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Indicators of Client Engagement in a University Psychotherapy Training Clinic

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Indicators of Client Engagement in a University Psychotherapy Training Clinic

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DISSERTATION

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DISSERTATION COMMITTEE PAGE

The undersigned have examined the dissertation entitled:

**INDICATORS OF CLIENT ENGAGEMENT IN
A UNIVERSITY PSYCHOTHERAPY TRAINING CLINIC**

presented on July 19, 2018

by

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Acknowledgments

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Abstract

A retrospective research study evaluated archival data on client engagement from a program evaluation project implemented at the Psychological Services Center at Antioch University New England. Student researchers from the Center for Behavioral Health Innovation (formerly Center for Research of Psychological Practices) partnered with the Antioch University Psychological Services Center (PSC) to investigate the impact of client early engagement on drop-out rates and therapy outcomes of mental health clients. Potential participants were administered a brief questionnaire, prior to the first session via phone call, to assess their readiness, expectations of therapy, potential barriers to seeking treatment, and their initial impression of the clinic. Evaluating the effects of client readiness on the working alliance and early treatment outcomes of 28 participants did not yield a significant effect. However, a nested path analysis revealed a significant effect for clinic timeliness as a moderator between two groups. In other words, predictive effects were observed between client readiness variables and the working alliance.

Keywords: timely response, client engagement, readiness, expectations, attrition, working alliance, early indicators, short-term outcome, long-term outcome

Indicators of Client Engagement in a University Psychotherapy Training Clinic

University training clinics could benefit from looking more closely at variables related to client preparedness in the psychotherapy process (Aubuchon-Endsley & Callahan, 2009). There is evidence that the use of site-specific research focused on indicators such as working alliance, pretreatment preparation, expectations, and client satisfaction may lead to improved treatment adherence (Lampropoulos, Schneider, & Spengler, 2009; Reis, & Brown, 1999; Richmond, 1992). This proposed study uses clinic and client feedback to evaluate early indicators of client engagement in a university training clinic. The assumption is that by identifying high leverage indicators during pre-treatment, clinicians can then target clients at-risk for drop out, effectively intervene, and subsequently, reduce rates of attrition.

Also referred to as premature or early termination, attrition is described as the "client-initiated cessation of therapeutic treatment before completed recovery" (Xiao et al., 2017, p. 65). Wide-ranging constructs defining attrition and variable methodological methods make finding substantial indicators of attrition problematic (Lampropoulos et al., 2009; Reis & Brown, 1999). While a subset of meta-analyses indicate that mental health clinics and university training clinic attrition rates have improved over the past two decades (Swift & Greenberg, 2012; Wierzbicki & Pekarik, 1993), other studies suggest that attrition rates remain steadily between approximately 40%–60% (Aubuchon-Endsley & Callahan, 2009; Lampropoulos et al., 2009; Muran et al., 2009; Sledge, Moras, Hartley & Levine, 1990).

About one in every five clients is likely to prematurely terminate therapy, with higher rates for clients who are young, have substance abuse disorders, eating disorders, and personality disorders (Swift & Greenburg, 2012; Barrett, Chua, Crits-Christoph, Gibbons, & Thompson, 2008). Red flags for attrition include canceled sessions, no-shows, and rescheduled appointments

within the first four weeks. Research also indicates rates of attrition trend highest in university

training clinics (Swift & Greenburg, 2012). On an individual level, approximately 30% of

attrition occurs after the first therapy session (Garfield & Hansen et al, 1994; Hansen, Lambert,

& Forman, 2002). Most attrition occurs within the first six sessions (Saltzman, Luctgert, Roth,

Creaser, & Howard, 1976). There is a clear need to investigate attrition trends to influence a

more substantive shift in preventing early drop-out. High rates of attrition identified early in

therapy pinpoint a high-leverage and data-rich opportunity to investigate early engagement.

Attrition is economically costly for university training clinics and produces higher rates

of clinician burn-out (Barrett et al., 2008). The majority of client attrition in university training

clinics continues to be categorized under clients who discontinue services without informing

their clinician or the clinic, often referred to as cases of drop-out and/or no-show (Renk &

Dinger, 2002). Not only does this effect cause a drain on clinic resources, but researchers also

struggle to identify indicators of attrition once clients have withdrawn. Attrition is correlated

with clients feeling hesitant to resume help-seeking behavior once they have dropped out of

therapy (King & Canada, 2004). Ending therapy before coping skills are improved leads to lower

rates of symptom remittance for clients and increased health care costs for clinics over time

(Lambert, 2005). To reduce those costs to the university and greater community, the following

study used archival data to learn more about predictors of attrition in a university training clinic.

This research seeks to inform psychotherapy trainees to better meet the needs of potential

clients by focusing on the following four constructs: client readiness, short-term outcomes, early

engagement, and clinic timeliness (see Figure 1). Each construct is characterized by observable

variables that existing psychotherapy literature identified as significant to each construct. The

study used a mediation model to explore the potentially interrelated effects of client readiness,

client early engagement, and short-term outcomes when compared across a measure of clinic

timeliness. Three central hypotheses predicted the following: (a) client readiness would affect

short-term outcomes; (b) early engagement would mediate the relationship between client

readiness and short-term outcomes; and finally, (c) clinic timeliness would moderate the

relationship between client readiness and early engagement.

<div align="center">**Literature Review**</div>

Client Readiness for Treatment

Client readiness continues to be a construct difficult to operationalize in psychotherapy

literature (Bachrach, 1996; Truant, 1999) and remains undefined in early engagement research

(Wampold, 2001). For purposes of this research, "client readiness" is the term used to describe

four important aspects of a client's potential ability to access and effectively engage in

psychotherapy services: (a) psychological readiness, (b) expectations, (c) barriers to treatment,

and (d) early impressions of fit. These elements have not yet been measured in one screening

tool. Though established and internally valid tools exist to measure client readiness, such as The

Readiness for Psychotherapy Index (Ogrodniczuk, Joyce, & Piper, 2009) and the Stages of

Change Scales (McConnaughy, DiClemente, Prochaska, & Velicer, 1989), most existing

readiness measures too narrowly conceptualize client readiness. Most commonly, readiness

measures evaluate psychological and cognitive readiness but do not include evaluation of

barriers to treatment, expectations, or client satisfaction. Therefore, these four potentially

predictive concepts were explored using meta-analyses and literature reviews to create a brief,

10-item cross-cutting Client Readiness Screening Questionnaire. This study identified the extent

to which the aforementioned client readiness indicators were predictive of early working alliance

and short-term outcomes. Each of the four client readiness indicators and the research to date

was explored.

Client readiness: psychological readiness. The most widely used conceptual models

that seek to capture client readiness include the Transtheoretical Model (Prochaska &

DiClemente, 1982), Social Cognitive Model (Longo, Lent, & Brown, 1992) and motivational

interviewing. A client's belief in themselves to successfully engage in the change process, also

known as motivation for change or self-efficacy, is also an important factor in psychological

readiness, as clients who have self-confidence and self-efficacy are more likely to actively seek

treatment (Vogel, Wade, & Haake, 2006). Once in treatment, those with more self-efficacy are

more likely to benefit (Bandura, 1977; Lambert & Bergin, 1994).

Transtheoretical model of patient readiness. The transtheoretical model (Prochaska &

Norcross, 2001) is a six-stage model of psychotherapy used to enhance awareness of the change

process. The stages of change include precontemplation, contemplation, preparation, action,

maintenance, and relapse. Meta-analyses indicate the model is applied in several fields of

intervention, including substance use treatment, educational coaching, and mental health settings

(Linden, Butterworth, & Prochaska, 2010; Norcross, Krebs, & Prochaska, 2011). When a client's

stage of change is congruent with their goals for therapy, clinical outcomes are significantly

enhanced, and clients are more likely to attain their therapeutic goals (Norcross et al., 2011).

Thus, in this model, a stage of change represents the patient's psychological readiness. And

therefore, predicts treatment outcome.

An overwhelming majority of clients who identify with the first two stages of change

prematurely terminate psychotherapy (Prochaska & Norcross, 2001). Action-oriented therapy

and intervention aimed at behavior change for clients in early stages resulted in an 80% drop-out

rate (Smith, Subich, & Kalodner, 1995). Incongruence with the stage of change is also associated

with increased symptoms of distress (Heather, Rollnick, Bell, & Richmond, 1996). However, moving a client one stage of change forward reliably indicates improved treatment adherence (Prochaska & Norcross, 2001).

Social cognitive theory of patient psychological readiness. Stemming from Bandura's early work on social cognitive theory, several studies have investigated the impact of motivation on treatment adherence (Baekeland & Lundwall, 1975; Bandura, 1977; Hardin, Subich & Holvey, 1988; Mennicke et al., 1988). Social learning theory describes motivation as an interaction between behaviors, cognitive factors, and the environment. Studies of social cognitive theory and client readiness had mixed results about the impact of self-efficacy on client attrition. One possible explanation is linked to a lack of knowledge about the psychotherapy process, and unrealistic client expectations (Longo et al., 1992). Clients readiness for psychotherapy may also be influenced by the impact of client expectations for treatment.

