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TREATMENT BARRIERS AND STAGES OF CHANGE
AMONG ADOLESCENTS IN PSYCHOTHERAPY

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Psychology

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DEDICATION

This dissertation is dedicated to my family, friends, coworkers, teachers, and professors who have provided support and guidance throughout this (almost) decade long process.

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Maintaining the stamina to follow through with completing this dissertation over a ten year period would not have been possible without the encouragement and support of my family, friends and dissertation committee.

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TREATMENT BARRIERS AND STAGES OF CHANGE AMONG ADOLESCENTS IN PSYCHOTHERAPY

HEIDI M. SLITER

ABSTRACT

One in five children and adolescents meet the criteria for psychiatric disorders each year. Of those who meet the criteria and are referred for treatment, forty to sixty percent will terminate prematurely (Nock & Kazdin, 2001). While some researchers studying this phenomenon have focused on how a client progresses through treatment and others look at dropout risk factors, no one has explored the relationship between the two.

The specific purpose of this study is to provide information to the existing pool of research focusing on treatment effectiveness and completion to help provide better services to the mentally ill adolescent population already being seriously underserved in this country. A client's readiness to change a behavior in treatment, as studied by James Prochaska (1993), and barriers one faces throughout treatment, as researched by Alan Kazdin (1997) are two variables that have been developed for the purpose of understanding the dynamics of change in the therapeutic setting.

Specifically, Prochaska has developed the Transtheoretical Model of Change including five stages (Precontemplation, Contemplation, Preparation, Action and Maintenance) through which one progresses while in treatment, from a lack of intention to change, to the recognition of a problem but an unwillingness to do anything about it, to a decision and commitment to change. Prochaska believes that change must occur for individual development and that his Transtheoretical Model provides a balance of empiricism and theory for utility among various populations (Petrocelli, 2002).

Kazdin (1997) has found that child and adolescent dropouts in treatment showed higher levels of barriers than did completers based on parent and therapist total barriers scores. His term “barriers to participation in treatment” explore factors that might impact a client’s ability to successfully complete a treatment program, including socioeconomic disadvantage, family stress and life events.

Data for this study were gathered at a community mental health agency with 153 participants among the 14-17 year old population. Measurements used included the Stage of Change Assessment (SoC; McConaughy, Prochaska & Velicer, 1983; McConaughy, DiClemente, Prochaska & Velicer, 1989), the Barriers to Treatment Participation Scale (BTPS; Kazdin, Holland, Crowley & Breton, 1997)) and the Child Behavior Checklist (CBCL; Achenbach, 1991). Participants also received a demographic data sheet which included the number of sessions attended and length of time in treatment.

The hypotheses examined the relationship between Stage of Change (Precontemplation, Contemplation, Action and Maintenance), Barriers to Treatment (Treatment Demands and Issues and Perceived Relevance of Treatment), the CBCL (Total Problems Scale) and attendance in treatment (number of sessions attended and length of time in treatment). Data analysis revealed a significant positive relationship between Contemplation stage scores and CBCL total problem scores, a significant negative relationship between Action stage scores and CBCL total problem scores, a significant positive relationship between Maintenance stage scores and CBCL total problem scores, and a significant positive relationship between time in treatment and CBCL total problem scores.

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CHAPTER I

INTRODUCTION AND STATEMENT OF THE PROBLEM

Attempts to empirically predict the way in which a child, adolescent or adult progresses through and/or successfully responds to therapy have been studied for decades, with tentative results. This is despite the fact that one in five children and adolescents meet the criteria for psychiatric disorders each year, and of those referred for psychotherapy, there is a high rate (40%-60%) of dropout and/or relapse (Nock & Kazdin, 2001). Further, it has been found that the rate of “no shows” for intake appointments among low income and minority children have reached as high as 39% in an outpatient clinic setting (Staudt M. M., 2003). Unanswered questions include; what type of treatment is the best for the client and why would a client change or not change in treatment? In addition, how might therapists determine what type of client is most likely to drop out of treatment and why?

