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Seeking and Engaging in Psychotherapy : Investigating the Comparative Value of Two Models

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Seeking and Engaging in Psychotherapy:
Investigating the Comparative Value of Two Models

Orly Rumstein McKean

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in
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This dissertation is dedicated to

*my husband, Greg McKean,
who loves and supports me unconditionally*

and

*my children, Jacob and Nissa,
who always remind me of what is important in life*

and

*my parents, Bryna and Ilan Rumstein,
who raised me to believe I could do anything and then stood by me while I did*

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ABSTRACT

This longitudinal study examined the predictive ability of the Theory of Self-Determination and the Transtheoretical Model of Change with respect to seeking and engaging in adult psychotherapy. Seeking therapy was operationalized by time (days between deciding to seek therapy and contacting a clinic), and difficulty (concerning this decision). Engagement was measured both behaviourally (attending at least three sessions of therapy) and psychologically (client rated alliance and satisfaction, and therapist rated alliance). To facilitate comparison between the models of motivation and change, the measures of these models were scored in identical ways (i.e., continuous full scale index scores, summary scale scores, and subscale scores). Modifications made to these measures and the implications of doing so are described.

The study variables were examined with self-report data from 155 clients and 107 therapists at a community mental health clinic. Data were collected before the therapy began and after the third treatment session, providing both prospective and retrospective information. Hierarchical multiple regression (HMR) and sequential logistic regression (SLR) were used to test three sets of hypotheses and their corresponding research questions.

Client rated alliance was significantly predicted by the full measure of motivation and by some of its scales (i.e., intrinsic subscale, identified regulation subscale, internal motivation summary scale). It was also predicted by the action subscale and the ready for change summary scale of the measure of change. Finally, client satisfaction was significantly predicted by the intrinsic motivation subscale. Further significant findings included the importance of the referral source and the waiting list. When clients were self-referred, they required less time but experienced more difficulty in seeking therapy. Also, the longer clients spent on the waiting list,

the less likely they were to attend at least three sessions of therapy.

The hypotheses of this study were generally not supported however several summary and subscales demonstrated predictive ability. Also, the serendipitous findings with respect to type of referral for therapy and length of time on the waiting list are noteworthy. The strengths and limitations of the study and the implications of these results for future research and clinical application are discussed.

INTRODUCTION

Psychotherapy is of interest to both researchers and practitioners alike. This interest has lead to the investigation of broad therapeutic constructs such as the process and outcome of therapy. It has also been directed toward more specific issues such as client and therapist variables and aspects of the therapeutic process (e.g., premature termination, therapeutic alliance). However, increased attention has been focused on the constructs of therapy that occur toward the end, rather than the beginning of the process. For example, termination has been more widely researched than the processes of seeking and engaging in therapy. Seeking psychotherapy, understood as the period preceding a decision to contact a professional for psychological help, has generally been a poorly defined and unclearly operationalized construct. Engagement, the point at which a client becomes involved and invested in the process of therapy resulting in a choice to continue attending, has received little empirical attention. This study will improve upon previous research by clearly defining seeking and engagement with multiple operationalizations, and then predicting them with theoretical models of change and motivation.

In this study, two models were used to understand the process of therapy, the Theory of Self-Determination (Deci & Ryan, 1985), which addresses the role of motivation in behaviour change, and the Transtheoretical Model of Change (DiClemente & Prochaska, 1982), which specifies the processes and stages of behaviour change. Deci and Ryan have developed a continuum of motivation which encompasses six types of motivation: intrinsic motivation, four types of extrinsic motivation (integrated, identified, introjected, and external regulation), and amotivation. With this model, motivation has been used to understand behaviours such as smoking cessation (Curry, Wagner, & Grothaus, 1991), participation in alcohol treatment

programs (Ryan, Plant, & O'Malley, 1995), weight loss (Williams, Grow, Freedman, Ryan, & Deci, 1996) and constructs such as relationship happiness (Blais, Sabourin, Boucher, & Vallerand, 1990). Results from these and other studies have indicated that the more the desire for behaviour change is internally motivated the more likely desired change will occur and be maintained.

Prochaska and colleagues identified five stages of change: precontemplation, contemplation, preparation, action, and maintenance. These stages of change have also been empirically investigated with various health-related behaviours (Prochaska, 1994; Prochaska et al., 1994), including smoking cessation (e.g., DiClemente, Prochaska, Fairhurst, Velicer, Velasquez, & Rossi, 1991; Pollak, Carbonari, DiClemente, Flores Niemann, & Dolan Mullen, 1998; Fava, Velicer, & Prochaska, 1995; Gottlieb, Galavotti, McCuan, & McAlister, 1990), participation in alcohol treatment programs (DiClemente, Carroll, Miller, Connors, & Donovan, 2003), and weight control (e.g., Suris, Carmen Trapp, DiClemente, & Cousins, 1998; Prochaska, Norcross, Fowler, Follick, & Abrams, 1992). An individual's pretreatment stage of change has been found to be predictive of the occurrence and maintenance of behaviour change. This model has also been examined within the context of psychotherapy (e.g., Derisley & Reynolds, 2000; Prochaska, 1991; Prochaska & Norcross, 2001; Prochaska, Rossi, & Wilcox, 1991; Smith, Subich, & Kalodner, 1995; Steenbarger, 1994). Their results have indicated that the stages of change are able to differentiate between premature and appropriate termination. However, the empirical support and practical utility of this model have been recently questioned. More specifically, concerns about the existence of, and sequential movement through mutually exclusive stages have been raised (Littell & Girvin, 2002).

In the present study, the comparative value of the two models discussed above is

examined to explain clients' seeking and engaging in psychotherapy. This research differs substantially from the existing literature because of its focus on these elements of therapy and its attention to clear definitions and multiple operationalizations of the predicted variables. These models were largely developed and validated on very specific health-related behaviours (e.g., smoking cessation, weight control) with a limited number of studies focusing on psychotherapy. Unlike specific health-related behaviours (e.g., amount of weight lost or number of cigarettes smoked), psychotherapy is a broader construct that is more difficult to evaluate concretely. This important discrepancy between existing research and the topic of this study that will have to be carefully considered in the interpretation of the findings.

A review of the psychotherapy utilization and client characteristics literature will provide the context and rationale for this study. Next, a literature review of the processes of seeking and engaging in therapy will be presented with a specific focus on the variables used to operationalize these constructs in this study. This will be followed by an overview of relevant research involving the Model of Self-Determination and the Transtheoretical Model of Change. Finally, the hypotheses and research questions to be investigated by this study are stated.

Psychotherapy Utilization and Client Characteristics

Whiston and Sexton (1993) concluded that most clients will benefit from psychotherapy if they attend at least a few sessions of treatment. In fact, psychological treatment is associated with significantly higher rates of improvement compared to the effects of spontaneous remission (i.e., after eight weeks, 50% of psychotherapy clients improved as compared with only 2% of untreated individuals; McNeilly & Howard, 1991). Approximately 65% of clients make improvements while only a small percentage (ranging from 6% to 11.3%) of clients reportedly get worse.

The dose-effect relationship refers to the link between number of therapy sessions and treatment outcome (Howard, Kopta, Krause, & Orlinsky, 1986). A meta-analysis involving 15 diverse sets of data, covering a period of over 30 years of research, indicated that by eight sessions of psychodynamic or interpersonal therapy, approximately 50% of clients are measurably improved and approximately 75% are improved by 26 sessions (Howard et al., 1986). Moreover, between 10% and 18% of clients can be expected to have shown some improvement before the first session of therapy, attributable to the act of contacting a clinic or therapist (Howard et al., 1986). Other therapeutic orientations, including behavioural, cognitive, and cognitive-behavioural approaches, have also been listed among the 16 empirically supported psychological treatments (Chambless & Ollendick, 2000). In sum, the research suggests that psychotherapy does help the majority of clients and that at least several sessions of treatment are necessary for most people to improve their level of functioning.

However, an overall median of four sessions and a mean of 4-8 sessions among mental health service users has been reported (Garfield, 1986). Only 50% of individuals who attend an intake return for subsequent sessions and, from session to session after the intake, a smaller but detectable decrease in attendance occurs. A more recent review of 28 studies that varied across treatment orientation and socioeconomic status, reported a median of 2-4 sessions, and a mean of 3-5 sessions (when one small sample was removed $n = 123$, $N = 6072$; (Hansen, Lambert & Forman, 2002). They also found that just over a third (i.e., 33%) of this amalgamated sample attended only one session of therapy and it was suspected that this value would have been higher if all the sites had provided data on participants who had completed only one session. These patterns indicate that many clients do not attend therapy long enough to reap the maximal benefits

(Hansen et al., 2002; Phillips, 1991).

The above reports of mental health utilization provide a context for understanding various essential elements of psychotherapy (e.g., dropout, premature termination, and attrition). It also allows for clients' needs to be anticipated so that changes can be implemented to improve service delivery (e.g., Vessey, Howard, Lueger, Kachele, & Mergenthaler, 1994). A strength of this type of research is that it has remained largely independent of therapeutic orientation allowing for a broader application of the findings (Phillips, 1991).

The majority of outpatient mental health users comprises a fairly homogeneous group (Howard, Davidson, O'Mahoney, Orlinsky, & Brown, 1989). A profile of people who utilize mental health services has been established based on data from several large American (Vessey & Howard, 1993) and Canadian (Hunsley, Lee, & Aubry, 1999) surveys. The individual most likely to enter therapy after an initial visit to a mental health clinic is white, single, educated, and female. The Canadian study further reported that individuals with higher income, increased numbers of past and recent stressors, distress and use of psychotropic medication were also typical of consumers of psychological services. Interestingly, the majority of individuals likely to meet criteria for a diagnosis of depression did not receive psychological services.

Study Rationale

An understanding of therapy utilization patterns and of client characteristics provides the context for this study. Next, the focus will shift from service utilization patterns to the process of therapy and its implications for the mental health system, the client and the interaction between these variables. Despite the vast literature reporting on general and specific aspects of psychotherapy, at least two important constructs remain relatively neglected. Both seeking

therapy and engaging in therapy have been discussed in the literature, but neither has been clearly examined within a particular theoretical framework. This is reflected by the limited amount of research that is scattered rather than conceptualized within a model. A review of the relevant existing literature will be provided, followed by a rationale for the proposed research that will investigate the relation between these important therapeutic constructs and the theories of motivation and change.

Process of Seeking Therapy

The process of seeking therapy begins with the recognition of a need for psychological services and ends with having the need met by receiving therapy. Kadushin (1969) and Mechanic (1976) each developed early theories of seeking psychotherapy involving discrete, identifiable steps. Kadushin described the process of receiving psychiatric services as involving four stages: realizing there is a problem, consulting one's social support network, choosing the type of professional to consult, and selecting a specific practitioner or clinic. Mechanic proposed three stages of the help-seeking process: the illness stage involving problem recognition; the illness stage involving attributions for the problem's existence and attempts at coping; and the help-seeking stage involving the pursuit of professional help.

Help-seeking behaviour has been increasingly investigated as the construct has been developed. Initially, the focus of research was to predict seeking mental health services with demographic variables such as gender, race, education, socioeconomic status, and religion (e.g., Kelly & Achter, 1995; Kushner & Sher, 1989, 1991). These findings provided a profile of those seeking therapy but did not contribute to understanding why those who sought help did so. Next, psychological factors including, level of distress (e.g., Ingham & Miller, 1986), attitudes towards

psychological counselling (e.g., Deane & Todd, 1996; Halgin, Weaver, Edell, & Spencer, 1987; Rickwood & Braithwaite, 1994), treatment fearfulness (Deane & Chamberlain, 1994; Kushner & Sher, 1991), available social support (e.g., Sherbourne, 1988), and self-concealment (i.e., a predisposition to actively hide personal negative information from others; Larson & Chastain, 1990) were examined and found to be predictive of help-seeking behaviour. Cramer (1999) reanalyzed data from two prior studies (Cepeda-Benito & Short, 1998; Kelly & Achter, 1995) that investigated whether personal distress, attitudes toward counselling, social support, and self-concealment predicted the likelihood that undergraduates would seek psychological services. Results indicated that individuals were more likely to seek therapy when support networks were impaired and when individuals concealed personally distressing information from others.

Saunders (1993), expanding on prior theoretical work, conceptualized the process of seeking psychotherapy as a series of four decisions: realizing there is a problem, deciding therapy might help, deciding to seek therapy, and contacting a clinic (or a professional). In an initial study, the difficulty and time involved at each of the four steps were used as descriptors of the help-seeking process. Therapy applicants reported varying levels of difficulty for these steps and over 75% of the sample needed at least a few months between problem recognition and realization that therapy would help (Saunders, 1993). Over half the sample required at least a month before deciding to seek therapy after concluding that it might help. The majority of participants indicated that the first step (i.e., realizing there is a problem) was the most difficult in the process of seeking services. Age was found to be related to time needed to decide that therapy might help. Individuals between the ages of 34 and 45 required less time than did older and younger clients to proceed through the latter three stages. Level of distress has a more complex relationship in the

help-seeking process. In fact, the least and the most distressed therapy applicants reported that the second and third steps were particularly difficult. They also reported more difficulty and more time needed for problem recognition. This suggests there is a critical range of distress which must be sufficient to trigger problem recognition but not so high as to paralyse the individual from acting to meet this need.

Further research of the time and difficulty involved in the process of seeking therapy will provide an understanding of how these constructs factor into the decision to obtain professional psychological services. This will help to address the “service gap” (Steffl & Prosperi, 1985) between the need for and the use of psychological services. In the proposed study, help-seeking is operationalized according to the time and difficulty experienced by individuals seeking psychotherapy identified by Saunders (1993).

Engaging in Therapy

Therapeutic engagement occurs early in the process of therapy and is particularly meaningful to practitioners, however, the existing research findings are inconsistent and difficult to interpret. The lack of a formal definition and adequate assessment instruments have limited the coherence of this research. Typically, authors have interpreted continued attendance as an indication of clients’ engagement, making the assumption that not terminating reflects engagement in therapy, rather than measuring engagement directly. Furthermore, psychological models have not been applied to understanding therapeutic engagement, leaving the field largely atheoretical. The advantage of theories is their ability to create a context within which a construct can be conceptualized, leading to testable questions and the beginning of empirically-based research. In this study, engagement is operationalized in terms of continuation in therapy for at least three

sessions, initial ratings of therapeutic alliance by the client and therapist, and initial client satisfaction.

Premature Termination

Premature termination, identified as problematic by both clinicians and researchers, is viewed as an obstacle to the delivery of effective mental health services (Wierzbicki & Pekarik, 1993), and is considered a waste of limited resources. A large number of individuals who begin therapy discontinue. According to Garfield (1994), they are known by a range of terms including discontinuers, premature terminators, or dropouts and refer to individuals who have been accepted for psychotherapy, attend at least one session and then discontinue treatment by failing to come for any future sessions. In these cases, there is no mutual agreement between the client and the therapist to terminate and therapy is viewed by the therapist as just beginning, in process, or noncompleted.

A meta-analysis of 125 psychotherapy studies from 1974 to 1990 reported an average dropout rate of 46.86% (Wierzbicki & Pekarik, 1993). A number of hypotheses have been proposed to explain dropout from therapy, among them, inadequate motivation to undergo therapy and a reluctance to acknowledge the need for help in resolving personal difficulties (Garfield, 1994). To date, there are no consistent findings as to the variables that reduce dropout rates. Also, the variability in defining premature termination limits the ability to draw definitive conclusions (Hatchett & Park, 2003).

Relationships between premature termination and the length of stay in therapy, demographic variables (e.g., social class, education, gender, age, race), and diagnostic classification have been explored (Wierzbicki & Pekarik, 1993). Although lower social class

appears to be consistently related to termination in outpatient settings, investigations of other demographic variables have yielded few significant results. It is also unclear whether psychiatric diagnoses contribute to premature termination (Bell, 2001). However, risk of dropping out of therapy is increased for clients of racial minority, low level of education, and low SES (Wierzbicki & Pekarik, 1993).

Although findings with respect to demographic variables represent a contribution to the literature, it has been suggested that a shift to focus on the psychological variables involved in understanding premature termination is now required (Mash & Hunsley, 1993). Existing areas of research that have been related to engagement in psychotherapy include pretherapy training or preparation for therapy (e.g., Deane, Spicer, & Leathem, 1992; Latour & Cappeliez, 1994), client anger (Erwin, Heimberg, Schneier, & Liebowitz, 2003), and client expectations (Elkin et al., 1999).

Premature termination, defined as dropping out before session three, will serve as the behavioural indicator of engaging in psychotherapy in this study. Session three was chosen because of its identification as an important milestone in the psychotherapy literature (e.g., Eaton, Abeles, & Gutfreund, 1988; Horvath & Symonds, 1991; Reis & Brown, 1999).

Therapeutic Alliance

The working alliance is defined as the therapeutic relationship established between the client and therapist which contributes to the process and outcome of therapy, therapeutic change, and to the client's decision to continue attending therapy. It is a concept that is applicable to psychotherapy, independent of orientation and technique (Gelso & Carter, 1985). The therapeutic relationship is not exclusively a client or a therapist quality, but rather refers to the quality of the

relationship between client and therapist (Beutler, Machado, & Neufeldt, 1994). Bordin (1979) defined the working alliance as comprised of agreement between the therapist and client on goals, tasks, and the development of bonds. It has been demonstrated that both clients and therapists are aware of the quality of the therapeutic alliance (Weiss, Marmar, & Horowitz, 1988).

It is essential to obtain more than one perspective in assessing the therapeutic alliance because perceptions of the therapist and client can vary significantly (e.g., Hunsley, Aubry, Vestervelt, & Vito, 1999). Bordin's model acknowledges the contributions of both the therapist and the client in creating an effective working relationship. It requires that both participants accept and work with each other, but that therapists focus on the client's perspective in addition to their own to ensure that they understand what the client requires to experience a positive therapeutic relationship.

As the alliance is typically established within the first three sessions and does not significantly change subsequently (Eaton, et al., 1988; Horvath & Symonds, 1991), it can be measured early in the therapeutic process (Beutler et al., 1994). In fact, there appear to be two important alliance phases, the first of which is its initial development, believed to take place within the first sessions and peaking during the third session (Horvath & Luborsky, 1993). Some research findings indicate that predictions of outcome based on the alliance are possible by the third or fourth session, an indication that therapists should be particularly attentive to what takes place early in therapy (Garfield, 1994). Failure to develop a strong alliance early in treatment has typically been associated with disruption of the therapeutic process and poor outcome (e.g., Horvath & Luborsky, 1993; Martin, Garske, & Davis, 2000; Piper et al., 1999).

Some contextual variables have been examined with respect to the alliance. Findings

indicate that the higher a client's psychological distress upon entering therapy, the lower the positive and the higher the negative contribution to the therapeutic relationship (Eaton et al., 1988). As positive contributions to the alliance increase and negative contributions decrease, client's somatization is reduced. Clients with higher levels of distress may be less capable of contributing to the establishment of a positive working alliance. Given the established importance of the alliance in predicting outcome, a new focus of research has been on determining what variables are predictive of the therapeutic alliance. Demographic, interpersonal and intrapsychic variables are beginning to be investigated. Age (Connors, DiClemente, Dermen, Kadden, Carroll, & Frone, 2000), gender (Santiago et al., 2002) and level of education (Connors et al., 2000) have been found to be predictive of the therapeutic alliance, indicating that an older, less educated woman is the most likely to establish a positive therapeutic alliance. Interpersonal difficulties such as a detached style of relating and difficulty forming and maintaining relationships are emerging as negative predictors of the therapeutic alliance (Connolly Gibbons, Crits-Christoph, de la Cruz, Barber, Siqueland, & Gladis, 2003; Hersoug, Monsen, Havik, & Høglend, 2002; Santiago et al., 2002; Saunders, 2001). Intrapersonal variables (i.e., low self-esteem, sense of demoralization) have also been reported to be associated with poorer ratings of alliance (Saunders, 2001).

Another area of alliance research has included the investigation of psychological variables such as pretreatment expectations and treatment motivation. Connolly Gibbons and colleagues (2003) reported that clients with increased pretreatment expectations that they would improve formed better alliances with their therapists across two treatment groups than did clients with lower expectations for improvement. Connors and colleagues (2000) reported that stages of change was predictive of client's rating of alliance in a sample of outpatients in an alcohol

treatment program. Two studies examined therapist ratings of the alliance and identified client gender, (Connors et al., 2000) and intrapsychic variables (Hersoug et al. 2002) as significant predictors. When their clients were female (Connors et al., 2000) and were perceived to have insight, tolerance for emotion, problem solving capacity, limited problems with aggression and a need for revenge, better global functioning and fewer symptoms (Hersoug et al. 2002), therapists rated the alliance more positively. Due to the very recent investigation of the predictors of the alliance, it is important to consider these findings as preliminary until they are replicated.

In this study, client and therapist rated alliance will be used to operationalize engagement in psychotherapy which will be predicted by the models of change and motivation. This is consistent with more recent studies that have shifted to predicting the therapeutic alliance as compared with earlier research that used it only as a predictor variable.

Client Satisfaction

Within the last twenty years, the inclusion of the client's perspective on mental health services has become standard practice (Larsen, Attkisson, Hargreaves, & Nguyen, 1979). However, research findings consistently indicate that there is little variability in clients' levels of satisfaction (i.e., very highly satisfied), raising questions regarding the meaning of such data. Despite these findings, meaningful and useful information can still be derived by controlling the conditions under which satisfaction data are collected. For example, the use of statistical norms, standardized measurement tools and adequate sampling techniques greatly improve the interpretability and applicability of results (Nguyen, Attkisson, & Stegner, 1983). Clients' ratings of satisfaction with services are most productively used when combined with service providers' perspectives. Together, this information is then applied toward increasing service quality,

adequacy, and appropriateness of the services being offered.