Client readiness: expectations for treatment. Client expectations of positive outcomes early in therapy are correlated with the client's early engagement and hopes of successful treatment outcomes (Dew & Bickman, 2005; Swift et al., 2012; Tschacher et al., 2000). In contrast, negative views of psychotherapy are associated with a higher likelihood of attrition. Two thirds of psychotherapy clients report they feel unsure of what to expect (Strupp & Bloxom, 1973). The public shares hesitant views of psychotherapy including defensiveness, rejection about the potential benefits of therapy, and embarrassment or shame in seeking services (Edlund et al., 2002). Additionally, client and therapist expectations are frequently discrepant and not always discussed, leading to increased rates of attrition (Barrett et al., 2008). Establishing a better understanding of client expectations at university training clinics will help facilitate stronger early engagement. One way this is sought is by engaging clients in explicit

conversations about expected goals.

Goal collaboration is described as, "the active process of working together to fulfill treatment goals" (Tryon & Winograd, 2001 as cited in Norcross, 2002, p. 157). As shown in studies by Tryon & Kane (1990, 1993, 1995) collaboration is positively associated with adult psychotherapy outcomes (as cited in Norcross, 2002). In other words, the more the therapist and client agree on the process of treatment, the more likely the client will successfully achieve the treatment goal.

When clinicians and clients agree on psychotherapy goals, clients are more engaged in treatment (Tryon & Winograd, 2001). Explicit conversations about expectations related to the therapy process have been correlated with, "increased motivation and expectations of improvement; viewing the therapist as more interested, respectful, and accepting; decreased approval seeking behavior and a better understanding of the therapy process and their (clients') role in it" (Schwartz & Flowers, 2010, p. 26). By making what is implicit practice for clinicians explicitly stated for clients, it is possible to see an increase in early engagement. More research is needed on the impact of client pre-treatment preparation. A better understanding will prove useful in creating an early engagement dialogue to align client and therapist views of psychotherapy expectations (Reis & Brown, 1999). The following study expands on current research by exploring client expectations prior to the intake session, as well as how client expectations relate to other client readiness characteristics.

Expectations regarding length of treatment. Clients report varying expectations for the length of psychotherapy required to meet their goals. Clients with complex histories and co-morbid diagnoses reported expecting to meet their goals in one to three sessions (Pekarik, 1985). Conversely, clients looking to reduce mild symptoms of anxiety and depression reported

expecting psychotherapy to take years to reduce their distress (Schwartz & Flowers, 2010). This study investigates the predictive effect of client expectations on early engagement in treatment.

Expectations of outcome. Clients' ability to reach psychotherapy goals demonstrated more reliable early engagement (Hilsenroth, Ackerman, Clemence, Strassle, & Handler, 2002). Client expectations of treatment efficacy, mediated by the quality of the working alliance, significantly predicted the reduction of client distress in a study from the National Mental Health Treatment of Depression Collaborative Research (Meyer et al., 2002). Not only was the working alliance a crucial factor in early engagement, but clients who reportedly were more confident in reaching their goals were rated as engaging more actively in early sessions. These clients, consequently, achieved a reduction in symptoms of anxiety and depression. This research indicates that early engagement in psychotherapy has robust potential for research. The use of a new readiness screening tool looked at client expectations of treatment outcomes in a training clinic and how client readiness related to early engagement and short-term outcomes.

Client readiness: barriers to treatment. Client barriers are typically categorized into psychological barriers such as stigma, fear, doubt, and shame, (Cruz, Pincus, Harman, Reynolds, & Post, 2008) and physical/environmental barriers, (e.g. insufficient financial resources, childcare, transportation).

Psychological barriers to client readiness. A study by Cruz et al. (2008) surveyed 43 African American women about why mental health utilization was significantly less than Caucasian American women with similar mental health distress. Participants identified stigma, dysfunctional coping behaviors, shame, denial, and uncertainty as the five most common variables for avoiding therapy. This research indicates psychological barriers may be just as impactful as physical barriers to treatment.

Physical/logistical barriers of client readiness. For purposes of this research study, barriers are defined as the physical/environmental obstacles to attending treatment. Pre-therapy conversations about barriers to treatment were shown to be highly effective in preventing client drop-out (Stark, Campbell, & Brinkerhoff, 1990). One clinic used phone contact as an "attrition prevention procedure," characterized by giving the client a scheduled appointment or inviting them into the clinic the same day. Clients in the same day condition achieved a higher rate of attendance than those with scheduled appointments (Hill, 1990). This research further explores how physical and environmental barriers effect a client's ability to engage and benefit in treatment.

Client readiness: impression of fit. Post-treatment surveys are primarily used to capture client satisfaction data. However, these results tend to be skewed as unsatisfied clients tend to drop-out of treatment and decline to complete post-treatment surveys. The closest research that currently relates to the impression of fit includes first impression research otherwise considered impression management literature.

Impression management. Impression management is most often applied to industrial and organizational management literature (Giacalone & Rosenfeld, 2013). Most first impression information pertains to the perception of an individual's personality (Hamilton, Katz, & Leirer, 1980). A few studies have investigated the impact of the therapist's first impressions on the course of treatment and case outcomes. Most research to date is lacking on clients' impressions of the clinician, the organization, and the overall course of treatment. Brown (1970) investigated experienced and inexperienced counselors' first impressions of their psychotherapy work. His findings suggest that inexperienced counselors were more satisfied with their own first impressions and treatment outcomes with clients than experienced clinicians. This study

uniquely explored the client's first impression of the university training clinic as an organization. The study sought to determine how the impression of fit, along with the three aforementioned client readiness constructs, predict early engagement and short-term outcome.

Client Readiness Predicts Early Outcome Indicators

  Short-term clinical outcomes. Investigating the client-therapist relationship improves understanding of outcome data. High attendance rates of clients are significantly correlated with maintaining those clients in long-term therapy (Smith & Glass, 1997). Highly rated working alliances are proven to effect long-term outcomes for psychotherapy clients and contribute to reduced attrition (Horvath & Symonds, 1991; Martin, Garske, & Davis, 2000). Clients adhere more strictly to treatment plans and are more likely to achieve desired results when they attend sessions regularly (Lambert et al., 2003).

  A closer look at client biases and assumptions, as well as a mental health clinics' ability to return timely contact, may contribute to outcome research. By understanding why clients drop out early, which clients are likely to drop out, and how university clinics may better meet clients' needs, at risk clients will be identified. Interventions can then be explored to improve treatment adherence.

Stronger Working Alliance Improves Treatment Outcomes

  Client attendance in psychotherapy is correlated with their likelihood to remain in treatment (Smith & Glass, 1997). Similarly, the strength of the client-therapist working relationship significantly predicts a reduction in dropout rates and improves long-term outcomes (Reis & Brown, 1999). Clients adhere more strictly to treatment plans and are more likely to achieve desired results when they attend therapy sessions regularly (Lambert et al., 2003). Therefore, it is important to look at variables that have potential predictive effects on client

engagement in the therapeutic relationship and related treatment outcomes.

Client and therapist expectations and satisfaction of the working relationship are often discrepant and not explicitly discussed in the treatment (Westmacott, Hunsley, Best, Rumstein-McKean, & Schindler, 2010). When a client and therapist discuss psychotherapy expectations, treatment is more likely to result in mutual termination (Hardin, Subich, & Holvey, 1988).

Early working alliance. Early engagement also commonly referred to as the early working alliance is the strongest indicator of client adherence to treatment plans and attendance for scheduled psychotherapy visits; Lambert et al., 2002; Muran et al., 2009). Additionally, the working alliance is the best predictor of psychotherapy client outcomes, particularly in cases of depression, as reported by Horvath, Del Re, Fluckiger, and Symonds (as cited in Norcross, 2002). The literature on the working alliance conversely indicates strong negative correlations with attrition (Samstag, Batchelder, Muran, Safran, & Winston, 1998; Tryon & Kane, 1990, 1993, 1995, in Muran et al., 2009). While a mismatch between client and therapist expectations has a significant effect on attrition, early detection of ruptures and appropriate intervention in the therapeutic relationship proves beneficial in measured long-term outcomes (Muran et al., 2009).

It is the hope of this study that improved understanding of the role of early engagement in psychotherapy will contribute to the establishment of a stronger working alliance. Therapists' ratings of working alliance have been positively associated with mutual termination (Tryon & Kane, 1993). Client retention improved significantly when therapists improved their initial dialogue specific to the therapeutic discourse about treatment planning (Stark, Campbell, & Brinkerhoff, 1990). Additionally, a study conducted at a university-based training clinic found a significant positive correlation between the use of working alliance strategies taught at an in-

service and ratings of the therapeutic relationship (Smith-Hansen, 2010).

