

DOES THE INTAKE METHOD AFFECT CLIENT RETURN RATE
IN A COMMUNITY COUNSELING CENTER?

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by

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This dissertation, by Ronald J. Nielsen, has
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DOCTOR OF PSYCHOLOGY

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ABSTRACT

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There is a large body of research examining the effects of client, therapist, and treatment modality variables on client outcome in mental health treatment. However, there are only a handful of retrospective studies of the intake process and its effect on client dropout or retention. The genesis of this research study was to examine and evaluate the intake methods of a community based, not for profit counseling center. The clinic found that clients would fail to return for therapy following an intake interview with a different counselor. Feedback from stakeholders indicated that the formal intake process was inefficient and direct assignment to a treating therapist would support a stronger alliance with the client, thereby increasing retention. To provide evidence-based support for a change to direct assignment, a study was developed that randomly assigned clients to either of the clinic's intake methods. The direct (DIR) method established continuity by assigning clients from the waitlist to a treating therapist. In the indirect (IND) model, clients were given a formal intake appointment and, if completed, were assigned from the waitlist to a treating therapist. Binary logistic regression was used to test the hypothesis that client return rates differ between the two intake models. The results are mixed. After controlling for client gender and age, clients in the DIR group were more than 8 times more likely to return for therapy following the intake with their treating therapist than those indirectly

assigned to a treating therapist. This result supports the belief that continuity can play a role in client retention. However, the DIR group clients were also two-thirds less likely, although non-significantly, to complete an intake interview with their treating therapist. Moreover, from the initial request for service, the DIR and IND groups were equally likely to achieve the goal of returning following the intake interview. This result may be explained by the break in continuity created by the waitlist. The DIR and IND groups experienced a break in continuity while waiting for assignment to a treating therapist averaging 17.7 and 18.7 days respectively. The waitlist effect in the intake process should be addressed to realize the benefits of continuity of care. Additional suggestions were developed that addressed clinical practice based on the study results. Limitations of the study were highlighted and suggestions for future research discussed. This dissertation is available in open access at AURA, <http://aura.antioch.edu/> and OhioLINK ETD Center, <https://etd.ohiolink.edu>

Keywords: Attrition, Dropout, Retention, Termination, Return, Intake, Continuity, Discontinuity

DEDICATION

This dissertation is dedicated in memory of my mother, Ferne, and step-father, James. Their unconditional love and support throughout my life was never expected but will forever be appreciated.

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CHAPTER I: INTRODUCTION

Background and Rationale

The intake interview is one of the first face-to-face encounters that a new client will experience when seeking therapy. Therefore, how the intake interview is conducted, and what follows, requires critical attention in any mental health delivery model. There can be substantial variation in how the interview is conducted. Nevertheless, the purpose of the intake interview is to assess whether a client is appropriate for the services provided by the therapist or the organization. The genesis of this dissertation topic arose from discussions within a mental health clinic regarding the intake process and its effect on the clients' clinic experience. As a not-for-profit, sliding fee, community-based counseling and training center serving low-income clients, the number of clients waiting to be served, at times, exceeds capacity. One issue that is a source of concern is the formal intake process involving an initial phone interview and an appointment for a structured clinical assessment. At that point, the clients are asked to provide information for the completion of a biopsychosocial assessment (Engel, 1977). The assessment is reviewed by the clinical director at the weekly new client assignment meeting. If an opening with an appropriate therapist becomes available, the client is likely assigned to a treating therapist. This model has several benefits. One valuable piece is the intake assessment. Both experienced therapists and trainees, who are proficient in conducting a thorough bio-psycho-social assessment, can gather information to benefit the client by developing an evidenced-based, effective treatment plan. In addition, the clinic can identify which clients are a good fit for the clinic. Moreover, clients can be seen by a clinician within a short period of time and inappropriate clients can be referred quickly to other services in the community. This reduces the impact on valuable treating therapists' time and supports the clients with resources that can

address their unique issues. A client's primary issue or complex presentation may often be better served with a referral to an agency with an emphasis, for example, on substance abuse, domestic violence, or sexual assault. Otherwise, the intake interview allows the clinic supervisor to assign clients to a therapist with the most appropriate skills and training. Lastly, trainees have an opportunity to interview and are exposed to a wide variety of interesting and diverse cases. Moreover, clients who inevitably do not appear for intake can be removed from the waitlist. However, the consensus was that the burden on the clients, which resulted from requiring them to repeat their life stories, outweighed the benefit of the assessment experience. Therefore, where appropriate, the clinic began direct assignment of clients to the treating therapist, following the phone interview as the primary intake method. A formal clinical interview, or the indirect method, is reserved for complex cases.

An important consideration in moving away from the formal intake interview and toward direct assignment is the role of the therapeutic relationship. Carl Rogers (1957, 1980) made his principal contributions to the client-centered approach to therapy by promoting the therapist's genuineness, openness, and positive regard in working with the client. According to Niolon (1999), "the therapeutic relationship has effectiveness at least as a primary element of therapy; it contributes a unique piece of variance to the effectiveness of therapy" (p. 1). It is clear that forming a successful therapeutic relationship is important. Having good relational skills cultivates the client-therapist bond. It is just one of the broader variables that are consequential in therapeutic effectiveness. Saul Rosenzweig (1936) sparked a large body of research by pointing to "unrecognized factors in any therapeutic situation" that can explain similar outcomes across many theoretical approaches (p. 412). Referred to as common factors, the variables are identified as the therapeutic alliance, empathy, positive regard and affirmation, congruence/genuineness,

goal consensus and collaboration, mastery, mentalization and emotional experience (Nahum, Alfonso, & Sönmez, 2019). Wampold (2005) is cited for his meta-analysis of outcome research, in which he concluded that the working alliance and the client's level of severity are the only two significant predictors of client outcome within the first three sessions. The working alliance has three elements of the therapeutic relationship: completion of mutually agreed tasks, congruent goals for therapy, and development of the client/therapist bond (Bordin, 1979; 1983). Therefore, a therapist cannot simply listen empathetically. The client must feel a connection. In addition, the client must find that the therapist's intervention approach will be effective. A client also has specific issues that they feel are important to address in therapy and he or she needs to feel that the therapist is addressing the relevant issue. Although this study does not seek to answer the question, it is conceivable that the development of a working alliance may differ between the two intake methods.

While there are numerous reasons why a client may not return for therapy, the client's experience of having a different interviewer, rather than being interviewed by his or her treating therapist, may disrupt the relationship. One way to describe this process is that of continuity versus discontinuity. In a university counseling center, discontinuity was linked to a reduced return rate and an increased number of sessions without a measurable difference in outcome (Nielsen et al., 2009). The importance of continuity of care across disciplines prompted three Canadian health services policy and research bodies to commission a study "to develop a common understanding of the concept of continuity as a basis for valid and reliable measurement of practice in different settings" (Haggerty et al., 2003, p. 1219). In the broader health care system, continuity of care is a process element within the system structure (e.g., integrated care) impacting the quality of care (e.g., outcome) (Wierdsma, Mulder, de Vries, & Sytema, 2009).

Therefore, this study assesses the continuity of care as it is related to the intake process, in order to understand its effect on the clients' success in accessing services.

While this question is straightforward, only a handful of studies directly address the effect of assigning a different therapist following the intake interview. These studies approach the question either as the effect on client return or as the effect of dropping out. For example, Betz and Shullman (1979) found a non-significant difference in favor of clients returning to a different counselor following an intake assessment and Krauskopf, Baumgardner and Mandracchia (1981) found a significant result in the same direction. Conversely, Noel and Howard (1989) found that 88% of the clients who did not return for therapy following the initial screening had been assigned to a different treating therapist. Alternatively, Tantam and Klerman (1979) found that dropping out for transferred clients reached significance after the 4th session and they were twice as likely to drop out during sessions 7, 8, and 9. However, the clients who remained with the interviewer were more likely to dropout after the first and fourth visits. It is notable that clients who were transferred remained in therapy for an average of three additional sessions. While dropping-out can be considered bad and remaining in therapy as good, the additional sessions for transferred clients is costly. Citing Sandler et al. (1970), Tantam and Klerman (1979) suggested that the additional time spent building the alliance delayed the start of therapy. Nielsen and colleagues (2009) showed that clients retained by their intake counselor continued at over two times the rate of that of the transferred group. Similar to Tantam and Klerman (1979), clients who were transferred remained in therapy longer. Nielsen et al. (2009) demonstrated that transferred clients' additional sessions were necessary to achieve comparable reductions in the client's reported levels of distress.

While earlier studies showed some evidence to the contrary, Nielsen et al., (2009) showed strong evidence that being transferred has an effect. Both dropout and extended therapy led to additional costs to the clinic and the client. However, there are limitations in the application of the results. In each study, the participants were clients seeking therapy at different types of treating facilities. Therefore, demographic variables may make the results difficult to generalize to other populations. Additional factors, such as perceptions of or openness to therapy, may differ between populations. There may also be a difference in the perceived value for paid services versus free services. Finally, as mentioned earlier, the therapeutic relationship developed in the initial assessment may be diminished by a number of unknown influences. While these studies point to a flaw in the intake process, the studies' greatest limitation rests primarily on the lack of a randomized, two group design. The intake interviewer or supervisor plays a significant role in the retention or transfer decision. The effect of selection bias as a confounding variable cannot be overlooked. Moreover, the use of retrospective data in much of the research that was not collected necessarily for the question at hand, may lead researchers to favor the known outcome, an example of hindsight bias (Mash & Hunsley, 1993).

This study was developed to evaluate and provide empirical data of the clinic's two intake models. It looked specifically at the return rate between two groups of randomly assigned clients. The client is either: (1) directly (DIR) assigned to a counselor for the the entire course of treatment, including their initial intake assessment following the phone interview or (2) indirectly (IND) assigned first to an intake counselor following the phone interview and then assigned to a different treating counselor for their continuing therapy.

Research Hypothesis

Return rate following the intake interview is greater for clients in the DIR group compared to those in the IND group.

CHAPTER II: REVIEW OF THE LITERATURE

There is a vast amount of extent literature on initiation, outcomes, and termination of therapy. For example, two significant comprehensive meta-analytic studies looking at premature termination over 35 years include a combined 794 studies (Swift & Greenberg, 2012; Wierzbicki & Pekarik, 1993). The research, as coded by Swift and Greenberg (2012), encompassed treatment, client, provider, and study design variables. This chapter provides a brief overview of the dropout variable and discussion of the complex nature of the phenomenon, followed by a detailed review of the four studies that specifically relate to the research question: Is there a difference in return rate between the two intake procedures?

In addition to positive outcome in psychotherapy, attrition, dropping out, failing to return, and early termination are other important research areas. Hundreds of studies have explored factors specific to dropout and several meta-analytic reviews have been conducted to focus further research and to inform clinicians and providers. For example, Baekeland and Lundwall (1975) reviewed the literature on dropout in areas of psychiatric inpatient and outpatient treatment, medical treatment, substance abuse treatment, and drug trials. They found 15 potentially relevant factors across all of the studies. Four factors were found to be significant across each study grouping. For example, in 35 of 35 outpatient psychotherapy studies, therapist attitude and behavior were implicated in dropout rates, while patient sociopathic features were found significant in just 14 of the 19 studies. The three other factors that had 100% agreement were social isolation and/or un-affiliation, and discrepancies between patient and therapist treatment expectations.

A meta-analytic review of 125 studies provides support for demographic variables of dropout as predictors (sex, race, gender, education, socio-economic status (SES), and marital

status). Wierzbicki and Pekarik (1993) found that being African American or a minority, as well as being less educated and having a lower income, increased dropout rates. However, the authors cautioned that the limited or no effect size data provided by many studies indicate that these results should be interpreted as the “upper-limit” of the effect (p. 194). In a broader review, Sharf (2007) found that age, gender, and education were weak predictors, while six moderately strong predictors were: therapeutic alliance, treatment expectations, patient motivation, patient self-efficacy, patient hostility, and patient impulsivity. Symptom severity and diagnosis, in addition to treatment length, treatment type, and therapist training, were less strongly correlated.