Client satisfaction has previously been investigated in relation to symptom change, outcome, and dropout. Individuals displaying clinically significant symptom change reported greater satisfaction with psychotherapy than did clients who changed only moderately or not at all (Ankuta & Abeles, 1993). Other research suggests that clients who drop out of therapy express less satisfaction with obtained psychological services than those who do not and this is most pronounced in clients who only attended the intake session (Kokotovic & Tracey, 1987). In fact, the most important discriminator between dropouts and continuers was client satisfaction with the intake interview. Accordingly, in this study client satisfaction was assessed as a measure of engagement in therapy.

In summary, this study will use Saunders' conceptualization to operationalize the process of seeking psychotherapy. Continuation in therapy beyond the third session, the therapeutic alliance as rated by the client and therapist, and client satisfaction will serve as multiple indicators of engagement in therapy. The use of clear definitions and multiple operationalizations of seeking and engaging in therapy represent an improvement upon existing research involving these constructs. This study will also contribute to the literature by using psychological models of change and motivation as predictors of these variables. Without empirically-based theories, the specific effects of psychotherapy remain undetermined. Theory-driven investigations are preferred because they offer direction to the research efforts, give meaning to their findings, and specify their implications for the larger literature. For these reasons, the Theory of Self-Determination and the Transtheoretical Model of Change have been chosen to better conceptualize these important components of psychotherapy.

Theory of Self-Determination

Deci and Ryan's (1985) theory of self-determination involves three basic types of motivation which are believed to regulate our behaviour: intrinsic, extrinsic, and amotivation (Pelletier, Tuson, & Haddad, 1997). Intrinsically motivated behaviours are engaged in strictly for the pleasure and satisfaction they produce. They are performed voluntarily and in the absence of any external rewards. Intrinsic motivation is thought to stem from basic needs to feel competent and self-determined (Deci & Ryan, 1985; Ryan & Deci, 2000). Intrinsically motivated behaviours produce feelings of competence and self-determination which are intrinsically rewarding in themselves making them likely to be performed again.

Extrinsically motivated behaviours are those which are engaged in for instrumental reasons. This type of behaviour is not performed for its own sake, but with a goal of obtaining a reward or avoiding a punishment (Deci, 1975). Initially it was believed that extrinsic motivation referred to non-self-determined behaviour, prompted only by external contingencies. It is now clear that there are different types of extrinsic motivation, some of which are self-determined (Deci & Ryan, 1985; Ryan & Connell, 1989; Ryan, Connell, & Deci, 1985). Four types of extrinsic motivation have been proposed, classified along a continuum of increasing self-determination. From lowest to highest they include: external regulation, introjection, identification, and integration.

External regulation involves behaviours which are controlled by external sources, motivated by material rewards or imposed constraints by another person (Deci & Ryan, 1985). When the external source of motivation becomes internalized so that its actual presence is no longer needed to initiate a behaviour, introjected regulation is operating. Internal pressures such

as guilt, anxiety, or emotion related to self-esteem reinforce these behaviours, perpetuating them (Ryan & Connell, 1989). Identified regulation is present when behaviour is chosen by an individual because it is congruent with his or her values and goals (Deci & Ryan, 1985). The behaviour is still performed for extrinsic reasons (e.g., to achieve personal goals), but it is internally regulated and self-determined. Behaviour motivated by integrated regulation are performed not only because its significance is valued, but also because it is consistent with self-schemas and self-identity (Deci & Ryan, 1985). Integrated regulation is the most fully self-determined type of the extrinsic motivational types.

Amotivation is the last type of motivation, operating when individuals do not perceive a relationship between their actions and the outcomes that follow. This type of motivation is accompanied by feelings of incompetence and lack of control (Deci & Ryan, 1985). When an individual engages in a behaviour without having a clear understanding of the reasons for the behaviours and there is no real sense of purpose, amotivation is involved.

Motivation is a dynamic concept, which signifies that an individual may have a motivational type at a particular point that can change depending on situational influences (Deci & Ryan, 1985). The majority of the research efforts regarding intrinsic motivation and self-determination have been directed at understanding the environmental factors that induce losses of motivation and self-determination, or factors that might enhance intrinsic motivation and self-determination. The results of this research have been formulated into the Cognitive Evaluation Theory (CET; Deci & Ryan, 1985; 1991). Deci and Ryan (1985) have also hypothesized that various consequences are predictably associated with different types of motivation. In a number of domains including education (Deci, Vallerand, Pelletier, & Ryan, 1991; Ryan & Connell, 1989;

Vallerand & Bissonnette, 1992), leisure (Pelletier, Vallerand, Green-Demers, Brière, & Blais, 1995), sport (Pelletier, Fortier, Vallerand, Tuscon, Briere, & Blais, 1995; Pelletier, Fortin, Vallerand & Briere, 2001), environmental issues (Pelletier, 2002), and interpersonal relationships (Blais, et al., 1990; Boislard-Pepin, Green-Demers, Pelletier, Chartrand, & Seguin Levesque, 2002), it has been established that increasing forms of self-determined motivation are associated with enhanced learning, greater interest, increased life satisfaction, persistence, and improved health.

Research findings suggest that client motivation may be related to participation in therapy. Curry and colleagues (1991) assessed the individual and combined impact of intrinsic (personalized feedback) and extrinsic (financial incentive) motivation enhancement strategies in the process of smoking cessation. Individuals (N = 1,217) who requested self-help materials for smoking cessation were randomly assigned to one of four treatment groups (varying by intrinsic and extrinsic motivation strategies) and were assessed during treatment, at initial cessation, and at long-term abstinence (3 and 12 months follow-up). The intrinsic motivation strategy consisted of written personalized feedback intended to enhance self-efficacy on two dimensions, health concerns, and self-control. The extrinsic motivation intervention was a prize incentive that was contingent on use of the self-help materials rather than smoking cessation. Results indicated that the financial incentive increased the use of self-help materials but did not increase cessation rates among program users, and was associated with higher relapse rates among those who did manage to quit. The personalized feedback increased both smoking cessation and use of materials three months after distribution. Continuous abstinence (at 3 and 12 months) in the group that received the personalized feedback alone was twice the rate of the other groups. These findings were

consistent with the Self-Determination theory and emphasized the importance of promoting a perceived internal locus of causality and self-determination in clients to facilitate health behaviour change.

This theory has also been investigated with individuals suffering from alcoholism in terms of their initial treatment motivations for involvement in outpatient treatment and dropout (Ryan et al., 1995). Clients (N = 98) seeking treatment for alcoholism were assessed upon entering treatment and eight weeks after intake. Outcome was evaluated through attendance and treatment retention (i.e., not dropping out). Results indicated that clients high in both internalized and external motivation demonstrated the best attendance. With respect to treatment retention, those low in internalized motivation showed the poorest treatment response, regardless of the level of external motivation. Internalized motivation was associated with greater confidence in treatment and with an orientation toward interpersonal help-seeking. Higher initial internalized motivation for treatment was positively related to outcomes at eight weeks. Problem severity was also related to a greater degree of internalized motivation.

Williams and colleagues (1996) tested self-determination theory within the context of weight loss and weight-loss maintenance to (a) examine whether behaviour change occurs and persists if it is autonomously motivated and (b) predict which people will lose the most weight and will maintain the greatest weight loss over a two year period. Participants (N = 128) were severely or morbidly obese and involved in a medically supervised, very-low-calorie weight-loss program. They were assessed before the first program meeting, five to ten weeks into the program, at the end of the six month program, and 20 months after a patient entered the program. Results indicated that participants whose motivation for weight loss was more autonomous

attended the program more regularly, lost more weight during the program, and maintained weight loss at follow-up. Participants' autonomous motivation for weight loss was predicted both by their autonomy orientation and by their perception of autonomy supportiveness created by the health-care staff. These findings indicate that self-determination theory, which differentiates between autonomous and controlled forms of motivation, is useful for predicting continued participation in health promotion treatments and the maintenance of health-relevant behaviour change.

Gradually, as indicated above, this theory is receiving support in the psychotherapy literature. These are important findings because generally, the treatment motivation literature is plagued with conceptual difficulties which are translated into problems with assessment and the interpretation of research findings (Drieschner, Lammers, & van der Staak, 2004). Fortunately, the conceptualization of human motivation by Deci and Ryan provides a framework within which specific therapeutic conditions may be identified and understood. Knowing which elements hinder or facilitate clients' motivation for therapy in addition to the consequences that may arise as a result of this motivation would be beneficial to clients and therapists. Building on the conceptual contribution of this model, Pelletier and colleagues (1997) developed the Client Motivation for Therapy Scale (CMOTS) based on Deci and Ryan's theory of self-determination.

In the first phase of test development, an initial pool of reasons why clients engage in therapy was generated during a two hour interview by three groups of therapists working in hospital clinics and private practices. Therapists were asked to generate reasons why people enter therapy. Next, they were given a brief description of Deci and Ryan's (1985) theoretical model of motivation and the different forms of motivation that have been identified, ranging from intrinsic

motivation to amotivation. Finally, therapists were asked to fit the reasons they had previously generated into the motivational continuum, requiring that they assign each of their reasons to a type of motivation. This exercise ensured that the therapist identified reasons that would be objectively classified, without input from the authors. Following the interviews, the most frequently reported reasons for entering therapy were formulated into items for the questionnaire. This first version of the CMOTS consisted of 10 items for each motivational subtype.

During the second phase of scale development the experimental version of the CMOTS was distributed, along with a battery of related scales for validity testing, to clients ($N = 138$) involved in therapy at outpatient hospital clinics, university psychological service centres, and private practices. The purpose of this second phase was to reduce the number of scale items from ten per motivational subtype to four by selecting those items that most reliably represent the motivation constructs. Results supported a 24-item subscale consisting of six factors corresponding to the six types of motivation identified in the model. In conjunction with the availability of a valid and reliable measure that operationalizes this theory, the Deci and Ryan theory of self-determination is a practical and relevant theory to be used in examining the processes of seeking and engaging in psychotherapy.

Transtheoretical Model of Change

The Transtheoretical Model of Change is a framework of intentional change developed in response to a need to understand how people change maladaptive behaviours, rather than why they do not change (Grimley, Prochaska, Velicer, Blais, & DiClemente, 1994; Prochaska & DiClemente, 1984). Prior to the development of this theory, it was unclear in the literature which people respond with change to what types of methods, at what times. Answers to these questions

were intended to lead to more effective interventions to assist people in favourably changing their life styles. This model was also developed to explain the full course of change, from problem awareness to after the behavioural change has occurred. An awareness of the individual's position in their process of change is used to determine the interventions that will facilitate behaviour change.

Cross-sectional and longitudinal studies of self-change indicate that individuals appear to progress through specific stages as they struggle to change problematic behaviours (DiClemente & Prochaska, 1982). The concept of stages implies a temporal dimension in which change occurs, with each stage involving a specific set of tasks needed for movement between stages. Time spent in each stage may vary, but the tasks to be accomplished to achieve progress to the next stage are assumed to be invariant. Individuals pass through each stage of change and cannot successfully move from an early stage to a later one without passing through intermediate stages.

The stages were first identified in a study comparing smokers quitting on their own with smokers in two smoking cessation treatment programs (DiClemente & Prochaska, 1982). These stages were then operationalized and further applied with a sample of outpatient therapy clients. Four stages of change were identified: precontemplation, contemplation, action, and maintenance (McConaughy, Prochaska, & Velicer, 1983). A fifth stage has since been identified and validated, fitting between contemplation and action, called "preparation" (DiClemente et al., 1991; Velicer, Prochaska, Rossi, & Snow, 1992).

In the precontemplation stage, individuals do not yet have intention of changing their behaviour in the near future. In this stage, individuals are usually uninformed about the long-term consequences of their behaviour, demoralized about their abilities to change, do not want to think

about the problem, and/or are defensive in response to social pressure to change. They do not intend to change their specific behaviour in the coming six months. This is the most stable stage and there is research to suggest that some precontemplators never progress to subsequent stages of change. In fact, in a sample of smokers, two-thirds never progressed from the precontemplation stage (Prochaska, Velicer, Guadagnoli, Rossi, & DiClemente, 1991).

In the contemplation stage, people are aware that a problem exists and have serious intention to change within the next six months. However, they lack the commitment to take action and can remain stuck in this stage for long periods. In samples of smokers, many remained in this relatively stable stage for two years without moving closer to action (DiClemente & Prochaska, 1982; Prochaska & DiClemente, 1984). The essence of the contemplation stage might be “knowing where you want to go, but not quite ready yet” (Prochaska, DiClemente, & Norcross, 1992).

The preparation stage includes individuals who intend to take action in the near future, usually in the next month. These individuals have usually developed a plan of action, have taken action in the past year, or have made some small behavioural change towards larger change (e.g., reducing the number of cigarettes they smoke). This stage, with both intentional and behavioural criteria, is a transitional rather than a stable stage (i.e., precontemplation and contemplation) and individuals are likely to progress toward the action stage within the next 30 days.

The action stage is characterized by overt and complete behavioural change occurring within the past six months (e.g., having quit smoking). This stage is the busiest of the five stages of change, with individuals actively engaged in eliminating their problem behaviour. It is also the least stable of the stages and carries the highest risk for relapse (Grimely et al., 1994).

Maintenance is the period from six months after the behaviour has been changed until the problem behaviour becomes less salient in daily functioning. In the maintenance stage, individuals actively refrain from re-engaging in the problem, relying on their acquired behavioural and experiential skills to prevent relapse (e.g., talking to others about their distress, involvement in physical exercise, use of relaxation techniques). Reliance on these techniques gradually decreases over time, as the salience of the problem behaviour decreases.

Progression through the stages is described as typically cyclical rather than linear, involving a return from later stages to earlier stages. Schachter (1982) found that smokers made an average of three to four action attempts before they became long-term maintainers. When individuals relapse, they tend to feel like failures and experience embarrassment, shame, and guilt. Some feel demoralized which impedes progression toward further behaviour change. Prochaska and DiClemente (1985) found that 15% of smokers who relapsed regressed back to the precontemplation stage but that 85% recycled only as far as the contemplation or preparation stages (Prochaska & DiClemente, 1984). This spiral model suggests that most relapsers do not revolve endlessly in circles nor do they regress all the way back to where they began.

The Transtheoretical Model of Change can be considered a template that can be applied to a variety of problems. It has already been applied to attempts by individuals to change the following patterns of behaviour: lack of exercise (e.g., Marcus, Rossi, Selby, & Niaura, 1992), obesity (e.g., Prochaska et al., 1992), sexual activity without using contraceptives (e.g., Grimley, Prochaska, & Prochaska, 1997), avoiding mammograms (Rakowski, Dube, Marcus, Prochaska, & Velicer, 1992), domestic abuse (e.g., Scott & Wolfe, 2003), alcohol abuse (e.g., DiClemente et al., 2003), and smoking (e.g., Pollak et al., 1998).

The amount of therapeutic change has been related to pretreatment stages of change. In a sample of 579 smokers, contemplators were nearly twice as likely as precontemplators to make progress towards smoking cessation within the first six months of treatment (Prochaska, DiClemente, & Velicer, 1988; cited in Prochaska, 1991). Also, in a work-site based behaviour therapy program for weight control, the stages of change were the second best predictor of outcome, more so than SES, self-efficacy, social support, proportion overweight, years overweight, goals and expectations (Prochaska, et al., 1992).

Prochaska and colleagues (1994) investigated the generalization of the Transtheoretical Model across 12 problem behaviours including: smoking, cocaine abuse, overeating and consumption of high-fat diets, adolescent delinquent behaviours, unsafe sex and lack of condom use, under use of sunscreen, exposure to radon gas, lack of exercise, avoidance of mammography screening, and under use of physician recommended smoking prevention programs. Participants were from 12 separate samples (total N = 3,858), representing behaviours differing on addictiveness, frequency, legality, privacy, social acceptability, and whether they should be encouraged or discouraged. Results indicated similarities across the 12 areas and provided strong support for the generalizability of the stages of change delineated by the Transtheoretical Model. When health behaviours were viewed within the context of advantages and disadvantages of change, people in the precontemplation stage evaluated the disadvantages of making a healthy behaviour change as higher than the advantages. The opposite was true for groups that were in the action stage. For the majority of problems, the balance between the advantages and disadvantages could be clearly interpreted as needing to be reversed before action occurs.

In an effort to understand how to best meet clients' therapeutic needs, research has been

conducted to determine the relationship between stages of change and psychotherapy (Derisley & Reynolds, 2000; Levy, 1997; Prochaska, 1991; Smith et al., 1995). Prochaska (1991) matched intervention to phobic client's stage and level of change in an effort to understand why these clients do not report better treatment outcome. Approximately 25% to 50% of phobic clients dropped out of psychological treatment, and less than 30% recovered with the help of psychotherapy. He concluded that despite known effectiveness in treating phobic clients, the reason many drop out is due to poor matching between the client's stage of change and the intervention offered. It has also been reported elsewhere that matching treatment interventions to clients' stage of change should improve the therapeutic experience of the client (Prochaska, 2000; Prochaska & Norcross, 2001).

Stage-related variables accurately predicted 93% of dropouts from therapy (Prochaska, 1991). That is, individuals who terminated therapy prematurely entered therapy in the precontemplation stage. Individuals who ended treatment early but appropriately (i.e., did not terminate prematurely) were characterized by the action stage and clients who continued therapy until appropriate termination were in the contemplation stage when they entered therapy. These findings suggest that identical treatment of each of these groups of clients upon their arrival for therapy would not take into consideration their pretherapy stage of change (therapeutic needs) and increase the likelihood of premature termination.

The Transtheoretical Model of Change was also applied to treatment interventions for bulimia nervosa to investigate the model's generalizability to weight related concerns (Levy, 1997). Women (N = 139 from eight separate samples) with current or past diagnosis of bulimia nervosa represented each of the five stages of change. Results identified a need for type of

intervention to be determined based on clients' readiness for change.

Smith and colleagues (1995) reported that of clients presenting to a counselling centre ($N = 74$), only two were in the maintenance stage, nine were in the precontemplation stage, 15 were in the preparation and action stages. Significant differences were found between the stages of change in which premature and appropriate terminators entered therapy. Premature terminators entered therapy at the precontemplation stage to a greater degree than would be expected by chance, and appropriate terminators tended to enter at the preparation and action stages. Therefore, premature and nonpremature terminators might be distinguished by their pretreatment stage of change. The precontemplation stage was associated with premature termination; contemplation was less clearly related to termination; preparation and action were negatively related to premature termination. The relationship between the maintenance stage and termination was difficult to establish because very few clients entering therapy in this sample were in the maintenance stage.

Brogan, Prochaska, and Prochaska (1999) investigated the predictive ability of the Transtheoretical Model with respect to termination and continuation status in psychotherapy clients. Results indicated that clients who terminated prematurely reported highest scores on the precontemplation stage of change, and appropriate terminators most frequently endorsed the action stage. Continuers in therapy presented a less clear pattern, scoring highest on both the contemplation and maintenance stages of change. Ninety-two percent of clients were correctly classified, discriminating between premature terminators, appropriate terminators and therapy continuers, indicating that the stages of change are important predictors of termination and continuation status.

Derisley and Reynolds (2000) investigated the predictive ability of the Transtheoretical Model with respect to premature termination, attendance and alliance in psychotherapy. In contrast with other studies, high precontemplation scores did not significantly predict premature termination but low contemplation scores did. Also, scores on the contemplation scale were positively associated with the therapeutic alliance. However, the hypotheses that clients with high action scores would attend more sessions and establish a more positive therapeutic relationship were not supported.

Despite the intuitive appeal of the Transtheoretical Model of Change, two recent review articles have identified some inconsistencies with the measurement and scoring of the stages of change (Littell & Girvin, 2002; Rosen, 2000). This variability between studies has implications for the consolidation and interpretation of this body of literature. Fortunately, the studies reviewed disclose their scoring and interpretation practices. This has allowed studies with similar procedures to be identified for more useful comparisons.

Another identified criticism of this model is the possible limited representation of the full range of stages in study samples. Individuals in the earlier stages of change, by definition, are less likely to be involved in treatment. A review of several studies to determine the distribution of clients seeking to make changes to health-related behaviours across these stages was conducted (see Tables 1 and 2). These tables reflect the percentage of participants in each stage of change in previous relevant research. These studies indicate that participants seeking to change behaviours, regardless of whether they were seeking treatment, were representative of the range of stages of change.

Despite the emerging criticisms of the Transtheoretical Model of Change, it continues to

to be widely accepted by those familiar with the task of helping others make changes. It has also identified the importance of an individual's readiness for change and its relevance to actually achieving change. This is significant because of the concept of matching client readiness with type of intervention in an effort to improve treatment outcome and prevent premature termination. In addition to focusing research on important clinical issues, this model is theoretically based, empirically verified, and deserving of applicability to other therapeutic constructs.

The Self-Determination Model and the Transtheoretical Model of Change are used to investigate seeking and engaging in psychotherapy in an effort to establish and apply a theoretical framework to these constructs. Both these models were developed and used primarily in examining specific health-related behaviours whereas the nature of this research applies these theories to psychotherapy, a much broader construct. This study can be seen on a continuum, in that research has initially been conducted on specific health behaviours and will now shift to broader types of change, like psychotherapy, representing a progression in the literature. A further contribution of this study will be its attention to the scoring of the measures of these models and its focus on incremental validity.