The interaction between the working alliance and dynamic client personality variables accounted for more than 50% variance in early alliance ratings by mental health clients (Sexton, Littauer, Sexton, & Tømmerås, 2005). Their research showed first-session psychotherapy connections to reliably predict higher second session alliance ratings. Additionally, clients who demonstrated more active engagement in the first session did not decrease their alliance ratings of the therapist in the second session. Albeit, for less engaged clients, and therapists, silence and lack of emotional expression predicted decreases in ratings of the working alliance.

Related to attrition, a rupture is a term used to define incongruence in the working relationship during psychotherapy. Safran and Muran (1996) devised a model of "rupture resolution," which has promising implications for outcomes in university training clinics. The model involves clinician training on indicators of early attrition and misalignment to inform interventions earlier in the therapy process. Additionally, a closer look at the clinic's ability to return timely contact, will likely also contribute to outcome research.

Clinic Timeliness Impacts the Client's Availability for Early Engagement

Clinic timeliness. When university training clinics are attentive to maintaining timely communication with potential clients, early engagement rates were shown to improve. One study of engagement found that a phone call reminder the day prior to the client's first appointment resulted in a 66% increase in early engagement (measured by session attendance) during the first four sessions of treatment (Hynan, 1990). Clients who were provided same day appointments demonstrated a statistically significant increase in the retention rate of early engagement of subsequent scheduled therapy sessions (Stark et al., 1990).

Clients' previous therapy experiences, if applicable, and the length of wait time from

referral call to the initial intake appointment reliably predicted appointment status 88.7% of the time in one study of early engagement (Swift, Whipple, & Sandberg, 2012). For purposes of this study, participants were split into two groups moderated by clinic timeliness. In the timely response group, fewer than seven days elapsed between the time when the phone screening was completed and the date of the in-person intake session. In the non-timely response group, seven or more days passed between the completed screening and the date of the intake. The objective of this research was to identify if clinic responsiveness is a moderating variable on the relationship between client readiness and early engagement.

Significant indicators of client retention were found in client and therapist self-reports as early as the first three sessions in one study of a university training clinic (Saltzman et al., 1976). Therapeutic ruptures may be recognized with greater accuracy and repaired more efficiently to improve client retention rates and bolster mental health clinic resources. By assessing client readiness, expectations, barriers to treatment, and impression of fit, variables that would indicate attrition can be identified and addressed prior to drop-out.

Statement of the Problem

University training clinics need to look more closely at the variables related to client preparedness to better understand and engage clients early in the psychotherapy process. There is evidence that the use of site-specific research focused on indicators such as the working alliance, pretreatment preparation, expectations, and client satisfaction may lead to improved interventions. This proposed study uses the clinic and client feedback to evaluate client early engagement to learn more about psychotherapy attrition in university training clinics. Therapeutic ruptures may be recognized with greater accuracy to inform treatment interventions. In turn, the goal is to improve client retention rates and reduce the drain on community mental

health resources. Figures 2 and 3, respectively, illustrate the theoretical constructs and observed variables measured through archival data located at the Antioch University PSC.

Research Questions

1. Does client readiness impact short-term outcomes?

2. Does early engagement mediate the relationship between client readiness and short-term outcomes?

3. Will clinic timeliness moderate the relationship between client readiness and early engagement in treatment?

Methods

Training Clinic

Data for this study was collected from a university-based training clinic in the clinical psychology department of a university in Keene, New Hampshire. The Antioch University PSC is an outpatient training clinic in which graduate students in the clinical psychology doctoral program provide reduced rate psychotherapy services to students in other university programs and residents in the local community. The clinic runs on an academic calendar, with clinician turn-over routinely occurring during the summer months (May–August).

Referrals to the Antioch University PSC are provided by community hospitals, the Division of Children, Youth, and Families (DYF), the community court system, private practitioners, or self-referred. An initial phone screening is completed, following the referral phone call, to refer potential clients with active substance abuse, eating disorders, psychosis, and/or immediate suicidal or homicidal risk indicators to local agencies that can better meet their needs. Clients deemed an appropriate match to the training clinic services are assigned to a clinician-in-training to schedule an initial intake appointment in-person (see Figure 1).

Trainee Clinicians

Approximately 10–15 pre-doctoral practicum students complete training and provide psychotherapy and assessment services each year. All clinicians are enrolled in the clinical psychology doctoral program at Antioch University New England, accredited by the American Psychological Association. Each clinician-in-training attends weekly supervision with a licensed faculty psychologist to review notes and audiotapes of the sessions. Trainees work using various theoretical frameworks and carry cases for the number of sessions they feel is appropriate to meet the needs of their clients.

Participants

Adult individual psychotherapy clients were recruited over the phone when calling the Antioch Psychological Services Center to request psychotherapy services. Archival data from research consenting participants was collected between September 2012 and June 2015. Clients were asked over the phone if they consented to completing the Readiness Screening Questionnaire as part of the Antioch University PSC intake process. Participants were then asked during the in-person intake, while signing the consent form, whether their responses to the Readiness Screening Questionnaire, as well as their demographic information, could be de-identified and used for research purposes. Clinicians explained to prospective clients that their choice to consent or decline would have no bearing on their mental health treatment. Only clients who checked the box allowing their treatment information to be used for research purposes were included in the study (see Appendix A).

Client referral, demographic, and diagnostic information and responses to the Client Readiness Screening Questionnaires were input into an encrypted Excel data file located within the Antioch PSC. Hard copies of client responses were kept in paper charts for active clients,

which were stored in a locked filing cabinet within the clinic.

Antioch University New England's Institutional Review Board (IRB) approved the proposal to use this archival data for the present study. When screening the data for participants who had both demographic data and had completed the pre-screening questionnaire, the sample was reduced from an initial sample size of 120 to approximately 80 participants. Significant missing and inconsistent data from subsequent sessions greatly impacted the analysis sample size.

Demographic variables. The final sample consisted of $n = 28$ participants (18 female, 10 male, mean age = 31 years, age range: 18–63 years). Demographically, the two groups were more homogenous in ethnicity, age, and years of education than a stratified sample may have produced. This sample contained sufficient data for inclusion in a path analysis model of structural equation modeling (see Table 1 for demographic characteristics).

Measures

Data was obtained from the Antioch Psychological Services Initial Contact Form, The Client Readiness Screener, Outcome Questionnaire (OQ), Working Alliance Inventory (WAI), and Antioch University PSC demographic database.

Intake form. The Antioch University PSC Initial Contact Form (see Appendix B) was used to collect the initial referral information and complete a screening for appropriateness of potential psychotherapy clients. The referral information was first completed by the PSC office manager, then available to be screened over the telephone by PSC clinicians-in-training. The bottom of the initial contact form was created to track the dates of client contact from the referral phone call to the initial intake appointment.

Clinic timeliness. Timeliness was represented by two groups based on the time elapsed

from screening to intake. The timely group had a response time of fewer than 7 days from

screening to intake ($n = 16$) and the non-timely group a response time of 7+ days ($n = 12$).

Client readiness questionnaire. The first measure of client pre-therapy engagement is a

10-item qualitative and quantitative questionnaire (see Appendix C). A team of investigators

from the Center for Behavioral Health Innovation (formerly Center for Research of

Psychological Practices; CROPP) consulted with PSC clinicians in a focus group to determine

efficacious ways to collect feedback for the clinic. CROPP investigators (Dr. James Fauth,

Fredrick Green, Ellette DiPietro, and Meg Pilling) asked PSC clinicians to identify factors that

contributed to client engagement. Investigators selected four high-leverage, relevant constructs

(readiness, expectations, barriers, and impression of fit) and extrapolated from current research

two questions to assess each construct. As a product of the literature review, the Client Readiness

Questionnaire was generated.

The 10-item survey is comprised of pairs of questions related to readiness, expectations,

barriers to treatment, and impression of fit. Potential clients were prompted with a 10-point

Likert scale 1 (not at all) to 10 (extremely important) when asked about their urgency and

preparation for psychotherapy. Additionally, individuals were asked to provide open-ended

responses to questions about their expected length of treatment and potential barriers which

could impede their ability to regularly attend therapy. Internal consistency of the measure was

obtained by evaluating how the items load onto each of the four constructs (psychological

readiness, expectations regarding the course of treatment, barriers, and impression of fit with

clinic).

The Client Readiness Questionnaire has not been psychometrically validated.