In a review of 11 studies, Sharf, Primavera and Diener (2010) reported a similar result for therapeutic alliance with a moderately strong relationship between dropout rates for clients with weaker therapeutic alliance. Moreover, therapist experience moderates dropout rates, whereas trainees, training centers, and counseling centers have higher dropout rates (Swift & Greenberg, 2012). It is logical that the relationship between therapist and client should be an important factor in client retention. Roos and Werbart (2013) examined 44 dropout studies, of which 19 looked at therapist variables, including relationship and process. Although the authors noted that the methodology across the studies does not allow for “strict meta-analytic procedure,” they found several factors related to client-initiated dropout, including “low early therapeutic alliance, less agreement and mutual understanding in matters of concrete arrangements and support, presenting problems, goals and procedures, therapy duration and achieved improvements, greater client dissatisfaction and more negative processes and with therapists with less experience and training” (p. 412). A recent study found that the therapeutic relationship and transfer following an intake was not associated with subjective premature termination at a university counseling

center (Al-Jabari, 2015). However, the 524 study participants included only those clients that completed both an intake and a subsequent session with a treating therapist.

Swift and Greenberg (2012) completed a meta-analysis of 669 studies published over a 20-year period from July 1990 to address the research that has been conducted since Wierzbicki and Pekarik's (1993) comprehensive analysis. The study found that individuals with personality or eating disorders and younger clients had higher dropout rates. Their results supported several conclusions of Wierzbicki and Pekarik including variables such as client gender, marital status, and education. However, the authors note that these outcomes are "mixed" with differing results found between statistical approaches (Swift & Greenberg, 2012, p. 555). The study disagreed with Wierzbicki and Pekarik's conclusions in that neither client race nor employment status affected dropout. Two external variables demonstrated higher dropouts. These included being seen in a university clinic or by a trainee. Interestingly, those clients receiving manualized or time-limited therapy had lower dropout rates. This latter finding may support the importance of the client-therapist working alliance in the establishment of shared goals for therapy (Bordin, 1983), an explicit feature of brief interventions. Finally, Swift and Greenberg (2012) found no significant provider variables related to age, race, gender, or treatment orientation.

How dropout is defined and operationalized differs widely. Successful therapy has long been associated with the number of sessions completed. A meta-analysis of 15 large studies spanning 30 years showed that 50% of patients showed improvement by eight sessions with 75% by the 26th session (Howard, Kopta, Krause, & Orlinsky, 1986). Hansen, Lambert and Forma (2002) found that fewer than 25% of the patients in a large meta-analysis received the median number of sessions necessary to show improvement. In addition, patients often continue to show improvement in outcome studies beyond eight sessions. While eight sessions is often the

endpoint for therapy for economic reasons, the authors suggest that eight sessions is the point where ending therapy must be justified, rather than justifying continuing therapy. Moreover, the length of therapy must be objectively assessed by measuring the client's progress rather than an arbitrary number of sessions. A program may provide "eight weeks of therapy" but not track a client's progress leading to either over or underutilization of services. Nearly a decade earlier, Morrow, Dal Gaudi and Carpenter (1977) pointed out that a methodological problem exists in the reliance on mean or median sessions completed, when determining successful outcome. Their review of the clinical data of 221 outpatient clients at a community mental health center compared to the reported classification of dropout found a large number of terminators classified as dropouts. Importantly, the research indicated that a large number of clients were dropouts by the clinical definition, because they did not meet the number of session criteria. Wierzbicki and Pekarik (1993) found similar discrepancies in dropout rates. When dropout was defined as missing a scheduled appointment versus therapist judgement or number of sessions completed, dropout rates declined. The therapist explanation for client dropout is often attributed to client attributes (Roos & Werbart, 2013), leaving some question as to the use of these results in practice and if the outcome reported reflects an actual benefit to the client. Swift and Greenberg (2012) found that "dropout rates were highest when determined by therapist judgment (37.6%) and were lowest when determined by the completion of a set number of sessions (18.3%) or a treatment protocol (18.4%)" (p. 555).

There are many variables related to dropout. Some of them are beyond the therapist's control (such as gender, marital status, and education) while others are an integral challenge to therapy (including personality or eating disorders). How can this information be helpful? Mennicke, Lent and Burgoyne (1988) reviewed dropout related to university counseling centers

with the purpose of deducing those factors that they felt were most useful for understanding dropout. However, the author's review of clinic, client, and therapist variables and their interactions reinforced their belief that clients who drop out are a heterogeneous group. They point out that the reasons for dropping out appear to differ between delivery methods (i.e., community counseling, university counseling, etc.) that can lead to overgeneralization. Moreover, the research relies heavily on broad data that does not take into account a client's unique experience and circumstances. For example, the effect size of therapeutic alliance and dropout was found to be greater in inpatient versus counseling centers and research clinics (Sharf, Primavera, & Diener, 2010). Directly asking clients why they dropped out of therapy is likely to yield a better understanding of this phenomenon. Baekeland and Lundwall (1975) recommended a client-centered approach by reducing or eliminating waitlist time, identifying and addressing substance use and being prepared to provide social service resources. They also suggested that centers have multiple treatment modalities available that are appropriate to the client's needs, rather than assignment to the first available staff, and clarify expectations by making sure the client understands the risks, benefits, and their role in therapy.

Research that is most relevant to this proposal looked at factors that affect pre-intake and first session dropout. Manthei (1996) found several factors related to a failure to attend the intake interview of 33 no-show clients seeking services at a church-sponsored counselling agency. Several of the responses were client-driven, including practical constraints (12%), personal decision not to attend (9%), other commitments (9%), got a job (6%), and/or sought help elsewhere (5%). Importantly, there were a great number of responses related to clinic variables, with the primary concerns being the length of time on the waitlist (36%) followed by excessive cost (27%) and dissatisfaction with agency/service (9%). When asked how their problem has

changed, 85% reported either somewhat of or a substantial improvement, 12% reported no change, and 3% reported being worse. The authors note that this level of improvement reported may be due to the high number (79%) who found help elsewhere and reported positive attitudes toward counseling. They suggest certain steps be taken, such as clear communication of clinic fees and costs, as well as addressing the time that the client may need to wait to be seen by a clinician.

In a 2004 study of child and adolescent non-attenders, Minty and Anderson (2004) first identified five domains in the literature that are related to non-attenders: demographic factors, referral-related reasons, systemic or clinic-related factors, problem-related issues, and personal and family factors. While the population in the present study is adult, the results may provide insight into factors related to non-attendance in general. Similar to Manthei (1996), system related factors were found to be significant in that communication reduced non-attendance of clients receiving pre-appointment contact and/or an introduction via a reply card (Minty & Anderson, 2004). Those clients with longer wait times tended to not return. However, this finding did not approach significance. Several factors not related to the system were also reported. In addition to simply forgetting the appointment, family issues that pertain to a child or a family member, such as an illness of the child, medical or other appointment conflicts, resulted in increased non-attendance. Moreover, the length of the clinic appointment caused conflict with other appointments. The authors suggest that reducing barriers to attendance, such as providing appointments that are optimal for those attending and offering a nursery for younger siblings.

Several studies have looked at the length of time between appointments and other factors as predictors of attrition. For example, younger children and older adults were more likely to attend their intake than adolescents and young adults (Gallucci, Swartz, & Hackerman, 2005).

Moreover, the odds of a no-show or cancellation increased by 12% per day during the first week while being on the waitlist but remained stable thereafter. Similarly, Reitzel et al. (2006) found that “as the time until the case was assigned [following intake] increased, the likelihood of the patient attending therapy decreased” (p. 55). Interestingly, Reitzel et al. (2006) found no relationship between the likelihood of attending therapy and variables that were common in other studies (such as ethnicity, age, gender, personality disorder diagnosis or severity of symptoms). However, race has been shown to affect attendance after intake in a college counseling center. African American clients showed higher overall attrition and White clients showed higher attrition when their wait time exceeded three weeks (Levy, Thompson-Leonardelli, Smith, & Coleman, 2005). The effect of counselor gender is mixed, with fewer clients returning after being seen by a male clinician or by referral to a male counselor by a male clinician (Betz & Shullman, 1979), higher return rates for male intake clinicians (Epperson, 1981) or no difference (Krauskopf, Baumgardner, & Mandracchia, 1981; Rodolfa, Rapaport, & Lee, 1983). Meta-analyses of therapy outcome found therapist gender to be a poor predictor (Bowman, 1993; Bowman, Scogin, Floyd, & McKendree-Smith, 2001). Presenting concerns, such as education/vocation and emotional/social issues did not differ (Anderson, Hogg, & Magoon, 1987). However, depression and a longer wait time were associated with increased attrition following the initial interview (Ray, Beig, & Gopinath, 1982).

Naturally, one area of anxiety and frustration for both providers and clients is the waitlist. While the research supports that waiting for help affects attrition with a few exceptions (e.g. Anderson, Hogg, & Magoon, 1987), there also appear to be few fruitful vectors to address the problem. In a systematic review of studies seeking to increase initial appointment attendance for an initial interview, Schauman et al. (2013) reported results for 16 randomized control trials

culled from 144 results obtained by both keyword search and a review of reference lists. They relied on a narrative synthesis approach, based on assignment of a risk of bias and a probability ratio within each intervention group. The results from community mental health centers, hospital outpatient settings, substance abuse clinics and psychotherapy services were mixed. The authors found that orientation and reminder letters may improve attendance, but that telephone prompts had contradictory effects. Moreover, sending a psycho-dynamically formulated questionnaire had no or a negative effect, whereas an opt-in intervention was positive in one small study. An accelerated versus standard intake procedure was not helpful. The latter finding was derived from research of attrition of clients seeking substance abuse treatment and differed from Reitzel et al. (2006), who showed an increased dropout rate for clients seeking psychotherapy whose wait averaged 15 days until being given an intake appointment, compared to those assigned an average of 9.5 days from the initial screening.

Few studies have considered the effect of the intake process on early termination. For example, Wise and Rinn (1983), in a retrospective analysis, looked at the effect of the intake procedure on dropout in a county mental health setting. They found that those clients who remained with the same clinician following the intake interview were more likely to complete at least three therapy sessions. However, inclusion criteria indicated that clients must have attended both the intake and the initial therapy session for inclusion in the data analysis. Conversely, Gottheil et al. (1994) found that patients attending a cocaine recovery program had similar dropout rates over three visits, whether they remained with the initial intake clinician or not. Unfortunately, in both studies, descriptive statistics are absent for the groups' return rates after intake. There are four studies that are most relevant to the research question. Early research that reports return rates focus on client/therapist gender and therapist experience (Betz & Shullman,

1979; Krauskopf, Baumgardner, & Mandracchia, 1981). Noel and Howard (1989) examined the specific question of dropout (not returning) between those clients who had remained with their intake interviewer and those that had been assigned to a different counselor. Lastly, Nielsen et al. (2009) used a large sample to report the effect of continuity (remaining with the intake counselor) and discontinuity on initial drop out, as well as drop out coupled with an objective measure of a client's progress in therapy by session.

Betz and Shullman (1979) randomly sampled 1,500 cases, resulting in a dataset of 141 clients that had either been referred to a counselor or scheduled to be seen by the intake counselor at the completion of a 20-minute interview. The 67 males and 74 females were between 18 and 43 years of age with 75% between the ages of 18 and 22. The 25 counselors included 13 (eight male, five female) PhD's with three or more years of counseling experience and 12 counselors (six male, six female) who were interns in their second or third year of supervised experience. Male and female counselors were aged 32.0 and 31.5 years, respectively. Each counselor had appointed times in which they were available to do intakes of prospective clients. The counselors were free to schedule the client with another counselor or suggest to the client that they could schedule an initial appointment with them.