While some researchers focus on how a client progresses through treatment and others look at dropout risk factors, little research has explored the relationship between the two in developing a more concise picture of the mechanisms of treatment practices. The specific purpose of this study focuses on the relationship of a client’s readiness to change in treatment, as studied by James Prochaska, the barriers one faces throughout treatment, as developed by Alan Kazdin, symptom severity, as measured by Achenbach’s

behavioral checklists, and attendance. The goal is to provide additional information in the pool of research focusing on treatment effectiveness and completion to help provide better odds for the mentally ill adolescent population already being seriously underserved in this country.

The Transtheoretical Model of Change

Prochaska (1998) has coined the term Transtheoretical Model of Change (TTM) to describe, empirically, a multistage and sequential model of general behavior change. This model incorporates a developmental perspective, utilizing many aspects of counseling, which Prochaska calls “the cookbook approach to counseling” (p.23). Prochaska has looked at hundreds of psychological theories and has combined the common characteristics of each into one “recipe” for psychotherapy. His model includes five stages of change in treatment: Precontemplation, Contemplation, Preparation, Action and Maintenance. They reflect the process of an individual as he/she experiences a lack of intention to change, recognition of a problem but unwillingness to do anything about it, or a decision and commitment to change. Prochaska believes that change must occur for individual development and that the TTM provides a balance of empiricism and theory for utility among various populations (Petrocelli, 2002). Unfortunately, the TTM of client readiness for change is rarely considered, despite its ability to individualize a treatment plan and regardless of the fact that there are hundreds of methods of therapy being used by therapists in a fragmented and unorganized manner (Prochaska, 1999).

With the empirical research accomplished by Prochaska and his associates over the past decade and a half, professionals may now be able to assess what stage a client is in (i.e. Precontemplation, Contemplation, Preparation, Action or Maintenance) as well as what therapeutic process might be most appropriate for each stage to facilitate successful

treatment completion. For example, through one of his studies, Prochaska (1993) has been able to determine that smokers who enter treatment in the Precontemplation Stage are less likely to complete treatment than those who start in the Preparation Stage (Prochaska, 1993). This may be due to the fact that in the Precontemplation Stage, one is not yet ready to acknowledge that there is a problem, while one in the Preparation Stage admits to a problem and may have tried to do something about it in the recent past. Also, the treatment program being offered may not be customized to accommodate someone in Precontemplation. Although most of his research has covered the effects of treatment in smoking cessation and weight loss, one might ponder the usefulness of the TTM in determining the effectiveness of treatment in other situations, such as community agency settings.

The Barriers to Treatment Model

Specifically, the purpose of this research is to explore the relationship between TTM, identified barriers to treatment, and outcomes for adolescents in treatment. Kazdin, Holland, Crowley and Breton (1997) state that it is the characteristics of the family that can affect treatment completion and/or outcome. Kazdin (1997) has coined the term “barriers to participation in treatment” to explore what might impact a client’s ability to successfully complete a treatment program. Kazdin (1997) has considered barriers such as socioeconomic disadvantage, difficult living circumstances for the parent and child, and family stress and life events. Obstacles associated with these characteristics include lack of transportation to and from sessions, and/or poor alliance with the therapist.

Through his research, Kazdin (1997) has been able to determine that child and adolescent dropouts in treatment showed higher levels of barriers than did completers

based on both parent and therapist total barrier scores. Kazdin (1999) also found that barriers to participation in treatment were associated with therapeutic change, with a higher number of barriers reducing therapeutic change. While Prochaska has researched how clients progress through treatment in stages, Kazdin has studied barriers that impact attendance and treatment completion. Thus, both of these theorists have identified variables of significance in treatment outcome, yet have not combined them for exploration in the context of the other.

Definition of Terms

Transtheoretical Model (TTM)

This model was developed by James Prochaska in 1980; this model is empirically derived and provides a sequential model of change during therapy. It includes a developmental perspective of change while considering five stages (representing the temporal, motivational and constancy aspects of change), ten processes (focusing on activities and events that create successful modification of behavior) and five levels (Prochaska, 2000). TTM integrates a combination of techniques and a merging of the strongest and most common theoretical perspectives (Petrocelli, 2002). For the purposes of this dissertation, only the first dimension of TTM, the five stages will be considered. These five stages include: the *Precontemplation Stage*, in which the client is not ready to recognize a problem with the current behavior and is quite resistant to modifying a behavior; the *Contemplation Stage*, in which the client might know where he/she wants to go but is not quite ready to commit to change--an awareness without commitment; the *Preparation Stage*, in which the client intends to take action in the near future and has already reduced some problem behaviors, but may have successfully tried to take action in the last year; the *Action Stage*, in which an overt behavior change can be seen in the

client as he/she is investing time and energy to successfully alter his/her behavior from one day to six months; and the *Maintenance Stage*, in which the client continues to change his/her behaviors while stabilizing past patterns and avoiding relapse.