Additionally, there was not sufficient evidence to support combining the item-level data into

more general scale scores or using latent variables. A subset of four quantitative items with non-missing responses to represent "Client Readiness" were selected, (Read2, Read3, Exp5, and Imp10). Participants were initially asked an open-ended question related to each construct before being asked to rate their readiness on a Likert scale. The questions used in the nested path analyses are as follows:

- On a scale of 1-10 (1 = not at all, 10 = extremely important) how important is it for you to address your therapy goal(s) now? (Read2)

- Again, on a scale of 1-10 (1 = not at all able, 10 = extremely able) how confident are you in being able to meet your goal(s)? (Read3)

- On a scale of 1-10 (1 = not at all helpful, 10 = very helpful), how helpful overall do you think therapy at the PSC will be for you? (Exp5)

- On a scale of 1-10, how confident are you that our clinic can meet your needs (1 = not at all, 10 = completely confident; Imp10)

Working Alliance Inventory. The Working Alliance Inventory (WAI-S) – Short Form (Horvath & Greenberg, 1989) is a 12-item client self-report measure of client-therapist convergence. The three WAI-S subscales—tasks, bonds, and goals of therapy—are based on Bordin's (1980) conceptualization of the psychotherapy alliance as three interrelated constructs. The WAI-S demonstrates adequate reliability and internal consistency alpha coefficients of .93 for overall client ratings and subscale alphas of .85 to .88 (Tracey & Kokotovic, 1989). At the Antioch University PSC, the WAI-S was used to measure client-therapist alignment during all even numbered sessions. This study collected WAI-S scores from the second session to evaluate early engagement.

Outcome questionnaire (OQ). The OQ 45.2 (Lambert & Finch, 1999) is a 45-item

outcome measure with high internal consistency (.93), test-retest reliability (.84), and moderate

to high validity against other measures of similar constructs (Miller, Duncan, Brown, Sparks, &

Claud, 2003). The OQ 45.2 measures three central constructs of client functioning which

include: individual outcomes including somatic symptoms (e.g., "I tire quickly," "I feel weak,"

etc.), interpersonal relationships with family and peers (e.g., "I have frequent arguments," "I feel

loved and wanted"), and social role functioning within a client's community (e.g., "I find my

work/school satisfying"). The OQ 45.2 was administered to clients at the time of intake and prior

to all odd-numbered sessions. This study collected OQ-45 scores from the third visit to evaluate

the relationship between early engagement and short-term outcomes.

A temporal precedence is a statistical assumption used for determining the strength of a

cause and effect relationship. To ensure temporal precedence, predictor constructs were

measured at earlier times than outcome measures. Specifically, Client Readiness Predictors

(Read2, Read3, Exp5, and Imp10) were collected during the initial screening period. Following

the intake appointment, working alliance indicators were obtained from the second appointment

and outcome indicators were obtained from session three. Though the greatest predictive power

comes from sessions one through four in psychotherapy treatment, the measurement of working

alliance and early outcome constructs may lack content validity. Figure 2 illustrates how the

study variables map on to the theoretical constructs in Figure 1.

Procedure

Required demographic information, referral date, and attempts to contact the client for

screening were gathered first from the initial referral form. Data were input into an Excel

database using a participant ID generated by protocol within the PSC clinic. The clinicians

completed a pre-therapy screening phone call, during which they completed the Client Readiness

Questionnaire. The purpose of the screening call was to provide a brief risk assessment for the goodness of fit with the clinic. Responses were documented in hard copy by the PSC clinician (see Appendix C), and input by a work-study student into an encrypted database. To calculate the timeliness between the initial referral call and the date of the intake session, all dates of contact with clients were gathered from the PSC Initial Contact Form (see Appendix B) and entered into an encrypted excel database. The clinical outcomes (therapeutic alliance and symptom severity) were collected using the Working Alliance Inventory-Short Form (WAI-S) and OQ (OQ 45.2).

Results

Analytic Strategy

The goal of the study was to establish whether potential predictor variables from the Client Readiness Screening Questionnaire had a significant impact on early engagement and short-term outcome indicators between a timely response group (<7 days) and an untimely response group (>7 days). A series of four nested multiple group path analysis models within the structural equation modeling (SEM) framework was used to test the moderating role of clinic timeliness on the theoretical model (Nachtigall, Kroehne, Funke & Steyer, 2003). Reduced sample size, in conjunction with the more complex initially proposed structural equation modeling, led to an adjusted analytic strategy. The subsequent nested group path analysis is a less complex model which requires fewer variables and does not require estimating latent variables. The following four nested multivariate path analyses were run across both timeliness groups (see Figure 1):

1. Model 1. Baseline Model: Assume all paths are equal across two timeliness groups.

2. Model 2. Path A Model: Allows paths from Readiness to Early Engagement to differ across groups (Path A)

3. Model 3. Path B Model: Allows paths from Early Engagement to Outcomes differ across

    groups (Path B)

4. Model 4. Path C Model: Allows paths from Readiness to Outcomes differ across groups

    (Path C)

The models were run in a sequential manner to evaluate whether the hypothesized paths

within the mediation model differed across the two timeliness groups (timely response versus

non-timely response). More precisely, Model 1 was run under the assumption that all paths were

equal across the timeliness groups. Next, less restrictive models were fitted to test whether Paths

A, B, and C differed across the groups. For example, Model 2 allowed the effects of the Client

Readiness variables on Early Engagement (WAI at visit 2) to differ across groups (see Path A

from Figures 1 and 2). Likelihood ratio tests (LRTs) were then used to compare whether the fit

of Model 2 was significantly better than Model 1. If the LRT was statistically significant, it

indicated that the less conservative model was preferred (e.g., Model 2 in this example). All

models were run in Mplus 7.3 using a maximum likelihood estimation with chi-square test

statistics and standard errors that are robust to non-normality (Muthén, & Muthén, 2012; Yuan &

Bentler, 2000). Likelihood ratio tests were also conducted according to the Satorra-Bentler

method (2010) because a maximum likelihood parameter estimate with standard errors (MLR

estimation) was used. A model of fit was evaluated using Root Mean Square Error of

Approximation (RMSEA), Tucker-Lewis Index (TLI), and Comparative Fit Index (CFI).

Widely-used cut-values for determining goodness of fit were CFI > .95, TLI > .95, and RMSEA

< .05 (Browne & Cudeck, 1993; Hu & Bentler, 1999). The standard non-adjusted, two-tailed

alpha level of 0.05 was used to determine statistical significance.

Results suggested that the best fitting model was Model 2. This model found significant

effects of the Client Readiness variables on WAI at visit 2 (Early Engagement) which differed across timeliness groups while all other effects were equal across groups. Specifically, Model 2 showed good model fit to the data ($\chi^2[5] =1.85$, $p =.87$, CFI=1.00, TLI=1.00, RMSEA=.00).

Table 2 provides details on the model comparisons across the competing models. Comparing Model 2 (Path A effects free across groups) to Model 1 (Baseline) showed that the less conservative Model 2 was preferred over Model 1 (LRT: $\chi^2[4] =13.79$, $p =.008$). Comparing Model 3 (Path A and B effects free across groups) to Model 2 (Path A effects free across groups) showed that the simpler Model 2 was preferred (LRT: $\chi^2[4] = 4.38$, $p =.36$). Comparing Model 4 (Path A and C effects free across groups) to Model 2 (Path A effects free across groups) showed that the simpler Model 2 was again preferred (LRT: $\chi^2[1] =1.26$, $p =.26$). Table 3 provides the standardized effects for Model 2.

Related to the study hypothesis, results showed that for both timeliness groups, the effects of the Client Readiness variables on OQ at visit 3 and the effect of WAI at visit 2 on OQ at visit 3 were similar in effect and statistically non-significant ($p>.05$). However, the impact of the Client Readiness variables on WAI at visit 2 (Early Engagement) did differ across groups. In the timely response group (less than a 7-day time from screening to intake), there were no statistically significant effects ($p>.05$ for all). Though non-significant, the effects of client readiness variables, Read2 and Imp10, did trend towards a statistically significant effect on WAI scores at session 2 ($p<.10$). An inverse relationship suggests that as the client readiness rating decreased, there was a small effect for an increased working alliance at session 2. Alternatively, as a client's impression of fit with the training clinic increased there was also a small effect for increased WAI at session two.

The most robust significant effect was found for the non-timely group (7+ day time lag).

In this group, an increased rating of psychological readiness (Read2), decreased rating of expectations for the helpfulness of therapy services (Exp5), and increased confidence in the clinic to meet the client's needs (Imp10) significantly predicted increased WAI scores at visit 2 ($p<.05$ for all). In sum, client psychological readiness and impression of fit showed a positive predictive relationship with working alliance. Conversely, expectations of therapy had an inverse relationship with the early working alliance (see Table 3).

Discussion

In conclusion, findings from the current study did not support the hypothesized model. Results did not show a statistically significant effect of Client Readiness indicators on Early Outcome Effects by the third session of therapy (Path C in Figures 1 and 2). Similarly, no significance was found in the relationship between the second session WAI and short-term outcome, (OQ) measured in session three, (Path B in Figures 1 and 2). As proposed, there was evidence to suggest a statistically significant effect of Client Readiness on Early Engagement (Path A) mediated by timeliness, as measured in the study (see Table 3). Unexpectedly, client readiness significantly predicted an increase in the early working alliance when the clinic was unable to schedule an intake appointment within seven days of the referral phone call. A similar but non-significant trend was also observed for the timely response group.