Of the 141 clients, 75% of the male clients and 77% of the female clients returned for their initial counseling session. While the result was not significantly different between the sexes, Betz and Shullman (1979) found that both had a "greater tendency" to return to counseling when a female counselor performed the intake (p. 543). Interestingly, there was no significant difference reported in return rates based on years of counseling experience. Regarding the question of return rate between those clients who were referred to other counselors and those who were retained by their intake counselor, the findings showed 76% returned when assigned to

another counselor and 67% returned to the “self-referred” intake counselor (p. 544). Although intriguing, the resulting difference was not significant.

In a replication of the Betz and Shullman study, Krauskopf, Baumgardner, & Mandracchia (1981) reviewed the intake history of 539 clients at a university counseling center. The clients included were not previously or directly assigned to counselors. Seventy-nine percent of the clients were between the ages of 18 and 25, 37.7% male and 62.3% female. No mean age was reported. The counselors included 112 staff, interns, advanced practicum and beginning practicum students. A breakdown of the gender of counselors was not included in the article. An additional question asked by the authors was: what is the effect of the level of agreement between the client and the counselor about the “nature of the problem”? (p. 519).

They found that 80.8% of the clients (78.7% male, 81.3% female) returned for counseling, but this difference was not significant. Moreover, the clients returned at a higher rate for female intake counselors (82.9%) compared to male counselors (78.8%). Once again, they found no significant difference between clients assigned to either a different female or male counselor and the return rate. Importantly, Krauskopf, Baumgardner and Mandracchia found a greater return rate for the clients assigned to a new counselor than for those who remained with their intake counselor. “Clients who continued counseling with the intake counselor returned at a rate of 76.8%; those referred to another counselor returned at a rate of 85.8%” (p. 520). Finally, the results indicated that the counselor experience level had no effect on the return rate. However, agreement between the client and counselor on the nature of the problem (such as educational, personal, or vocational) was significantly better with a 85.8% return rate, compared to 76.8% for the non-agreement group.

Noel and Howard (1989) examined the number of sessions completed by clients seeking psychodynamically oriented long-term therapy at an out-patient hospital-based training center. The 418 clients were primarily White and 68% female, with a mean age of 32. The therapists consisted of psychology and psychiatry residents, primarily between 20 and 39 years of age. Seventy-four percent had worked with at least 20 clients and 84% had personal psychotherapy. The question for the researchers was: Is the dropout rate by session different between clients who continued with the screening “same” therapist ($N = 203$) and those that were assigned to a new “different” therapist ($N = 215$).

The results of this study contradicted Betz and Shullman (1979) and Krauskopf et al., (1981). Following the one to two hour face-to-face screening interview, 26 clients did not return after assignment, with 23 (88%) of those clients assigned to a new therapist. However, they found that clients assigned to a different therapist were more likely to continue therapy beyond eight sessions (140 vs. 112). In this study design, if a client remained with the screening therapist, the screening was considered the first session and the new therapist meeting following the screening was also considered the first session. With that in mind, if a client was assigned to a different therapist, that client was more likely to dropout after the first session with the new therapist (18 vs. 8). Interestingly, clients who remained with the initial screening therapist were more likely to dropout after the second session (18 vs. 5).

In a retrospective study spanning 11 years, Nielsen et al. (2009) reviewed the appointment records for 17,854 clients at a large university counseling center and found that 15,137 met criteria for being seen for an intake, as well as being scheduled to see the same or a different counselor. The authors’ rationale for their study was similar to the concerns expressed at our counseling center. They worried that the discontinuity experienced by the client by one

counselor performing a traditional clinical intake interview and then being passed to another counselor for therapy, had implications on the participation, length, and outcome of therapy. Furthermore, the impact of discontinuity has an economic cost, when services are allocated but no services are performed. They point to the review by Haggerty et al. (2003) noting that continuity of care was a concern for many disciplines, including primary care, nursing, disease management, and mental health. “Continuity implies a sense of affiliation between patients and their practitioners (my doctor or my patient), often expressed in terms of an implicit contract of loyalty by the patient and clinical responsibility by the provider” (p. 1219). With this in mind, Nielsen et al. (2009) examined the return rate, dropout, and outcome between 8,423 (55.6%) discontinuity and 6,714 (44.4%) continuity clients. The sample was primarily Caucasian (87.95%) and was 60.4% female with a mean age of 22.6 years. The counselors and therapists included 51 licensed clinicians and 229 psychology trainees from 32 accredited training programs in professional psychology.

Following the initial intake, Nielsen et al. (2009) looked at each subsequent session, 2 through 5, examining both missed-appointment terminations after session one (i.e., the client’s failure to return, if the client agreed to an appointment time - see Hatchett and Park (2003)) and outcome. The results showed that at sessions 3, 4, and 5, there was a trend towards higher termination in the discontinuity group but the results were not significant (45.7% versus 48.5%; 46.5% versus 46.5%; 43.8% versus 47.3% respectively). However, on the key question, is there a difference between clients assigned to a new counselor (discontinuity) after the intake compared to those that remained with their intake counselor, the researchers found 48.1% of discontinuity clients failed to return, in contrast to 30.6% in the continuity group. Furthermore,

this result was significant and indicated that discontinuity clients were two times more likely to terminate due to missed appointments.

Interestingly, the researchers also found that clients who were assigned to a new therapist attended an additional two sessions which, naturally, impacted the client as well as limited resources. To investigate whether there was a difference between the two groups at intake that could explain this difference, the researchers analyzed the clients' OQ[®]-45 scores collected prior to the start of each session, including the initial intake. The OQ[®]-45 is a 45-item self-report paper and pencil inventory that uses a 0-to-4 Likert-type response interface to measure a client's level of distress (Lambert et al., 2004). Nielsen et al. (2009) found the client's OQ[®]-45 at intake for both groups were similar with discontinuity clients reporting a higher but not statistically significant score prior to meeting with their new therapist after their intake. While both groups showed consistent improvement, the discontinuity group "lagged behind" the continuity group through sessions 2 and 3, and became nearly the same by sessions 4 and 5. This means that discontinuity clients do not achieve the significant level of improvement achieved by the continuity group in sessions 2 and 3. The researchers believe that this is an indication of the disruption caused by discontinuity that leads to unnecessary additional sessions. "It seems reasonable that these catch-up sessions would add two extra sessions to the average case length of discontinuity clients" (p. 276).

As shown in the review of the broader research into dropout, many client, therapist, and clinic variables were studied but few can actually be altered (e.g., gender, race). Furthermore, the variables' reported interactions often differ over the course of the intake and therapy process. However, a clinic variable that can be targeted, and found to affect dropout, is discontinuity during the intake process. In addition, the four studies that answer the question are from

university counseling centers and may not be generalizable to a community counseling center. Thus, the rationale for this dissertation is to answer the counseling center's question: Is there a difference in client return rate due to direct or indirect assignment models? Not only is it important to determine if there is a difference, but if so, how strong an effect it is. The latter finding can guide a decision to favor one intake method over another. For example, it may be that there is a modest effect in favor of one method, however, the effect is deemed to be too weak to justify a change in the intake process. In addition, the studies reviewed used retrospective data in which the client's file was reviewed and then placed into one of two groups as a simple, dichotomous variable. There are clearly many factors that affect the assignment of clients. Therefore, the research design for this study sought to control the assignment variable, by randomly placing new clients into two distinct intake processes. In one intake model, the clients were seen for an intake interview but did not remain with the interviewer, while in the other model, the client remained with the intake interviewer/therapist.

CHAPTER III: METHOD

This study was designed to determine if either assigning a participant directly (DIR) to a treating therapist for the initial intake interview and subsequent therapy, or assigning a participant indirectly (IND) to the treating therapist following an initial intake interview with a different clinician, had an effect on the return rate after the first face-to-face scheduled meeting. From the outcome literature, there is an effect on client return behavior due to transfer. A salient factor that has not been controlled methodologically in a prospective study is the effect of continuity/discontinuity on client return rates. Therefore, the procedures detailed here provided an opportunity to manipulate this system variable. The result was hoped to provide a clearer understanding of the effects of intake procedures that can lead to improved client retention.

This chapter begins with a description of the participant population that was sampled for this study. The instrumentation and procedures sections are followed by the proposed design and analysis plan. Finally, the rights and protection of the participants, ethical guidelines and principles and the compliance procedures relevant to this study are presented.

Participants

The research sample includes male and female clients, age 18 and older, who were seeking individual therapy at a not-for-profit, sliding fee, community-based counseling center in California. This center provides supervised training of psychotherapists completing pre-practicum, practicum, and internship hours for MA, MFT, LCSW, LPCC, and pre-doctoral degrees. The center's clients are, in general, uninsured and from a lower socio-economic background. Many types of disorders are treated at the facility, but clients most commonly present with mood and anxiety disorders.

Inclusion Criteria

The following inclusion criteria, developed in collaboration with the counseling center, were that potential participants needed to: (a) contact the center on or after the commencement of the research study, (b) agree to participate, (c) provide informed consent, (d) be 18 years of age or older, (e) not be funded by third party payers from a government or community organization, (f) not be developmentally disabled or considered to be dangerous to themselves or to others, (g) not have been a counseling center client in the past three years and (h) have completed the intake process to be included in the study.

Tests of Power and Sample Size

Tests of power were conducted to determine the appropriate sample size for this study. Power analysis was performed using G*Power 3.1 (Faul, Erdfelder, Buchner, & Lang, 2009; 2007), which is based on the power calculations of Cohen (1988; 1992). The selected power level of 0.80 is considered “reasonable” and ensures an adequate sample, in order to reduce the risk of accepting a false null hypothesis (Cohen, 1988; Wilson VanVoorhis & Morgang, 2007). A conventional significance level of .05 reduced the probability of incorrectly rejecting a correct null hypothesis. Lastly, the effect of $w = .50$ was considered a large effect size, which indicates the “the degree to which the null hypothesis is false” (Cohen, 1988) and was selected because a smaller effect might be statistically significant but not clinically meaningful.

Tests of power revealed that, assuming a 95% confidence interval and an effect size of $w = .50$, statistically significant results of a simple chi square analysis would be realized 80% of the time (power = .80), with as few as 16 participants per group ($N = 32$; see Figure 1). However, the appropriate sample size for logistic regression that also includes other control variables (e.g., gender, age, etc.), in addition to group identification (IND or DIR), would require 34 participants

per group, or 68 total participants (Cohen, 1992). Therefore, in order to ensure adequate power, this study included a minimum of 68 total participants.

Instrumentation

The Outcome Questionnaire-45.2 (OQ[®]-45; Lambert et al., 2004) is a 45-item self-report paper and pencil inventory that uses a 0-to-4 Likert-type response interface (see <http://www.oqmeasures.com>). The OQ[®]-45 has been translated into several languages. The OQ[®]-45 is designed to assess three areas of the client's therapy process; current level of distress (baseline), therapy progress, and therapy outcome. The OQ[®]-45 was used to estimate the degree of client distress at intake and was an ideal way for this study to demonstrate the group similarity of the mean distress level of the two groups. Moreover, the OQ[®]-45 is currently given to all new clients, as part of their intake paperwork. The test-retest reliability is .84 with an internal consistency of .94 (Lambert et al., 2004, Table 8, p. 12). Moreover, the concurrent validity is reported to be between .71 and .84. The OQ[®]-45 typically takes between 3-15 minutes to complete (Lambert et al., 2004).

In-house Database

The center maintains an in-house database for tracking client progress, demographic information, OQ[®]-45 scores, presenting symptoms, and diagnoses, which was used to track the initial telephone contact, the group assignment, the OQ[®]-45 scores, and whether a client returned for therapy. Participant demographics were gathered using a self-report questionnaire (Appendix A) that was completed prior to the intake interview and entered into the database by counseling center staff. The in-house database was maintained by this researcher, who oversaw the group assignment, data acquisition, and correct data entry for this study.

Procedures

Permissions & Recruitment

This study has been approved by both the Internal Review Board (IRB) of Antioch University as well as the counseling center. Participants were those clients seeking therapy services, either by telephone or walk-in at the counseling center. The clients were asked a minimal number of demographic questions and the nature of their presenting problem during a phone interview (Appendix B). Clients meeting inclusion criteria were either placed on the waitlist for direct assignment to a treating therapist or were given an appointment with an intake counselor at the earliest convenience. Clients who did not wish to be included in the research study, were given the opportunity to withdraw, prior to meeting for their first face-to-face encounter or anytime during the course of treatment.