Hypotheses

Hypothesis 1

It is hypothesized that seeking therapy (time and difficulty) will be predicted by stages of change, and by type of motivation, after the effects of the covariates (age, gender, referral source, psychological distress, problem duration) have been controlled. That is, less time and less difficulty in seeking therapy will be predicted by further progression within each model. This progression is expected in the direction of the maintenance stage and towards the intrinsic end of

the motivation continuum.

Hypothesis 2

Behavioural engagement in therapy (measured by attendance/nonattendance at session 3) will be predicted by stages of change and by type of motivation once covariates (age, gender, referral source, psychological distress, time on waiting list) are accounted for. That is, attendance until at least session 3 will be predicted by further progression within each model. This progression is expected in the direction of the maintenance stage and towards the intrinsic end of the motivation continuum.

Hypothesis 3

It is hypothesized that psychological engagement in therapy (client and therapist rated alliance, client satisfaction with services) will be predicted by stages of change and by type of motivation, after the effects of the covariates (age, gender, referral source, psychological distress, time on waiting list) have been controlled. That is, higher alliance ratings by client and therapist, and higher client satisfaction will be predicted by further progression within each model. This progression is expected in the direction of the maintenance stage and towards the intrinsic end of the motivation continuum.

Given that the Model of Transtheoretical Change has been reported upon in the literature more frequently than the Model of Self-Determination in predicting aspects of psychotherapy (e.g., premature termination), it is expected that it will be more successful in significantly predicting seeking and engaging in therapy.

Hierarchical multiple regression will be used to test the first and third hypotheses and sequential logistic regression will be used to test Hypothesis 2. Hierarchical multiple regression is

appropriate for predicting continuous variables (i.e., operationalizations of seeking and psychological engagement), but sequential logistic regression is required to predict dichotomous variables (i.e., attendance until at least session 3). For each hypothesis, predictor variables will be added to the equation in a distinct step. Through this procedure, it will be possible to determine the increase in variance accounted for by each variable at its point of entry in the equation.

Regression equations will be computed separately for each predicted variable of Hypothesis 1 (seeking therapy), Hypothesis 2 (behavioural operationalization of engaging in therapy), and Hypothesis 3 (psychological operationalization of engaging in therapy) to determine the predictive value of the predictor variables (stages of change and type of motivation) both separately and in combination (to test the incremental validity) using a continuous score for each predictor variable. In addition, for each measure of each predicted variable (i.e., time and difficulty for seeking therapy, and satisfaction and alliance rated by client, and alliance rated by therapist for engaging in therapy) separate analyses will also be conducted. At each step, the significance of R^2 change will be assessed to determine whether each predictor variable adds to the predictiveness of the overall equation. The superiority of one predictor variable over the other will be determined by the most explained variance. In addition, for sequential logistic regressions, an evaluation of improvement of the model will be made after each new variable is added. Thus, a total of four regression models will be computed to test each of the three hypotheses.

Research Questions

In addition to the testing of the hypotheses, the investigation of research questions will be conducted to determine how alternate scoring techniques will influence the predictive ability of the models of change and motivation. Hierarchical and sequential logistic regression will be used

to determine the predictive value of each subscale and each summary scale of stages of change and type of motivation. This will involve using a continuous score for each subscale and summary scale of each model. This is in contrast to the procedure for testing the hypotheses in which, a single continuous score for each total scale (stages of change or type of motivation) will be conducted. Testing of the research questions may provide more detailed information about the predictive ability of specific aspects of motivation and stages of change models once general findings have been determined through the investigation of the hypotheses.

METHOD

Participants

Adults seeking individual psychotherapy from the Centre for Psychological Services (CPS) were considered eligible for participation in this study. The sample size required for the study was determined based on three factors: multivariate statistical requirements, power, and anticipated attrition rates. For the purposes of the multivariate analyses conducted with these data, ten participants per variable was required (Tabachnick & Fidell, 2001). As this study involved a maximum of seven variables for the purposes of multiple regression, a sample size of at least 70 participants was required. In terms of power, a sample size of 97 participants would allow for power = .80 with $\alpha = .05$ for a medium effect size (Cohen, 1992). Taking these factors into account and in recognition of the fact that the nature of the research (i.e., two assessment times) would involve some attrition (e.g., failure to attend the intake interview, lack of interest or commitment to their therapy or the study, inability to contact participant following the third therapy session), the decision was made to recruit at least 150 participants. A total of 155 participants were involved in the study. Of these 155, 118 attended some therapy sessions but only 110 attended at least three sessions. Of these 110, only 107 clients and 107 therapists completed measures at the time of the second assessment.

During the recruitment period for the study, a total of 254 people seeking therapy were eligible for inclusion in the study. Forty-five of these individuals declined to participate when the study was described to them, possibly attributable to their uncertainty or anxiety about seeking psychological services. Another 54 individuals initially agreed to participate, but when they were contacted by a research assistant, 14 declined, indicating that they were no longer interested in

participating, and 25 were not eligible to participate for various reasons (i.e., not fluent enough in English [$n = 7$], decided not to attend therapy at CPS by the time they were contacted to complete Time 1 measures [$n = 13$], had requested psychological services that were not offered by the CPS [$n = 5$]. Finally, 15 individuals were either never reached by the research assistant ($n = 11$) or, when they were reached, had already attended at least one session of therapy ($n = 4$).

Therapist participants were practicum students and interns in a doctoral program in clinical psychology who were supervised by registered psychologists. Thirty-eight different therapists began the study. For the 107 clients who completed the measures after session 3, there were 36 different therapists (29 women and 7 men), providing therapy to between 1 and 11 different client participants.

Initially, the demographic characteristics of the full sample and the subsample (i.e., those who attended at least three sessions of therapy) will be presented. This will also include the group of participants who did not attend at least three sessions of therapy with respect to their reasons for not pursuing therapy and the length of time they spent on the waiting list. Additionally, the characteristics of the therapist participants will be discussed. This section will be followed by descriptions of the study's procedure, recruitment, interviews, and administration of measures. Next, its policies regarding consent and confidentiality will be presented. Finally, a description of each of the measures used for the collection of data is provided.

Demographic Characteristics

For the hypotheses involving seeking psychotherapy, the full sample of 155 client participants was used. For the hypotheses related to engaging in psychotherapy the full sample was used for analyses involving the behavioural operationalization of this construct and the

subsample of 107 client participants and their therapists (i.e., those who completed Time 2 measures) was used for analyses involving the psychological operationalizations of engaging. This information is presented in Table 3. The demographic characteristics of both samples were consistent with information from Statistics Canada (2001) for income (median income of \$29,000 for persons 15 years of age or older) and ethnic diversity (Community Profile for the Ottawa-Hull region, Statistics Canada, 2001).

Although CPS is a training facility, training centers have not been found to be different from non-training outpatient community clinics in terms of client characteristics and interventions (Todd, Kurcias, & Gloster, 1994). Based on comparisons with the demographics of the overall population of clients who receive psychological services at CPS (CPS Annual Report, 2001-2002), the current full sample of 155 is similar in terms of age, education, income and ethnicity. CPS, however, has a higher percentage of male clients (36%) compared to the study sample in which approximately 20% of the participants were men. This difference is likely due to the exclusion of career counseling clients from this study. The profile of a typical CPS client (CPS Annual Report, 2001-2002) is also consistent with a recent profile of consumers of psychological services in Canada (Hunsley et al., 1999) with respect to age, gender, marital status, and education, which permits wider generalizability of the findings of this research.

The current subsample of 107 client participants, who completed both phases of the study, is also similar to the 48 clients who initially participated in the study, but did not complete it. On 12 different demographic measures the only statistically significant differences between the two groups was on education, where the sample of study completers had a slightly higher level of education ($M = 7.1$, $SD = 1.6$; characterized by some university courses) than the group who did

not complete the study ($M = 6.4$, $SD = 2.2$; that was characterized by college graduation; $F(1,153) = 10.7$, $p < .01$). This finding is consistent with the literature that suggests that individuals with higher education are less likely to drop out of therapy (Garfield, 1994). A comparison of these two groups on self-reported problem duration and on level of psychological distress prior to therapy (SCL-10) revealed no significant differences.

Of the 48 client participants who did not complete both phases of the study, 37 did not attend any therapy. This group of 37 participants was examined more closely in terms of their reasons for not attending therapy and their time on the waiting list. Either they could not be reached by the therapist or, when they were contacted to schedule an intake session, these clients provided a range of reasons why they were no longer interested in therapy. These reasons were organized into four categories. The first category included 12 client participants for which it was concluded that they were no longer interested in services. The policy at CPS requires that a client be left several messages and when the calls are not returned, the therapist sends a letter requiring the client to respond within a specified time frame or it is assumed that they are no longer interested in services at the CPS. A second category involved clients who were reached by the therapist and, at the time of the call, indicated that they were already receiving services elsewhere and were no longer interested in services at the Centre ($n = 10$). A third category involved those who scheduled an intake when the therapist contacted them but then did not attend the intake session, did not return subsequent messages from the therapist to reschedule, and eventually had a letter sent to them similar to the one described above ($n = 10$). The remaining five client participants provided other reasons for not attending therapy: two clients were no longer interested in services but did not provide a reason, one client reported being financially unable to

pursue therapy, and one indicated that an anticipated move to Ottawa did not occur. For the fifth client there was no record of the reason not to attend therapy.

A *t* test was used to compare clients who attended at least three sessions of therapy with those who did not. A significant difference was found between these groups for time spent on the waiting list. Participants who did not attend therapy until session 3 had been on the waiting list longer ($M = 84$ days, $SD = 46.9$) than those who did engage in therapy ($M = 47$ days, $SD = 33.8$; $F(1, 153) = 10.1, p < .01$). Time on the waiting list was calculated from the date the client called the CPS to request services until the date the client attended an intake. For clients who never attended an intake, this variable was calculated from the days between the date services were requested to the date the client declined the services or the final contact was made by the therapist (i.e., the date the letter was sent or the date of the final phone call). According to the CPS Annual Reports for 2001 and 2002, the average time on the waiting for clients who attended any type of service (not just adult individual therapy) was 62 and 58 days, respectively.

Time on the waiting list was recalculated for the clients who never attended any therapy to ensure that the difference was not a result of how this variable was calculated. The recalculation involved counting the days from the date services were requested until the first date the therapist left the initial message ($n = 30$; for $n = 7$ there was no information about the sequence of contacts). Even with this recalculation, these participants who did not attend any therapy were still on the waiting list significantly longer ($M = 75$ days, $SD = 46.0$) than those who attended at least three sessions of therapy ($F(1, 153) = 12.8, p < .001$). Therefore, it can be concluded that participants who did not attend up to three sessions of therapy waited longer for services.

Clients presented with a range of presenting problems. Percentages are presented for the

full sample of 155 first, followed by percentages for the subsample of 107 in brackets: 34% (37%) presented with symptoms of anxiety, 32% (32%) with depressive symptomatology, 28% (33%) with relationship problems, 9% (9%) had suffered sexual abuse, and 7% (8%) had anger management problems. Other identified problems included difficulties with attention, loneliness, interpersonal relationships, past traumatic events, sexual functioning, and shyness.

Clients were treated by 36 different therapists who provided therapy to between 1 and 11 different participants. To determine if there was a problem of dependence in the data, a oneway ANOVA was conducted on the therapist rating of alliance measure. The ANOVA compared eight groups of therapists who had seen 1, 2, 3, 4, 5, 7, 8, and 11 different clients, respectively. Because two therapists were unique in the number of clients they saw (i.e., only one therapist saw seven clients and only one therapist saw 11 clients), therapists who saw seven or more clients were grouped together. This resulted in a sample of six groups of therapists. Results from this analysis were not significant at $p < .05$. To be thorough, the same analysis was conducted a second time, removing the two therapists who had been grouped together. Again, the findings were not significant at $p < .05$. This suggests that there were no significant differences in therapist alliance ratings among therapists who provided treatment to different numbers of client participants.

Procedure

This longitudinal study was conducted in conjunction with another study on the role of therapy-specific and contextual factors of premature termination (Best, 2003). Measures for both studies were administered at the same time to maximize efficiency and to minimize the time required by the participant to take part in the project. Data collection took 35 months.

For this study, client participants were assessed on two different occasions. The first time

followed the request for therapy (but prior to the intake session) to gather information regarding seeking therapy, stages of change, motivation for therapy, psychological distress, and demographics. This is referred to as Time 1. The second time occurred after the third therapy session, and measures of the therapeutic alliance and satisfaction with therapy were obtained from client participants. This is referred to as Time 2. In addition, the therapist's perspective regarding the therapeutic alliance was measured at Time 2.

Recruitment

When individuals call CPS to request psychological services, a 15 minute phone appointment is arranged for an intern to conduct a brief assessment of the person's presenting problem and objectives for services. The identification of potential participants by interns during this screening call followed the CPS protocol. It required less than one additional minute from interns during this contact to ask if the individual was interested in the study and to advise him/her that if s/he was, s/he would be contacted by a research assistant within the next week at a time indicated as convenient by the participant (see Appendix A). In this way, involvement in the study was completely independent from the client's request for psychological services from CPS, and was designed not to cause the individual who was requesting services any additional burden or undue stress. Any individuals seeking adult individual psychotherapy and who were fluent in English were eligible to participate.

A trained research assistant administered a standard recruitment script (see Appendix B) that provided detailed information about the study, the researchers, and the steps that were taken to protect participant confidentiality (i.e., access to raw data, its storage and labeling). The second time of assessment, which was also scripted (see Appendix C), required 10 minutes of clients'

time over the phone and therapists' time at their convenience.

Interviews

Time 1: Initial Interview

Following screening calls, interns advised the research assistant for the study about individuals interested in participating by placing a note in her mailbox at CPS (see Appendix D). The research assistant called the individual back within a week to explain the purpose of the study, obtain informed consent, advise the client of the honoraria for participation in the study, and, once the individual agreed to participate to administer questionnaires on seeking therapy (modified PSTQ; Saunders, 1993) (see Appendix E), client motivation for therapy (CMOTS; Pelletier et al., 1997) (see Appendix F), stages of change (SCS; McConaughy, DiClemente, Prochaska, & Velicer, 1989; McConaughy et al., 1983) (see Appendix G), and psychological distress (SCL-10; Nguyen et al., 1983) (see Appendix H), and to obtain demographic information (see Appendix I). If the client preferred, an arrangement was made to administer the measures at a later time. Consent was requested to both access the participant's CPS clinical file in order to obtain further demographic information and to contact the participant after his or her third therapy session. Participants were informed that an honorarium of \$15 would be provided for their participation at Time 1 and \$10 at Time 2. Participation in Time 1 required approximately 20 minutes.

A standard script (see Appendix B), approved by the Human Research Ethics Committee of the School of Psychology at the University of Ottawa, was used to ensure that all participants received an identical description of the study and that no details were inadvertently omitted. Once an individual agreed to participate, the research assistant completed a brief form (see Appendix D)

that was given to the receptionist to attach to the initial intake sheet when the case was assigned to a therapist to notify him or her of the client's participation in the study. For the purposes of the study, the participant was only identified by his or her client identification number.

Time 2: Post Third Session

All participants were eligible to participate in the second assessment phase. Because the third session of therapy had been found to be critical in the formation of the therapeutic alliance, participants were contacted by phone after their third session to complete measures. Measures examined the client's perception of the therapeutic alliance (WAI-C; Tracey & Kokotovic, 1989) (see Appendix J) and their satisfaction with services (CSQ-8; Nguyen et al., 1983) (see Appendix K). Participation in Time 2 took less than 10 minutes. If the client ended therapy before the third therapy session, Time 2 measures were not administered.

To ensure that data were collected from multiple perspectives, therapists were also asked to participate in the study after the third therapy session. Research assistants contacted the therapist, consent was obtained for participation in the study (see Appendix L), and a measure of alliance (WAI-T; Tracey & Kokotovic, 1989) (see Appendix M) was administered in a self-report questionnaire format. The completion of the measure took less than 10 minutes and was carried out at the convenience of the therapist before the fourth therapy session. Despite the lack of an honorarium for the therapists' participation, almost all therapists agreed to participate in this research. However, one therapist gave consent to participate but was reluctant about completing measures on time despite frequent reminders. When asked about the feasibility of continued involvement in the project, the therapist decided to continue.

To ensure that the timing of session 3 was communicated to the researchers, a form was

attached to the inside of each participant's CPS client file (see Appendix N). So as not to place all the responsibility on the therapists to notify the researchers regarding the timing of the second assessment, researchers also used a tracking sheet that was kept in each participant's file to monitor participant attendance at sessions and dates of assessment. Once the researcher was notified of the scheduling or the occurrence of session 3, she contacted the participant by phone to administer the measures or to arrange another more convenient time prior to session 4.

Administration of Measures

As indicated above, different methods were used to administer questionnaires to clients and therapists. At Time 1, the research assistant administered the questions to the client in a telephone interview. At Time 2, data were collected from the client in a telephone interview, and from the therapist using a self-report questionnaire. Client participants received an honorarium after each assessment which was mailed to their home address.

Standardized administration of the measures was ensured by clear written instructions that were provided at the top of each measure. The research assistant read the instructions to the participant verbatim. Consent forms were also read to the participant and provided to the therapist, and any questions or concerns were addressed prior to the administration of the measures.

Consent

At Time 1, as part of the telephone interview, the research assistant read the consent form which also outlined the purpose of the study (see Appendix B) to the potential client participant prior to administering questions relevant to the study. The research assistant asked for consent to answer questions over the phone and for permission to access their CPS client file for the purpose

of collecting demographic and service data only (e.g., number of sessions, scheduling of sessions).

At Time 2, participants were reminded of their previous consent to participate in the study and asked to confirm their current willingness to continue in the study (see Appendix C). They were also reminded that they would receive \$15 and \$10 participation honorarium for completing each phase of the study. At Time 2, therapists were asked to sign a consent form that outlined the purpose of the study and requested their consent to participate (see Appendix L) by answering a series of questions about their perceptions of the therapeutic alliance.

Issues of Confidentiality

Confidentiality was ensured to all participants in this study, clients and therapists alike. Participants were assigned a client identification number and were not identified by name. Therapists did not have access to any client data obtained for the sole purpose of this study. Therapists were also assigned an identification number to guarantee their anonymity. Therapists were assured that data collected would not be used for the purpose of evaluating their performance in the clinical training program. Access to CPS files was used strictly for the purposes of collecting demographic and assessment data not already acquired directly from the participant. All information gathered from participants was analyzed and reported in group format so the personal identity of individual clients and therapists was protected. Both therapists and clients were offered the opportunity to receive a summary of the results of this study once it was completed.

Measures

Demographic Data

With the consent of the client, information from the client's file (e.g., occupation) was

obtained once the file had been created after the intake. Additional demographic data such as age, gender, education level, employment status, annual income, cultural/ethnic background and source of referral were obtained at the Time 1 interview (see Appendix I).

Client Motivation for Therapy Scale

The Client Motivation for Therapy Scale (CMOTS; Pelletier et al., 1997) is a 24-item scale designed to measure clients' Intrinsic Motivation, four forms of regulation for Extrinsic Motivation (integrated, identified, introjected, and external regulation) and Amotivation for therapy (see Appendix F). The six subscales correspond to different forms of motivation identified by Deci and Ryan (1985) and fall along a self-determination continuum. The 6-factor structure of the scale has been supported and a satisfactory level of internal consistency for the subscales ranging from .70 to .92 was reported (Pelletier et al., 1997). In the current study, the alpha levels for the subscales ranged from .52 to .78, with alpha levels for three of the subscales below .70. The problem of low subscale reliability was not a significant problem because only the overall score was used in the primary analyses using this measure.

Items on the CMOTS are rated on a 7-point scale ranging from 1 (does not correspond at all) through 4 (corresponds moderately) to 7 (corresponds exactly). Sample items for each subscale include: "For the pleasure I experience when I feel completely absorbed in a therapy session" (Intrinsic Motivation; $\alpha = .92$; current study $\alpha = .73$), "Because through therapy I have come to see a way that I can continue to approach different aspects of my life" (Integrated Regulation; $\alpha = .91$; current study $\alpha = .74$), "Because I would like to make changes to my current situation" (Identified Regulation; $\alpha = .82$; current study $\alpha = .52$), "Because I would feel guilty if I were not doing anything about my problems" (Introjected Regulation; $\alpha = .75$; current study $\alpha =$

.67), “Because other people think that it’s a good idea for me to be in therapy” (External Regulation; $\alpha = .70$; current study $\alpha = .78$), and “Honestly, I really don’t understand what I can get from therapy” (Amotivation; $\alpha = .91$; current study $\alpha = .68$). Some items (i.e., 3, 4, 8, 9, 12, 13, 17, 18, 19, 23, and 24) were changed slightly to accommodate the administration of this measure prior to actually beginning therapy. Examples of such changes include changing “I experience” to “I will experience”. Also the instructions for the measure were changed from “Why are you presently involved in therapy?” to “...why are you currently interested in seeking therapy...”. This modification was also necessary because of the timing of the administration of this measure and may have implications for the validity of this scale.

Total scores for each subscale were summed to obtain two summary scores: internal motivation (intrinsic regulation + integrated regulation + identified regulation) and external motivation (introjected regulation + external regulation + amotivation). In this study, alpha coefficients for these summary scores were .84 and .74, respectively. A relative autonomy index score was also calculated for each participant using the following formula: $(3 \times \text{intrinsic regulation}) + (2 \times \text{integrated regulation}) + (1 \times \text{identified regulation}) + (-1 \times \text{introjected regulation}) + (-2 \times \text{external regulation}) + (-3 \times \text{amotivation})$. In this study, the internal consistency for this index was .82.