Termination is achieved when the client has reached 100% self-efficacy, with no urges to go back to old behaviors (Prochaska, 1993).

Barriers to Treatment Model

This model, created by Alan Kazdin (2000), suggests that families experience multiple barriers while participating in treatment. These barriers include perceptions that treatment is too demanding, that treatment is not relevant to the client's problem or that there is a poor therapeutic alliance. Another barrier includes the stressors and obstacles that interfere with participating in and coming to treatment, such as transportation conflicts and arguments between family members about the relevance of coming to treatment in the first place. It has been expressed by Kazdin, Holland and Crowley (1997) that the existence of these barriers may significantly interfere with remaining in treatment, as coming to treatment in the first place is a burden on the client and his/her family. In addition, they suggested that the absence of barriers may serve as a protective factor or as a mediational role by explaining how predictors operate to produce dropping out behavior.

Research questions and hypotheses

Perhaps, if the existence of a relationship between stages of change, perceived barriers to treatment, attendance and symptoms can be demonstrated, one might further understand "what makes people tick" in treatment. In addition, community agencies and

other therapeutic settings may change their tendencies to provide a narrow treatment spectrum and to disregard parent(s) and child readiness for and barriers to treatment.

The research questions being considered in this study ask if there is a relationship between barriers to treatment studied by Kazdin and the stages of change developed by Prochaska, as evidenced by total behavior problems on the CBCL, and attendance in treatment. Specifically, what measures are most effective at determining the likeliness of an adolescent to improve in treatment; what combination of barriers and stage of change correlates to the lowest or highest number of symptoms in treatment?

Current research done by Kazdin indicates that treatment outcome and progression in treatment is partly influenced by the number of perceived barriers experienced throughout the treatment process. In addition, the stage of change one is in at the start of treatment has been found by Prochaska to affect the level of readiness to change during treatment. In other words, is a person who is unaware of a problem more likely to endorse an excess of barriers to change? Also, is there a process used which rationalizes maladaptive coping mechanisms and impedes the change of a behavior in treatment? This study will examine the relationship between barriers to treatment, stage of change, total behavior problems as reported by the CBCL and attendance. The research hypotheses include:

1. Clients in higher stages of readiness to change will exhibit fewer behavior problems. The data to support this hypothesis will be as follows:
 - a. Precontemplation Stage scores will be significantly positively related to the Total Problems Scale scores of the CBCL (Achenbach, 1991).
 - b. Contemplation Stage scores will be significantly positively related to the Total Problems Scale scores of the CBCL (Achenbach, 1991).

- c. Action Stage scores will be significantly negatively related to the Total Problems Scale scores of the CBCL (Achenbach, 1991).
 - d. Maintenance Scale scores will be significantly negatively related to the Total Problems Scale scores of the CBCL (Achenbach, 1991).
2. The Treatment Demands and Issues Subscale of the Barriers to Treatment Participation Scale will be significantly positively related to the Total Problems Scale of the CBCL (Achenbach, 1991).
 3. Higher scores on the Perceived Relevance of Treatment Subscale will be significantly positively related to the Total Problems Scale of the CBCL (Achenbach, 1991).
 4. Number of sessions attended will be significantly negatively related to the Total Problems Scale of the CBCL (Achenbach, 1991). It is hypothesized that as the number of sessions attended increases, the Total Problems Scale score will decrease.
 5. Length of time in treatment will be significantly negatively related to the Total Problems Scale of the CBCL (Achenbach, 1991). It is hypothesized that as the length of time in treatment increases, the Total Problems Scale score of the CBCL (Achenbach, 1991) will decrease.