Data Collection

Clients were first randomly assigned to two groups (IND or DIR) at the time of the phone interview by the intake coordinator, based on a random assignment table. The group assignment label was affixed to the initial request for service interview. Second, prior to the intake interview and data collection, the intake coordinator reviewed the status of informed consent and the inclusion criteria and entered the appropriate status in the database, as well as the demographic and OQ[®]-45 information. Third, relevant dates, intake and treating counselors, and completed/returned information was noted in a simple spreadsheet.

Data Management

Data was exported from the in-house database (without identifying information) to a spreadsheet by the researcher, then cleaned and checked for errors in preparation for analysis in the SPSS software. All of the data is stored on-site in electronic form on the counseling center's

server and will be retained for a minimum of seven years after the publication of the completed study. The center's electronic database is password protected and the server has automated, daily backup. All materials and data shall be destroyed in accordance with applicable regulations and guidelines (45 CFR 46.115(b), 2009).

Design and Analysis

This study employed an experimental design utilizing random assignment to two groups with an experimentally controlled treatment manipulation (Barker, Pistrang, & Elliot, 2002; Creswell, 2009). The participants were randomly assigned to one of two conditions: (1) the participant was assigned *directly* (DIR) to a treating therapist for the initial intake interview; or (2) the participant was assigned *indirectly* (IND) to a treating therapist, following an initial intake interview with another clinician (Figure 2).

Assignment to Group

Participants seeking services at the center either walk in or call to request counseling services. They are then entered into a written log. The participants were contacted by phone for a brief interview to assess their appropriateness for therapy and to gather basic information. The participants included were placed in the DIR or IND conditions, using a random number table in the form of adhesive labels. The interviewer completed a *Request for Service* (RFS) form that provided a record of the client's issues, special needs, and the client's fee calculation. During the phone interview, clients often expressed preferences for the time they were available, as well as for the therapist gender, age, etc. that the center tried to accommodate. Therefore, each group was assigned to the first available clinician meeting their criteria. However, all assignments were reviewed by the clinical director to ensure the appropriateness of the match for the counselor's

level of experience and scope of practice. If a client was subsequently assigned by the clinic director, that variable was coded for analysis.

The face-to-face interview: The clinic provided didactic training in the conduct and content of the client's first face-to-face session and assessment. Both the counselors and the supervisors participated in the presentation and discussion of the importance of a therapeutic but thorough bio-psycho-social gathering of the client's history. Regardless of the intake method, the counselors were asked to gather the same information. The written assessment included a complete risk assessment, a clear articulation of the presenting issue(s) and the relevant bio-psycho-social data. The clinic believes that a good assessment is necessary for case formulation and conceptualization, treatment planning and for effective supervision.

Direct group: The DIR participant's RFS was forwarded to the clinical director for direct assignment to the first available therapist. The DIR therapist contacted the client for an appointment. Upon completion of the informed consent, demographic questionnaire, OQ[®]-45, and the intake interview, the written assessment was forwarded to the clinical director for review. Unless deemed inappropriate, the DIR therapist then began regular counseling sessions.

Indirect group: The IND participant was given an appointment with the first available intake counselor. Upon completion of informed consent, demographic questionnaire, OQ[®]-45, and the intake interview, the written assessment was forwarded to the clinical director for assignment to the first available treating therapist. The assigned therapist then contacted the client to begin regular sessions.

Descriptive data was expressed as frequencies and percentages with included tests of significance. Binary logistic regression was conducted to predict whether the DIR return rate was greater than the IND return rate. Additional convenience variables were examined. For logistic

regression, completion and returned were the dependent variables, group (DIR or IND) was the independent predictor variable and both gender and age were included as control variables in both the completing an intake and overall return rate models. To build a model for return after the intake interview, the independent variables were analyzed individually with an inclusion criterion of $p < 0.1$. The hypotheses were tested at the $p < .05$ threshold for statistical significance.

Compliance with Ethical Guidelines

Participant rights were protected throughout this study. In accordance with Section 3.10 & Section 8.02 of the American Psychological Association's (APA) *Ethical Principles of Psychologists and Code of Conduct* (2010), the informed consent to participate (Appendix C) in a research study was obtained prior to the collection of data. As per APA Code of Ethics Section 8.14 (2010), data will be shared upon the request of a qualified researcher "provided that the confidentiality of the participants can be protected and unless legal rights concerning proprietary data preclude their release." Data reporting was in accordance with APA (2010) Code Sections 5.01a, 8.10, and 8.11, in which every effort was made to report accurate, original work and to avoid false, deceptive, or previously published material. Participant anonymity, privacy, and confidentiality were fostered by de-identifying data, prior to exporting any data for analysis.

CHAPTER IV: RESULTS

The following data was collected between August 2017 and April 2018 with 177 phone intakes completed. Of the 177 requesting services, 131 also met criteria for inclusion in the study. The initial cohort was 59.4 % female (male $n = 51$, female $n = 78$, Missing $n = 2$). The age range was between 18 and 81 years, with a mean age of 41.2 years. The number assigned to each group was DIR ($n = 85$) and IND ($n = 46$). Analysis of the data was conducted using the IBM *Statistical Package for the Social Sciences* (SPSS) Version 25. To determine if there was a difference for those assigned to the DIR and IND groups, a Chi-Square analysis revealed no significant difference in gender distribution ($\chi^2(1) = .47, p = .50$). However, the independent samples t-test examining differences in average age of the two groups was significant, $t(125) = 1.99, p = .048$. The IND was significantly younger ($M = 37.43, SD = 14.82$) than the DIR group ($M = 43.12, SD = 15.55$).

Completing the Intake Interview

Fifty-nine percent (59.5%, $n = 78$) of the clients completed the intake interview process with fewer DIR clients (55.3%, $n = 47$), compared to 67.4% ($n = 31$) IND clients. Clients who did not complete their intake, did not differ significantly by group (each group had approximately equal ratios of those who completed and those who did not), $\chi^2(1) = 1.81, p = .18$. A Chi-Square analysis found that males and females were about equally likely to complete the intake interview in both the DIR group ($\chi^2(1) = .44, p = .51$) and the IND group ($\chi^2(1) = 2.56, p = .11$). Moreover, the ages of those who completed vs. those who did not complete their intake session did not differ significantly within either the DIR group ($t(81) = .51, p = .62$) or the IND group ($t(19.85) = .92, p = .37$). The age of those who attended a DIR intake ($M = 42.36, SD = 15.96$) and the age of those who did not attend a DIR intake ($M = 44.11, SD = 15.17$) did not

differ significantly. Likewise, the age of those who attended an IND intake ($M = 35.72$, $SD = 12.02$) and the age of those who did not attend an IND intake ($M = 40.73$, $SD = 19.18$) did not differ significantly.

Predicting Completion of the Intake Interview

The hypothesis was that clinic participants in the DIR group would be more likely to complete the intake process than participants in the IND group who had two different therapists for intake and for treatment. To test this hypothesis at the intake interview step, a binary logistic regression was performed. In addition to the intake method, the three previous covariates were included to control for the effects of the participant's gender (0 = male; 1 = female) and age, which was coded in years. The results did not support the hypothesis, as the overall model was non-significant ($LR \chi^2(3) = 5.26$, $p = .15$; see Table 1). Not surprisingly, given the non-significance of the omnibus test, none of the Wald tests of the individual regression parameters for the model predictors were statistically significant: gender adjusted odds ratio (AOR) = 1.79, $p = .12$; age AOR = .98, $p = .23$; method AOR = .67, $p = .30$. Moreover, and despite non-significance, the AOR of .67 for method is in the opposite direction of the hypothesized effect; participants in the DIR condition were estimated as having only about two-thirds the chance of completing the intake, compared with participants in the IND condition. However, because the lower and upper bounds of the 95% confidence interval for the method AOR encompasses 1 (0.31 – 1.43), this result is not statistically reliable.

Analysis of Participants following the Intake

Seventy-eight (59.4%) of the participants completed their intake interview. Fifty-five percent (55.1%) of the completers were female ($n = 43$), and 45% of the completers ($n = 35$) self-identified as male. The age range of completers was between 18 and 81 years, with a mean

age of 39.1 years ($SD = 14.86$). This sub-sample was predominantly White (52.6%, $n = 41$) and Hispanic (29.5%, $n = 23$). Forty-five percent (44.9%, $n = 35$) of the completers reported their religious beliefs to be “spiritual but not religious,” while 25.6% ($n = 20$) of the completers responded that Christianity was their primary religious belief system. Education among this cohort was diverse, with 25.6% ($n = 20$) of completers receiving a high school diploma or GED, 23.1% ($n = 18$) of completers having a Bachelor’s degree, and 17.9% ($n = 14$) of completers reporting some college level coursework. A large percentage of the participants were unemployed (37.2%, $n = 29$), with 26.9% ($n = 21$) reporting part-time and 29.5% ($n = 23$) full-time employment. More than half (57.7%, $n = 45$) of the participants had some form of health insurance. Sixty-nine of those that attended their intake interview, also completed the OQ[®]-45. The mean score was 71.1 ($SD = 20.56$). For participants that were given a provisional diagnosis by the intake interviewer, forty-two percent (42.3%) of the participant were categorized as experiencing anxiety (21.8%, $n = 17$) and depressive (20.5%, $n = 16$) disorders, in addition to 14.1% for trauma related disorders ($n = 11$). A variety of other disorders accounted for 25.6% ($n = 20$) of the disorders with the remaining categorized as diagnosis deferred (17.9%, $n = 14$).

To determine if there were differences in the demographics of the completers assigned to the DIR ($n = 47$) and IND ($n = 31$) groups, a series of Chi-Square analyses were conducted. The Chi-Square analysis examining potential gender differences of completers by group (IND compared to DIR) revealed no significant gender difference ($\chi^2(1) = .95, p = .33$). The subsequent Chi-Square analyses followed a similar pattern, and did not reveal significant demographic differences between completers in the IND and DIR groups: Race ($\chi^2(7) = 10.33, p = .17$), Religion ($\chi^2(6) = 2.20, p = .90$), Education ($\chi^2(8) = 6.05, p = .64$), Employment ($\chi^2(3) = 1.63, p = .66$). However, a greater proportion (68.1%) of completing participants in the DIR

group indicated they had health insurance coverage, compared to 41.9% for the IND group ($\chi^2(1) = 5.23, p = .02$). An Independent Samples t-test ($t(70.96) = 2.06, p = .04$) found that the average age was significantly higher for completers in the DIR group ($M = 42.36, SD = 15.96$), compared to completers in the IND group ($M = 35.72, SD = 19.02$). No significant difference was observed between the two groups' average distress scores, as reported on the OQ[®]-45 ($t(67) = .99, p = .33$), or in distribution of provisional diagnostic categories ($\chi^2(4) = 3.64, p = .46$).

Analysis of Return Rate after Intake

To answer the primary research question, "Is there a difference in the return rate between two intake methods following the intake interview?", a Chi-Square analysis was conducted. The analysis revealed that the ratio of those that did and did not return after their intake differed significantly by group, $\chi^2(1) = 9.47, p = .002$. An examination of the percentages by group showed that 95.7% ($n = 45$ of 47) returned in the DIR group, compared to 71% ($n = 22$ of 31) in the IND group. To look for possible covariates that might explain the difference in return rates, a series of Chi-Square analyses were conducted, examining the possible effect of participants' demographics on return rate by group. These analyses revealed no significant difference between the gender distributions of those who did and did not return in the DIR group ($\chi^2(1) = .080, p = .78$) and the IND group ($\chi^2(1) = .079, p = .78$).