When considering the items individually for the non-timely group, good predictive ability was indicated by client readiness items Read2, Exp5, and Imp10. In sum, as client's ratings of their readiness for psychotherapy and impression of fit with the clinic increased, so did their ratings on the working alliance inventory in session two. Inversely, the lower a client's rated expectations of the clinic to meet their needs, the higher their rating of the working alliance was after their second session of psychotherapy.

The group of clients for which the clinic responded to in a timely manner, did not meet the clinically significant alpha level. A possible confound was also identified in the Read2 variable, as findings suggest an inverse relationship between client psychological readiness and the WAI score at session two. This is in direct opposition to significant findings of a positive, predictive relationship in the non-timely group. Also non-significant, the Imp10 variable in the timely response group showed a similar relationship to the Imp10 variable of the non-timely response group.

Strengths and Limitations

The current study added the importance of timeliness and its impact on the working alliance to the growing research in clinical and counseling graduate psychology training clinics. Clinic timeliness, unlike the working alliance, is a novel concept in psychotherapy literature and has not yet been operationalized. The predictive impact of clinic timeliness as a moderating variable on early engagement suggests a promising direction for future research. Practice-based participatory research in university and outpatient psychology clinics should target clinic timeliness indicators prior to the first intake session.

Though the sample obtained in the present study was considerably smaller than expected, there was evidence the effects of client readiness on early engagement depend on clinic timeliness. Analytic trends indicate a larger sample size would provide greater power to detect differences between the two groups, which may or may not result in a smaller effect size. The use of complex, multivariate analyses to evaluate significance was another strength as it mitigated the effects of missing and inconsistent data. The use of multiple regression models would have resulted in a smaller available sample size.

Using a nested path SEM framework, the study was able to optimize the number of cases

and information available. The standard error of measurement allowed in path analysis allowed for retention of more observations compared to using standard regression (with full information maximum likelihood estimation). In other words, the analytic model assumed data were missing at random (MAR), which is considered standard for modern missing data approaches using structural equation modeling.

While the study suggests clinic timeliness has a mediating effect on client readiness and early working alliance, there are several limitations to consider when interpreting the study. The primary restricting factor in this study was the significantly reduced sample size. Structural equation modeling shows best-fit results with larger sample sizes, particularly for multiple group mediation models. To mitigate the limited sample size, a nested group path analysis was selected as an analytic strategy. The alternative strategy was chosen as it is the more demanding statistical model, did not require a latent measurement model (which would also require a minimum of two operational variables for each latent variable), maintained more individual cases than separate regression analyses, and required relatively few paths to be equal across the two groups.

A second limiting factor was the lack of data on the construct validity of client readiness, early engagement, and short-term outcomes. While the WAI and OQ are empirically supported tools, their use as measures of early engagement and short-term outcome, as indicated for purposes of this study, are debatable. The reduced sample size led to a single rating from WAI and OQ scales selected from sessions 2 and 3 to represent early engagement and short-term outcomes, respectively. However, a more in-depth analysis might suggest that a truer measure of early engagement may be captured by using alternative measures or by comparing WAI scores over time. To date, client engagement measures are used inconsistently in behavioral health settings, which inhibits robust research on the efficacy of the individual tools available. Scales

such as the Patient Activation Measure (PAM) and the Patient Health Engagement Scale (PHE)
are also early engagement tools, most often used in primary care settings with chronically ill
clients (Graffigna, Barello, Bonanomi, & Lozza, 2015). These tools, while also measurements of
early engagement, may better assess the frequency that clients attend appointments or complete
homework, rather than the quality of the relationship with their primary care providers. More
investigation of tools to assess the working alliance prior to the start of the psychotherapy
process will lead to deeper insight on client early engagement. Similarly, the OQ-45 may not be
the most ideal measure to assess short-term outcomes, as defined in the existing study. Future
research is needed to investigate the model of fit for the use of these constructs with the Antioch
University PSC.

A third limitation was the reconceptualization of the study from a team research project
into an individual dissertation. By nature, an empirical study using archival data is expected to
result in incomplete data sets. However, the team research project tracked a wider breadth of
operationalized variables. Specifically, to assess clinic timeliness, the goal of the original project
was to track the date of every phone call and client contact (by phone or in person) before the
intake session. By attempting to collect data at several time intervals, the likelihood of missing
data, unrecorded contacts, and human error during data entry increased.

Additionally, this study was conducted over several years with contributions from several
students and faculty of the clinical psychology department. The extended length of time data was
tracked (i.e.; 3 years, 2012–2015), the delayed time between data entry and data collection, the
annual change of students needed to track the data, and the multiple methods of data tracking all
contributed to reduced integrity and consistency in the final data set. For future research studies
at the Antioch University PSC, it may be helpful to review and standardize the database of

demographic variables to both reduce the likelihood of missing data and generate similar categories for demographic variables in future research (i.e., ethnicity, income).

Finally, about half of the prospective clients completed the Client Readiness Questionnaire prior to dropping out before the intake session. Contributing factors to client attrition remain unclear as termination data was not collected for purposes of this study. Future studies should consider contacting psychotherapy clients and clinicians following termination to learn more about reasons for attrition.

Implications for Clinical Practice

The concept of this research was derived from a practice-based participatory study to evaluate existing practices at the Antioch Psychological Services Center. Based on the findings, university training clinics, outpatient clinics, and private practitioners may want to consider adjusting current practices and procedures to improve clinic timeliness in responding to referral phone calls.

The practice-based participatory research applied in the Antioch Psychological Services Center indicated several existing strengths of the current policies and procedures of the clinic related to timeliness. For example, the office manager or another PSC clinician is assigned to answer the phones during business hours, so potential clients are more likely to connect with a clinician than leave a voicemail. The clinic staff strictly enforce the process of screening referral phone calls, to ensure goodness-of-fit between clinicians in training and potential clients. However, the screening process may also contribute to a less timely response rate, as potential clients are left waiting for an unknown amount of time before their scheduled intake appointment.

As indicated in the literature review, implementing ways to manage expectations and find

goal collaboration will lead to reduced early attrition. Therefore, clinics may consider a policy where screening phone calls are scheduled on the same day and completed 24–48 hours after the referral phone call. Alternatively, clinicians in training may be designated as "on-call," to be available during certain hours to complete screening phone call the same day the referral phone call is made. Additionally, clinics may find it helpful to develop a policy to ensure intakes are scheduled within seven days of a completed screening. Using standard time frames, client and clinic expectations will be better aligned.

Visual tools for tracking the timeliness of client responsiveness, accessible to all staff, may improve clinic trainees' awareness of attrition and increase motivation to work as a team in finding remediating strategies. Color-coded systems are one way to track clinic timeliness, quickly and efficiently, between referral calls and the first intake session. The system may include a single page color-coded chart posted in the central office, visible to all staff, where timeliness is averaged biweekly or monthly (i.e., [greater than 7 days] = green, 7–10 days = yellow; 10–14 days = red).

Psychotherapy clinics and practitioners can also support potential clients' early engagement by using feedback tools in conjunction with timely communication. The use of automatic tools such as e-mail confirmations, voicemail messages, and e-mail/text message reminders for upcoming appointments are effective systems used to increase client engagement in medical and mental health settings.

Finally, future studies in university training clinics may wish to look more closely at the interaction of fixed demographic variable (i.e., specific ages, income brackets, education, and diagnoses) and alternative dynamic variables of client readiness to identify additional predictive variables of client early engagement and short-term outcomes.

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Appendix A: Training Clinic Consent Form

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Serving the community for over 20 years

CONSENT FORM

Welcome to Antioch's Center for Psychological Services. This form will provide information about our services and about your rights and responsibilities as a client. Please be sure to discuss any questions with your clinician or the Director, Dr. Victor Pantesco. Your signature at the bottom indicates that you understand the information and freely consent to treatment. This is a training clinic for doctoral students in clinical psychology. Our students are under the supervision of our doctoral program faculty, licensed psychologists with expertise in many specialties, such as children, families, trauma and addictions. In order to ensure the best possible service, your clinician will be discussing your treatment with her/his supervisor(s). If you are seeing a student-clinician, you will be informed of the name of this supervisor during your first session. The name of my supervisor is _____. It is the nature of a training clinic to closely train and supervise clinicians. Therefore, in keeping with common practice nationally, we tape record all counseling sessions. Clinicians and their supervisors review tapes to refine their clinical skills. The tapes are not a part of your record and are erased regularly after use.

TREATMENT:
There are a number of different forms of treatment available including individual psychotherapy, relationship and family counseling, group therapy, psychological assessments, and various educational activities. It is important to realize that although there are many potential benefits from these treatment activities, there are also some risks. In psychotherapy, for example, it is not uncommon to experience feelings of sadness, anger, anxiety, or guilt. These feelings may be natural and normal, and an important part of the therapy process, but they may also be unexpected and confusing. Although there are no guarantees, when therapy is effective there is a reduction in feelings of distress and a positive experience of problems being improved or resolved. You are encouraged to discuss with your clinician any feelings or concerns that arise during your treatment.