Significance of This Research

To date, neither Prochaska nor Kazdin have examined the way both readiness for treatment and barriers to treatment impact each other. On the other hand, both have looked at ways that their theories relate to symptom severity and attendance. If a relationship can be found between these two variables, it might provide a more comprehensive picture of one's "place" in treatment. This, in turn could facilitate many

aspects of treatment including goal setting, therapeutic technique, motivation and successful change.

In revealing any relationship between readiness for change and barriers to treatment in an outpatient community mental health center, this research project is an effort to promote a more thorough understanding of the counseling process.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter will examine the incidence of psychiatric disorders in children and adolescents, including the impact of environment, parenting and family dynamics on the prevalence of numerous pathologies. Next, Prochaska's TTM will be examined, with an emphasis on the Stage of Change (SoC) and University of Rhode Island Change Assessment (URICA) Scales (McConaughy, Prochaska & Velicer, 1983; McConaughy, DiClemente, Prochaska & Velicer, 1989) as they have been used in research. Finally, Kazdin's barriers model and Barriers to Treatment Participation Scale (BTPS; Kazdin, Holland, Crowley & Breton, 1997) will be reviewed based on studies conducted at the Yale Child Conduct Clinic by Kazdin and his associates.

Incidence of Children with Psychiatric Disorders

Between 18 and 20% of children and adolescents meet criteria for psychiatric disorders each year and are not referred for psychotherapy (Nock & Kazdin, 2001). Some of the disorders that emerge during infancy, childhood and adolescence include Dysthymic Disorder, Conduct Disorder, Adjustment Disorder, Learning Disorders, Oppositional Defiant Disorder, Sleep Terror Disorder, Bipolar I Disorder, Generalized

Anxiety Disorder, Social Phobia, Post Traumatic Stress Disorder, Obsessive Compulsive Disorder, Gender Identity Disorder, Major Depressive Disorder and Substance Abuse Disorders (Welfel & Ingersoll, 2001). Determining the exact prevalence of mental illnesses in children and adolescents, however, is difficult, due to many recent trends such as diagnosing children and adolescents with adult disorders and the high incidence of co-morbidity in children.

Typically, a child or adolescent may show symptoms without a high level of impairment in daily functioning, resulting in under-referral for treatment (Kazdin, 1999). Similarly, those who seek treatment may have a reduction in symptoms but not in impairment in daily functioning, resulting in a greater chance for relapse (Kazdin, 1999). Antisocial and aggressive behaviors are the most frequently referred symptoms for outpatient therapy (Kazdin & Wassell, 1999) compared to the more internalized behaviors, such as depression that do not pose as much of a disturbance to external settings and so are less likely to result in a mental health referral. Specifically, aggressive and antisocial behavior may include fire setting, vandalism, lying, truancy, running away and other similar rule violations (Kazdin & Whitley, 2003).

Of those who attend therapy, 40-60% will terminate prematurely (Nock & Kazdin, 2001). Compounding this deficit is the fact that adolescents are generally not used in research because of biological and developmental maturational factors and the myth that youth will eventually “grow out of it” (Kazdin, Feb. 1993). This is a concerning problem, as untreated antisocial and aggressive behavior early in life has the potential to manifest as another disorder in adulthood (Kazdin & Wassell, 1999), or to become apparent in future generations (Kazdin et al., 1987).

The Developing Child and the Environment

Perhaps nothing is more important in the diagnosis of a child with a mental or learning disorder than the effects of his or her environment. Although a student spends an average of seven hours in a school setting, he/she spends even more time at home.

Patterson, DeBaryshe, and Ramsey (1989) and Dadds, Sanders, Morrison, and Reibetz (1992) believe that antisocial behavior, as well as other diagnoses that interfere with a child's functioning in a school setting begins with home training. Specifically, families of children who have a history of being suspended or expelled from school are often characterized by inconsistent and harsh disciplining, poor monitoring of the child, and lack of involvement with the child. The disruption in the parent-child bond results in a lack of identification by the child of values and internal control. According to this view, this type of family trains their child to be antisocial through inconsistent parenting, teaching the child to be coercive to avoid any further intrusion or conflict.