The analysis of race revealed no significant difference in the distributions of those who did and did not return in the DIR group ($\chi^2(5) = 5.96, p = .313$) and the IND group ($\chi^2(4) = 3.06, p = .548$). No significant difference in distributions were found in the religious affiliation of those who did and did not return in the DIR group ($\chi^2(6) = 7.73, p = .26$) and the IND group ($\chi^2(5) = 5.00, p = .42$). The analysis of education revealed no significant difference in the distributions of highest level of education attained of those who did and did not return in the DIR

group ($\chi^2(7) = 4.49, p = .72$) and the IND group ($\chi^2(7) = 12.19, p = .09$). Employment status was not found to be distributed in a significantly different way between those who did and did not return in the DIR group ($\chi^2(3) = 9.49, p = .14$) and the IND group ($\chi^2(3) = 2.16, p = .54$).

However, analysis of the effect of not having health insurance by group showed fewer without health insurance returned after the intake in the DIR group (No Insurance/Returned - 86.7%, $n = 13$ of 15), compared to all those with health insurance in the DIR returned after their intake ($n = 32$, $\chi^2(1) = 4.46, p = .04$), whereas the distribution was not found to differ significantly for the IND group (No Insurance/Returned - 83.3%, $n = 15$ of 18 vs. Insurance/Returned - 53.8%, $n = 7$ of 13, $\chi^2(1) = 3.19, p = .074$). It should be noted here that the clinic, at the time of this study, did not accept any form of health insurance reimbursement. Though an interesting data point, it does not appear to be a useful criterion. An Independent Samples t-test revealed the average age of those that did or did not return did not differ significantly for the DIR group ($t(45) = 3.26, p = .75$) or in the IND group ($t(27) = -7.12, p = .48$).

Analysis of Subjective Measures and Return Rate

A Chi-Square analysis was conducted to examine whether return rates differed by diagnosis. This analysis used the provisional diagnosis recorded by the intake counselor by diagnostic category. The result of the Chi-Square test of the mental health diagnosis on return rates showed that there was an equal distribution between those that did and did not return after intake in the DIR group ($\chi^2(4) = 6.84, p = .15$). Likewise, no significant difference in the distribution of diagnoses was noted for the IND group ($\chi^2(4) = 6.69, p = .15$). An independent samples t-test was conducted to examine whether self-reported levels of distress, as measured by the OQ[®]-45 showed that the mean scores of those who did and did not return, did not differ significantly for the DIR group ($t(39) = .05, p = .96$) or in the IND group ($t(26) = 1.55, p = .13$).

Analysis of Counselor Effects

Twenty counselors were part of the study process with one-half being female ($n = 10$), 75 % White ($n = 15$) and 25 % Hispanic ($n = 5$). The mean age of the counselors was 39.4 years old ($SD = 12.9$) with a range of 24 to 70 years. The majority (85%, $n = 17$) of the counselors were MSW, MA, PhD, and PsyD students with one PsyD Doctoral Candidate, one Licensed Psychological Assistant (LPA) and one Marriage and Family Therapist (MFT). Analyses were conducted to look for counselor effects during the intake process. Of the 131 participants that met the criteria, a small number (DIR: $n = 8$, IND: $n = 9$) of non-completers did not have documented intake counselors and are removed from the analysis of counselor interactions. A Chi-Square test showed a similar distribution of missing intake interviewers in the DIR and IND groups ($\chi^2(1) = 2.73, p = .10$). Analysis of the non-completers by those participants with and without documented interviewers found no significant difference in the distribution of participant gender ($(\chi^2(1) = .05, p = .83)$ or Age ($t(125) = 5.78, p = .56$). The participants may have been aware of one intake interviewer demographic variable, that of gender. This variable may have influenced return rates. Our data cannot distinguish whether a participant was explicitly made aware of the name of their interviewer if, in fact, they were ultimately scheduled for an intake. A series of Chi-Square tests were conducted to assess the potential role of interviewer gender on return rates. A Chi-Square test revealed no significant role of gender on return rates for the DIR group ($\chi^2(1) = .06, p = .80$). Thirty of 50 (60%) assigned to male interviewers completed the intake process and 17 of 27 (63%) assigned to female interviewers completed the process. However, a significant difference in interviewer gender distribution between completers and non-completers was identified in the IND group ($\chi^2(1) = 3.88, p = .049$). In the IND group ($n = 37$), male

interviewers were assigned 24 participants and 75% ($n = 18$) completed an interview and the female interviewers had 100% completion ($n = 13$).

Analysis of Treating Counselor Demographics on Return Rate after Intake

As noted earlier, of the 131 participants that met the criteria, a total of 78 completed the intake interview (47 DIR and 31 IND) and more participants returned to the DIR group ($p = .002$). A series of analyses were performed to look for possible effects of the treating counselor demographic covariates on the participant return rate after the intake interview. The distribution of male and female treating counselors did not differ significantly in the return rate of the participants in either the DIR group ($\chi^2(1) = .173, p = .677$) or in the IND group ($\chi^2(1) = .143, p = .706$). The return rate of the participants by counselor race was equally distributed for both the DIR group ($\chi^2(1) = 1.078, p = .299$) and the IND group ($\chi^2(1) = .026, p = .872$). The academic level of the treating counselor was also equally distributed for the DIR group ($\chi^2(4) = 6.09, p = .19$) and the IND group ($\chi^2(5) = 4.27, p = .51$). Lastly, an independent samples t-test found that the mean age of the treating counselors of those participants who did and did not return after intake, did not significantly differ in either the DIR group ($t(2.12) = -.78, p = .51$) or the IND group ($t(27) = .54, p = .60$).

Analysis of Time and Return Rate

There are several time intervals related to each group's intake process. A shared interval, assignment days from the initial request for service to a treating counselor, was examined. The mean time for assignment to a treating counselor in the DIR group was 17.7 days ($SD = 19.4$). Although the IND group completed an intake interview following the request for service, the time was similar to the IND interval mean of 18.7 days ($SD = 18.4$). An Independent samples t-test found that the mean days did not differ significantly ($t(126) = -.27, p = .79$). In addition,

completing or not completing an intake interview, participants in the DIR group assigned days were found to differ but not significantly. The completers' days were 16.8 days ($SD = 17.8$) and the non-completers' were 18.8 days ($SD = 21.4$, $t(82) = .48$, $p = .64$). As previously reported, nearly everyone in the DIR group returned to their treating counselor/interviewer but the IND group experienced significant attrition. However, those that did not return assigned days ($M = 18.6$, $SD = 15.6$) did not differ significantly from those that did return following their intake interview ($M = 27.5$, $SD = 19.9$, $t(28) = -1.14$, $p = .26$).

Probability of Returning after the Intake Interview

Binary logistic regression was performed to model the effects of method of intake as well as client gender and age as predictors on the dichotomous dependent variable Returned after Intake, with Returned after Intake coded as 0 for "No" and 1 "Yes". A significant result was found following the return after an intake for the overall regression model (LR $\chi^2(3) = 9.988$, $p = .02$; see Table 2). Intake method was found to predict the likelihood of a client's return to therapy following the completion of the intake interview (AOR = 8.32, $p = .01$). Gender (AOR = .73, $p = .65$) and age (AOR = 1.02, $p = .61$) were not significant. This result shows that, when controlling for the clients' gender and age, clients in the DIR group were more than 8 times more likely to return to their treating therapist following the completion of the intake interview.

A large number of additional convenience predictors were identified as potential candidates for inclusion in a model equation. In addition to the intake method and client gender and age, there were eight additional client variables: race, religion, education, employment, health insurance, diagnostic category, OQ[®]-45, and proposed fee. Four counselor variables were identified: intake counselor gender, age, and race as well as the assigned days to the treating therapist. Several of the predictors had categories with simply too few cases (i.e., < 5). To

enhance the regression model, each categorical variable for categories with a sparse number of cases, invalid codes, or unidentified missing values were identified. The identified variables were race, religion, and education. For example, the initial coding for client race/ethnicity included seven categories, plus an additional category for 'Not Reported'. Some of the groups such as Black, Asian, and American Indian/Alaska Native/Pacific Islander had only one case per category. Several other race/ethnicity groups were represented by fewer than five cases. Those smaller cases were collapsed into three categories: White ($n = 41$), Hispanic ($n = 23$), and Other or Unknown ($n = 14$).

Because of the small sample size and large number of candidate variables, it was not possible to include all of the possible predictors into a single multivariable equation. Instead, a forward stepwise analysis was performed with a likelihood ratio inclusion criterion of $p < .05$. The final model was significant (LR $\chi^2(1) = 9.571$, $p = .002$; see Table 3), showing that the intake method, DIR versus IND, as the only significant model predictor odds ratio (OR = 9.127; $p = .007$). No additional variables met criteria for inclusion in the model. Table 3 provides the results of each independent variable processed alone in a regression equation.

Probability of Returning after the Request for Service

In the final statistical model, a regression analysis examined the effects of method as well as client gender and age on returning for a session following an intake interview for all clients completing the request for service. As previously reported, 95.7% ($n = 45$ of 47) returned after the intake interview in the DIR group compared to 71% ($n = 22$ of 31) in the IND group. Of the 131 clients requesting service however, 51.1% ($n = 67$) returned overall with 52.9% ($n = 45$ of 85) returning in the DIR group, compared to 47.8% ($n = 22$ of 46) in the IND group (see Figure 3; Table 5). Unlike the significant result found following the return after intake, a non-significant

result for the overall regression model was found ($LR \chi^2(3) = 1.67, p = .649$; see Table 4). The three predictor variables, including method, could not predict the likelihood of a client's return to therapy: method AOR = 1.31, $p = .46$; gender (AOR) = 1.42, $p = .33$; age AOR = .99, $p = .46$.

CHAPTER V: DISCUSSION

The purpose of this research study was to examine and evaluate the intake methods of a community based, not for profit, counseling center. The clinic often found that clients completing an intake would fail to return for therapy. Feedback from stakeholders pointed to the process as inefficient and not congruent with establishing an alliance with the treating therapist or the clinic as a whole. The method in question, the clinic's formal intake interview process, involved an intake by one counselor with subsequent assignment to a treating therapist as openings became available. To address this issue, an alternative method of direct assignment to the treating counselor from the initial request for service was initiated. As the clinic migrated to the latter method, this study was developed to provide evidence-based support for the change. With the removal of the formal intake, the belief was that improved continuity in care would result in better return rates after the first meeting with the treating therapist. Thus, the resulting hypothesis was that direct (DIR) and indirect (IND) client assignment groups differ in their return rate following the intake interview.

Summary

The evaluation of the data collected followed three basic steps. The steps, request for service, intake interview, and returned after intake, used correlations at pre- and post-steps to identify any significant differences in client variable distributions. For the most part, the two groups did not differ in the pre-step and post-step analysis, except for intake method. A third analysis using binomial regression was performed to identify predictor variables in a model equation. While the research question sought to answer the simple question of returning after intake, analysis of the preceding steps and available variables was performed to gain insight into

and illuminate any issues that may be useful for recommendations to improve client retention in general.

The key findings of the study revealed that DIR clients were more than 8 times as likely to return to their treating therapist following completion of the intake interview, compared to IND clients. This result supports the contention of Nielsen et al. (2009) that the continuity/discontinuity variable plays an important role in client retention. Conversely, clients in the IND group tended to complete their intake interview with their intake counselor at a greater rate, although the result did not achieve significance. This improved attendance for an intake interview in the IND group mirrors the Reitzel et al. (2006) finding that dropout was greater for waitlisted clients seeking an intake versus those assigned an intake at the time they requested service. However, the analysis revealed that a client's return after the initial intake interview, regardless of group assignment, was simply impossible to predict at the time of the request for service.

In this study, both groups average wait time for assignment to a treating therapist did not differ significantly. When considering that each client experienced time on a waitlist, this variable should be an additional vector to address in improving retention. The DIR group waited 17.7 days for assignment to a treating therapist and the IND group waited 18.7 days for assignment, including their intake interview. This waitlist period is where the greatest attrition occurred in each group. While the data to examine this further is not available in this study, the deleterious effects of the waitlist are well-supported (e.g., Baekeland and Lundwall, 1975; Manthei, 1996; Gallucci, Swartz, & Hackerman, 2005; Reitzel et al., 2006).