Stages of Change Scale

The University of Rhode Island Change Assessment Scale (URICA), also known as the Stages of Change Scale (SCS; McConaughy et al., 1989; McConaughy et al., 1983) is a 32-item scale which assesses clients’ readiness for involvement in change at the start of therapy (see Appendix G). It is comprised of four 8-item, internally consistent subscales which correspond

with the theoretical stages of change (Precontemplation, Contemplation, Action, and Maintenance) as defined by DiClemente and Prochaska (1982). The Preparation stage is not included because every item designed to measure this stage also had high loadings on the Contemplation and Action stage (McConaughy et al., 1983). Items are rated on a 5-point scale from 1 (strongly disagree) to 5 (strongly agree).

McConaughy and colleagues (1989) described the SCS and reported the following internal consistency reliability coefficients for a clinical sample for the subscales of the measure. In the Precontemplation stage, clients enter treatment with the wish to change others or the environment, or they feel coerced into coming in by the courts or significant others. The clients are not choosing to change themselves. A sample item from the precontemplation scale ($\alpha = .79$) is: "As far as I'm concerned, I don't have any problems that need changing". In the current study, alpha for this subscale was .63. Contemplators are aware of a distressing life situation and are interested in determining whether the problems are resolvable and whether therapy could be helpful to them. An example from the Contemplation subscale ($\alpha = .84$) is, "It might be worthwhile to work on my problem". In the current study, alpha for this subscale was .76. In the Action stage, clients have begun to work on changing and seek help in implementing action strategies. An example from the Action subscale ($\alpha = .84$) is: "I am really working hard to change". In the current study, alpha for this subscale was .68. Maintainers have already made changes in problem areas and seek treatment to consolidate previous gains. A sample item from the Maintenance subscale ($\alpha = .82$) is, "I'm here to prevent myself from having a relapse of my problems". In the current study, alpha for the subscale was .88. To facilitate the administration of the measure over the telephone prior to actually beginning therapy, slight modifications (changing

words such as “here” and “place” to “at the clinic”) were made to Items 3, 5, 6, 7, 11, 12, 16, 17, 21, 24, and 27. Finally, items on the Precontemplation subscale were reverse scored before being summed for scoring.

Little information is provided in the literature about the scoring of this measure. As previously discussed, Littell and Girvin (2002) suggested that stages of change is best measured by a continuous score for the full scale rather than with discrete categories or profiles. For this study, the measure was scored in two ways to parallel the scoring of the CMOTS. First, scores for each subscale were grouped into two summary scores indicating not ready to change (Precontemplation + Contemplation) and ready to change (Action + Maintenance). Alpha coefficients of .73 and .86, respectively, were found for these summary scores for this study. Second, the continuous score for the full scale was obtained with an equation similar to the one used to calculate the index score for the CMOTS, that is $(-2 \times \text{Precontemplation}) + (-1 \times \text{Contemplation}) + (1 \times \text{Action}) + (2 \times \text{Maintenance})$. In the current study, the alpha for the full scale was .85.

Process of Seeking Therapy Questionnaire

The PSTQ (Saunders, 1993) was developed to assess clients' experiences in seeking therapy. The measure includes a short paragraph describing the four-step conceptualization of the process of seeking therapy. This conceptualization involves realizing there is a problem, deciding therapy might help, deciding to seek therapy and, contacting the clinic. The PSTQ repeats three basic questions at each of the four steps concerning the difficulty of each step and how long it took them to achieve each step after achieving the previous one. Finally, participants are asked whether anyone helped them achieve the first three steps and, at the fourth step, whether anyone

referred them for psychological services. The PSTQ was developed for the purpose of measuring the process of seeking therapy. Despite the use of this measure in at least two studies (Saunders 1993; 1996), no psychometric information has been presented nor are the descriptions of the PSTQ consistent across these two studies. However, this measure does provide a framework and a format for gathering information about the process of seeking psychotherapy. As a result, a modified version of PSTQ was used as an alternative to the original scale.

For the purposes of this study, participants were asked how long their current problem has existed. Then two items were used to assess seeking therapy, one specific to time and the other to difficulty. The question regarding time was “Once you had decided to seek therapy, how long did it take you to contact the Centre for Psychological Services?” This item was rated on a 6-point scale from 1 (right away) to 6 (more than a year). The question about the difficulty involved in seeking services was “How difficult was this decision for you?” to be rated on a 6-point scale from 1 (extremely hard) to 6 (extremely easy) (see Appendix E).

Symptom Checklist-10

The Symptom Checklist-90 (SCL-90; Derogatis, Lipman, & Covi, 1973) is a 90-item self-report clinical rating scale which measures the symptomatic behaviour of psychiatric outpatients. The SCL-10 (Nguyen et al., 1983) was derived from the SCL-90 (see Appendix H). Based on a 5-factor solution of the SCL-90 by Hoffmann and Overall (1978), a single global score was deemed appropriate as a general measure of psychological distress. Items were selected from the depression (6 items), the somatization (2 items) and the phobic anxiety (2 items) subscales because they are the most interpretable and accounted for a large proportion of the variance in the SCL-90 scores. A sample item from the depression subscale is “How much were you distressed

by feeling lonely?'. A sample item from the somatization scale is "How much were you distressed by feeling weak in part of your body?". Finally, a sample item from the phobic anxiety scale is as follows, "How much were you distressed by feeling afraid in open spaces or on the street?". Items are rated on a 5-point scale ranging from 1 (not at all) to 4 (extremely). Scoring requires that five items be reversed and the results scored for a total score of psychological distress. Nguyen and colleagues (1983) found a high level of internal consistency ($\alpha = .88$) for the SCL-10. Rosen and colleagues (2000) reported a correlation of .92 between the SCL-10 and the SCL-90 indicating it is a good substitute for the longer measure. In the current study, the alpha value was .80. This scale was used for descriptive purposes only in order to allow comparison with other samples and ensure generalizability of the research findings.

Definition of Engagement in Treatment

As previously discussed, engagement was measured in two ways, first by attendance (or not) to the third session of therapy (behavioural engagement) and, second, with self-report measures of the alliance from both clients and therapists, and of client satisfaction (psychological engagement).

Working Alliance Inventory

The Working Alliance Inventory (WAI; Horvath & Greenberg, 1986, 1989) is a 36-item scale consisting of three, 12-item subscales: agreement on tasks, agreement on goals, and development of bonds. The purpose of the scale is to assess the strength and dimensions of the alliance as conceptualized by Bordin (1979; Horvath, 1994). The WAI was designed to assess the therapeutic relationship from multiple perspectives (i.e., client, therapist, and observer) in its early stage of development (between the third and fifth sessions). Items are rated on a 7-point scale.

The four highest-loading items from each subscale were selected to form a 12-item version of the WAI (Tracey & Kokotovic, 1989). Although the short form of the WAI appears to measure four alliance factors, the primary construct is the overall alliance score. Because the factor structure and internal consistency of the 12-item WAI are similar to that of the original measure, the short version is preferred for its length and ease of administration. Two versions of the shortened WAI is employed, the client form (WAI-C; $\alpha = .93$) (see Appendix J) and the therapist form (WAI-T; $\alpha = .87$) (see Appendix M) which was adapted by altering pronouns to fit the therapist's perspective (Horvath & Greenberg, 1986). In the current study, the alpha values were .91 for the client version and .91 for the therapist version. Both measures are rated on a 7-point scale from 1 (Does not correspond at all) to 7 (Corresponds exactly). Negative items (4 and 10) were reversed, and scores were summed to provide a rating of the alliance.

Client Satisfaction Questionnaire-8

The Client Satisfaction Questionnaire (CSQ; Larsen et al., 1979) is a 31-item measure covering several domains of client satisfaction. The Client Satisfaction Questionnaire-8 (CSQ-8; Nguyen et al., 1983; see Appendix K) is the 8-item short form of the CSQ. The purpose of the scale is to provide an efficient, sensitive, and reasonably comprehensive measure of client satisfaction with services received (Attkisson & Greenfield, 1994). The internal reliability for the CSQ-8 is good, ranging from .86 to .87 and construct and discriminant validity have been repeatedly demonstrated in the literature. The short form CSQ-8 assesses a single general satisfaction factor. Item responses of the CSQ-8 involve anchored Likert-type scales with four levels. Sample items include "How would you rate the quality of service you have received?" and "Have the services you received helped you to deal more effectively with your problems?". In the

current study, the alpha coefficient for the scale was .90. Scoring of the CSQ-8 involved the summation of the items with items 2, 4, 8 reverse scored.

RESULTS

Results of the preliminary analyses are presented first. Next, the results of the analyses for each hypothesis are described. Finally, research questions are presented and the results of those analyses are presented.

Seeking therapy was operationalized by two items from the PSTQ (i.e., “Once you decided to seek therapy, how long did it take you to contact the CPS?” and “How difficult was this decision for you?”). Engagement was operationalized in two different ways: first, behaviourally by attendance of at least three therapy sessions and, second, psychologically through measures obtained from the client (therapeutic alliance and satisfaction) and the therapist (therapeutic alliance). Hierarchical multiple regressions (HMR) were used to predict seeking and psychological engagement and sequential logistic regressions (SLR) were used to predict behavioural engagement. The results of these analyses are reported for each hypothesis. The overall findings of the study are summarized at the end of the section, and the results of the two different operationalizations of engagement will be described separately. The research questions designed to assess the predictive value of the individual subscales and summary scales of the stages of change and type of motivation using both HMR and SLR are presented and the results are discussed.

Preliminary Analyses

SPSS FREQUENCIES was used in the evaluation of statistical assumptions for the regression models (Tabachnick & Fidell, 2001). The first stage of the analysis involved screening the data for incomplete questionnaire responses and univariate outliers. In the majority of cases, there were no missing data. Sample item means were substituted for missing values in

questionnaires where missing data did not exceed 5 % of the items on one measure (Tabachnick & Fidell, 2001). Any missing data that exceeded this limit (i.e., two therapist participants' ratings of the therapeutic alliance) were not included in analyses for this reason (Tabachnick & Fidell, 2001).

In some cases, client participants who completed Time 1 measures did not attend any therapy sessions ($n = 37$). In other cases, participants attended the initial therapy session but left therapy prior to session 3 ($n = 7$). One client participant attended two therapy sessions but did not attend the third. None of these groups of clients were eligible to complete Time 2 measures. Finally, three clients did not provide information at Time 2 because either they were inadvertently not contacted, or when they were contacted, they indicated that they were no longer interested in the study. In summary, analyses performed using Time 1 variables alone (i.e., the seeking hypotheses and the behavioural engagement hypotheses) were conducted with a sample size of 155 participants. Analyses using both Time 1 and Time 2 variables (i.e., psychological engagement hypotheses) were conducted with a sample size of 107 participants, or approximately 69% of the total ($N = 155$) sample size.

The possible influence of univariate outliers (scores more than three standard deviations from the sample mean) on planned analyses was minimized by reducing 18 data points to three standard deviations from the mean (see Tabachnick & Fidell, 2001). Out of the 2491 data points which made up variables used in the analyses, values that were reduced represented less than 1% of the data set.

SPSS FREQUENCIES was used for the evaluation of normality. A range of transformations were applied to reduce skewness and improve the normality of the distributions. The types of

transformations applied to variables are reported in Table 4.

Pearson correlation analyses were conducted to examine associations among all the variables used in the study, including demographic (i.e., age, gender, and referral source) and contextual (i.e., time on the waiting list, problem duration and SCL-10) variables that were used as controls in the regression analyses. These results are reported in Tables 5 and 6, and include correlations of both transformed and untransformed data. When both variables of interest were transformed, the doubly transformed results are reported (i.e., PSTQa, CMOTS, CSS, and WAI-C). Correlations ranged from very low to moderate for the variables associated with the seeking hypotheses. For the engagement variables, correlations ranged from very low to high.

All planned analyses were performed on both transformed and non-transformed variables. For each analysis, there were differences in the results of the analyses for raw and transformed variables, therefore, a decision was made to use and report analyses using the more statistically-sound transformed measures. With the use of $p < .001$ criterion for Mahalanobis distance no multivariate outliers were kept in any of the HMR analyses (unless otherwise indicated). For the SLR analyses, using the SPSS casewise listing of residuals outside three standard deviations from the mean, no outliers were found.

Testing of Hypotheses

For the testing of the hypotheses, no adjustments were made to control for the possibility of Type I error due to multiple analyses. Because past research had failed to consistently identify factors that predict seeking or engaging, it was considered appropriate to maximize the chances of finding significant predictors of seeking and engaging in therapy by testing all hypotheses at a $p < .05$ level.

All the HMR tables which summarize analyses conducted to test each hypothesis show the R^2 , adjusted R^2 , changes in R^2 , and significance for changes in R^2 for each step in the analysis. The first columns for each HMR table show the unstandardized beta weight, the standard error of beta, and the standardized beta weight for the final equation. The order of entry of the variables was determined prior to the analysis. Consistent with the nature of the planned hypotheses, in each HMR the specific variables of interest were entered in subsequent steps once demographic (age, gender, referral source) and contextual variables (problem duration or time on the waiting list, psychological distress) were controlled for. All HMR tables are structured in the same manner.

All the SLR tables summarizing the statistical analyses performed to test each hypothesis show the Odds ratio and Wald statistic for each variable at each step of the analysis. The first two columns of each SLR table show the beta weight and standard error of beta for each variable. The order in which variables were entered was also planned prior to the analysis, including the entry of age, gender, referral source, psychological distress, and time on the waiting list as control variables in each analysis. All SLR tables are structured in the same manner.

Hypothesis 1

It was hypothesized that seeking therapy, operationalized by time and difficulty, would be predicted by stages of change, and by type of motivation, after the effects of the covariates (age, gender, referral source, psychological distress, and problem duration) were controlled. It was anticipated that less time and less difficulty in seeking therapy would be predicted by further progression within the stages of change in the direction of the maintenance stage and by progression towards the intrinsic end of the motivation continuum.

Pearson correlation coefficients were used in the preliminary analyses to determine the relation between the Hypothesis 1 variables. As shown in Table 5, the magnitude of correlation among the variables ranged between .01 - .31 (.01 - .19 for transformed variables), indicating very low to moderate correlations.

Four models were planned to test this hypothesis. Step 1 was common to each model and involved entering demographic (age, gender, referral source) and contextual (problem duration, psychological distress) variables in a block to control for their net effect on the predicted variable. Models 1 and 2 involved only one additional step: Step 2 involved entering either stages of change or type of motivation, respectively using a single continuous score for each measure. These models provided comparative information concerning the predictive value of each of the predictor variables separately after controlling for demographic and contextual variables. Models 3 and 4 each involved three steps. In Model 3, Step 2 involved entering stages of change and Step 3 type of motivation. In Model 4, Steps 2 and 3 were reversed. Models 3 and 4 were used to determine the predictive value of stages of change and type of motivation in combination after controlling for demographic and contextual variables.

Model 1: Stages of Change

In order to predict time and difficulty in seeking therapy, two HMR analyses were performed to determine the amount of variance that could be accounted for by stages of change after demographic and contextual variables were controlled for. Age, gender, referral source, problem duration, and psychological distress were entered as predictor variables on the first step, followed by the addition of stages of change on the second step.

The amount of variance in time and difficulty of seeking therapy accounted for by

demographic and contextual variables and stages of change is presented in Tables 7 and 8, respectively. The results indicated that demographic and contextual variables were able to significantly predict time but the addition of stages of change did not significantly increase R^2 when entered on the second step of the regression equation. As for difficulty, neither the control variables nor stages of change were significantly predictive. Therefore, only the control variables contributed in a significant way to the prediction of time in seeking psychotherapy and difficulty was not significantly predicted by any variables. However, common to both time and difficulty regression equations was the significant predictive ability of whether clients were self or other referred. That is, the more likely a client was referred to therapy by someone other than themselves, the longer it took for them to contact the CPS after deciding to seek therapy. With respect to difficulty, results indicated that when clients were self-referred, contacting the clinic was more difficult than when they were referred by someone else.

The hypothesis that stages of change would be predictive of seeking therapy (as measured by time and difficulty) after demographic and contextual variables were controlled for was not supported.

Model 2: Type of Motivation

Two HMR analyses were performed to determine the amount of variance that could be accounted for by type of motivation after demographic and contextual variables were controlled for in predicting time and difficulty involved in seeking therapy. After the control variables were entered as predictors on the first step, type of motivation was entered on the second step.

Tables 9 and 10 show the amount of variance in time and difficulty, respectively accounted for by demographic and contextual variables and type of motivation. Similar to the results for

Model 1, the demographic and contextual variables were significantly predictive of time required for seeking therapy but type of motivation did not significantly increase R^2 when entered on the second step of the regression equation. As for difficulty in seeking therapy, neither the control variables, with the exception of referral source, nor type of motivation were significantly predictive.

The hypothesis that type of motivation would be predictive of seeking therapy (as measured by time and difficulty) after demographic and contextual variables were controlled for was not supported.

Because of the results for Models 1 and 2 (i.e., neither stages of change nor type of motivation contributed to the prediction of the seeking therapy variables), the planned analyses for testing Models 3 and 4 were not conducted.

Consistent across all Models 1 and 2 of Hypothesis 1 was the significance of the covariates in predicting seeking therapy when it was defined by time. Also significantly predictive was the referral source (self or other) for therapy. However, the hypothesis for seeking therapy was not supported by either of these models.

Hypothesis 2

It was hypothesized that behavioural engagement in psychotherapy (measured by attendance/nonattendance of session 3) would be predicted by stages of change and by type of motivation once covariates (age, gender, referral source, psychological distress, time on waiting list) were accounted for. That is, attendance until at least session 3 would be predicted by further progression within the stages of change in the direction of the maintenance stage and by progression towards the intrinsic end of the motivation continuum.

In order to predict engagement in therapy, as measured by whether clients attended session 3 of therapy or not, SLR analyses were performed. Four models, similar to those described for Hypothesis 1, were used to test this hypothesis. Step 1 was common to each model and involved entering demographic (age, gender, referral source) and contextual (time on the waiting list, psychological distress) variables in a block to control for their net effect on the predicted variable. Models 1 and 2 involved only one additional step: Step 2 involved entering either stages of change or type of motivation, respectively using a single continuous score for each measure. These models provided comparative information concerning the predictive value of each of the predictor variables separately after controlling for demographic and contextual variables. Models 3 and 4 each involved three steps. In Model 3, Step 2 involved entering stages of change and Step 3 type of motivation. In Model 4, Steps 2 and 3 were reversed. Models 3 and 4 were used to determine the predictive value of stages of change and type of motivation in combination after controlling for demographic and contextual variables.

Model 1: Stages of Change

There was poor discrimination between groups based on age, gender, referral source, time on the waiting list, and psychological distress, $\chi^2(5, 155) = 7.27$, ns. Adding the final predictor, stages of change, did not statistically improve the predictive ability of the model, $\chi^2(6, 155) = 6.74$, ns, Nagelkerke $\Delta R^2 = .26$, indicating that the predictors, as a set, did not distinguish between clients who attended session 3 of therapy and those who did not. The overall prediction of success was 77%, or moderate. Prediction success was good (93%) for those who attended session 3 and less than chance (42%) for those who did not.

Table 11 shows regression coefficients, Wald statistics, and odds ratios for each of the

predictors. According to the Wald criterion, only time on the waiting list reliably predicted whether a client would attend therapy until the third session or not. That is, the longer a client was on the waiting list, the less likely s/he is to attend at least three sessions of therapy.

Model 2: Type of Motivation

The results for the control variable predictors were identical to Model 1 because the same covariates were entered as a block. Similarly, adding the final predictor, type of motivation, did not statistically improve the predictive ability of the model, $\chi^2(6, 155) = 7.40$, ns, Nagelkerke $\Delta R^2 = .26$, indicating that this set of predictors was also unable to distinguish between clients who attended session 3 of therapy and those who did not. Overall prediction of success was 77%, or moderate. Prediction success was good (94%) for those who attended session 3 and less than chance (40%) for those who did not. See Table 12 for regression coefficients, Wald statistics, and odds ratios for each of the predictors.

Model 3: Stages of Change and Type of Motivation

This model added a third step to Model 1. Not surprisingly, adding type of motivation after the entry of stages of change did not statistically improve the predictive ability of the model, $\chi^2(7, 155) = 10.08$, ns, Nagelkerke $\Delta R^2 = .26$, indicating that this set of predictors was also unable to distinguish between clients who attended session 3 of therapy and those who did not. Overall prediction of success remained unchanged at 77%. Prediction success was good (93%) for those who attended session 3 and less than chance (42%) for those who did not.

Model 4: Type of Motivation and Stages of Change

This models added a third step to Model 2. Adding stages of change after the type of motivation did not improve on previous findings, $\chi^2(7, 155) = 10.08$, ns, Nagelkerke $\Delta R^2 = .26$,

indicating once again that this set of predictors could not distinguish between these types of clients. Overall prediction of success remained unchanged at 77%. Prediction success was good (93%) for those who attended session 3 and less than chance (42%) for those who did not.

All four models for Hypothesis 2 were unable to predict engagement when it was defined behaviourally. The only variable that was statistically significant in this set of analyses was time on the waiting list. The remaining control variables did not provide any increase in predictive ability and the models of change and motivation were unable to demonstrate any incremental validity.

Hypothesis 3

It was hypothesized that psychological engagement in therapy, as measured by the client and therapist rated alliance and client satisfaction with services, would be predicted by stages of change and by type of motivation, after the effects of the covariates (age, gender, referral source, time on the waiting list, and psychological distress) were controlled. That is, higher alliance ratings by client and therapist, and higher client satisfaction would be predicted by further progression within the stages of change in the direction of the maintenance stage and by progression towards the intrinsic end of the motivation continuum. To determine the relation among these variables, Pearson correlation coefficients were calculated. As shown in Table 6, the magnitude of correlations among the variables involved in the hypothesis of interest ranged between .01 and .81 (.01 to .78 for transformed variables), indicating a range of very low to high correlations. More specifically, the three measures of engagement were significantly correlated, ranging from .44 to .81 (.40 to .78 for transformed variables).