Specifically, Patterson et al. (1989) propose that delinquency happens in steps from poor discipline and monitoring in early childhood. This event results in conduct problems, the rejection by normal peers and academic failure in middle childhood, followed by a commitment to a deviant peer group and delinquency in late adolescence. Norcross and Prochaska (1985) suggest that the causes of conduct problems evolve in a hierarchy from the external/objective (how the environment and others affect them) to the internal/subjective (confused identity). They state that this is further organized on levels of symptoms, maladaptive cognitions, current interpersonal conflicts, family systems conflicts and intrapersonal conflicts. This is driven by the way a child explains his/her experiences and its effects on thoughts, emotions and behaviors. They also suggest that

environmental events, cause more stress to the child who lacks internal resources and personality strengths. According to Norcross and Prochaska (1985), parenting practice and family interaction account for 30 to 40% of antisocial behavior, while better discipline and monitoring accounts for a decrease in antisocial behaviors.

The Developing Child and the Family

Families of children in need of mental health services are often in a low socioeconomic status (SES) category with few social supports, family overcrowding, marital discord, and family psychopathology (Jouriles, Bourg & Farris, 1991; Lytton, 1990; Patterson et al., 1989). Children from economically disadvantaged and single parent homes are often at high risk for emotional and behavioral problems as well as academic struggles and social skills deficits. Economic struggles also exacerbate barriers in accessing help which, in turn, negatively impacts motivation to seek help in the first place (Donovan et al., 1998). Unfortunately, it has been difficult to determine which came first, the behavior of the child or the parent's ineffective discipline techniques. Jouriles et al. (1991) suggest that families in a lower economic category do not have the resources to hire a sitter or go on vacations, resulting in little to no opportunity for breaks from their child. Lytton (1990) on the other hand, suggests that factors in the child, such as temperament, result in poor discipline, or that genetic factors in both the parent and child predispose both to maladaptive behavior, leading to neglectful parenting and antisocial behaviors. He also found that the existence of criminality or alcoholism in parents of children with behavioral disorders might be due to the role of environment and genetics not being separate entities, but functioning together. Still, Sanders et al. (1992) believe that affective disturbances in children involve genetic vulnerability, biochemical disturbances and psychosocial factors, such as family conflict,

parental modeling, prompting and reinforcing distress behaviors like withdrawal, irritability, crying and complaining. Sanders also found that these children showed a decrease in problem solving abilities and an increase in aversive verbalizations, due to elevated levels of angry affect and depressive affect during family interactions, while both the children and parents lacked conflict resolution and problem solving skills. Hedeker and Mermelstein (1998) hypothesized that authoritarian parenting, corporal punishment and positive reinforcement of negative behaviors all pose risks for aggression in children. They found that the influence of changing negative parenting practices and the decrease in aggressive and antisocial behaviors in children is reciprocal; that after administering parent management training, the aggressive and antisocial symptoms are reduced *and* authoritarian parenting is reduced.

In a study by Dadds et al. (1992), the authors suggested that problem behaviors including aggression in children may be used as a skill to reduce the incidents of being the victim of aggression from others. They also found that even children raised in the same home can have very different exposure to the same family environments, thus producing problems in a specific child. For example, one child may be present and/or victimized by aggression while another child hides and may hear but not physically be a victim of the violence. On the other hand, Sander et al. (1992) suggest that a lack of aggression in a child with a diagnosis of a behavior disorder may be due to the dampening effects of depression symptoms on aggression. Thus, the child has internalized the experiences of the disorder, resulting in a depression which leaves little energy to act out against the external environment.

When considering a mother's and father's influence on the child diagnosed with a mental illness, theorists have varying perspectives. For example, Lahey, Russo, Walker

and Piacentini (1989) believe that Conduct Disorder (CD) in children is related to a prevalence of Antisocial Personality Disorder, including hysteria in mothers. Current Minnesota Multiphasic Personality Inventories (MMPI-2; Butcher, Dahlstrom, Graham, Tellegen & Kaemmer, 1989), also show elevations in hysteria for mothers of children with Conduct Disorder, as well as elevations in psychopathic deviance, mania, hypochondriasis, paranoia, psychasthenia and depression. Dumas et al. (1989) have found that this depressive symptom in mothers with children diagnosed with CD may be related to an increase in the use of inconsistent discipline, resulting in a decrease in child compliance. Still, Lytton (1990) provides another suggestion, stating that mothers of strong willed temperament infant boys were later more permissive of aggressive behaviors, leading to an increase in aggressiveness from their child. In the child's later life, Patterson et al. (1989) suggest that when the mother is feeling stressed, the antisocial child will feed off of that emotion and have even more behavioral problems. In a study done by Dumas et al. (1989) it was stated that maternal distress may be associated with child maladjustment, but that this may be due to the level of challenge faced when raising a child with a behavioral disorder, causing mothers to be dysphoric and poor disciplinarians.