Clinical Implications

This study's purpose, in addition to contributing to the body of research related to client retention and outcome, was to provide the clinic with a greater understanding of their own intake process and its effect on client retention. The results indicate that neither the DIR nor the IND assignment method is an ideal process without addressing the waitlist effect. To fully realize the benefit of continuity of care in the DIR model, providing a client with an appointment with a treating therapist at the time of the request for service should be the default procedure. To that end, an emphasis should be placed on observing and anticipating trends in clients' requests for service. There are a few areas that may help achieve greater success in maintaining the optimal intake method. First, continuously monitoring client attendance to identify and end inactive cases, would free valuable openings for new clients. Second, maintain a strong trainee recruitment program that promotes adequate staffing, by anticipating both staff attrition and new clients' requests for service.

Limitations of the Findings

There are several limitations to the generalizability of the research findings. Notably, the study sought to answer the simple question about the return rate of clients between the clinic's two intake methods. An overarching limitation is the clinic's sliding fee-for-service model. Clients seeking services may differ in their motivation or willingness to seek and continue in therapy, compared to those seeking therapy paid in part by insurance or, for example, provided at no cost by a university counseling center. How the client experiences the interaction with the clinic may also affect retention specific to this clinic. There are several variables, such as front-line staff warmth, ease of contact and responsiveness to inquiries, the condition of the facility, and clinic location and hours. In addition to clinic and staff effects, during the study period, the

community as a whole experienced events outside the norm that had an economic and emotional impact on many clients. These events may have had both a negative or positive effect on a client's motivation to attend their intake or their second therapy session. During this period the number of requests for service slowed. This is an example of a real-world factor affecting the intake process. The homogeneous demographic nature of the clients and the therapists limits the application of the findings. When reviewing the findings of this study, it is important to understand that these variables were to convey to the reader a picture of the client and therapists' profiles. A non-significant result may be misleading, due to the study's small sample size. Thus, a larger sample or advanced statistical analysis may have revealed interactions that could not be detected in this investigation.

Methodological Limitations

The study design attempted to provide a randomized two-group sample with an equal number of participants. However, the two groups differed in size, primarily due to human error in the use of the random assignment procedure that skewed towards the DIR group. It is unclear how this may have affected the findings. Due to the limited nature of the research question and the need to limit impacts on client and staff time, many variables that are part of the intake process were not captured. For example, the study used a simple dichotomous variable to report client attendance at each step. This single variable was sufficient to answer the research question but it did not provide any insight into why a client did or did not return. The assignment to a treating therapist was also confounded by clients' expressed preferences at the time of the request for service. Thus, some level of bias would be expected, as staff weighed clients' needs with treating therapists' attributes and availability. Additionally, there may have been a bias in the therapist stance during a DIR or an IND intake interview. The role of the common factors in

psychotherapy outcome, including those related to the working alliance, are relevant here. How the treating therapist conducts the interview may differ from a therapist collecting data for a transfer. Perhaps the treating therapist naturally begins a relationship that consciously or not, the intake counselor does not. These variables may be a moderator of discontinuity but they were not addressed in the study design.

Implications for Future Research

There are several avenues of research that should be considered. The replication of this study with a larger sample size and diverse populations may reveal additional vectors to improve retention that can be generalized across a broader clinical population. In this study, there was also a waitlist period that likely affected client retention. The waitlist is an obvious break in continuity of care. A useful extension of this study design would include both an immediate assignment of DIR clients to a treating therapist, as well as the immediate assignment to a treating therapist following the IND intake interview. In the later IND condition, the continuity of care is maintained in the IND group, because the client is provided an appointment with their treating therapist. These results may be helpful for organizations that believe their clients' profiles necessitate a face-to-face interview.

The reason(s) why a client failed to complete an intake or return after an intake could provide important clues. For example, the hypothesis considered in this study focused on a clinic system variable. There are undoubtedly other potential system variables that each group can experience that may have influenced the results. Therefore, the development of a survey for non-completing clients is necessary. These results may point to additional system barriers in the intake process. A continuous sampling of non-completers may be helpful by alerting the clinic to system issues as well as changes in the non-completers profile over time. There are many

client/therapist variables affecting dropout that are not within the clinic's control. However, a natural extension of this study would include the assessment of the strength of the working alliance, as well as other potential common factors identified in positive psychotherapy outcome, following the completion of the intake interview. A better understanding of the variables contributing to the negative effect of discontinuity may provide specific supervision and training components to improve return rates for organizations that prefer the formal intake process.

Conclusion

It should be understood that clients seeking mental health services have reached a level of personal distress, evidenced by the fact that they are reaching out to strangers for help. Therefore, the interaction of a new client with a clinic and its staff is a unique social one. They may be emotionally exhausted, fragile, angry or sad. Their initial steps through the intake process have the potential of either a negative or positive experience. The organization's leadership and staff should place themselves in the clients' shoes and evaluate the intake process in its entirety. While there has been a great emphasis on the client and therapist relationship within the psychotherapy experience, addressing the initial client intake process experience can provide a positive start to a successful therapy outcome.

References

- Al-Jabari, R. (2015). *Therapist (dis)continuity, therapeutic relationship, and (premature) termination in a psychology training clinic (Order No. 10032204), Available from ProQuest Dissertations & Theses Global. (1774248632)*. Retrieved from <http://search.proquest.com.antioch.idm.oclc.org/docview/1774248632?accountid=26438>
- Anderson, R. T., Hogg, A. J., & Magoon, T. M. (1987). Length of time on a waiting list and attrition after intake. *Journal of Counseling Psychology, 34*(1), 93-95, <https://doi.org/10.1037/0022-0167.34.1.93>
- APA. (2010). *Ethical Principles of Psychologists and Code of Conduct*. Retrieved February 25, 2012, from American Psychological Association: <http://www.apa.org/ethics/code/index.aspx?item=7#402>
- Baekeland, F., & Lundwall, L. (1975). Dropping out of treatment: A critical review. *Psychological Bulletin, 82*(5), 738-783, <https://doi.org/10.1037/h0077132>
- Barker, C., Pistrang, N., & Elliot, R. (2002). *Research methods in clinical psychology* (2nd. ed.). West Sussex, England: John Wiley & Sons, Ltd.,
- Betz, N. E., & Shullman, S. L. (1979). Factors related to client return rate following intake. *Journal of Counseling Psychology, 26*, 542-545, <https://doi.org/10.1037/0022-0167.26.6.542>
- Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: theory, research and practice, 16*(3), 252-261, <https://doi.org/10.1037/h0085885>
- Bordin, E. S. (1983). A working alliance based model of supervision. *The Counseling Psychologist, 11*(1), 36-42, <https://doi.org/10.1177/0011000083111007>

- Bowman, D. (1993). Effects of therapist sex on the outcome of therapy. *Psychotherapy: Theory, Research, Practice, Training*, 30(4), 678-684, <https://doi.org/10.1037/0033-3204.30.4.678>
- Bowman, D., Scogin, F., Floyd, M., & McKendree-Smith, N. (2001). Psychotherapy length of stay and outcome. *Psychotherapy: Theory, Research, Practice, Training*, 38(2), 142-48, <https://doi.org/10.1037/0033-3204.38.2.142>
- Code of Federal Regulations*. (2009, July 14). Retrieved March 15, 2014, from U.S. Department of Health and Human Services:
<http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.html#46.115>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (Second ed.). New York: Psychology Press.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155-159, <https://doi.org/10.1037//0033-2909.112.1.155>
- Creswell, J. W. (2009). *Research Design: Qualitative, quantitative, and mixed methods approaches* (Third ed.). Thousand Oaks, California: Sage Publications.
- Engel, G. L. (1977). The need for a new medical model: A for biomedicine. *Science*, 196, 129-136. Retrieved from <http://www.jstor.org/antioch.idm.oclc.org/stable/1743658>
- Epperson, D. L. (1981). Counselor gender and early premature termination from counseling: A replication and extension. *Journal of Counseling Psychology*, 28(4), 349-356, <https://doi.org/10.1037/0022-0167.28.4.349>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. r.-G. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175-191.

- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149-1160, <https://doi.org/10.3758/BRM.41.4.1149>
- Gallucci, G., Swartz, W., & Hackerman, F. (2005). Impact of the wait for an initial appointment on the rate of kept appointments at a mental health center. *Psychiatric Services*, 56(3), 344-346, <https://doi.org/10.1176/appi.ps.56.3.344>
- Gottheil, E., Sterling, R. C., Weinstein, S. P., & Kurtz, J. W. (1994). *Journal Of Addictive Diseases*, 13(4), 169-176. https://doi.org/10.1300/J069v13n04_05
- Haggerty, J. L., Reid, R. J., Freeman, G. K., Starfield, B. H., Adair, C. E., & McKendry, R. (2003). Continuity of care: A multidisciplinary review. *British Medical Journal*, 327(7425), 1219-1221, <https://doi.org/10.1136/bmj.327.7425.1219>
- Hansen, N. B., Lambert, M. J., & Forma, E. M. (2002). The psychotherapy dose-response effect and its implications for treatment delivery services. *Clinical Psychology: Science and Practice*, 9, 229-343, <https://doi.org/10.1093/clipsy.9.3.329>
- Hatchett, G. T., & Park, H. L. (2003). Comparison of four operational definitions of premature termination. *Psychotherapy: Theory, Research, Practice, Training*, 40(3), 226-231, <https://doi.org/10.1037/0033-3204.40.3.226>
- Howard, K. I., Kopta, M. S., Krause, M. S., & Orlinsky, D. E. (1986). The dose-effect relationship in psychotherapy. *American Psychologist*, 41(2), 159-164, <https://doi.org/10.1037/0003-066X.41.2.159>
- Krauskopf, C. J., Baumgardner, A., & Mandracchia, S. (1981). 1981. *Journal of Counseling Psychology*, 28(6), 519-521., <https://doi.org/10.1037/0022-0167.28.6.519>

- Lambert et al. (2004). *OQ-45.2 administration and scoring manual*. Salt Lake City: American Professional Credentialing Services, LLC.
- Levy, J. J., Thompson-Leonardelli, K., Smith, N. G., & Coleman, N. M. (2005). Attrition after intake at a university counseling: Relationship among client race, problem type, and time on a waiting list. *Journal of College Counseling*, 8(2), 107-117, <https://doi.org/10.1002/j.2161-1882.2005.tb00077.x>
- Manthei, R. A. (1996). A follow-up study of clients who fail to begin counselling or terminate after one session. *International Journal for the Advancement of Counselling*, 18(2), 115-128, <https://doi.org/10.1007/BF01421563>
- Mash, E. J., & Hunsley, J. (1993). Assessment considerations in the identification of failing psychotherapy: Bringing the negatives out of the darkroom. *Psychological Assessment*, 5(3), 292-301, <https://doi.org/10.1037//1040-3590.5.3.292>
- Mennicke, S. A., Lent, R. W., & Burgoyme, K. L. (1988). Premature termination from university counseling centers: A review. *Journal of Counseling & Development*, 66(10), 458-465, <https://doi.org/10.1002/j.1556-6676.1988.tb00788.x>
- Minty, B., & Anderson, C. (2004). Non-attendance at initial out-patient appointments at a hospital-based child psychiatric clinic. *Clinical Child Psychology and Psychiatry*, 9(3), 403-418, <https://doi.org/10.1177/1359104504043923>
- Morrow, G. R., Del Gaudio, A. C., & Carpenter, P. J. (1977). The dropout and the terminator: A methodological note on definitions. *Journal of Clinical Psychology*, 33(3), 867-869, [https://doi.org/10.1002/1097-4679\(197707\)33:3<867::aid-jclp2270330354>3.0.co;2-g](https://doi.org/10.1002/1097-4679(197707)33:3<867::aid-jclp2270330354>3.0.co;2-g)