CONFIDENTIALITY:
What you talk about with your clinician is confidential and will not be revealed outside this clinic without your permission. Before any information is shared with other professionals or agencies, we would request a written release from you. *This release is available in our office or may be completed with any individual whom you wish to give such access, and then provided to us.* The only exceptions to this policy are rare situations in which we are required by law to release information with or without your permission. These are: 1) if there is evidence of physical and/or sexual abuse of children or abuse of the elderly; 2) if we judge that you are in danger of harming yourself or another individual, and 3) if your records are subpoenaed by the court. In the rare event of any of these situations, we would attempt to discuss our intentions with you before an action is taken, and we would limit disclosure of confidential information to the minimum necessary to ensure safety.
This is a training clinic attached to a university department of clinical psychology that is also part of a larger group of departments housed in the same building. As such, it is a facility that serves various segments of the population such as first-year assessment students' accessing testing materials in our storage closet. In

addition, predictable traffic for bathrooms and cleaning personnel, for example, is present. It is therefore impossible to guarantee anonymity in our waiting area, for example. Our staff, faculty, and clinical psychology students are all sensitive and tuned to the respect and demands of confidentiality and proceed with decorum and professional attunement to privacy. It is important to realize, however, that sterilized insulation from persons as described here is not possible.

In order to provide the best clinical service to you and your family, different family members may be seen by various clinicians on our staff. We feel that it is appropriate for our staff to consult with one another and discuss the meetings held with different family members in order to facilitate the overall therapeutic work. Information shared with staff will be done with discretion, discussing only what each clinician feels would be relevant. Part of training involves peer review and supervision as monitored by the Director and faculty supervisors. Once or twice a year, the student clinicians review the entire folder of a peer clinician for completeness, accuracy, and clarity. As for all clinical endeavors, the same demands for confidentiality exist. In other words, a reviewer is bound to the same level of confidentiality as the clinician. If you have any questions or concerns about this, please feel free to discuss these concerns with your clinician.

EMERGENCIES:
Our office is usually open Monday through Friday from 9:00 until 5:00. When we are unavailable, your call will be answered by an answering machine, and we will return your call as soon as possible during working hours. **The clinic does not have a way to respond to crisis situations that occur at times when the office is closed**. For this reason, it is important to be aware of the general support services that are available to you in your community; your clinician will discuss these services with you during your intake interview. If you or your clinician believes that your well-being might be at risk due to these limitations in after-hours crisis coverage, we will help you find a more appropriate setting for your treatment. It is the PSC's policy to contact your emergency contact(s), the police, or both in the event of a medical or psychiatric emergency.

NO WEAPON POLICY:
For many reasons, the PSC cannot allow weapons in the facility. If you have things like a Leatherman, pepper spray, for example, or anything else that could be used as a weapon, you must not bring it into the building.

FEE AND PAYMENT POLICY:
The standard hourly fee for psychotherapy services is $60 when seeing a student-clinician, and $85 when seeing a faculty member or New Hampshire Licensed Psychologist. This fee may be adjusted depending upon your financial circumstances. The fee for group treatment and educational activities will vary according to the nature of the activity. Your clinician will discuss your fee with you and will record any adjustments below. Client's Fee:_____

You will be expected to pay for each session at the time it is held unless you have made another arrangement with your clinician.

We will be happy to provide you with a statement that you may submit to your insurance company for possible reimbursement. Please be aware that you are responsible for any unpaid portion of your bill. You should also be aware that many insurance companies do not pay for psychotherapy services provided by students in training.

CANCELLATION POLICY:
If you cannot attend a scheduled appointment, we ask that you call to cancel the appointment at least 24 hours in advance. Missed appointments for reasons other than emergencies will be billed at your normal hourly fee. You will be expected to pay this fee prior to your next scheduled session.

FAMILY AND COUPLES THERAPY:
The clinic does not perform child custody or visitation evaluations. If, based on information provided, there is a reasonable expectation or potential for these matters to be contested in a way that could involve clinician testimony or records; we are not the service for you. But we would be willing to provide referrals to services that would be more in line with those needs.

To obtain records from couple's therapy sessions the clinic requires a release signed by both individuals who attended the sessions.

I have read and understand the above clinic policy

☐

MONITORING TREATMENT PROGRESS AND OUTCOME:

The clinic, along with the clinical psychology field in general, is committed to monitoring the effectiveness of our treatment and educational activities. Therefore, we will routinely collect questionnaire data from you during the course of your treatment. This data is used for a variety of clinical purposes, such as assessing your progress during treatment, training our student clinicians, and tracking our service utilization rates. This information becomes a permanent part of your record and will, therefore, be treated with the same respect for confidentiality as other information in your file. Your clinician may discuss the information obtained from these questionnaires with you, and many clients find this a useful way to reflect upon their own treatment progress and goals.

RESEARCH ACTIVITIES:

We are also committed to enhancing our body of scientific knowledge about psychological treatment through faculty and student research projects. As such, your treatment data (e.g., the questionnaires mentioned above that all clients respond to during treatment), in combination with treatment data from other clients, can help us improve treatment effectiveness in the future. We take every precaution to ensure that your confidentiality and anonymity will be protected in all of our research. First, any such research projects using data must be reviewed and approved by the Antioch University New England Institutional Review Board to ensure that your rights are protected. Second, we require that all information that would identify you, such as name, date of birth, address, and job, be removed and replaced with a code before the data are used for scientific purposes.

Please initial the box below that indicates whether you consent to making your anonymously coded data available for research purposes. Your permission is entirely voluntary, and you will not be penalized in any way should you choose to withhold your consent.

Please initial the box below that indicates whether you consent to making your anonymously coded data available for research purposes. Your permission is entirely voluntary, you can change your mind at any time, you will not be penalized in any way should you choose to withhold or revoke your consent.

I consent to making my treatment data available for research purposes.   ☐

I do not consent to making my treatment data available for research purposes.   ☐

Occasionally, when treatment is terminated before completing a final assessment or when a research design requires it, we may wish to contact you after treatment has ended to verify existing data or collect additional data. Any follow-up contact that we attempt will be conducted in an anonymous manner (i.e., using unmarked envelopes and/or callers who do not reveal that they are calling on behalf of the center until they are talking directly to you), thereby protecting your confidentiality. Further, either our quality assurance coordinator or a research investigator (not your therapist), who is bound by the same confidentiality code as your therapist, will initiate the follow-up contact.

Please initial the box below that indicates whether you consent to post-treatment follow-up contact. Your consent to such contact is completely voluntary and your treatment will not be affected in any way by your decision.

I consent to a follow-up contact.   ☐

I do not consent to a follow-up contact.   ☐

AGREEMENT:
I have read the information contained in the **Consent Form** and I fully understand my rights and obligations as a client at the Antioch Psychological Services Center. I freely agree to treatment.

_____
Name of Client

_____   _____
Signature (Client or parent/legal guardian)   Date

_____   _____
Clinician's Signature   Date

Appendix B: Psychological Services Center Intake Form

<u>Antioch Psychological Services Center</u>
<u>Initial Contact Form</u>

Client Name: _____ **Date:** _____ **Age:** _____

Address: _____ **DOB:** _____

Phone: (Home) _____ **(Work)** _____ **(Cell)** _____

Best time to call: _____ **OK to leave msg: home ( ) wk ( ) cell ( )**
Email Contact: Yes   No

ANE Student: Yes   No   If yes what program:
_____

Availability: Tues. _____ **Wed.** _____ **Thurs.** _____ **Fri.** _____

If client under 18 yrs., name of parent/guardian:
_____

Relationship to minor: _____ **Custody held by:** _____

If this is a couple/family referral, please include the names and D.O.B. of others residing in the home:
_____   _____
_____   _____

How did you learn about the PSC? _____
Is there a divorce current or pending? _____   **Do both parents currently have legal custody?** _____
Is there a foreseen change in this in the near future? _____   **Is there mutual signed consents?** _____

<u>Screening</u>

Clinician: _____ **Date:** _____ **Time:** _____

Reason for Referral:
_____

Treatment Requested: _____

<u>Treatment History:</u>

Previous Therapy: Yes   No   If yes, why and when?
_____
_____
_____

Psychiatric Hospitalization: Yes No   If yes, why and when?
_____
_____

Current Medications:
_____
_____

<u>Risk Assessment:</u>

Current Suicidal Ideation:	**Yes No**	**Hx of Suicidality:**		**Yes No**
Current Homicidal Ideation:	**Yes No**	**Hx of Homicidal Ideation:**		**Yes No**

History of Violence toward Others: Yes   No   **Hx of Violence From Others:**   Yes No
Current Self Injurious Behavior: Yes   No   **Past Self Injurious Behavior:**   Yes No