Four models were tested using the order of entry of variables described for Hypothesis 2. Each model controlled for the same demographic (age, gender, referral source) and contextual

(time on the waiting list, psychological distress) variables. Model 1 tested the predictive value of stages of change. Model 2 tested the predictive value of type of motivation. Model 3 examined the value in combining stages of change and type of motivation, respectively. Finally, Model 4 reversed the sequence of entry, with type of motivation entered first, followed by stages of change. HMR was used to test each model in Hypothesis 3 and was conducted three times to independently assess each psychological measure of engagement, a) client rating of the alliance, b) therapist rating of the alliance, c) client rating of satisfaction.

Model 1: Stages of Change

In order to predict engagement in therapy, measured in three ways, three HMR analyses were performed to determine the amount of variance that could be accounted for by stages of change after demographic and contextual variables were controlled for. Age, gender, referral source, time on the waiting list, and psychological distress were entered as predictor variables on the first step, followed by the addition of stages of change on the second step. This was conducted with client rated alliance, therapist rated alliance, and client rated satisfaction.

Table 13 shows the amount of variance in client rated alliance accounted for by demographic and contextual variables and stages of change. Table 14 shows the amount of variance in therapist rated alliance accounted for by demographic and contextual variables and stages of change. Table 15 shows the amount of variance in client rated satisfaction accounted for by demographic and contextual variables and stages of change. Stages of change did not significantly increase R^2 when entered on the second step of the regression equation for any of the measures of engagement once the variance from the control variables was removed. In fact, none of variables contributed in a significant way to the prediction of engagement in any of these

analyses.

The hypothesis that stages of change would be predictive of engagement in therapy (as measured by client or therapist rated alliance, or client rated satisfaction) after demographic and contextual variables were controlled for was not supported.

Model 2: Type of Motivation

Three HMR analyses were performed to determine the amount of variance that could be accounted for by type of motivation, after demographic and contextual variables were controlled, in predicting psychological engagement. After the control variables were entered as predictors on the first step, type of motivation was entered on the second step.

Table 16 shows the amount of variance in client rated alliance accounted for by demographic and contextual variables and type of motivation. Type of motivation significantly increased the R^2 when entered on the second step of the regression equation once the variance from the control variables was removed, however in this analysis, none of the control variables contributed significantly to prediction of engagement. This indicates that type of motivation contributed significantly to the prediction of engagement as measured by client rated alliance. The hypothesis that type of motivation, after controlling for demographic and contextual variables, would help predict engagement, as measured by client rated alliance, therefore was supported.

Table 17 shows the amount of variance in therapist rated alliance accounted for by demographic and contextual variables and type of motivation. Table 18 shows the amount of variance in client rated satisfaction accounted for by demographic and contextual variables and type of motivation. Type of motivation did not significantly increase R^2 when entered on the second step of the regression equation once the variance from control variables was removed for

either therapist rated alliance or client rated satisfaction. Therefore, type of motivation did not contribute significantly to the prediction of engagement as measured by therapist rated alliance or client rated satisfaction.

The hypothesis that type of motivation would predict engagement in therapy, after demographic and contextual variables were controlled was supported only when it was operationalized by client rated alliance.

Model 3: Stages of Change and Type of Motivation

To examine the incremental validity of these models, HMR analyses were conducted to determine whether adding type of motivation after stages of change to the regression equation would offer any further predictive ability of psychological engagement in therapy. Table 19 shows the amount of variance in client rated alliance accounted for by demographic and contextual variables, stages of change and type of motivation. As reported in Model 2, type of motivation significantly increased the R^2 when entered on the third step of the regression equation once the variance from the control variables and the stages of change were removed, indicating its ability to significantly account for variance beyond the contribution of stages of change.

Tables 20 and 21 show the amount of variance in therapist rated alliance and client rated satisfaction, respectively, accounted for by the control variables, followed by the stages of change and type of motivation. Neither of these analyses produced significant results.

Model 4: Type of Motivation and Stages of Change

Again, to examine the incremental validity, an additional three HMR regression analyses were conducted. For these analyses, type of motivation was entered into the regression equation after the control variables but before stages of change. This was to determine whether stages of

change offered any further predictive ability of psychological engagement in therapy after type of motivation was accounted for. Table 22 shows the amount of variance in client rated alliance accounted for by the control variables followed by type of motivation and then, stages of change. Only type of motivation was significant in its statistical contribution to the regression equation. Otherwise the equation was non-significant.

Tables 23 and 24 indicate the amount of variance in therapist rated alliance and client rated satisfaction, respectively, accounted for by the control variables, followed by the type of motivation and stages of change. Neither of these analyses produced significant results.

Consistent across all four models of Hypothesis 3 was the significance of type of motivation in predicting psychological engagement in therapy when it was defined by client rated alliance. In terms of incremental validity, these findings indicate that the contribution of type of motivation is significant, and in addition to the contribution from stages of change.

Summary

Generally, stages of change and type of motivation performed poorly as predictors of the seeking and engaging constructs of psychotherapy. The analyses for the seeking hypothesis revealed that only the control variables were significantly predictive of time involved in seeking therapy. In fact, referral source alone was significantly predictive of time required in seeking therapy indicating that the more likely a client was referred to therapy by someone other than themselves, the longer it took for them to contact the CPS after deciding to seek therapy. However, with respect to difficulty, results indicated that when clients were self-referred contacting the clinic was more difficult than when they were referred by someone else. In terms of predicting engagement in therapy whether it was defined behaviourally or psychologically,

statistically significant results were limited to motivation being able to predict engagement when it was defined by client rated alliance. Otherwise, the only significant result (from the SLR analyses) indicated that the longer clients are on the waiting list, the less likely they were to attend the third therapy session.

Research Questions

The total index scores for the measures of stages of change and type of motivation were used to test the hypotheses in this study. However, two alternate methods of scoring were discussed in the presentation of these measures. These research questions used HMR and SLR to determine the predictive value for each subscale and summary scale of stages of change and type of motivation. This involved conducting analyses using a continuous score for each subscale of each measure as well as grouping these subscales to create summary scales (i.e., ready to change vs. not ready to change and internally vs. externally motivated). These analyses were conducted to provide more detailed information about the predictive ability of specific aspects of each model.

Preliminary analyses were conducted on all the subscales and summary scales in the same fashion as described for variables involved in the hypothesis testing. Missing data and univariate outliers were addressed and subscales and summary scales that did not satisfy the assumption of normality were transformed. Table 25 reports the types of transformations applied to these variables. Pearson correlation analyses were also conducted for both transformed and untransformed data. Table 26 presents correlations between three subscales and two summary scales of stages of change and type of motivation measures that were significantly predictive of the measures of engagement. Correlations were low ranging from .16 to .26 (.20 to .28 for transformed variables).

Analyses for the research questions involved numerous individual analyses conducted on both raw and transformed data. A total of 9 analyses were conducted for the stages of change scales and 14 for the type of motivation scales for each of Models 1 and 2 of Hypothesis 1, Hypothesis 2, and Hypothesis 3. This resulted in a total of 69 analyses for Research Question 1, 27 analyses for Research Question 2 and 115 analyses for Research Question 3. To balance the significance of these results with the number of analyses performed, a correction for Type I error was required. The Bonferroni correction suggests that $p < .05$ be divided by the number of analyses conducted (Tabachnick & Fidell, 2001). This would require using $p < .005$ ($.05/9$) for stages of change analyses and $p < .003$ ($.05/14$) for type of motivation analyses. Because these research questions are exploratory, it was decided that using the Bonferroni adjustment for Type I error was too stringent. A compromise was reached when $p < .01$ was chosen as a balance between providing an adjustment for multiple analyses without making it impossible to find anything statistically significant. All analyses were conducted on transformed and untransformed data and results from the transformed data are presented below. When both variables of interest were transformed, the doubly transformed results are reported (see Tables 4 and 25).

Research Question 1

Research Question 1 addressed whether the subscales or summary scales of stages of change and type of motivation would be able to predict seeking therapy, as measured by the time and difficulty involved in contacting the CPS after deciding to seek therapy, after the effects of the covariates (age, gender, referral source, problem duration, and psychological distress) were controlled.

Step 1 was common to both models and involved entering demographic (age, gender,

referral source) and contextual (problem duration, psychological distress) variables in a block to control for their net effect on the predicted variable. Step 2 involved entering either stages of change or type of motivation subscales or summary scales in independent analyses. These models provided comparative information concerning the predictive value of each of the predicted variables separately after controlling for demographic and contextual variables. Results from these analyses revealed that the subscales and summary scales of stages of change and type of motivation were unable to significantly predict seeking therapy, as measured by time or difficulty.

Research Question 2

To examine the value of the subscales and summary scales of stages of change and type of motivation in predicting behavioural engagement in therapy, as measured by attendance of the third therapy session, SLR was used. Analyses identical to those conducted in Hypothesis 2 were conducted using individual subscales and summary scales instead of total scale scores.

Step 1 was common to both models and involved entering demographic (age, gender, referral source) and contextual (time on the waiting list, psychological distress) variables in a block to control for their net effect on the predicted variable. Step 2 involved entering either stages of change or type of motivation subscales or summary scales in independent analyses. These models provided comparative information concerning the predictive value of each of the predicted variables separately after controlling for demographic and contextual variables. Results from these analyses revealed that the subscales and summary scales of stages of change and type of motivation were unable to significantly predict behavioural engagement, as measured by the attendance or not to session 3 of therapy.

Research Question 3

Research Question 3 was conducted to examine whether the subscales or summary scales of stages of change and type of motivation would be able to predict psychological engagement in therapy, as measured by the client and therapist rated alliance and client satisfaction with services, after the effects of the covariates (age, gender, referral source, time of the waiting list, and psychological distress) were controlled. As described above, Model 1 and Model 2 from Hypothesis 3 were re-analyzed using the subscales and summary scales.

Results indicated that for stages of change, only the action subscale and the ready for change summary scale were significantly predictive of engagement as measured by client rated alliance at $p < .01$ (see Tables 27 and 28). All the other subscales and summary scales were unable to significantly predict engagement.

As for type of motivation, only two subscales (intrinsic motivation subscale, identified regulation subscale) and one summary scale (internal motivation summary scale) were able to significantly predict ($p < .01$) engagement when it was operationalized by client rated alliance, (see Tables 29, 30, and 31). When engagement was measured by client rated satisfaction, the intrinsic motivation subscale was the only type of motivation that was significantly predictive, ($p < .01$; see Table 32). All the other subscales and summary scales were unable to significantly predict psychological engagement in therapy.

A final way of scoring and analyzing the stages of change subscales was considered because some researchers have classified participants into a single stage of the model using a total score from 8 to 40 for each subscale to determine on which stage their score is the highest (e.g., Prochaska et al., 1992). After careful consideration, it was decided not to use this type of scoring

in this study. This decision was based on a personal communication from the HABITS (Health and Addictive Behaviours: Investigating Transtheoretical Solutions) laboratory of Dr. Carlo DiClemente at the University of Maryland, Baltimore County that clearly stated that classifying participants is a “practice [that] is not well justified from a measurement point of view and should be discouraged” (A. Marinilli, October 15, 1999).

Summary of All Findings

The analyses of the hypotheses revealed that type of motivation was significantly predictive of engagement only when it was measured by client rated alliance. Type of motivation did not predict seeking therapy as measured by time or difficulty or engagement as measured by therapist rated alliance, client rated satisfaction or attendance to the third session of therapy. Neither seeking, nor engagement was significantly predicted by stages of change, regardless of how they were operationalized.

The analyses of the research questions indicated that most subscales and summary scales of stages of change and type of motivation were unable to predict seeking therapy defined by time or difficulty, or engagement whether it was operationalized behaviourally or psychologically. However, for stages of change, the action subscale and the ready for change summary scale were able to significantly predict engagement when it was measured by client rated alliance. As for type of motivation, the intrinsic and identified subscales, and the internal motivation summary scale were significantly predictive of engagement as measured by client rated alliance. In both of these cases, the subscales mentioned are part of their respective summary scales. Also, the intrinsic subscale was significantly predictive of engagement when it was operationalized by client rated satisfaction.

DISCUSSION

This study was designed to determine the predictive ability of the Self-Determination Model and the Transtheoretical Model of Change with respect to seeking and engaging in psychotherapy. Both models are empirically based and have been researched with a range of health-related behaviours. Treatment for changing behaviours that are compromising to healthy living (e.g., smoking cessation) can be planned, implemented and assessed in a relatively straightforward way. For example, smoking cessation requires an individual to stop smoking which can be measured by the number of cigarettes consumed daily. In contrast, to understand the processes involved in psychotherapy, less is known with respect to these models. These processes are more abstract and the difficulties in examining them begin with a lack of clear definitions and operationalizations. Initial investigations of seeking and engaging in therapy have been difficult to interpret due to a variety of conceptual and methodological issues. The primary purpose of this study was to clearly operationalize and accurately measure the constructs of seeking and engaging in therapy and then to predict them with these models of change and motivation. The secondary objective was to determine the incremental validity of these models.

The findings of this study will be presented and discussed. To avoid repetition, each hypothesis will be discussed with its corresponding research question. This will be followed by an examination of the methodology of this study, in terms of strengths and weaknesses, as it is relevant to the interpretations and generalizations that can be made about its findings. The final section will include a discussion of the implications of this research for future research and for clinical practice.

Summary and Discussion of Findings

Seeking Psychotherapy

It was hypothesized that seeking therapy, would be predicted by stages of change and by type of motivation, after the effects of the covariates (age, gender, referral source, psychological distress, and problem duration) were controlled. The corresponding research question was planned to examine the value of the subscales and summary scales of the stages of change and type of motivation in predicting seeking therapy. Results indicated that stages of change and type of motivation were not significantly predictive of either time or difficulty involved in seeking therapy. The same was true for their respective subscales and summary scales. However, the control variables were found to be significantly predictive only of the time involved in seeking therapy. More specifically, self-referring to therapy was significantly predictive of decreased time required to contact the Centre after deciding to seek therapy, and increased difficulty when compared to those who were referred by someone else.

Referral source has not been widely investigated in previous research. A recent study found that individuals who were self-referred for psychological services to a community based mental health clinic were more likely to attend the intake appointment than those who were referred by others (Sparks, Daniels, & Johnson, 2003). In the present study, referral source was not significantly predictive of engaging in therapy, but this was a measure of attending at least three sessions of therapy rather than only the intake. Regardless of this difference, the present results could be interpreted as consistent with those of Sparks and colleagues' (2003). That is, less time required to contact the clinic, increased difficulty and increased likelihood of attending the intake, were all significantly predicted by self-referral and might be representative of the

client's determination to obtain services. The increased difficulty may be because self-referred clients are more thoughtful and understanding of the implications of their decisions to enter therapy.

These results are also consistent with conclusions that many referrals from a family physician may be inappropriate (Spector, 1988) and increase the rates of pre-intake attrition (Frace, Weddington, & Houpt, 1978). This might explain why individuals take more time (i.e., no sense of urgency for help) but experience less difficulty (i.e., not invested in obtaining therapy) in seeking services if they do not believe therapy is needed but it has been recommended to them. Given that referrals by physicians have been found to be problematic, this area warrants further investigation to determine what might improve these recommendations for psychological services. This might include educating physicians about the function and value of psychotherapy and for whom these services are known to be optimally beneficial.

The findings from the current study with respect to referral source are important and indicate a significant contribution to the literature for a number of reasons. First, this is a variable that has not been greatly investigated and to date, has not been examined with respect to seeking therapy. Second, it is a construct that is straightforward to assess (i.e., by asking clients) and has implications that are highly relevant to clinical practice. Third, these findings reinforce the need for future research that continues to investigate this variable with a focus on better defining "other-referral" which is a category that often includes, but is not exclusive to physicians, family members, and friends.

Existing research findings with respect to the predictive ability of demographic and contextual variables and seeking therapy are varied. The present research found that only when

the control variables (i.e., age, gender, referral source, problem duration, and psychological distress) were entered together could they significantly predict seeking behaviour as defined by time. This was inconsistent with previous research that found age and gender, as individual predictors, to be significantly related to seeking therapy (Deane & Chamberlain, 1994). With respect to psychological distress the current findings were consistent with one study (Deane & Todd, 1996) but not with others (e.g., Deane & Chamberlain, 1994; Ingham & Miller, 1986; Kushner & Sher, 1989). The contradictory findings with respect to demographic variables and seeking therapy, including those from the present study, may be a reflection of the range in definition and measurement of seeking therapy and will be discussed further below.

Seeking therapy has been investigated with a range of demographic variables allowing for a profile of the typical client to be established (e.g., Kelly & Achter, 1995; Kushner & Sher, 1989, 1991). For example, being older than 20 years of age and being female increases the likelihood of seeking therapy (e.g., Deane & Chamberlain, 1994). Although this provides some information about who seeks therapy, these studies did not attempt to predict why or when people seek psychological services. A progression toward a better understanding of seeking therapy involved the examination of a range of psychological variables some of which were found to be predictive of this construct (e.g., Deane & Todd, 1996; Halgin et al., 1987; Rickwood & Braithwaite, 1994; Sherbourne, 1988). However, to date, no attempt has been made to predict seeking therapy using the theoretical models of motivation and change.

This study found that neither model of change nor of motivation significantly predicted seeking therapy regardless of whether it was defined by time or difficulty. The lack of significant findings could be due to range of reasons. Seeking is a difficult construct to define and measure

because it is unclear whether intention to seek psychological services and the actual seeking of services should be considered as separate constructs. The choice between investigating intention to seek rather than seeking behaviour has implications for the type of sample used (i.e., general population or therapy clients) and how seeking is measured (i.e., concurrently or retrospectively). Retrospective assessment is not necessarily problematic (e.g., Gutek, 1978; Kreulen, Stommel, Gutek, Burns, & Braden, 2002) but requires that memory bias be taken into consideration. If these variables are examined separately, it is difficult to know how they relate to each other because assessing intention to seek does not provide information about who eventually seeks therapy unless the study is longitudinal. However, if seeking and intention to seek are investigated as one construct, important information might be lost.

Finally, there are no consistent parameters around the construct of seeking therapy. This applies, regardless of whether the process of seeking, (i.e., wide range of behaviours that have yet to be consistently defined) or the time frame of seeking (i.e., standard markers of the beginning and ending of the process) is being considered. To the extent that a clear and concise definition of the construct of seeking therapy is absent, the development of valid and reliable measure is unlikely.

Summary

Despite the inability of the models of motivation and change to significantly predict seeking therapy, important findings with respect to the predictive ability of the referral source were discovered. In addition, findings from this study support the notion that seeking therapy is a difficult construct to define and measure. More specifically, it raises serious concerns about Saunders' conceptualization and measurement of this construct. The findings from this research

support the need for further investigation of seeking therapy that is valid, reliable, and based on an accurate and standard definition so as to facilitate the interpretation of its results.

Behavioural Engagement in Psychotherapy

It was hypothesized that engagement in psychotherapy (measured by attendance/nonattendance of session 3) would be predicted by stages of change and by type of motivation once covariates (age, gender, referral source, psychological distress, and time on the waiting list) were controlled. The corresponding set of research questions was planned to examine the value of the subscales and summary scales of the stages of change and type of motivation in predicting behavioural engagement. Neither stages of change nor type of motivation, nor any of their subscales or summary scales, were able to predict engagement when it was defined behaviourally. The only variable that was statistically significant in these analyses was time spent on the waiting list. That is, the longer client participants were on the waiting list, the less likely they were to attend any sessions of therapy.

Engagement, like seeking, is a therapeutic construct that is inconsistently defined in the literature. References made about engagement are further complicated by the range of terms used to infer it. It is difficult to reconcile the relation among concepts such as engagement, continuation, therapy attendance, and other potentially equal but opposite concepts such as dropout, premature termination, and non-engagement, each of which is defined in a range of ways. Most obvious is the lack of consistency within each of these concepts' respective definitions which is complicated further by the differences between them. For example, the definition of dropout or premature termination from services ranges from attending at least one therapy session (e.g., Smith et al., 1995) to at least 13 therapy sessions (Keijsers, Kampman, & Hoogduin, 2001).

In some studies, premature termination is also based on the type of agreement regarding termination by the client and the therapist, that is, whether it is a unilateral or mutual decision (e.g., Brogan et al., 1999; Derisley & Reynolds, 2000). Finally, very few studies actually use the term engagement. This range of definitions has significant negative implications for the interpretation of existing research findings.

Motivation

Results from the current study indicate that type of motivation was unable to significantly predict behavioural engagement in therapy. Unfortunately, there is no existing literature to which these results can be directly compared. However, previous research that has examined related constructs can be divided into two groups and warrant discussion here. The first group of studies includes the examination of client attendance in treatment programs to change specific health-related behaviours (i.e., alcohol treatment, Ryan et al., 1995; weight loss program, Williams et al., 1996) and involve the Model of Self-Determination. However, these studies differ from the current study in terms of the predicted construct (i.e., attendance vs. engagement) and type of treatment (i.e., treatment for specific health-related behaviours vs. psychotherapy) investigated. The second group of three studies examines treatment motivation and premature termination/engagement (Keijsers et al., 2001; Miller & Prinz, 2003; Simpson & Joe, 1993). Only one of these studies is specific to psychotherapy and none of them involve the Self-Determination Model in defining motivation. In addition, these studies differ in terms of the participants' reasons for seeking services (i.e., panic disorder, childhood conduct problems, and drug abuse), their definitions of dropout (i.e., between the first and thirteenth session; parent indication that the family was terminating; less than 60 days of treatment), and their conceptualization and

measurement of motivation (i.e., Nijmegen Motivation List-2; two open-ended questions categorized as external or internal locus-of-control; Desire for Help Scale). Furthermore, the latter group of studies are different from the current one which involves psychotherapy clients, behavioural engagement defined by at least three therapy sessions, and the CMOTS to assess client motivation for therapy.