- Nahum, D., Alfonso, C., & Sönmez, E. (2019). Common Factors in Psychotherapy. In: Javed A., Fountoulakis K. (eds). *Advances in Psychiatry*. Springer, Cham, https://doi.org/antioch.idm.oclc.org/10.1007/978-3-319-70554-5_29
- Nielsen, S. L., Okiishi, J., Nielsen, D. L., Hawkins, E. J., Harmon, S., Pedersen, T., et al. (2009). Termination, appointment use, and outcome patterns associated with intake therapist discontinuity. *Professional Psychology: Research and Practice*, 40(3), 272-278. <https://doi.org/10.1037/a0013286>
- Niolon, R. (1999, December). *The therapeutic relationship - Part II*. Retrieved May 24, 2011, from Resources for students & professors: <http://www.psychpage.com/learning/library/counseling/thxrel2.htm>
- Noel, S. B., & Howard, K. I. (1989). Initial contact and engagement in psychotherapy. *Journal of Clinical Psychology*, 45(5), 798-805, [https://doi.org/10.1002/1097-4679\(198909\)45:5<798::AID-JCLP2270450517>3.0.CO;2-C](https://doi.org/10.1002/1097-4679(198909)45:5<798::AID-JCLP2270450517>3.0.CO;2-C)
- Ray, E., Beig, M. A., & Gopinath, P. S. (1982). Walk-in clinic drop-outs. *International Journal of Social Psychiatry*, 28(3), 179-184, <https://doi.org/10.1177/002076408202800303>
- Reitzel, L. R., Stellrecht, N. E., Gordon, K. H., Lima, E. N., Wingate, L. R., Brown, J. S., et al. (2006). Does time between application and case assignment predict therapy attendance or premature termination in outpatients? *Psychological Services*, 3(1), 51-60, <https://doi.org/10.1037/1541-1559.3.1.51>
- Rodolfa, E. R., Rapaport, R., & Lee, V. E. (1983). Variables related to premature terminations in a university counseling service. *Journal of Counseling Psychology*, 30(1), 87-90, <https://doi.org/10.1037/0022-0167.30.1.87>

- Rogers, C. R. (1957). On becoming a person. In S. Doninger, & S. Doninger (Ed.), *Healing: Human and divine: Man's search for health and wholeness through science, faith, and prayer* (pp. 57-67, <https://doi.org/10.1037/10811-003>). New York: Association Press.
- Rogers, C. R. (1980). *A Way of Being*. New York: Houghton Mifflin Company.
- Roos, J., & Werbart, A. (2013). Therapist and relationship factors influencing dropout from individual psychotherapy: A literature review. *Psychotherapy Research*, 23(4), 394-418, <https://doi.org/10.1080/10503307.2013.775528>
- Rosenzweig, S. (1936). Some implicit common factors in diverse methods of psychotherapy. *American Journal of Orthopsychiatry*, 6(3), 412-415. <https://doi.org/10.1111/J.1939-0025.1936.TB05248.X>
- Schauman, O., Aschan, L. E., Arias, N., Beards, S., & Clement, S. (2013). Interventions to increase initial appointment attendance in mental health services: A systematic review. *Psychiatric Services*, 64(12), 1249-1258, <https://doi.org/10.1176/appi.ps.201200540>
- Sharf, J. (2007). Psychotherapy dropout: A meta-analytic review of premature termination (Doctoral Dissertation)(Order No. 3281748), Available from ProQuest Dissertations & Theses A&I; ProQuest Dissertations & Theses Global. (304736327). Retrieved from <http://search.proquest.com.antioch.idm.oclc.org/docview/304736327?accountid=26438>
- Sharf, J., Primavera, L. H., & Diener, M. J. (2010). Dropout and therapeutic alliance: A meta-analysis of adult individual psychotherapy. *Psychotherapy Theory, Research, Practice, Training*, 47(4), 637-645, <https://doi.org/10.1037/a0021175>
- Swift, J. K., & Greenberg, R. P. (2012). Premature Discontinuation in adult psychotherapy: A meta-analysis. *Journal of Consulting and Clinical Psychology*, 80(4), 547-559, <https://doi.org/10.1037/a0028226>

- Tantam, D., & Klerman, G. (1979). Patient transfer from one clinician to another and dropping-out of out-patient treatment. *Social Psychiatry, 14*(3), 107-113, <https://doi.org/10.1007/BF00582175>
- Wampold, B. E. (2005). Establishing specificity in psychotherapy scientifically: Design and evidence issues. *American Psychological Association, 194*-198, <https://doi.org/10.1093/clipsy/bpi025>
- Wierdsma, A., Mulder, C., de Vries, S., & Sytema, S. (2009). Reconstructing continuity of care in mental health services: a multilevel conceptual framework. *Journal Of Health Services Research & Policy, 14*(1), 52-57, <https://doi.org/10.1258/jhsrp.2008.008039>
- Wierzbicki, M., & Pekarik, G. (1993). A meta-analysis of psychotherapy dropout. *Professional Psychology: Research and Practice, 24*(2), 190-195, doi: 10.1037//0735-7028.24.2.190.
- Wilson VanVoorhis, C. R., & Morgan, B. L. (2007). Understanding power and rules of thumb for determining sample sizes. *Tutorials in Quantitative Methods for Psychology, 3*(2), 43-50, <https://doi.org/10.20982/tqmp.03.2.p043>
- Wise, M. J., & Rinn, R. C. (1983). Premature client termination from psychotherapy as a function of continuity of care. *Journal of Psychiatric Treatment & Evaluation, 5*(1), 63-65.

Tables and Figures

χ^2 tests - Goodness-of-fit tests: Contingency tables

Analysis: A priori: Compute required sample size

Input: Effect size $w = .50$

α err prob = 0.05

Power ($1 - \beta$ err prob) = 0.80

Df = 1

Output: Non-centrality parameter $\lambda = 8.00$

Critical $\chi^2 = 3.84$

Total sample size = 32

Actual power = 0.80

Figure 1. Power Analysis Output for Sample Size (Faul, Erdfelder, Buchner, & Lang, 2007; 2009). To answer the research question without regard to control variables, test of power revealed that, assuming 95% confidence interval and an effect size of $w = .50$, statistically significant results of a simple chi square analysis would be realized 80% of the time (power = .80) with as few as 16 participants per group ($N = 32$).

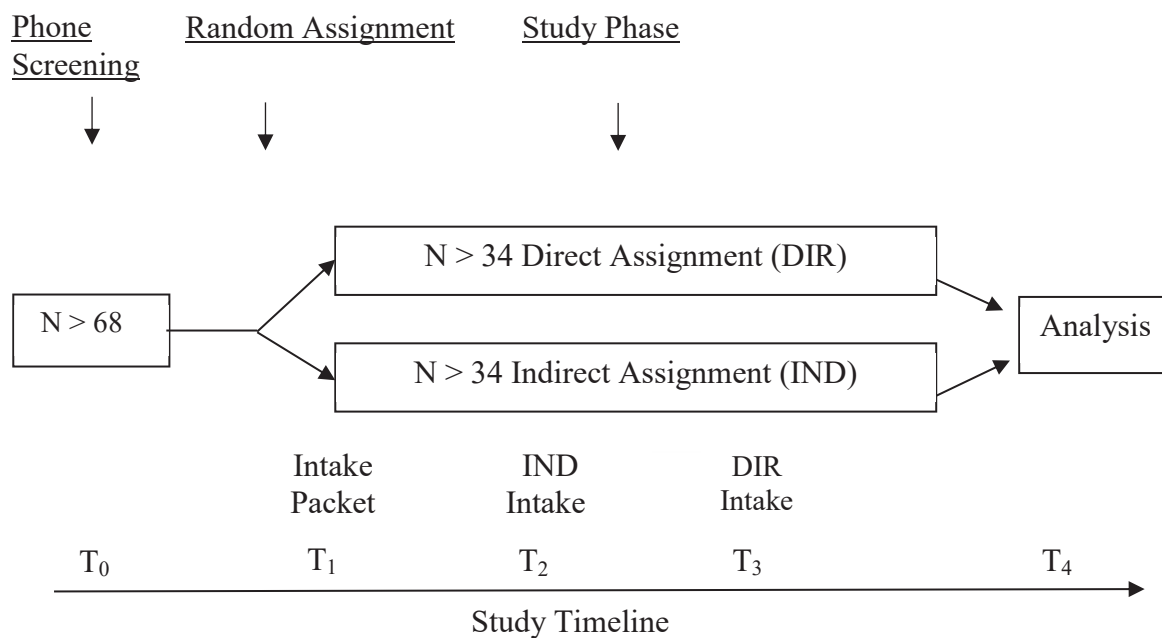


Figure 2. This figure shows the design timeline: T_0 – Phone intake and random assignment; T_1 – Prior to the intake, clients complete consent, demographic questionnaire, and the OQ[®]-45; T_2 and T_3 – Clients complete an intake interview with a DIR or IND counselor; T_4 – Did they return after the intake?

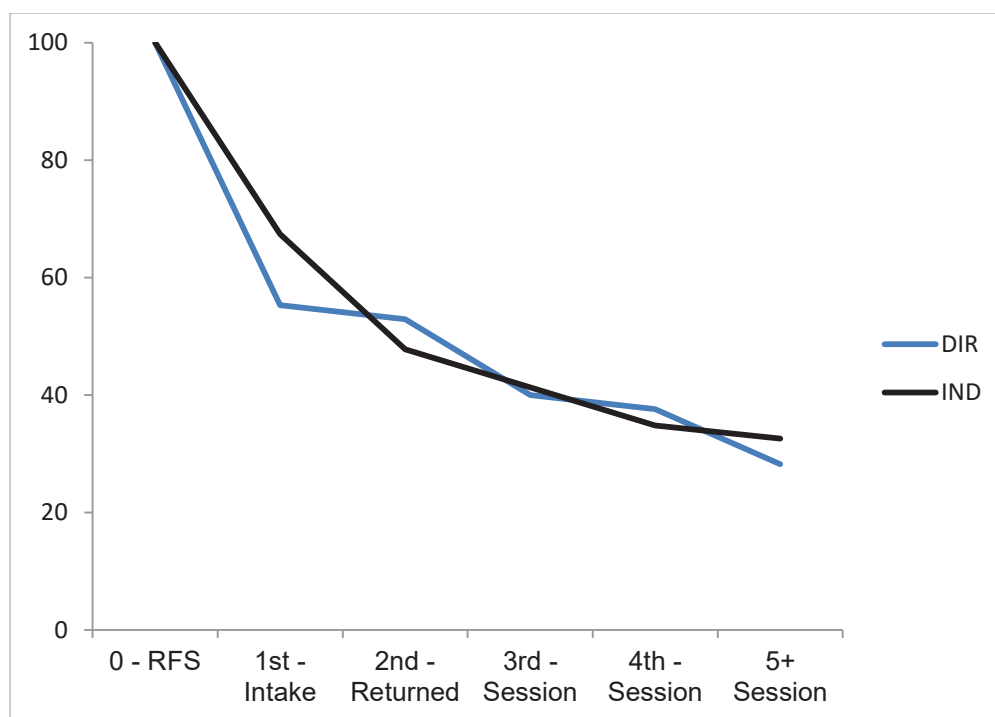


Figure 3. This graph provides a view of the retention rate of clients in the IND and DIR groups by session. Additional post-study session data is included for context (Table 5).

Table 1.*Binomial Regression Analysis for Completing an Intake after the Request for Service*

Dependent Variable	
Completed an Intake	Internal Value
NO	0
YES	1

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	5.262	3	0.154
	Block	5.262	3	0.154
	Model	5.262	3	0.154

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	171.542 ^a	0.039	0.053

a. Estimation terminated at iteration number 3 because parameter estimates changed by less than .001.