Impression of Risk: ( ) No/Low   ( ) Medium   ( ) High

Comments/Elaboration on any "Yes" answers:
_____

_____

Substance Use:

Has alcohol or other substance use ever caused problems for you, either legally, in your relationships, or in your ability to function?   Yes   No
If no: Would others who live with you or know you well agree?   Yes   No
If yes: Have you ever been in treatment for this problem?   Yes   No

Please explain yes answers:
_____
_____

Alcohol Use: Yes   No   Frequency of
Use_____

Most recent use and how much:
_____

Highest amount consumed in one sitting in past year:
_____

Drug Use: Yes No   Drugs Used and Amount Used:
_____
_____

Impression of Fit with PSC: (   ) Yes   (   ) No   (   ) Unsure

Please explain:
_____
_____
_____

Disposition:_____

Case Assignment:

Clinician Assigned: _____ **Date:** _____

Intake Date: _____ **Time:** _____ **Arrival Time:** _____ **Map/Appt Card Sent:**
Yes   No

Please document attempts to contact client for screening/initial appointment here:

Date/Time	Clinician	Comments

Appendix C: Client Readiness Screening Questionaire

Client Readiness Screening Questionnaire

Now, we are going to shift to some additional questions that will help the clinic identify how to best serve your needs. Some of the questions you may have already answered in part. I will summarize your answers to verify I heard you correctly and ask you to restate them in your own words. Are you willing to answer 10 more brief questions for me? (*I have modified this form for clarity of research purposes)

Psychological Readiness:

1. What has caused you to seek therapy now, as opposed to some other time?

   _____

2. On a scale of 1-10, (1= not at all, 10= extremely important) how important is it for you to address your therapy goal(s) now?

Please circle one: 1   2   3   4   5   6   7   8   9   10

3. Again, on a scale of 1-10 (1= not at all able, 10= extremely able) how confident are you in being able to meet your goal(s)?

Please circle one: 1   2   3   4   5   6   7   8   9   10

Expectations Regarding Course of Treatment:

4. What are your hopes and expectations of therapy?

   _____

5. On a scale of 1-10 (1= not at all helpful, 10= very helpful), how helpful overall do you think therapy at the PSC will be for you?

Please circle one: 1   2   3   4   5   6   7   8   9   10

6. How many sessions are you expecting to attend therapy in order to meet your goals? _____

Client Barriers:

7. In your life right now, what types of things may make it difficult for you to attend therapy? (*prompts:* work commitments, family, transportation, child care)

   _____

8. On a scale of 1- 10, (1= not at all, 10= a great deal) how much will these things likely get in the way of attending therapy?

Please circle one: 1   2   3   4   5   6   7   8   9   10

Impression of Fit with Clinic: We would like your feedback on your contact(s) with the PSC.

9. What have your contacts with the PSC been like so far?

Very Good   Good   Neutral   Poor   Very   Poor

10. On a scale from 1-10, how confident are you that our clinic can meet your needs (1 = not at all confident, 10 = completely confident)?

Please circle one: 1   2   3   4   5   6   7   8   9   10

Table 1

Demographic Characteristics for The Sample Used in The Current Study

	Timely Response (n=16)	Non-Timely Response (n=12)	Pooled (n=28)
	%(n) or Mean (SD)	%(n) or Mean (SD)	%(n) or Mean (SD)
Sex			
Male	37.50(6)	33.33(4)	35.71(10)
Female	62.50(10)	66.67(8)	64.29(18)
Ethnicity			
Arab	0.00(0)	8.33(1)	3.70(1)
Biracial	0.00(0)	8.33(1)	3.70(1)
Caucasian	100.00(15)	83.33(10)	92.59(25)
Age	29.69(8.08)	32.42(10.77)	30.86(9.24)
Education	14.85(2.30)	15.00(2.54)	14.91(2.35)

Note: Demographics are based on all available data.

Table 2

Model Comparisons Across Nested Multiple Group Models

	Model 1 Baseline (All Paths Equal)	Model 2 Path A Free	Model 3 Path A and B Free	Model 4 Path A and C Free
Chi-Square Test of Model Fit	$\chi^2(13) = 18.61$, $p = .14$	$\chi^2(9) = 6.51$, $p = .69$	$\chi^2(5) = 1.85$, $p = .87$	$\chi^2(8) = 5.13$, $p = .74$
CFI	0.00	1.00	1.00	1.00
TLI	0.00*	1.00*	1.00*	1.00*
RMSEA	0.18	0.00	0.00	0.00
Model Comparisons				
Compared to	-	Model 1	Model 2	Model 2
Likelihood Ratio Test	-	$\chi^2(4) = 13.79$, $p = .008$	$\chi^2(4) = 4.38$, $p = .36$	$\chi^2(1) = 1.26$, $p = .26$
Preferred Model	-	Model 2	Model 2	Model 2

Note: Likelihood ratio tests are based on the Satorra-Bentler method because MLR estimation

was used. *This is a truncated TLI estimate based on Mplus webnote.[1]

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[1] Mplus (2017). Unusual TLI Value. Accessed from https://www.statmodel.com/download/TLI.pdf.

Table 3

Standardized Results from the Final Multiple Group Model (Model 2)

	Timely Response Group (*n* = 16)			Non-Timely Response Group (*n* = 12)		
	Est. (SE)	z-value	p-value	Est. (SE)	z-value	p-value
WAI at Visit 2 on *(Path A)*						
Read2	-.35 (.18)	-1.91	.06	.76 (.21)	3.71	<.001
Read3	-.36 (.47)	-.76	.45	.17 (.23)	.74	.46
Exp5	0.06 (.36)	.16	.88	-.41 (.21)	-1.98	.05
Imp10	.86 (.48)	1.79	.07	.37 (.16)	2.27	.02
OQ at Visit 3 on *(Path B)*						
WAI at Visit 2	-.10 (.24)	-.43	.67	-.11 (.26)	-.42	.67
OQ at Visit 3 on *(Path C)*						
Read2	.22 (.30)	.74	.46	.21 (.29)	.72	.47
Read3	-.19 (.26)	-.74	.46	-.16 (.21)	-.73	.46
Exp5	.01 (.30)	.03	.98	.01 (.27)	.03	.98
Imp10	-.02 (.15)	-.11	.91	-.02 (.17)	-.12	.91

Note: Exact standardized coefficients for Path B and Path C differ slightly across groups despite

being constrained to be equal in the unstandardized metric due to the standardization process.