When various theorists and researchers consider the pathology of fathers, the effects seem more irreversible in the child. For example in a study comparing the genetic and environmental effects of criminality in children of criminal parents, Lytton (1990) found that criminality in adoptive parents had a decreased effect on children when the biological parents lacked criminality. However, when the biological fathers were criminals, then the son's chance of becoming a criminal were increased, even when they had been adopted away. Still, there is not quite enough research separating the effects of

parenting and prior child characteristics. More research needs to be done on interactions of parents, possibly with unrelated children (Lytton, 1990).

Empirical Research on Treatments for Children and Adolescents

Therapists today have significantly less control in determining the therapeutic structure for clients with mental health issues due to managed care, insurance companies, and the increase in the client's role in therapy (Prochaska, 1993). Caprizzi and Gross (1995) suggest that all major counseling theories have two basic similarities: they draw attention to their respective processes of change and their respective interventions. They state that eclectic theorists must account for both processes of change and role of interventions when creating new theories to explain processes of healing during treatment. Weinstein et al. (1998) introduced four defining properties of a stage theory of health behavior. These properties include a classification system to define the stages, a sequential ordering of the stages, an incident of common barriers to change facing people in similar stages, and different barriers to change facing people in different stages. Two theorists who seem to have originally promoted this concept include James Prochaska and Alan Kazdin in the consideration of the development of five stages of change one goes through during treatment and the development of children and adolescents, respectively.

Prochaska's Transtheoretical Model

Prochaska's Transtheoretical Model (TTM), inspired by a realization by many in the 1980's that the number of individual types of therapies had been growing rapidly (from 130-200 between 1975 and 1979), is a theory of behavioral change which can be used to describe one's expected cognitive stages of change (Precontemplation,

Contemplation, Preparation, Action and Maintenance) and the projected movement through the stages; one's intention to change and the behaviors one carries out through change. In the stages of change, preaction stages focus on tasks needed to prepare for taking action, such as creating concern, goals, intentions, plans and a commitment for engaging in a behavioral change, while the action oriented stages focus on implementing the behavioral change and maintaining it over time. The processes are then defined as the "engines" (p. 26) that help people complete tasks and progress through the stages (DiClemente et al., 2008). Prochaska (1993) believed that "how much people change following a brief course of therapy is directly related to the stage they are in prior to therapy" (p.424). Specifically, described by Derisley and Reynolds (2000), TTM is a model that is capable of predicting the attendance of a client throughout therapy, associating increased attendance with the "Action Stage" at the beginning of treatment.

Prochaska emphasizes that the stages of change are temporal and help clients and therapists understand *when* shifts occur, while the processes help us understand *how*. In addition, the stages of change reflect the motivation and constancy in behavior change (DiClemente et al., 1991). Motivation has been defined, at times, as the "central mechanism that lies at the heart of why and how people change addictive and health behavior...Being motivated to perform a behavior is critical to an individual's performance and whether or not a successful outcome is achieved" (DiClemente et al., 2008, p.26). Bowles (2006) explains further that the stages of change include change processes that require various tasks and goals to be considered that depend on effort, energy and motivation from the individual in treatment. He also states that readiness is important in the confidence level in one's ability to change. Prochaska (1994) found that as people change a high risk behavior such as smoking, overeating, or lack of exercise,

and replace it with a healthier behavior, they progress through five stages of change. As these stages vary, so do the clients and the methods they use to get from one stage to the next.

In general, Prochaska argues that clients in treatment are treated as if they are all in the same stage, but that treatment should be specialized according to the stage in which one started treatment, reflecting and respecting how people change on their own (Prochaska, DiClemente & Norcross, 1992). He also recognizes that many persons interested in behavior changes, such as quitting smoking, are not prepared to take action, especially on their own (self-help) (Prochaska et al., 1994).