Despite their differences, the above mentioned studies all produced evidence in support of the predictive ability of motivation with respect to dropout/engagement. These findings are contradictory to those of the current study. However, these findings need to be interpreted within the context of their variability. That is, when research definitions, conceptualizations and measurements are so diverse, it is difficult to know how much can be inferred about the similarity of their findings. These studies and their findings demonstrate the range in conceptualization and measurement of treatment motivation and dropout/engagement and emphasize the need for a conceptually-sound theory of treatment motivation (Drieschner et al., 2004).

Results from the present study indicate that the Self-Determination model of motivation was unable to predict whether clients would attend at least three sessions of therapy. This may be because motivation is a fluid construct that changes based on a range of factors (e.g., practical issues, feelings about therapy). Based on what is known about the ability of early alliance assessment to predict later elements of therapy, it is also possible that clients need to meet with their therapist and initiate the therapeutic relationship before their motivation for therapy can be predictive of future aspects of the therapy process. Future research might involve frequent measurement of treatment motivation beginning before therapy and then at regular intervals to help unravel the potentially changing relationship between motivation and behavioural

engagement.

Stages of Change

Several studies have reported on the predictive ability of the stages of change model. However, these findings must also be interpreted with caution because none of them have used the continuous scoring approach to the SCS. Variability in the scoring techniques between studies makes it difficult to compare existing research findings with the current ones. Although continuous scoring is recommended, a strength of the current study is the additional analyses of the research questions which involved the use of individual subscales and summary scales to score the SCS. These less recommended, but more commonly used procedures more closely resemble the classifying or profile scoring used by all the existing studies that examined premature termination and dropout.

The most common of the existing findings is that individuals who enter therapy in the precontemplation stage are more likely to terminate therapy prematurely (Brogan et al., 1999; Smith et al., 1995). However, these must be considered within the context of other research findings that are inconsistent and even contradictory. For example, premature termination has also been predicted by a combination of high levels of initial symptom severity and low contemplation scores (Derisley & Reynolds, 2000). Appropriate termination has been predicted by both the action stage (Brogan et al., 1999; Medeiros & Prochaska, 1989), and a combination of the action and preparation stages (Smith et al., 1995). Continuation (or engagement) in therapy has been predicted by the contemplation stage (Derisley & Reynolds, 2000) but also by a combination of high scores on both contemplation and maintenance stages (Brogan et al., 1999), and action and preparation stages (Smith et al., 1995).

The findings from the present study are inconsistent with these above mentioned results because they did not identify any significant predictive relationships between stages of change (scored continuously for the whole scale, summary scales, or subscales) and engagement defined behaviourally. However, these results are similar to the findings that indicate that the contemplation stage was inconsistently associated with termination (Smith et al., 1995), and the action stage was not predictive of attendance (Derisley & Reynolds, 2000).

Two review articles highlight the contradictions that plague the stages of change literature and provide hypotheses to explain these discrepancies (Littell & Girvin, 2002; Rosen, 2000). A meta-analysis of 47 cross-sectional studies concluded that these inconsistencies can be attributed to methodological weaknesses which include variability in stage assignment, difficulty defining criteria for the action stage, small sample sizes, and studies involving people who have never received psychological services (Rosen, 2000). Concerns regarding the validity of this model were raised by Littell and Girvin (2002). After their review of 87 studies on the stages of change across a range of behaviours, these authors challenged the practical utility of the model largely due to assessment issues (i.e., the measure of stages of change and the inconsistency of its scoring). This is depicted in ongoing research by the continued use of classification systems rather than continuous scoring techniques despite recommendations from the authors of the scale (A. Marinilli, personal communication, October 15, 1999). The classification systems are problematic because they impair the interpretation and comparison of research findings between studies and because different classification systems produce different responses. In addition to the different scoring approaches, variability within the existing studies can also be attributed to the assessment of the stages of change after therapy had already begun (Brogan et al., 1999; Smith et al., 1995),

and the use of unstandardized definitions of premature termination and drop out. Only in two studies were the definitions of premature termination similar to the one used in this study (Derisley & Reynolds, 2000; Smith et al., 1995).

Littell and Girvin (2002) also found that the stages of change are not discrete and the categories can be considered somewhat arbitrary. This is consistent with research that has questioned the model's direction of proposed sequence of change (e.g., cognitive change proceeds behavioural change or vice versa; Velicer, Rossi, Prochaska, & DiClemente, 1996). They also reported many nonsignificant findings between stages of change and treatment attendance, duration, and program completion that further call into question the predictive validity of the model. Their findings are consistent with the results of the current study which also identifies a lack of significant relationships between the stages of change and engagement in therapy.

Finally, Littell and Girvin (2002) concluded, based on their extensive literature review, that there is no clear and consistent evidence to support the predictive validity of the stages of change model. These concerns regarding the stages of change were unknown at the development of the current study. Regardless, in the current study careful consideration was taken with respect to the scoring of the SCS, using the recommended continuous approach. Behavioural engagement in psychotherapy was clearly defined based on existing research parameters. The use of this type of scoring to examine engagement makes this study unique and important in its contribution to this body of knowledge. This is because despite addressing the major concerns regarding scoring and the discrepancies in definitions, the findings from this study are consistent with the conclusions of Littell and Girvin (2002), that the SCS seems to be limited in its predictive ability

of therapeutic engagement. This is an important finding, given that the Transtheoretical Model of Change has been accepted and widely used in the field of behaviour change. Evidence that suggests the contrary must be reported so that researchers and practitioners alike are informed by empirical rather than anecdotal findings.

Waiting List

Twenty-four percent of the sample for this study called to request services, agreed to participate in the study, completed study measures, but did not attend any therapy sessions. A further five participants (3% of the full sample) attended either one or two sessions of therapy but did not attend the third. Reports in the literature of non-attendance of therapy range from 19.7% to 52.6% (Morton, 1995; Loumidis & Shropshire, 1997, respectively). The subgroup of participants in this study differed from participants who attended at least one therapy session on only one variable: time spent on the waiting list. This control variable was the only significant predictor of behavioural engagement. That is, the longer participants spent on the waiting list, the less likely they were to attend even one session of therapy. This is consistent with some reports in the literature (e.g., Carpenter, Morrow, Del Gaudio, & Ritzler, 1981; Loumidis & Shropshire, 1997; Morton, 1995) but contradicts others (e.g., May, 1991; Sparks et al., 2003). Loumidis and Shropshire (1997) reported that clients who never attended therapy had to wait an average of six weeks (42 days) longer than did attenders. In the present study, participants who did not attend at least one session of therapy were on the waiting list an average of a little more than five weeks (37 days) longer than those who did. This seems to suggest that longer waiting lists are significantly predictive of non-attendance but shorter ones (e.g., 14 days; Sparks et al., 2003) are not. It would be important for future research to investigate when the length of waiting lists begin

to have an adverse impact on therapy attendance.

The current study improves upon previous research by calculating time on the waiting list in multiple ways to ensure an equivalent comparison with clients who chose to continue in therapy. This represents a unique and important contribution to this area of research. Regardless of the way in which time on the waiting list is calculated, it is striking that the significance of this result remains, suggesting it is a robust finding rather than an artifact of the way the waiting list is calculated.

To better understand this subgroup of participants, the reasons provided by clients who declined services before intake were gathered and grouped into three general categories, including, receiving services elsewhere (27%), no longer interested in services (32%), and scheduled an intake, cancelled or never attended, and then did not respond to subsequent messages left by the therapist (27%). These findings suggest that individuals who dropout before attending any therapy are likely a heterogeneous group and further investigation is required to determine the reasons why some people seek psychological services but then fail to follow through on their service requests. More specifically, it would be interesting to focus on each of these groups individually to better understand these reasons for non-attendance in therapy. For example, just over a quarter of non-attenders in this study (i.e., 27%) reported declining services because they were already receiving services elsewhere. This is comparable to reports from other research (e.g., 25%; Carpenter et al., 1981). It would be important for future research to determine the reasons individuals refuse services from one service provider but choose to obtain them from another. Use of multiple waiting lists, financial resources, level of comfort with different types of professionals (e.g., psychologist, psychiatrist, social worker), and fit between

client needs and services offered by a particular site should be considered in these investigations.

Time on the waiting list is emerging as a significant predictor of therapy attendance/engagement. Given that more complex models, such as those involved in this research, have been unable to predict these variables, waiting time for psychological services warrants further investigation. Some have suggested that waiting for services functions as a filter for those who are not motivated to attend therapy (e.g., Robin, 1976), whereas others disagree and believe this is an excuse for poor management by service providers (Morton, 1995). Regardless, this variable has been consistently related to non-attendance in therapy and efforts to reduce waiting lists should be implemented. One example of this is provided by Spector (1988) who reported that providing an information sheet to clients via their family physician reduced the number of referrals to a clinical psychologist which translated to shorter waiting times for those who were referred. It was hypothesized that the handout may have educated the physicians about the services provided by the psychologist, resulting in fewer, but more appropriate referrals. This was consistent with reports that evasive and vague reasons for wanting to seek services were significantly related to failure to keep an initial appointment (Carpenter et al., 1981; Noonan, 1973). This is obviously an important area of research because of its practical implications for service delivery in a time of decreasing availability of resources. Future research needs to be empirically valid and focussed on the specific aspects of being on waiting lists. This will help to determine which aspects of waiting are detrimental to client attendance in therapy and lead to the development of ways to address them.

Summary

The Self-Determination Model and the Transtheoretical Model of Change did not

significantly predict behavioural engagement in therapy. This construct had not been previously assessed with respect to the Self-Determination Model. The existing findings investigating the stages of change are confusing and it is difficult to draw clear conclusions from the research. The only consistent finding from the analyses from this study concerning behavioural engagement was the predictive role of time spent on the waiting list, which is emerging as an important variable throughout the literature.

Psychological Engagement in Psychotherapy

It was hypothesized that engagement in psychotherapy, as measured by the client and therapist rated alliance and client satisfaction with services, would be predicted by stages of change and by type of motivation, after the effects of the covariates (age, gender, referral source, psychological distress, and time on the waiting list) were controlled. The research question to examine the value of the subscales and summary scales of stages of change and type of motivation in predicting psychological engagement was also conducted.

Multiple measures of psychological engagement in therapy have been supported in review articles (e.g., Reis & Brown, 1999). In this study, the correlations between the client and therapist ratings of alliance and client satisfaction were significant and ranged from .44 to .81 (.40 to .78 for transformed variables). These moderate to high correlations indicate these variables measure similar but not identical constructs.

Client Rated Alliance

A recent trend in the literature is a focus on predicting the therapeutic alliance. Age (Connors et al., 2000), gender (Santiago et al., 2002), and level of education (Connors et al., 2000) have been found to be predictive of alliance. The present study did not find any significant

relationships between demographic or contextual variables and therapeutic alliance. This may be due to the specificity of the samples used in the existing research which involved individuals seeking help for alcohol problems (Connors et al., 2000) and chronic depression (Santiago et al., 2002) as compared with the current sample of individuals seeking psychotherapy for a range of difficulties. Future studies that investigate the predictive ability of these and other variables, with a range of samples, will lead to an improved understanding of client rated alliance.

Poor therapeutic alliance has been predicted by client interpersonal (Connolly Gibbons et al., 2003; Hersoug et al., 2002; Santiago et al., 2002; Saunders, 2001) and intrapersonal difficulties (Saunders, 2001). These can both be considered longstanding and defining qualities of individuals that would likely require intentional and effortful change, perhaps with the help of psychotherapy. However, if these are the only predictors of the alliance in psychotherapy, it would suggest that the individuals most in need of services are the least likely to establish a positive therapeutic alliance. This has substantial implications given the predictive ability of the alliance on positive therapeutic outcome. Fortunately, another area of research has included the investigation of treatment motivation, a more dynamic variable specific to the therapeutic process.

Motivation and client rated alliance. In this study, type of motivation contributed significantly to the prediction of engagement as measured by client rated alliance. That is, the more intrinsically motivated clients were, the more likely they were to perceive a positive alliance with their therapist. Also, two subscales (intrinsic motivation subscale and identified regulation subscale) and one summary scale (internal summary scale) were able to significantly predict engagement when it was operationalized by client rated alliance. The findings with respect to the subscales and summary scales are consistent with the Self-Determination model that indicates that

motivation that is more intrinsic than extrinsic is predictive of a positive therapeutic alliance.

Intrinsically motivated behaviours are engaged in strictly for the pleasure and satisfaction they produce. They are voluntarily, absent of any external rewards, and create feelings of competence and self-determination (e.g., Deci & Ryan, 1985; Ryan & Deci, 2000). Although, individuals typically enter therapy to reduce distress rather than to seek pleasure, the findings from this study are consistent with what is known about the continuum of self-determination. That is, increasing forms of self-determined motivation and not necessarily intrinsic motivation alone, are associated with enhanced learning, increased life satisfaction, persistence, and improved health. They are also associated with promoting a perceived internal locus of causality and facilitating behaviour change (Curry et al., 1991). Furthermore, internalized motivation is associated with greater confidence in treatment and increased help-seeking behaviour (Ryan et al. 1995). In a weight loss treatment program, autonomous motivation in participants was predicted both by their level of autonomy and the staff's support of this autonomy (Williams et al., 1996). The current study reported a predictive relationship between intrinsic motivation and client-rated therapeutic alliance. These findings combined provide a guide for what therapists should do to foster the intrinsic motivation and the therapeutic alliance from the client's perspective, namely to encourage and support the client's sense of efficacy and autonomy and to resist creating external rewards that risk eroding the internal motivation.

Stages of change and client rated alliance. The stages of change total scale was not able to predict psychological engagement as defined by client rated alliance after the demographic and contextual variables were controlled. However, the action subscale and the ready to change summary scale were significantly predictive of engagement as measured by client rated alliance.

Only two studies have examined similar variables. Connors and colleagues (2000) reported that stages of change were predictive of clients' rating of alliance in a sample of outpatients in an alcohol treatment program (accounted for only 4%-10% of variance). These are interesting findings because they differ from the findings of the current study despite some methodological similarities. They used the WAI to measure the alliance at session 2 and a continuous method of scoring the SCS (adding contemplation, action and maintenance subscales and subtracting precontemplation). Although these methods are similar, they are not identical to the current study which assessed alliance at session 3, scored the SCS with a relative index score, and focused on the broader construct of psychotherapy. The differences between these studies in terms of samples (alcohol treatment vs. general psychotherapy), time of alliance assessment (session 2 vs. session 3), and type of continuous scoring of the SCS may all account for the differences in results.

Individuals seeking alcohol treatment may have other psychological/psychiatric diagnoses that complicate their treatment. Also, the therapeutic alliance may change substantially over the span of a single therapy session. Finally, variability in the continuous scoring of the SCS may result in differences as large as those between continuous and categorical scoring practices.

In terms of the predictive ability of the subscales of the stages of change, results from the present study indicated that only the action subscale and the ready to change summary scale were predictive of the therapeutic alliance as rated by the client. Although these findings have not been reported elsewhere, the predictive role of the action scale was hypothesized but not supported in existing research (Derisley & Reynolds, 2000). Instead, with the use of profiles, Derisley and Reynolds (2000) found that high contemplation scores were predictive of a positive therapeutic alliance at session 3.

Therapist Rated Alliance

In the present study, therapist rated alliance was not significantly predicted by the stages of change or by type of motivation when they were scored as full scales or by their summary scales or subscales. Two prior studies examined therapist ratings of the alliance and identified client gender (i.e., female; Connors et al., 2000) and intrapsychic variables (i.e., clients perceived by the therapist to have insight, tolerance for affects, problem solving capacity, limited problems with aggression and a need for revenge, better global functioning and fewer symptoms; Hersoug et al., 2002) as significant predictors. These findings are interesting but have yet to be replicated by other research. Further research is required to determine the importance of the therapist's perception of the therapeutic relationship.

Client Satisfaction

When engagement was defined by client rated satisfaction, only the intrinsic motivation subscale was significantly predictive. That is, the more intrinsically motivated, the more satisfied clients were with therapy after the first three sessions. These findings are consistent with the Self-Determination theory that states that intrinsically motivated behaviours correspond with related variables such as increased life satisfaction. This study makes this finding relevant to the psychotherapeutic context.

Client satisfaction has previously been investigated with the therapeutic constructs of symptom change, outcome, and dropout. Individuals displaying clinically significant symptom change reported greater satisfaction with psychotherapy than clients who changed only moderately or not at all (Ankuta & Abeles, 1993). Other research suggests that clients who drop out of therapy express less satisfaction with obtained psychological services, particularly those clients

who attended only an intake session (Kokotovic & Tracey, 1987). In fact, the most important discriminator between dropouts and continuers was client satisfaction with the intake interview.

Strengths and Limitations of the Study

Strengths

The strengths of this study include its use of empirically-based models, its clear and concise definition and measurement of variables and its longitudinal design. In addition to its significant findings, the non-significant and the unexpected findings also represent important contributions to the existing literature. The present study is the first to compare these models of change and motivation. Both models are theoretically derived and have been empirically investigated. The Transtheoretical Model has been widely tested, but the consistency of its findings are questionable. This makes it especially important to continue investigating these issues towards establishing some clarity. The Self-Determination Model has been well established but not in the realm of psychotherapy. Not only were these two models compared, but their incremental validity was to be investigated in response to a need for more of this type of research (Hunsley & Meyer, 2003). This was a strength of the research design, but unfortunately, little progress towards understanding the incremental validity of these models was possible.

These two models were used to predict two important therapeutic constructs about which little is empirically known. The importance of seeking and engaging in therapy is derived from the established finding that therapy is beneficial to clients. If therapy results in positive change for clients, information about the factors involved in deciding to obtain and to continue in therapy is required. This study further adds to the literature by being clear and concise in the definition of its terms. Specifically, engagement, a construct around which there is limited research, was defined

both behaviourally and psychologically (in three ways) and assessed with well established measures at a commonly used and recommended time in therapy (session 3; e.g., Reis & Brown, 1999).

Furthermore, as a measure of psychological engagement, the therapeutic alliance was rated by the client and the therapist to provide multiple perspectives. The choice to focus on predicting the therapeutic alliance rather than using it as a predictor was also timely since the importance of the alliance in the therapeutic process has been well established (e.g., Santiago et al., 2002; Martin et al., 2000).

The design of this study was unique because of its longitudinal nature and employed both clients and therapists within a sample that was not specific to type of disorder/health-related problem behaviour or therapeutic orientation. Also, it was conducted within the context of a community-based psychology clinic making its findings highly generalizable (external validity). Furthermore, the realism of the study is an added strength because the relevance of its findings to clinical practice. The execution of this study required extensive planning and organization. Protocols were established early in the planning stage to predict and prevent unnecessary attrition. For example, tracking sheets were created and employed to help ensure that the progress of therapy (i.e., number of sessions) was monitored appropriately because of the time sensitive nature of the data collection. Also, extra attention was given to the issue of confidentiality because of client and therapist dyad participation in the study. Both clients and therapists were assured that the other would not have access to information they provided for the study. Also, clients were reassured that their participation in the study would have no implications for their therapy and therapists were informed that there would be no implications for their training. Further, data were collected via phone interviews, which reduced the amount of missing data.

A further strength of this study was the unexpected information concerning the demographic and contextual variables. Results indicated that for most of the covariates, not only were they unrelated to seeking and engaging in therapy, they actually compromised the significance of the regression equations by consuming variance without explaining it. However, the two exceptions to this include the significant predictive ability of the referral source with respect to seeking therapy and time on the waiting list with respect to behavioural engagement. Both of these contribute important and practical information about the therapeutic process that is highly relevant to researchers and practitioners alike. A second area that was not intended as a focus but that was carefully interpreted was the group of participants who never attended any therapy following their request for services. Their time on the waiting list was calculated in more than one way and their reasons for not attending any services were collected and organized. This provided some interesting qualitative information about a frequently occurring subsample of people who consider receiving psychological services but never obtain them.

Because of the above mentioned strengths, the lack of significant findings are unlikely to be due to problems with research design, measurement, or sampling. The present study had a larger sample size than most cited in the literature. It used the recommended continuous method of scoring for the stages of change measure rather than the more common use of profiles and scored the measures of both models in the same way to facilitate interpretation of the findings. The required attendance of at least three therapy sessions to meet criteria for the behavioural definition of engagement as evidence for engagement or "continuation" in therapy corresponds with at least one other study (e.g., Reis & Brown, 1999). Also, this study required that the measures of both models be administered prior to any therapy sessions, and differs from the reported administration

of pretherapy measures after at least one session (e.g., Smith et al., 1995). These differences may help to account for the discrepancy between the findings of this study and those reported in the literature but also make it difficult to compare findings with existing research. In interpreting null findings, it is always necessary to consider methodological weaknesses to which they may be attributed, including problems in sampling and measurement. Based on the reasons provided above, it is highly unlikely that the findings from the current study can be dismissed or attributed purely to research design.

Methodological Limitations

Four potential methodological limitations of this study have been identified and should be considered in the interpretation of the findings. They include aspects of the study design, the nature of the sample (i.e., referral source and University site), and the involvement of a training clinic.

This study was not a true experiment, as a result participants could not be randomly assigned to receiving or not receiving psychological services. This has implications for internal validity. However, the external validity of the study outweighs these disadvantages because in actual psychotherapy settings, it is ultimately the individual themselves who decides to attend therapy. The more similarities between the research context and real situations, the more generalizable the findings will be.

