33.757	5.671	11.5 – 40
CSI-16 Mean	2.497	1.209	0 – 4.94
Total Number of Sessions Attended	5.83	5.959	1 – 43
Age	35.87	9.330	19 – 66

Male Continuous Descriptive Statistics (N = 136)

Variables	*M*	*SD*	Range
Fee as a percent of income (FPI)	15.4147	16.78116	0 – 148.91
Income	56,802.817	29,875.270	5,500 – 100,0000
SRS Mean	32.585	6.226	2.8 – 40
CSI-16 Mean	2.784	1.196	0 – 5.88
Total Number of Sessions Attended	6.72	6.419	1 – 43
Age	38.59	10.273	23 – 73

Table 1 (Continued)

Female Categorical Descriptive Statistics (N = 152)		*Male Categorical Descriptive Statistics (N = 136)*	
Variables	*%*	Variables	*%*
Race		Race	
White	79%	White	71.6%
African American	15.6%	African American	20.3%
Hispanic	3%	Hispanic	4.1%
Asian	1.2%	Asian	0.7%
Education		Education	
Junior High School or Less	1.2%	Junior High School or Less	3.4%
GED/High School	26.9%	GED/High School	31.8%
Vocational/Technical Degree	4.8%	Vocational/Technical Degree	10.1%
Associate Degree	15%	Associate Degree	9.5%
Bachelor's Degree	29.9%	Bachelor's Degree	23%
Graduate Degree	21.6%	Graduate Degree	21.6%
Relationship Type		Relationship Type	
Married	83.8%	Married	84.5%
Committed Relationship	15.6%	Committed Relationship	13.5%

Table 2

Female Correlation Matrix

Variables	1	2	3	4	5	6
1. Income	–					
2. Fee as a percent of income	-.469**	–				
3. SRS Mean	-.206*	.082	–			
4. CSI-16 Mean	-.107	-.073	.156	–		
5. Total Number of Sessions	-.052	-.099	.007	.062	–	
6. Age	.295**	-.079	-.045	-.181*	.007	–

Note. *$p < .05$, **$p < .01$

Table 2 (Continued)

Male Correlation Matrix

Variables	1	2	3	4	5	6
1. Income	–					
2. Fee as a percent of income	-.417**	–				
3. SRS Mean	-.003	.057	–			
4. CSI-16 Mean	-.220**	.203*	.227**	–		
5. Total Number of Sessions	.006	-.079	-.014	-.097	–	
6. Age	.241**	-.106	-.114	-.014	.155	–

Note. $*p < .05$, $**p < .01$

Table 3

Female Summary of the Hierarchical Regression Analysis for FPI and Total Sessions Attended with Race as a control variable (N = 152)

	Model 1			Model 2		
	B	*SE*	β	*B*	*SE*	β
Intercept	-5.879	0.493	-	3.276	1.075	-
FPI	-0.021	0.017	-0.099	-0.009	0.018	-0.042
Race				3.230**	1.219	0.218**
ΔR^2	-			0.044		

Note. *$p < .05$, **$p < .01$

Female Summary of the Hierarchical Regression Analysis for FPI and Total Sessions Attended. Moderated by Therapeutic Alliance (N = 152)

	Model 3			Model 4		
	B	*SE*	β	*B*	*SE*	β
Intercept	3.258	1.113	-	3.261	1.117	-
FPI	-0.010	.018	-0.046	-0.011	0.019	-0.052
Race	3.185*	1.257	0.215*	3.172*	1.264	0.214*
SRS Mean	0.071	0.088	0.067	0.072	0.088	.067
FPI × SRS				0.001	0.003	.015
ΔR^2	0.001			0.000		

Note. *$p < .05$, **$p < .01$

Table 3 (Continued)

Male Summary of the Hierarchical Regression Analysis for FPI and Total Sessions Attended with Race and Age as control variables (N = 136)

	Model 1			Model 2		
	B	*SE*	β	*B*	*SE*	β
Intercept	6.815	0.587	-	0-.326	2.361	-
FPI	-0.031	0.033	-0.079	-0.024	0.033	-0.062
Race				3.297**	1.260	0.220**
Age				0.124*	0.054	0.192*
ΔR^2	-			0.084		

Note. $*p < .05$, $**p < .01$

Male Summary of the Hierarchical Regression Analysis for FPI and Total Sessions Attended. Moderated by Therapeutic Alliance (N = 136)

	Model 3			Model 4		
	B	*SE*	β	*B*	*SE*	β
Intercept	-0.281	2.431	-	-0.294	2.422	-
FPI	-0.030	0.033	-0.077	-0.036	0.034	-0.092
Race	3.311*	1.307	0.218*	3.339*	1.302	0.220*
Age	0.122*	0.055	0.192*	0.120*	0.055	0.188*
SRS Mean	-0.013	0.094	-0.012	0.043	0.102	0.040
FPI × SRS				0.010	0.007	0.131
ΔR^2	0.002			0.014		

Note. $*p < .05$, $**p < .01$

Table 4

Female Summary of the Hierarchical Regression Analysis for Fee and Total Sessions Attended with Race as a control variable (N = 152)

	Model 1			Model 2		
	B	*SE*	β	*B*	*SE*	β
Intercept	8.944	1.244	-	6.426	1.547	-
Fee Average	-0.079**	0.030	-0.206**	-0.080**	0.029	-0.211**
Race				3.097**	1.123	0.209**
ΔR^2	-			0.051		

Note. *$p < .05$, **$p < .01$

Male Summary of the Hierarchical Regression Analysis for Fee and Total Sessions Attended with Race and Age as control variables (N = 136)

	Model 1			Model 2		
	B	*SE*	β	*B*	*SE*	β
Intercept	9.672	1.429	-	2.896	2.322	-
Fee Average	-0.074*	0.034	-0.180*	-0.107**	0.033	-0.258**
Race				3.780**	1.164	0.258**
Age				0.138**	0.051	0.219**
ΔR^2	-			0.113		

Note. *$p < .05$, **$p < .01$

Table 5

Sliding Fee Scale Based on Family Size and Gross Income

# Family	UNDER $10,000	$10,000 $14,999	$15,000 $19,999	$20,000 $24,999	$25,000 $29,999	$30,000 34,999	35,000 39,999	40,000 44,999	45,000 49,999	50,000 54,999	55,000 59,999	60,000 64,999	65,000 69,999
1	$20	$20	$25	$35	$40	$45	$50	$50	$50	$50	$50	$50	$50
2	$20	$20	$20	$25	$30	$35	$40	$45	$50	$50	$50	$50	$50
3	$20	$20	$20	$20	$25	$30	$35	$40	$40	$45	$45	$50	$50
4	$20	$20	$20	$20	$25	$30	$30	$35	$40	$45	$45	$50	$50
5	$20	$20	$20	$20	$20	$25	$30	$30	$35	$40	$45	$45	$50
6	$20	$20	$20	$20	$20	$20	$25	$30	$35	$35	$40	$45	$45
7+	$20	$20	$20	$20	$20	$20	$25	$25	$30	$35	$40	$40	$45

Note. This does not include the additional intake fee or individually negotiated price reductions in special circumstances

Table 6

Distribution of Fee as a Percent of Income (FPI) (N=288)

FPI Quartiles	Frequency	Range
Q1	69	2.08 – 7.37
Q2	70	7.43 – 12.48
Q3	73	13 – 20.28
Q4	76	20.8 – 236.36