Typically, Prochaska's studies have examined the stages of change and the pros and cons of changing specific problem behaviors such as smoking, cocaine use, weight control, high fat diets, sun exposure, and delinquent behavior (Prochaska, 1994). These behaviors were all considered by Prochaska to have mental health consequences, require long-term attention, and are relevant to many people who represent a great challenge to schools, home, family, and community (Prochaska et al., 1994). He has concluded that based on initial measurements, one can test whether a client has improved, regressed, or stayed the same based on assessments conducted at a later time (Velicer et al., 1999).

University of Rhode Island change assessment scale. To date, The Stages of Change have been assessed by two different types of self-report methods, including a categorical measure used to assess the stage one is in based on the answers to a series of questions, and a continuous measure which reveals separate scales for Precontemplation, Contemplation, Preparation, Action and Maintenance (Prochaska, DiClemente & Norcross, 1992). Specifically, the University of Rhode Island Change Assessment Scale (URICA) developed by Prochaska in 1983 is a 32 item scale which measures a client's

attitudes about changing a behavior. The stage classifications are related to self efficacy, to decision making constructs, and to processes of change for quitting problem behaviors (DiClemente et al., 1991). Specifically, it is an assessment tool meant to be more sensitive to the complex motivational postures of those seeking treatment for mental health or chemical dependency issues (Callaghan et al., 2005). The assessment consists of 32 items, with eight items each loading on Precontemplation, Contemplation, Action and Maintenance, scored on a five point Likert-type scale ranging from 1=strong disagreement, to 5=strong agreement.

The stages of change questionnaire. Similarly, the Stages of Change (SoC) questionnaire is a four to five item algorithm based on the URICA, which places respondents in stages based on if the respondent currently had the problem or had engaged in the desired positive behavior and if they intended to change (Prochaska, 1994). At times, the Stages of Change Questionnaire was used by Prochaska to assign a client to a stage of change category on the basis of the highest score, while others used the SoC scores as continuous variables (Derisley & Reynolds, 2000). There is a debate as to whether readiness to change is best conceptualized as a continuum or by discrete stages. It is difficult to segment into steps because stages are linked and interactive throughout the process of change in treatment (Callaghan et al., 2005) (See Appendix F for complete SoC Assessment)

Participant demographics. Prochaska utilized volunteers in his studies from the areas of Kingston, Rhode Island and Houston, Texas, who had responded to newspaper ads. His sample sizes ranged from 365 to 4,144 participants, who were given assessments for stage of change (SoC and URICA), as well as other various assessments which helped to provide a base for factors such as tolerance and stress level (Prochaska,

DiClemente & Norcross, 1992; Prochaska et al., 1994; Prochaska et al., 1993; DiClemente et al., 1991; Velicer et al., 1999; and Prochaska & DiClemente, 1983). For example, in a study measuring the usefulness of the stages of change in predicting the success in treatment of smokers, Prochaska used the Perceived Stress Scale (PSS; Cohen, Kannarck & Mermelstein, 1983), which is a 14 item assessment measuring the stress level in a client's life in the past month, and the Fagerstrom Tolerance Questionnaire (FTQ; Fagerstrom, 1978) which is an eight item scale assessing one's physical dependence on nicotine, as well as their level of addiction. The latter assessment focuses on observable behaviors and not emotions (DiClemente et al., 1991).

Prochaska's findings. Prochaska's research supported his use of the Stages of Change Assessment as a predictor for premature termination, response to treatment and readiness for change (Derisley & Reynolds, 2000; DiClemente et al., 1991; Prochaska, 1994; Prochaska & DiClemente, 1983; Prochaska, DiClemente & Norcross, 1992; and Velicer et al., 1999). First of all, it should be noted that in a typical study, 50% of clients are in Precontemplation, 10-20% are in Preparation and 10-20% are prepared to take Action (Prochaska, 1994). With these statistics, it is not surprising that Prochaska was concerned about the fact that most treatment programs are geared towards those already in the Action Stage. This neglects the more vulnerable 50% in the highly unstable (Velicer et al., 1999) stage of Precontemplation, who Prochaska found are more likely to have poor attendance (Derisley & Reynolds, 2000). Clients in Precontemplation processed less information about their problem behavior, spent less time evaluating themselves in their problem behavior role, experienced fewer emotional reactions to the negative aspects of their problem behavior, and did little to shift their attention or their environment away from their problem behavior (Prochaska & DiClemente, 1983). In