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
Step 1 ^a	Method ^b	-0.409	0.393	1.082	1	0.298	0.665	0.308	1.435
	Gender(1)	0.583	0.381	2.349	1	0.125	1.792	0.850	3.779
	AGE	-0.015	0.012	1.423	1	0.233	0.986	0.962	1.009
	Constant	1.037	0.566	3.352	1	0.067	2.820		

a. Variable(s) entered on step 1: Method IND=0, DIR=1, Gender, AGE.

b. IND is the reference variable

Table 2.*Binomial Regression Analysis for Returned after the Intake*

Dependent Variable	
Returned after Intake	Internal Value
NO	0
YES	1

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	9.988	3	0.019
	Block	9.988	3	0.019
	Model	9.988	3	0.019

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	53.476 ^a	0.120	0.216

a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Step 1 ^a	Method IND=0, DIR=1(1)	2.118	0.834	6.450	1	0.011	8.318	1.622	42.662
	Gender(1)	-0.322	0.706	0.208	1	0.648	0.725	0.182	2.892
	AGE	0.015	0.029	0.264	1	0.607	1.015	0.959	1.074
	Constant	0.536	1.107	0.235	1	0.628	1.710		

a. Variable(s) entered on step 1: Method IND=0, DIR=1, Gender, AGE.

Table 3.*Binomial Regression Analysis of Return Rate after the Intake by Individual Variable*

Variable	Coding ^a	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Intake Method ^b	IND=0, DIR=1	2.220	0.824	7.259	1	0.007	9.205	1.831	46.270
	Constant	0.894	0.396	5.103	1	0.024	2.444		
Proposed Fee	Fee	0.003	0.021	0.023	1	0.879	1.003	0.962	1.046
	Constant	1.730	0.597	8.397	1	0.004	5.639		
Client Gender	M=0, F=1	0.453	0.654	0.479	1	0.489	1.572	0.437	5.664
	Constant	1.576	0.448	12.341	1	0.000	4.833		
Client Age	Age	0.025	0.025	1.030	1	0.310	1.026	0.977	1.077
	Constant	0.848	0.959	0.781	1	0.377	2.334		
Client Race	White=0			1.677	2	0.432			
	Hispanic=1	-0.944	0.730	1.672	1	0.196	0.389	0.093	1.627
	Other=2	-0.433	0.928	0.218	1	0.641	0.649	0.105	3.995
	Constant	2.225	0.526	17.865	1	0.000	9.250		
Client Religious Affiliation	Christian=0			1.688	3	0.640			
	Other=1	-0.383	1.256	0.093	1	0.761	0.682	0.058	8.002
	Spiritual=2	0.886	0.781	1.285	1	0.257	2.424	0.525	11.205
	Secular=3	0.128	0.919	0.019	1	0.889	1.136	0.187	6.889
	Constant	1.482	0.495	8.943	1	0.003	4.400		
Client Education	No HS/none=0			2.057	4	0.725			
	Comp HS=1	0.636	0.915	0.483	1	0.487	1.889	0.315	11.344
	AA/Trade=2	0.693	0.913	0.577	1	0.448	2.000	0.334	11.969
	Bachelor's=3	1.735	1.226	2.002	1	0.157	5.667	0.512	62.657
	Graduate=4	0.693	1.269	0.298	1	0.585	2.000	0.166	24.069
	Constant	1.099	0.667	2.716	1	0.099	3.000		
Employment	Unemployed=0			2.200	3	0.532			
	Part-time=1	-0.122	0.742	0.027	1	0.870	0.885	0.207	3.791
	Full-time=2	1.522	1.135	1.801	1	0.180	4.583	0.496	42.353
	Not reported=3	-0.182	1.221	0.022	1	0.881	0.833	0.076	9.129
	Constant	1.569	0.492	10.182	1	0.001	4.800		
Health Insurance	No=0, Yes=1	0.149	0.654	0.052	1	0.820	1.161	0.322	4.184
	Constant	1.723	0.486	12.591	1	0.000	5.600		

(Continued)

Table 3 (Continued).*Binomial Regression Analysis of Return Rate after Intake by Individual Variable*

Variable	Coding ^a	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Diagnostic Category	Deferred=0			2.033	4	0.730			
	Anxiety=1	-0.550	1.282	0.184	1	0.668	0.577	0.047	7.118
	Depression=2	-1.466	1.188	1.525	1	0.217	0.231	0.023	2.366
	Trauma=3	18.638	12118.000	0.000	1	0.999	1.24X108	0.000	
	Other=4	-1.179	1.179	1.000	1	0.317	0.308	0.031	3.101
	Constant	2.565	1.038	6.109	1	0.013	13.000		
OQ@45	OQ@45	-0.018	0.018	1.054	1	0.305	0.982	0.949	1.017
	Constant	3.140	1.378	5.190	1	0.023	23.094		
Intake Counselor Gender	M=0, F=1	0.588	0.721	0.664	1	0.415	1.800	0.438	7.401
	Constant	1.609	0.387	17.269	1	0.000	5.000		
Intake Counselor Age	Age	0.051	0.037	1.893	1	0.169	1.053	0.978	1.133
	Constant	0.059	1.244	0.002	1	0.962	1.060		
Intake Counselor Race	W=0, H=1	0.720	0.825	0.762	1	0.383	2.054	0.408	10.347
	Constant	1.631	0.364	20.034	1	0.000	5.111		
Assignment to Treating Therapist	Days	0.020	0.022	0.820	1	0.365	1.020	0.977	1.064
	Constant	1.536	0.482	10.144	1	0.001	4.647		

a. For categorical variables, the first item should be interpreted as the reference item.

b. Method was the only variable in a model equation to meet significance at the $p < .05$, $LR \chi^2(1) = 9.571$, $p = .002$

Table 4.*Binomial Regression Analysis for Returned after the Request for Service*

Dependent Variable	
Returned after RFS	Internal Value
NO	0
YES	1

Omnibus Tests of Model Coefficients				
		Chi-square	df	Sig.
Step 1	Step	1.647	3	0.649
	Block	1.647	3	0.649
	Model	1.647	3	0.649

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	179.889 ^a	0.012	0.017

a. Estimation terminated at iteration number 3 because parameter estimates changed by less than .001.

Variables in the Equation									
		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Step 1 ^a	Method ^b	0.276	0.376	0.540	1	0.463	1.318	0.631	2.754
	Gender(1)	0.354	0.364	0.947	1	0.330	1.425	0.698	2.907
	AGE	-0.009	0.012	0.532	1	0.466	0.991	0.969	1.015
	Constant	0.083	0.541	0.024	1	0.878	1.087		

a. Variable(s) entered on step 1: Method IND=0, DIR=1, Gender, AGE.

b. IND is the reference variable

Table 5.*Client Retention by Intake Method and Session*

Step ^a	DIR		IND		All	
	N	%	N	%	N	%
0 - RFS ^b	85	--	46	--	131	100.0
1st - Intake	47	55.3	31	67.4	78	59.5
2nd - Returned	45	52.9	22	47.8	67	51.1
3rd - Session	34	40.0	19	41.3	53	40.5
4th - Session	32	37.6	16	34.8	48	36.6
5+ Session	24	28.2	15	32.6	39	29.8

a. Additional post-study session data is included for context.

b. Column denominator.

Appendix A. Client Questionnaire

Note: Some of the information you provide here is required for grants that we receive, so that NBCC can continue to provide low-cost services to our local community.

1) Race and Ethnicity: Please check the one that most applies

- | | |
|---|---|
| ☐ - White | ☐ - Asian/White |
| ☐ - Black/African American | ☐ - Black/African American & White |
| ☐ - American Indian/Alaskan Native | ☐ - American Indian/Alaskan Native & Black/African |
| ☐ - Native Hawaiian/Other Pacific Islander | ☐ - American |
| ☐ - American Indian/Alaskan Native & White | ☐ - Other multi-racial _____ |

2) In addition to the choice you indicated above, are you of Hispanic/Latino heritage? ☐ Yes ☐ No

3) Are you collecting disability, or have a pending disability claim? ☐ Yes ☐ No

4) Are you a U.S. Military Veteran? ☐ Yes ☐ No

5) Employment ☐ None ☐ Full-Time ☐ Part-Time Occupation _____

6) What is your approximate Annual Gross household income in U.S. dollars? \$ _____

7) Are you considered the head of household? ☐ Yes ☐ No

8) How many people are in your household? _____ Circle that number in the chart below.

In the column you circled, circle the amount that equals (or is greater than) the *before-tax* household income that you anticipate will be received in the next 12 months from all adults in your household.

Category	% Median	1 Person	2 People	3 People	4 People	5 People	6 People	7 People	8 People
Extremely Low	0 - 30%	16,850	19,250	21,650	24,250	28,410	32,570	36,370	40,980
Low	31 - 50%	28,100	32,100	36,100	40,100	43,350	46,550	49,750	52,950
Moderate	51 - 80%	44,950	51,350	57,750	64,150	69,300	74,450	79,550	84,700

****Income Inclusions** *Area Median Income \$72,800 ** For families above 8 people add 6.5% per additional person

Earned Income	TANF/Public Assistance Income	Business Income	Interest & Dividend Income
Unemployment/Disability Income	Alimony, Child support, Foster Care Income	Armed Forces Income	Pension/Retirement Income

**** Income Exclusions**

Income of Children	Medical Reimbursements	Student Financial Aid	Adoption Assistance Payments
Inheritance and Insurance	Armed Forces Hostile Fire Pay	Live-in Aides	Social Security & SSI Deferred
Property Tax Refunds	Self-Sufficiency Program Income	Home Care Assistance	Other Federal Exclusions

9) Do you have health insurance? ☐ Yes ☐ No If 'yes' what type of coverage do you have?

☐ - Medicare	☐ - VA	☐ - Other _____
☐ - Medi-Cal	☐ - Private Insurance (HMO/PPO)	

10) Are you currently receiving any County services, if yes, what are they? _____ If

☐ - No ☐ - Yes _____

11) Please indicate the highest level of education you have completed:

☐ - Did not complete High School	☐ - Associate's Degree	☐ - Doctorate
☐ - High School (GED)	☐ - Bachelor's Degree	☐ - Trade or Certification
☐ - Some College Level Coursework	☐ - Master's Degree	

12) Regarding your religious and spiritual beliefs, which *one* of the following best describes your faith?

☐ - Spiritual but not religious	☐ - Catholicism	☐ - Hinduism
☐ - Secular/nonreligious	☐ - Islam	☐ - Buddhism
☐ - Christianity	☐ - Judaism	☐ - Other _____

Your housing situation ☐ Own ☐ Rent ☐ Shelter ☐ Transitional ☐ Homeless ☐ Other _____

If currently homeless, for how long have you been homeless? _____

Appendix B: Request for Service

Request for Service

Name		Date:	
Phone		If we call, may we leave a message & identify as a counseling center?	
Age:	Date of Birth:		
Zip:	Referred by:		
Is this a crisis situation (Are you in danger of harming yourself or anybody else)?			
Describe the nature of the crisis:			
Are you seeking counseling for:			
Self	Couple	Child	Family
Have you ever been a client at this Center before?		#	
What are the best days and times for you to make an appointment?			
Briefly, what is it that you would like to discuss with a counselor?			
Do you drink or use other substances?			
If yes, how much and how often?			
Taking any medications? Please list:			
Do you have any current or recent legal involvements?			
If so, what and when?			
Do you have any medical insurance, including Medi-Cal or Medicare?			
If so, which one(s)?			
Are you currently receiving any type of services from County Mental Health?			
If yes, what?			
1. Total household's net monthly income:			
2. Less Rent/House payment:			
3. Adjusted monthly income:			
4. Number of people in household:			
5. Assigned Fee:			
Contacted by: Staff name:	Date:	Outcome: Ready for assignment.	

Appendix C. Consent for Treatment

“13. The clinic is conducting ongoing research to evaluate different methods of providing counseling services. We collect demographic, diagnostic, and outcome measures. You may decline to participate or withdraw from the research at any time. Whether you participate or withdraw will not affect your access to services. There is minimal risk in your participation and your participation can provide valuable information for improving mental health services here as well as in other mental health agencies. Your privacy is important to us and NO identifying information is used in the analysis or publication of research results. The [clinic] does not provide any payment for your participation. For more information or information on the general findings at the end of the study, you may contact the Clinic Supervisor,” (Excerpt: *Consent for Treatment*, Revised 2/23/2016).