Another methodological limitation of this study might be the homogeneity of the sample with respect to seeking therapy. Approximately two thirds of the participants in this study were referred to the clinic by someone other than themselves but made the decision on their own to contact CPS. This might have resulted in a limited range of scores on the models of change and motivation at the Time 1 assessment. A methodological improvement might involve a broader

sample that includes participants required to attend treatment by someone other than themselves (e.g., court mandated, coerced by significant others). However, the characteristics of the present sample are consistent with those of individuals who typically attend psychotherapy and maximize the generalizability of these findings.

The second issue concerning the homogeneity of the sample is related to the use of a community based psychological center located on a university campus. It is possible that the university setting may be intimidating to some potential clients and might result in a highly homogeneous sample (i.e., more highly educated). However, psychotherapy clients are typically better educated than members of the general population.

The use of a training clinic for doctoral level students is another methodological issue that may have implications for interpreting study findings. Therapist participants ranged in their level of training and clinical experience from the second year of their doctorate to their internship year (i.e., a range of approximately three years of clinical training). It is possible that the lack of experience of some therapists might have limited what was accomplished within the first three sessions of therapy in comparison with more senior students. This would have implications for the generalizability of these findings to non-training sites that offer psychological services.

Measurement Issues

Three measurement issues represent potential limitations of this study, the measurement of seeking therapy, the collection of data via telephone interviews, and the modification of the CMOTS instructions. The measurement of seeking therapy in this study was problematic on two levels. First the measure of seeking therapy was reduced from eight items to two items for theoretical reasons. It would have been counterintuitive to ask participants' about past events and

then try to predict them with current levels of change and motivation. The reduction in items resulted in the second problem, using only two items to assess the broad construct of seeking therapy created decreased variability in assessing this construct. It can be concluded that the conceptualization by Saunders was a poor choice for assessing seeking therapy. In retrospect, it had not been well enough established to be employed in this study. The cost of using this conceptualization and method of assessment for seeking therapy was the lost opportunity to empirically investigate this important therapeutic construct.

Standardized telephone interviews were used to collect all the client participant data. Although this is known to reduce missing data, it is possible that participants' awareness of the social desirability of the information they were providing was increased because of the direct personal contact with a research assistant. This may have influenced client participants to present themselves in an overly positive way. The impact of this is unknown.

The CMOTS instructions were adjusted to accommodate the time of the administration of this measure. Instead of asking clients to rate why they were involved in therapy, they were asked to rate to why they were seeking therapy. Although this modification may seem minute, it may have had implications for the validity of this measure.

Statistical Limitations

Statistically, two of the predictor variables and one predicted variable required transformation before analyses could be conducted. Also, six of the ten subscales and three of the four summary scales were transformed. This is evidence that only a limited amount of the data collected for this study was representative of a normal distribution. Analyses were conducted for each hypothesis and research question on the raw and transformed data. In all analyses, the results

from the transformed data was reported and interpreted because it was deemed to be more statistically sound.

Theoretical Limitations

The primary theoretical concern of this research is the possibility that the hypothesized direction of relationship with respect to seeking therapy would be more accurately explained by its reverse. More specifically, this study was designed to assess the predictive ability of two models. In retrospect, seeking might actually be predictive of motivation and change which is the reverse of what was hypothesized. The Transtheoretical Model of Change and the Self-Determination Theory can be considered forms of treatment motivation. Treatment motivation has many conceptual and assessment difficulties that contribute to this confusion (Dreischner et al., 2004).

It is also possible that treatment motivation, including these two models, are unrelated to seeking therapy. In fact, seeking therapy might be more related to the therapy process than to the individual who is seeking therapy. This could lead to a hypothesis that the quality and nature of seeking services may precedes treatment motivation. For example, if seeking therapy (i.e., contacting a clinic) is a positive experience, it may increase a client's motivation to pursue the therapy process beyond the initial contact. This has implications for future research that could investigate areas of importance at the level of service providers (e.g., waiting room experience, quality of first phone contact between client and clinic) rather than within the individual.

Implications for Research and Clinical Practice

Future Research Directions

Attempts to predict who begins therapy and their reasons for doing so is gradually being understood as a complex task. This is likely due to the emerging recognition of the many unknown

variables involved in addition to the difficulties involved in defining and measuring the known criteria. However, seeking and engaging are beginning to command attention as important aspects of therapy that require further investigation. There are at least two avenues of research to be pursued in the future. The first involves ways to improve upon this study, and follow the pursuit of psychological models as predictors of these therapeutic constructs. The second involves the consideration that the most important predictors of seeking and engaging in therapy have yet to be identified and new variables need to be identified and subsequently investigated.

Psychological Models

Further pursuit of research in the same direction as the current study would continue to endorse the belief that treatment motivation is a significant predictor of seeking and engaging in therapy. To date, treatment motivation has been defined, conceptualized and measured in many ways which has contributed to the difficulty in consolidating the existing findings. In future studies, these findings need to be integrated for a clearer understanding of what is known about treatment motivation models and what areas require further investigation.

In addition to the models used in this study, at least one other psychological model has been applied to the prediction of help-seeking. The Theory of Reasoned Action is a social psychological model that has theoretically made the connection between the behaviour and intention of seeking therapy (Ajzen & Fishbein, 1980 cited in Codd & Cohen, 2003). Codd and Cohen (2003) reported that individuals with positive attitudes toward seeking therapy and beliefs that others would consider it beneficial for them to seek help predicted intention to seek help for alcohol abuse in college students (12% of variance explained). Similar to the models investigated in the present research, this theory shows potential but requires further investigation.

Psychological models are appealing because they have the potential to conceptually organize and sequence constructs relevant to therapy processes. However, empirical evidence must support such models. If that point is reached, a shift in research will be required. For example, the Transtheoretical Model has been the most researched and reported on with respect to a range of areas of behaviour change. However, upon closer examination, the support for this model may actually be overstated and not based on the systematic evaluation of existing research (Littell & Grivin, 2002). Support for and against the validity of this, and any model, must be considered.

Future research to pursue the role of psychological models in predicting seeking and engaging in therapy would require at least a minimal degree of standardization in terms of defining and measuring the psychological models and the therapeutic constructs. This is the first study to investigate the predictive ability of the Self-Determination Model with respect to seeking and engaging in therapy. Some support for the model was obtained, but it was not as successful as was anticipated. Because stages of change has been the most popular model in the literature, it is especially important that the SCS be administered and scored in a standardized way across studies to improve the interpretation and consolidation of new research findings. This would also be important for the CMOTS so as to avoid the confusion that has resulted for the SCS. Future studies would also be improved by designs that assess seeking concurrently rather than retrospectively. This would help to determine if retrospective assessment is problematic in this context. Finally, studies that investigate incremental validity would represent a significant contribution to the literature because of their ability to identify which models of treatment motivation are the most useful. Until these improvements can be implemented, future research findings specific to these constructs will only add to the confusion which already exists in the

literature.

New Areas of Research

This study was well designed and implemented and should have lead to the discovery of any existing significant relationships. Because very few significant findings were among the results, consideration should be given to other possible avenues of investigation. Areas of future research might include the investigation of practical barriers, matching within the therapeutic context and pretherapy interventions with respect to time on the waiting list.

Practical variables such as barriers to treatment warrant further investigation in terms of their role in seeking and engaging in psychotherapy. These could be circumstances in the lives of clients, separate from or impacting on the therapy process. Examples of these might include being a parent, for which initial investigations have begun (e.g., Morton, 1995; Orme & Boswell, 1991), or difficulties with transportation, finances, or time. Other barriers might be related to the stigma of receiving psychological services. For example, having to sit in a large waiting room, or attend therapy sessions at a place of work might discourage individuals from obtaining desired psychological help. In addition, individuals' knowledge and beliefs about therapy, that is, how and when to access psychological services and for what purpose, are additional examples of practical variables may also be barriers that warrant investigation.

Another direction of research might involve matching within the therapeutic context to increase the likelihood of engagement in therapy. Identification of more illusive variables such as the fit between clients and their therapists (separate from the alliance) or between clients expectation for therapy and the treatment orientation (e.g., Elkin et al., 1999) could be considered. This is similar to the concept of matching treatment interventions to treatment motivation which

gives practical utility to the concept of the stages of change. Applying the concept of matching to new issues, that is matching clients with therapists and/or matching client expectations to therapeutic orientation might be worthy of future research.

Length of time spent on a waiting list is emerging as a predictor of nonengagement and dropout from therapy. However, little is known about what occurs to clients during the time that they are waiting for services. Research in this area could help determine which aspects of waiting for services contributes to dropout by assessing variables such as fears and expectations of individuals while they are waiting for psychological services. This could lead to the development of interventions to increase the likelihood of attendance and subsequently engagement in a therapy. Pretherapy training could also be used to target client knowledge (Latour & Cappeliez, 1994) and expectations of therapy and to reduce their fears about therapy (Kushner & Sher, 1991). The use of various forms of education while waiting for services might include information about what therapy involves, the role of clients and therapists in the process, and the types of possible outcomes to be expected. Self-help materials could also be introduced to help alleviate psychological distress while waiting for services and to prime individuals for therapeutic interventions. Of course, these interventions would require adequate evaluation to determine their effectiveness in reducing dropout and increasing seeking and engaging behaviour.

Regardless of the future direction of research, a tightening of the conceptualization, definition, and assessment of seeking and engaging are strongly needed. With respect to treatment seeking, there is no standard for defining the beginning, duration or completion of this process. Another important clarification involves the distinction between the intention to seek therapy and actual seeking behaviour. As for engagement, the range of terms considered the equivalent or

equally opposite to engagement (e.g., drop out, premature termination, failure to engage, continuation) have led to significant confusion in the interpretation of research findings. Finally, although engaging in the therapeutic process and engaging in the therapeutic relationship are likely closely related, it would be worth investigating whether there is a difference between them.

Summary

From this vantage point, there are at least two paths of research that would be beneficial to the knowledge base about seeking and engaging in therapy. The first involves further investigation of psychological models with better study designs, standardized measurement, and investigation of incremental validity for the range of existing models. The second research direction requires identifying more practical or illusive variables that have not yet been investigated and identifying ways to make time waiting for services beneficial rather than detrimental to seeking and engaging in therapy. Both avenues of future research require improvements to the definition and measurement of the constructs of seeking and engaging.

However, these are areas of study that seem important from a researcher's perspective. In considering the alliance literature, it is clear that the client's perspective is the most significant in understanding the therapeutic alliance. In that vein, it might be important to do the same with the constructs of seeking and engaging. These efforts should begin with qualitative designs that solicit clients to help identify where quantitative studies should focus their efforts. In this way more practical, illusive, or other variables involved in this process might be identified for further investigation.

Clinical Implications

The clinical implications of the findings from this study include the importance of the

waiting list and the lack of support found for the stages of change.

Time Waiting for Services

Waiting for psychological services has become a reality of the current mental health system. It is also likely that these waiting times will increase as a result of limited financial and human resources. This is especially true in settings where fees are covered by a source other than the client (e.g., insurance, health care). However, if research is indicating that spending extended amounts of time on waiting lists reduces the likelihood of attending therapy, attention should be directed to this issue. This is a significant finding because some of the issues might be remedied by implementing changes to clinic policies with respect to waiting lists or by earlier identification of which clients seeking services will likely not attend.

When waiting lists exist, their length should be monitored by clinics and communicated to clients. If the waiting time is unacceptable to clients, they should be informed of alternate resources. If waiting lists cannot be shorted, better use of the time spent on the waiting list is realistic. This could involve providing clients with information that would contribute to the development of accurate expectations of the therapeutic process, the reduction of any fears they may have, and the provision of self-help material specific to the reason(s) they are seeking therapy.

Psychological Models

In this study the stages of change were unable to significantly predict seeking or engaging in psychotherapy regardless of how they were operationalized. The exception to this was the significant ability of the action subscale and the ready for change summary scale to predict client rated alliance. This model's general inability to significantly predict these constructs is contradictory to many reports that the Transtheoretical Model of Change is effective in predicting

behaviour change across a range of behaviours. Littell and Girvin (2002) provided an important review of these issues and concluded that the existing evidence in support of this model is not as strong as it has been presented. This study concurs with their findings. Given the appealing nature of this model and its seemingly “obvious” applicability, its actual limitations should be known and respected. This also has implications for matching treatment to clients entering therapy. The concept of matching is presented as one of the benefits of knowing a client’s stage of change but it assumes the existence of discrete stages for which supporting evidence is being questioned. In contrast, the Self-Determination Model shows some potential but requires further investigation before it can be considered clinically useful. However, based on these findings, therapists might want to assess the motivational reasons that have brought clients to therapy and foster any intrinsic motivation with the intention of benefitting the alliance that is known to lead to positive therapeutic results.

Conclusions

The nonsignificant results of this study are as important as the significant ones. The findings from this study did not support the generally accepted predictive ability of the stages of change. This has important clinical implications at a time when the value of this model is already under scrutiny. Seeking, as measured by time and difficulty and engagement, as measured behaviourally and psychologically (i.e., therapist rated alliance and client rated satisfaction) were not significantly predicted by either of the models in this study. Also, many of the demographic variables assumed to be predictive of seeking and engaging were found to be unrelated in this study, challenging clinical assumptions about the importance of these variables.

However, the significant findings that resulted from this study also revealed important and

unanticipated information. Client rated alliance has been repeatedly established as an essential element of psychotherapy. The findings from this study indicate that in addition to being a predictor of therapeutic outcome, client rated alliance can also be predicted, mostly by the Self-Determination Model of motivation (full scale, internal motivation summary scale, intrinsic and identified subscales) but also by aspects of the Transtheoretical Model of Change (action subscale and the ready for change summary scale). Client rated satisfaction was also significantly predicted in this study by the intrinsic motivation subscale. These findings were in addition to two unexpected, but very practical significant findings which pertained to the referral source and to the time on the waiting list. Results indicating the implications of being self versus other-referred and the detrimental impact of longer waiting lists are important findings for researchers, but even moreso for clinicians who can easily assess these variables within their daily practices and make changes to improve their delivery of psychological services.

This empirical study that is theoretically based incorporated the strengths and value of empirical models with clinically relevant variables. This unique combination represents an important contribution to an area of research that is difficult in terms of definition, assessment, and interpretation of results. This research is most significant in its clear defining and reporting of the details of its practices so that it can be replicated, creating a baseline for interpreting previous and future research and providing important information concerning its clinical applicability.

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TABLES

Table 1

Sample Size and Distribution Across Stages of Change in Prior Treatment Research

Authors	Variables of interest	Time assessed	n	PC %	C %	P % ¹	A %	M %
Brogan, Prochaska, & Prochaska (1999)	termination & continuation	at least 1 session but no more than 2	60	reported a distribution across PC, C, A, & M and presented it in the form of profiles				
Levy (1997)	bulimia	N/A	139	16.5	14.4	20.1	25.9	23.7
Prochaska, Norcross, Fowley, Follick, & Abrams (1992)	weight control program	beginning of week 1 of 14 week treatment program	30	reported a distribution across PC, C, A, & M without specifying the proportion				
Smith, Subich, & Kalodner (1995)	termination	immediately following intake	74	12.1	64.9	12.1	8.1	N/A

Note. Stages of change represented by PC = precontemplation, C = contemplation, P = preparation, A = action, M = maintenance.

¹ The preparation stage will not be used in this study.

Table 2

Sample Size and Distribution Across Stages of Change in Student Samples Not Seeking Treatment

Authors	Variables of interest	n	PC %	C %	P %*	A %	M %
Grimley, Prochaska, Velicer, & Prochaska (1995)	contraceptive and condom use	248	6.1	12.7	31.8	11.8	37.6
Grimley, Riley, Bellis, & Prochaska (1993)	contraceptive use to prevent pregnancy & disease	104	6.4	9.2	12.8	9.2	62.4
			37.4	11.2	15.0	8.4	27.1

Note. Stages of change represented by PC = precontemplation, C = contemplation, P = preparation, A = action, M = maintenance.

* The preparation stage will not be used in this study.

Table 3

Demographic Characteristics of Full Sample (Time 1 only) and Subsample (Time 1 and 2)

	N = 155	N = 107
Age	30.1 years (SD = 8.8) Range 16-59	29.9 years (SD = 8.3) Range 17-59
Gender		
Male	34 (21.9%)	20 (18.7%)
Female	121 (78.1%)	87 (81.3%)
Marital Status		
Single	60%	63%
Married or Living with a Partner	26%	24%
Children Living in Same Household	23%	24%
Education		
Some University or College Attained At Least an Undergraduate Degree	38%	40%
	47%	50%
Employment		
Students	33%	33%
Employed Full-Time	34%	34%
Unemployed	21%	20%
Employed Part-Time	10%	13%
Not Working Outside The Home	2%	1%
Income		
Under \$10,000	35%	35%
\$10,000 - \$20,000	24%	35%
\$20,000 - \$30,000	18%	20%
\$30,000 - \$40,000	13%	12%
Over \$40,000	10%	8%
Racial Background		
White	87%	86%
Black	5%	4%
Asian	5%	7%
Aboriginal	1%	1%
Other	3%	3%

Table 4

Transformations of Variables

Variable	Transformation
Age	none
Gender	none
Time on Waiting List	none
Referral	none
Problem Duration	none
Symptom Checklist-10	none
Stages of Change Scale Total Scale Score	none
Client Motivation for Therapy Scale Total Scale Score	square root
Process of Seeking Therapy - Time	logarithmic
Process of Seeking Therapy - Difficulty	none
Working Alliance Inventory-Client	square root
Working Alliance Inventory-Therapist	none
Client Satisfaction Questionnaire - 8	square root

Table 5

Intercorrelations Between Variables used in Seeking Hypothesis (N = 155)

	2	3	4	5	6	7	8	9	<u>M</u>	<u>SD</u>
1. Age	-.06	.08	.31**	.05	.06 (.06)	.08	.02	-.01 (.01)	30.14	8.79
2. Gender		-.02	-.10	.09	.03 (.03)	-.01	.11	.15 (-.14)	1.78	.42
3. Referral			-.06	.12	.22** (.19*)	-.18*	.14	-.13 (.12)	1.66	.48
4. ProbDur				.13	.15 (.15)	-.06	.03	.07 (-.09)	126.47	132.01
5. SCL-10					.15 (.10)	-.06	.30**	-.12 (.11)	15.27	7.21
6. PSTQa						-.15 (-.18*)	.05 (.05)	-.02 (.01)	2.41 (.31)	1.43 (.26)
7. PSTQb							-.07	.10 (-.08)	4.36	1.31
8. SCS								-.12 (.11)	-19.32	18.65
9. CMOTS									76.82 (7.22)	28.92 (1.20)

Note. Values based on raw data are presented throughout the Table, followed by comparable values for the transformed variables in parentheses. Referral = Referred for services by self or other. Problem Duration = Problem duration in months. SCL-10 = Symptom Checklist-10. PSTQa = Process of Seeking Therapy Question-Time. PSTQb = Process of Seeking Therapy Question-Difficulty. SCS = Stages of Change total scale score. CMOTS = Client Motivation for Therapy total scale score. * $p < .05$, ** $p < .01$.

Table 6

Intercorrelations Between Variables used in Engagement Hypothesis (N = 155)^a

	6	7	8	9	10	11	<u>M</u>	<u>SD</u>
1. Age	-.02 (.01)	-.20*	.06 (-.08)	-.04	.00	-.15 (.15)	29.89	8.27
2. Gender	.01 (-.04)	-.05	.11 (-.15)	.12	.17	.09 (-.09)	1.81	.39
3. Referral	-.04 (.05)	-.09	-.13 (.12)	-.01	.11	-.28** (.26**)	1.65	.48
4. TimeWait	.06 (-.02)	.01	.05 (-.04)	-.41**	-.10	-.08 (.08)	46.83	33.79
5. SCL-10	-.15 (.10)	-.11	-.18 (.16)	-.04	.27**	-.16 (.16)	15.08	7.00
6. WAI-C ^b		.50** (-.47**)	.81** (.78**)	.55** (-.46**)	.07 (-.12)	.19 (.22*)	69.98 (3.61)	11.05 (1.41)
7. WAI-T ^b			.44** (-.40**)	.27**	-.08	.19 (-.18)	65.11	9.72
8. CSQ-8 ^b				.63** (-.52**)	-.02 (-.02)	.16 (.17)	27.13 (2.28)	3.81 (.81)
9. S3					-.11	-.03 (.04)	0.69	.46
10. SCS						-.01 (-.01)	-20.73	19.21
11. CMOTS							76.20 (7.28)	28.59 (1.96)

Note. Variables based on raw data are presented throughout the Table, followed by comparable values for the transformed (both variables when available) variables in parentheses. Referral = Referred for services by self or other. TimeWait = Time on waiting list. SCL-10 = Symptom Checklist-10. 1. WAI-C = Working Alliance Inventory - Client. WAI-T = Working Alliance Inventory - Therapist. CSQ-8 = Client Satisfaction Questionnaire-8. S3 = Attendance to Session 3 or not. SCS = Stages of Change total scale score. CMOTS = Client Motivation for Therapy total scale score. ^aCorrelations between demographic variables can be found in Table 3. ^bCorrelations for these variables are based on n = 107. *p<.05, **p<.01.

Table 7

Hierarchical Regression of Stages of Change on Seeking Therapy Measured by Time (N = 155)

Variable	B	SE B	β	R^2	Adj. R^2	ΔR^2
Step 1				0.09*	0.06	
Age	-0.00	0.01	-0.01			
Gender	0.13	0.27	0.04			
Referral	0.67**	0.24	0.22			
ProbDur	0.00	0.00	0.16			
SCL-10	0.02	0.02	0.11			
Step 2				0.09*	0.05	0.00
SCS	-0.00	0.01	-0.02			

Note. Referral = Referred for services by self or other. ProbDur = Problem duration in months. SCL-10 = Symptom Checklist-10. SCS = Stages of Change total scale score. * $p < .05$. ** $p < .01$.