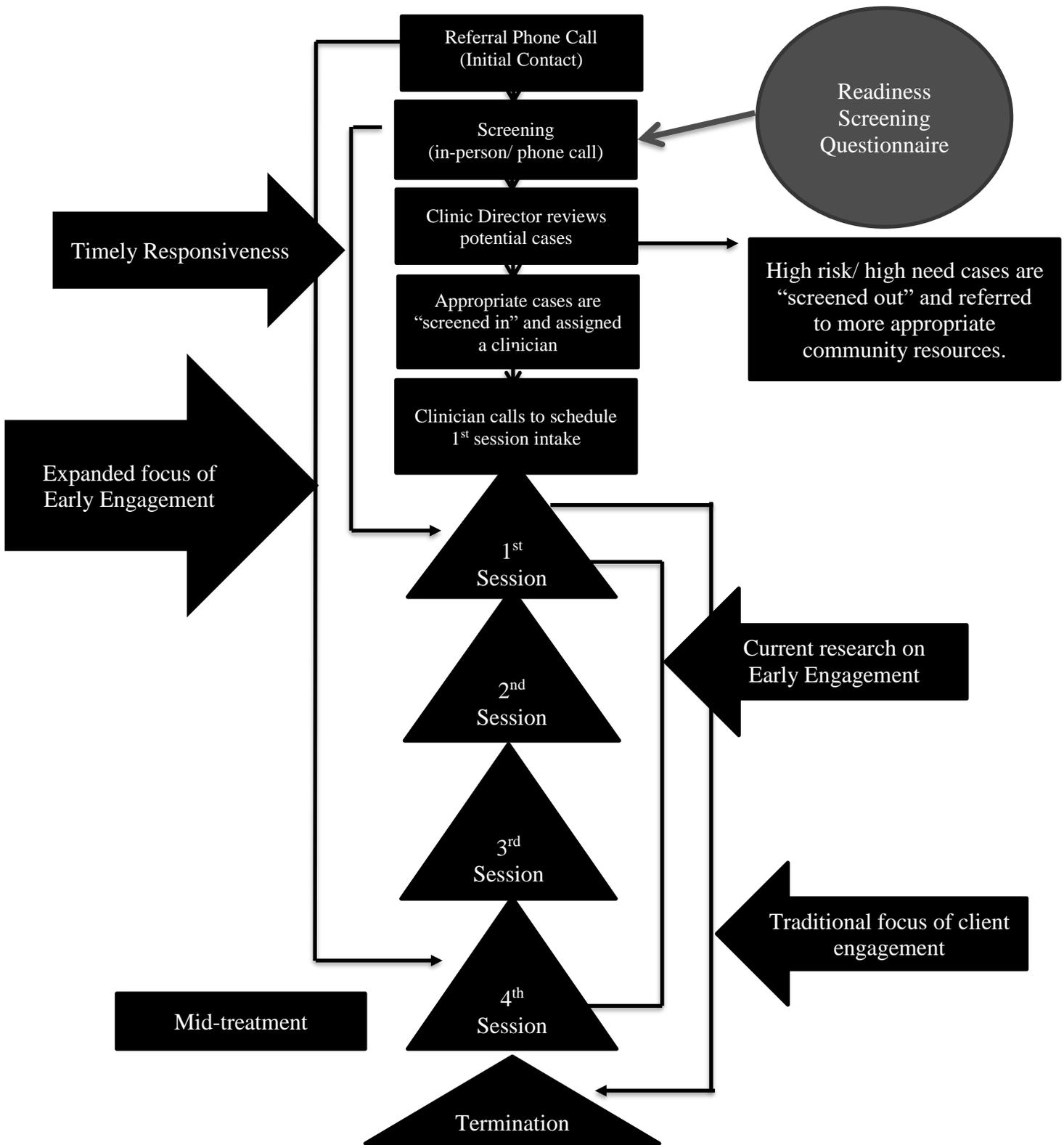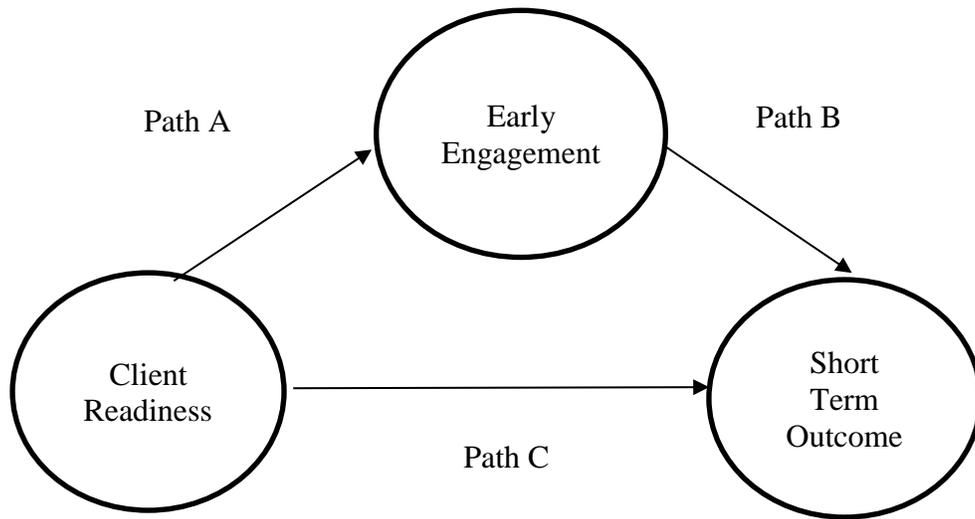Model fit statistics: $\chi^2(9) = 6.51$, $p = .69$, CFI=1.00, TLI=1.00, RMSEA=.00.

Figure 1. Client Treatment Process at the Antioch University Psychological Services Center.

Group 1: Timely Response Group (< 7 Days Screening to Intake)

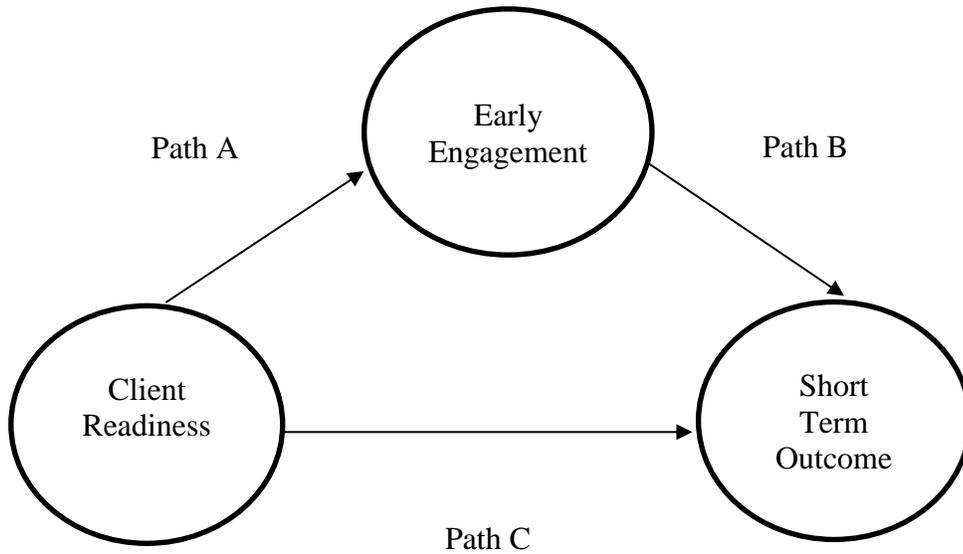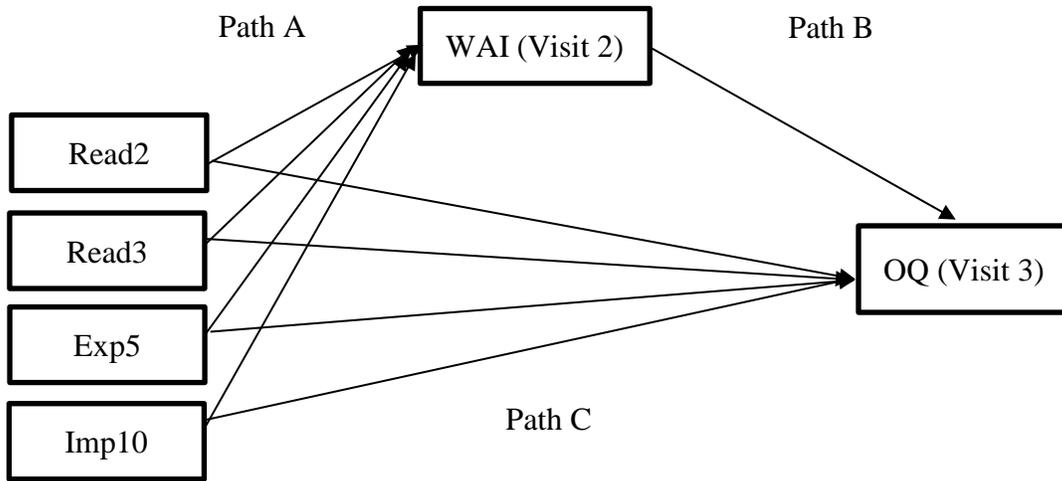*Group 2: Non-Timely Response Group (≥ 7 Days Screening to Intake)*

Figure 2. Theoretical model of early engagement. Note: Circles represent theoretical constructs rather than latent variables.

Group 1: Timely Response Group (< 7 Days Screening to Intake)

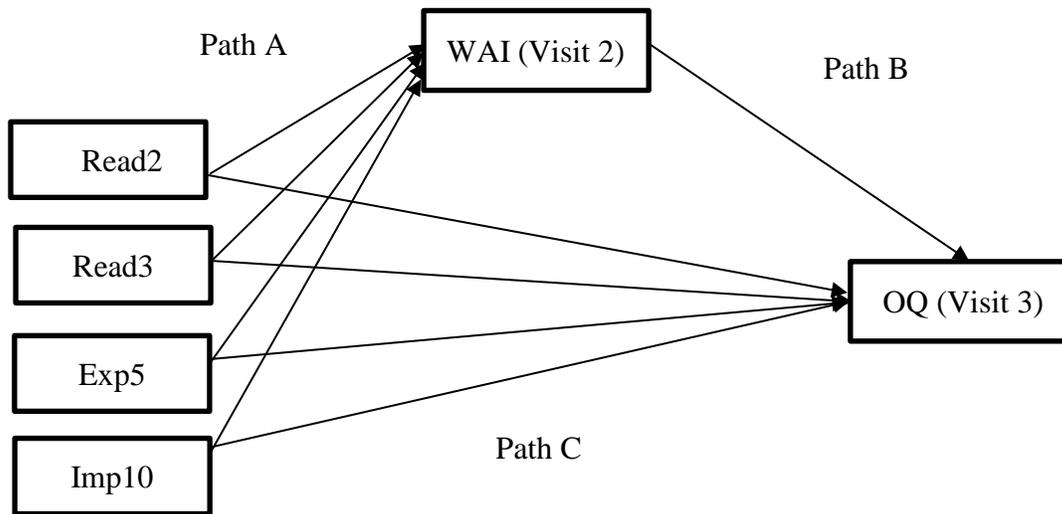*Group 2: Non-Timely Response Group (≥ 7 Days Screening to Intake)*

Figure 3. Path diagram of the multiple group model using observed variables.