Table 8

Hierarchical Regression of Stages of Change on Seeking Therapy Measured by Difficulty
(N = 155)

Variable	B	SE B	β	R^2	Adj. R^2	ΔR^2
Step 1				0.05	0.02	
Age	0.02	0.01	0.12			
Gender	-0.03	0.26	-0.01			
Referral	-0.51*	0.22	-0.18			
ProbDur	-0.00	0.00	-0.11			
SCL-10	-0.00	0.02	-0.02			
Step 2				0.05	0.01	0.00
SCS	-0.00	0.01	-0.03			

Note. Referral = Referred for services by self or other. ProbDur = Problem duration in months.
SCL-10 = Symptom Checklist-10. SCS = Stages of Change total scale score. * $p < .05$.

Table 9

Hierarchical Regression of Client Motivation (transformed) on Seeking Therapy Measured by Time (N = 155)

Variable	B	SE B	β	R^2	Adj. R^2	ΔR^2
Step 1				0.09*	0.06	
Age	-0.00	0.01	-0.01			
Gender	0.12	0.28	0.04			
Referral	0.66**	0.24	0.22			
ProbDur	0.00	0.00	0.16			
SCL-10	0.02	0.02	0.10			
Step 2				0.09*	0.05	0.00
CMOTS	0.00	0.06	0.00			

Note. Referral = Referred for services by self or other. ProbDur = Problem duration in months. SCL-10 = Symptom Checklist-10. CMOTS = Client Motivation for Therapy total scale score. * $p < .05$, ** $p < .01$.

Table 10

Hierarchical Regression of Client Motivation (transformed) on Seeking Therapy Measured by Difficulty (N = 155)

Variable	B	SE B	β	R^2	Adj. R^2	ΔR^2
Step 1				0.05	0.02	
Age	0.02	0.01	0.12			
Gender	-0.08	0.26	-0.02			
Referral	-0.50*	0.22	-0.18			
ProbDur	-0.00	0.00	-0.12			
SCL-10	-0.00	0.02	-0.02			
Step 2				0.06	0.02	0.00
CMOTS	-0.05	0.05	-0.07			

Note. Referral = Referred for services by self or other. ProbDur = Problem duration in months. SCL-10 = Symptom Checklist-10. CMOTS = Client Motivation for Therapy total scale score.

* $p < .05$.

Table 11

Summary of Logistic Regression Analysis of Stages of Change Predicting Engagement Measured by Attendance to Session 3 of Psychotherapy (N = 155)

Variable	B	SE	Odds Ratio	Wald statistic	χ^2	$\Delta\chi^2$
Model at Step 1					7.27	
Age	-0.02	0.02	0.98	0.85		
Gender	0.73	0.44	2.07	2.74		
Referral	0.20	0.41	1.22	0.24		
TimeWait	-0.02	0.01	0.98	20.50***		
SCL-10	-0.02	0.03	0.98	0.44		
Model at Step 2					6.74	1.86
Age	-0.02	0.02	0.98	0.81		
Gender	0.78	0.45	2.18	2.96		
Referral	0.26	0.42	1.30	0.39		
TimeWait	-0.02	0.01	0.98	20.45***		
SCL-10	-0.01	0.03	0.99	0.06		
SCS	-0.02	0.01	0.98	1.82		

Note. Referral = Referred for services by self or other. TimeWait = Time on waiting list. SCL-10 = Symptom Checklist-10. SCS = Stages of Change total scale score. *** $p < .001$.

Table 12

Summary of Logistic Regression Analysis of Client Motivation for Therapy Predicting Engagement Measured by Attendance to Session 3 of Psychotherapy (N = 155)

Variable	B	SE	Odds Ratio	Wald statistic	χ^2	$\Delta\chi^2$
Model at Step 1					7.27	
Age	-0.02	0.02	0.98	0.85		
Gender	0.73	0.44	2.07	2.74		
Referral	0.20	0.41	1.22	0.24		
TimeWait	-0.02	0.01	0.98	20.50***		
SCL-10	-0.02	0.03	0.98	0.44		
Model at Step 2					7.40	0.21
Age	-0.02	0.02	0.98	0.80		
Gender	0.76	0.45	2.15	2.91		
Referral	0.19	0.41	1.20	0.20		
TimeWait	-0.02	0.01	0.98	20.16***		
SCL-10	-0.02	0.03	0.98	0.51		
CMOTS	0.05	0.10	1.05	0.21		

Note. Referral = Referred for services by self or other. TimeWait = Time on waiting list.
SCL-10 = Symptom Checklist-10. CMOTS = Client Motivation for Therapy total scale score.

*** $p < .001$.

Table 13

Hierarchical Regression of Stages of Change on Engagement Measured by Client Rating of Alliance-Transformed (n = 104)

Variable	B	SE B	β	R^2	Adj. R^2	ΔR^2
Step 1				0.01	-0.04	
Age	-0.00	0.02	-0.00			
Gender	-0.09	0.37	-0.02			
Referral	0.17	0.31	0.06			
TimeWait	0.00	0.01	0.02			
SCL-10	0.02	0.02	0.12			
Step 2				0.04	-0.02	0.03
SCS	-0.01	0.01	-0.18			

Note. Referral = Referred for services by self or other. TimeWait = Time on waiting list.
SCL-10 = Symptom Checklist-10. SCS = Stages of Change total scale score.

Table 14

Hierarchical Regression of Stages of Change on Engagement Measured by Therapist Rating of Alliance (n = 104)

Variable	B	SE B	β	R^2	Adj. R^2	ΔR^2
Step 1				0.06	0.01	
Age	-0.24	0.12	-0.21			
Gender	-1.61	2.54	-0.06			
Referral	-0.99	2.08	-0.05			
TimeWait	-0.01	0.04	-0.02			
SCL-10	-0.11	0.14	-0.08			
Step 2				0.06	0.00	0.00
SCS	-0.01	0.05	-0.03			

Note. Referral = Referred for services by self or other. TimeWait = Time on waiting list.
SCL-10 = Symptom Checklist-10. SCS = Stages of Change total scale score.

Table 15

Hierarchical Regression of Stages of Change on Engagement Measured by Client Rating of Satisfaction with Psychological Services-Transformed (n = 104)

Variable	B	SE B	β	R^2	Adj. R^2	ΔR^2
Step 1				0.07	0.02	
Age	-0.01	0.01	-0.11			
Gender	-0.31	0.21	-0.15			
Referral	0.22	0.17	0.13			
TimeWait	0.00	0.00	0.00			
SCL-10	0.02	0.01	0.16			
Step 2				0.08	0.02	0.01
SCS	-0.00	0.00	-0.09			

Note. Referral = Referred for services by self or other. TimeWait = Time on waiting list.
SCL-10 = Symptom Checklist-10. SCS = Stages of Change total scale score.

Table 16

Hierarchical Regression of Client Motivation on Engagement Measured by Client Rating of Alliance-Transformed (both) (n = 104)

Variable	B	SE B	β	R^2	Adj. R^2	ΔR^2
Step 1				0.01	-0.04	
Age	-0.00	0.02	-0.02			
Gender	-0.17	0.36	-0.05			
Referral	-0.05	0.31	-0.02			
TimeWait	0.00	0.01	0.06			
SCL-10	0.01	0.02	0.04			
Step 2				0.07	0.01	0.06*
CMOTS	0.18	0.08	0.25*			

Note. Referral = Referred for services by self or other. TimeWait = Time on waiting list.
 SCL-10 = Symptom Checklist-10. CMOTS = Client Motivation for Therapy total scale score.
 * $p < .05$.

Table 17

Hierarchical Regression of Client Motivation on Engagement Measured by Therapist Rating of Alliance-Transformed (n = 104)

Variable	B	SE B	β	R^2	Adj. R^2	ΔR^2
Step 1				0.06	0.01	
Age	-0.23	0.12	-0.19			
Gender	-1.87	2.47	-0.07			
Referral	-0.31	2.09	-0.02			
TimeWait	-0.02	0.04	-0.04			
SCL-10	-0.08	0.14	-0.06			
Step 2				0.09	0.03	0.02
CMOTS	-0.83	0.52	-0.17			

Note. Referral = Referred for services by self or other. TimeWait = Time on waiting list.
SCL-10 = Symptom Checklist-10. CMOTS = Client Motivation for Therapy total scale score.

Table 18

Hierarchical Regression of Client Motivation on Engagement Measured by Client Rating of Satisfaction-Transformed (both) (n = 104)

Variable	B	SE B	β	R^2	Adj. R^2	ΔR^2
Step 1				0.07	0.02	
Age	-0.01	0.01	-0.12			
Gender	-0.33	0.20	-0.16			
Referral	0.15	0.17	0.09			
TimeWait	0.00	0.00	0.02			
SCL-10	0.01	0.01	0.11			
Step 2				0.09	0.04	0.02
CMOTS	0.07	0.04	0.17			

Note. Referral = Referred for services by self or other. TimeWait = Time on waiting list.
SCL-10 = Symptom Checklist-10. CMOTS = Client Motivation for Therapy total scale score.

Table 19

Hierarchical Regression of Stages of Change and Client Motivation on Engagement Measured by Client Rating of Alliance-Transformed (both) (n = 104)

Variable	B	SE B	β	R^2	Adj. R^2	ΔR^2
Step 1				0.01	-0.04	
Age	-0.00	0.02	-0.02			
Gender	-0.06	0.36	-0.02			
Referral	0.01	0.30	0.00			
TimeWait	0.00	0.01	0.05			
SCL-10	0.02	0.02	0.08			
Step 2				0.04	-0.02	0.03
SCS	-0.01	0.01	-0.17			
Step 3				0.10	0.03	0.05*
CMOTS	0.18	0.08	0.24			

Note. Referral = Referred for services by self or other. TimeWait = Time on waiting list.
 SCL-10 = Symptom Checklist-10. SCS = Stages of Change total scale score. CMOTS = Client
 Motivation for Therapy total scale score. *p<.05.

Table 20

Hierarchical Regression of Stages of Change and Client Motivation on Engagement Measured by Therapist Rating of Alliance-Transformed (both) (n = 104)

Variable	B	SE B	β	R^2	Adj. R^2	ΔR^2
Step 1				0.06	0.01	
Age	-0.23	0.12	-0.19			
Gender	-1.73	2.52	-0.07			
Referral	-0.23	2.12	-0.01			
TimeWait	-0.02	0.04	-0.04			
SCL-10	-0.07	0.14	-0.05			
Step 2				0.06	0.00	0.00
SCS	-0.02	0.05	-0.03			
Step 3				0.09	0.02	0.02
CMOTS	-0.84	0.52	-0.17			

Note. Referral = Referred for services by self or other. TimeWait = Time on waiting list.
 SCL-10 = Symptom Checklist-10. SCS = Stages of Change total scale score. CMOTS = Client Motivation for Therapy total scale score.

Table 21

Hierarchical Regression of Stages of Change and Client Motivation on Engagement Measured by Client Rating of Satisfaction -Transformed (both) (n = 104)

Variable	B	SE B	β	R^2	Adj. R^2	ΔR^2
Step 1				0.07	0.02	
Age	-0.01	0.01	-0.01			
Gender	-0.30	0.21	-0.14			
Referral	0.16	0.17	0.10			
TimeWait	0.00	0.00	0.02			
SCL-10	0.02	0.01	0.13			
Step 2				0.08	0.01	0.01
SCS	-0.00	0.00	-0.08			
Step 3				0.10	0.03	0.02
CMOTS	0.07	0.04	0.16			

Note. Referral = Referred for services by self or other. TimeWait = Time on waiting list.
 SCL-10 = Symptom Checklist-10. SCS = Stages of Change total scale score. CMOTS = Client Motivation for Therapy total scale score.

Table 22

Hierarchical Regression of Client Motivation and Stages of Change on Engagement Measured by Client Rating of Alliance-Transformed (both) (n = 104)

Variable	B	SE B	β	R^2	Adj. R^2	ΔR^2
Step 1				0.01	-0.04	
Age	-0.00	0.02	-0.02			
Gender	-0.06	0.36	-0.02			
Referral	0.01	0.30	0.00			
TimeWait	0.00	0.01	0.05			
SCL-10	0.02	0.02	0.08			
Step 2				0.07	0.01	0.06*
CMOTS	0.18	0.08	0.24			
Step 3				0.10	0.03	0.03
SCS	-0.01	0.01	-0.17			

Note. Referral = Referred for services by self or other. TimeWait = Time on waiting list.

SCL-10 = Symptom Checklist-10. CMOTS = Client Motivation for Therapy total scale score.

SCS = Stages of Change total scale score. *p<.05.

Table 23

Hierarchical Regression of Client Motivation and Stages of Change on Engagement Measured by Therapist Rating of Alliance-Transformed (both) (n = 104)

Variable	B	SE B	β	R^2	Adj. R^2	ΔR^2
Step 1				0.06	0.01	
Age	-0.23	0.12	-0.19			
Gender	-1.72	2.52	-0.07			
Referral	-0.23	2.12	-0.01			
TimeWait	-0.02	0.04	-0.04			
SCL-10	-0.07	0.14	-0.05			
Step 2				0.08	0.03	0.02
CMOTS	-0.84	0.52	-0.17			
Step 3				0.09	0.02	0.00
SCS	-0.02	0.05	-0.03			

Note. Referral = Referred for services by self or other. TimeWait = Time on waiting list.
 SCL-10 = Symptom Checklist-10. CMOTS = Client Motivation for Therapy total scale score.
 SCS = Stages of Change total scale score.

Table 24

Hierarchical Regression of Client Motivation and Stages of Change on Engagement Measured by Client Rating of Satisfaction -Transformed (both) (n = 104)

Variable	B	SE B	β	R^2	Adj. R^2	ΔR^2
Step 1				0.07	0.02	
Age	-0.01	0.01	-0.12			
Gender	-0.30	0.21	-0.14			
Referral	0.16	0.17	0.10			
TimeWait	0.00	0.00	0.02			
SCL-10	0.02	0.01	0.13			
Step 2				0.09	0.04	0.02
CMOTS	0.07	0.04	0.16			
Step 3				0.10	0.03	0.01
SCS	-0.00	0.00	-0.08			

Note. Referral = Referred for services by self or other. TimeWait = Time on waiting list.
 SCL-10 = Symptom Checklist-10. CMOTS = Client Motivation for Therapy total scale score.
 SCS = Stages of Change total scale score.

Table 25

Transformations of SCS and CMOTS Subscales

Variable	Transformation
Stages of Change Scale	
Precontemplation Subscale	logarithmic
Contemplation Subscale	logarithmic
Action Subscale	none
Maintenance Subscale	none
Not Ready to Change Summary Scale	square root
Ready to Change Summary Scale	none
Client Motivation for Therapy Scale	
Intrinsic Motivation	none
Integrated Regulation	logarithmic
Identified Regulation	logarithmic
Introjected Regulation	none
External Regulation	inverse
Amotivation	inverse
Internal Motivation Summary Scale	square root
External Motivation Summary Scale	square root

Table 26

Correlations Between Significant Subscales of Stage of Change and Type of Motivation used in Research Questions to Predict Engagement Defined by Client Rated Alliance and Satisfaction (n = 107)

	WAI-C	CSQ-8 M	SD	
Stages of Change				
Action Subscale	.26** (-.27**)		33.89	4.00
Ready to Change Summary Scale	.18 (-.22*)		60.25	10.64
Client Motivation for Therapy Scale				
Intrinsic Subscale	.25* (-.28**)	.18 (-.20*)	18.99	5.38
Identified Subscale	.16 (.25*)		25.58 (.39)	2.94 (.35)
Internal Motivation Summary Scale	.18 (-.22*)		67.48 (3.97)	11.22 (1.34)
WAI-C			69.98 (3.61)	11.05 (1.41)
CSQ-8			27.13 (2.28)	3.81 (.81)

Note. Variables based on raw data are presented throughout the Table, followed by comparable values for the transformed (both variables when available) variables in parentheses. WAI-C = Working Alliance Inventory - Client. CSQ-8 = Client Satisfaction Questionnaire-8. *p<.05, **p<.01.

Table 27

Hierarchical Regression of the Action Subscale on Engagement Measured by Client Rating of Alliance-Transformed (n = 104)

Variable	B	SE B	β	R^2	Adj. R^2	ΔR^2
Step 1				0.01	-0.04	
Age	-0.00	0.02	-0.01			
Gender	-0.17	0.36	-0.05			
Referral	-0.03	0.40	-0.01			
TimeWait	0.00	0.01	0.05			
SCL-10	0.02	0.02	0.08			
Step 2				0.10	0.05	0.09**
Action Subscale	-0.11	0.04	-0.30			

Note. Referral = Referred for services by self or other. TimeWait = Time on waiting list.
SCL-10 = Symptom Checklist-10. **p<.01.

Table 28

Hierarchical Regression of Change Summary Scale on Engagement Measured by Client Rating of Alliance (n = 104)

Variable	B	SE B	β	R^2	Adj. R^2	ΔR^2
Step 1				0.01	-0.04	
Age	-0.00	0.02	-0.01			
Gender	-0.07	0.36	-0.02			
Referral	0.10	0.30	0.03			
TimeWait	0.00	0.01	0.03			
SCL-10	0.03	0.02	0.15			
Step 2				0.09	0.04	0.08**
Ready to Change Summary Scale	-0.04	0.01	-0.29			

Note. Referral = Referred for services by self or other. TimeWait = Time on waiting list.
SCL-10 = Symptom Checklist-10. ** $p < .01$.

Table 29

Hierarchical Regression of Intrinsic Motivation Subscale on Engagement Measured by Client Rating of Alliance with Psychological Services-Transformed (n = 104)

Variable	B	SE B	β	R ²	Adj.R ²	ΔR^2
Step 1				0.01	-0.04	
Age	-0.01	0.02	-0.06			
Gender	-0.29	0.35	-0.08			
Referral	-0.06	0.29	-0.02			
TimeWait	0.00	0.01	0.04			
SCL-10	0.01	0.02	0.06			
Step 2				0.13	0.07	0.11**
Intrinsic Motivation Subscale	-0.10	0.03	-0.35			

Note. Referral = Referred for services by self or other. TimeWait = Time on waiting list. SCL-10 = Symptom Checklist-10. **p<.01.

Table 30

Hierarchical Regression of the Identified Regulation Subscale on Engagement Measured by Client Rating of Alliance-Transformed (n = 104)

Variable	B	SE B	β	R^2	Adj. R^2	ΔR^2
Step 1				0.01	-0.04	
Age	-0.01	0.02	-0.04			
Gender	-0.24	0.35	-0.06			
Referral	0.03	0.29	0.01			
TimeWait	0.00	0.01	0.06			
SCL-10	0.02	0.02	0.12			
Step 2				0.11	0.05	0.09**
Identified Regulation Subscale	1.29	0.40	0.31			

Note. Referral = Referred for services by self or other. TimeWait = Time on waiting list.
SCL-10 = Symptom Checklist-10. **p<.01.

Table 31

Hierarchical Regression of Internal Motivation Summary Scale on Engagement Measured by Client Rating of Alliance - Transformed (n = 104)

Variable	B	SE B	β	R^2	Adj. R^2	ΔR^2
Step 1				0.01	-0.04	
Age	-0.01	0.02	-0.07			
Gender	-0.26	0.35	-0.07			
Referral	-0.07	0.29	-0.02			
TimeWait	0.00	0.01	0.04			
SCL-10	0.02	0.02	0.10			
Step 2				0.13	0.08	0.12**
Internal Motivation Summary Scale	0.39	0.11	0.35			

Note. Referral = Referred for services by self or other. TimeWait = Time on waiting list.
SCL-10 = Symptom Checklist-10. **p<.01.

Table 32

Hierarchical Regression of Intrinsic Motivation Subscale on Engagement Measured by Client Rating of Satisfaction with Psychological Services-Transformed (n = 104)

Variable	B	SE B	β	R ²	Adj.R ²	ΔR^2
Step 1				0.07	0.02	
Age	-0.02	0.01	-0.15			
Gender	-0.38	0.20	-0.18			
Referral	0.13	0.17	0.08			
TimeWait	0.00	0.00	0.01			
SCL-10	0.01	0.01	0.12			
Step 2				0.14	0.08	0.07**
Intrinsic Motivation Subscale	-0.04	0.02	-0.27			

Note. Referral = Referred for services by self or other. TimeWait = Time on waiting list. SCL-10 = Symptom Checklist-10. **p<.01.

APPENDIXES

Appendix A
Script for Clinicians Conducting Screening Calls

Because our clinic is affiliated with the University of Ottawa, there are often research projects underway at the Centre. Currently, a study is being conducted to better understand the factors that are involved in decisions to seek, receive, and terminate psychological services. Participants will receive a total of \$40 for their participation. Participation would require about 1 hour of your time. Would you be interested in receiving a phone call from one of the researchers from this project to learn more about the study and what participation would involve?

YES NO DATE OF SCREENING CALL:

IF THE CLIENT INDICATES AN INTEREST, THEN:

What days and times would be most convenient for you?

NAME:

PHONE NUMBER:

DAYS AND TIMES:

I will pass your name and telephone number along to a research assistant and you can expect a call at the time (or one of the times) you have indicated.

Thank you.

**PLEASE RETURN IN AN ENVELOP TO THE CPS MAILBOX OF ORLY RUMSTEIN
MCKEAN OR MARLENE BEST. THANKS**