addition, Satterfield et al. (1995) found that clients in the Precontemplation stage have lower expectations for counselor acceptance, genuineness, confrontation, and trustworthiness than do clients who are in the higher stages of Contemplation, Action and Maintenance. This could be a result of the type of treatment used, as Prochaska stated “Change processes traditionally associated with the experiential, cognitive and psychoanalytic persuasions are most useful during the Precontemplation and Contemplation stages. Change processes traditionally associated with the existential and behavioral traditions, by contrast, are most useful during Action and Maintenance.”(Prochaska, DiClemente & Norcross, 1992, p. 1112).

Further, Prochaska was able to identify that as one changes from one stage to the next they go through an adjustment measured in standard deviations from increasing healthy behaviors and decreasing unhealthy behaviors, to decreasing healthy behaviors and increasing unhealthy behaviors. Thus, Prochaska concluded that to help the larger size population in the Precontemplation stage, a therapist needs to use an intervention that could increase the pros of healthy behavior changes by about one standard deviation, such as consciousness raising and self-evaluation. In other words, Prochaska predicted that the perceived pros of change would increase and the perceived cons would decrease as one moved from Precontemplation to Maintenance in changing a behavior (Prochaska, 1994). More specifically, the cons outweigh the pros for changing behavior for those in the Precontemplation Stage, the pros and cons are similar in the Preparation Stage and the pros outweigh the cons in the Action and Maintenance Stages (Prochaska et al., 1994).

Prochaska also found that those in Preparation were able to enter the action stage with increased success and at a higher frequency than a Precontemplator getting to Contemplation and a Contemplator to Preparation. The relevance here is that this data

could greatly impact outcome measures in the effectiveness of the treatment and in the advancement from one stage to the next. For example, if a sample for a study comprised mostly Preparation Stage participants, then effect size would be greater than if from the Precontemplation or Contemplation Stages (DiClemente et al., 1991). In assessing the reliability of the Stage of Change Scale, Bowles (2006) found that Precontemplation and Action stages were more reliable than Contemplation and Preparation stages. He suggested that scale items need to be adjusted to define the difference between stages. Also, since different behaviors have different characteristics, different scales may be needed for different behaviors. Thus, using a variety of items for classification into scales may help with internal reliability of the Stage of Change Scale. With this information, one might consider that future interventions should focus more on increasing the pros of changing to increase treatment success, than to put effort into decreasing the cons of changing problem behaviors (Prochaska et al., 1994). Overall, however, Prochaska found that “moving from recruitment rates to treatment outcomes; we have found that the amount of progress clients make following intervention tends to be a function of their pretreatment stage of change” (Prochaska, DiClemente & Norcross, 1992, p. 1105).

Weaknesses and needs in future research. Regardless of his findings, Prochaska recognizes in this study that the stage of change a client is in at pretreatment was not the only difference among subjects; his study did not take into account SES, demographics, or history of diagnosis (Prochaska et al., 1994). Although, in a study by Velicer et al. (2007), researchers found that demographic variables such as race, ethnicity, gender, age and education level are static and smoking behavior variables (first cigarette, number of quit attempts and Number of cigarettes) are more dynamic and open to change. Thus, an

intervention tailored to behavioral variables should be more successful than those aimed at demographic variables. In addition, Herzog (2007) concluded that just because a person is not considering changing a behavior in a specific time frame, it does not necessarily reflect a lack of motivation. It is important to not draw conclusions regarding readiness to change if one is not considering changing a behavior within a given time frame. Prochaska concluded that what is needed in research is further longitudinal data to determine the predictive validity of the SoC model as a client moves from one stage to another, as well as comparative studies with a variety of other problem behaviors to assess the variety of change processes in reducing them (Prochaska & Diclemente, 1983). DiClemente et al. (2004) state that problems found in assessing stage status in various studies seem to be related to four key issues; the target goal of the behavior change is poorly specified, measures have been poorly constructed and inadequately evaluated in their applications, measures are setting sensitive because they must rely on self report and the accuracy and honesty of the individual, and stage status is difficult to capture because it represents a changeable state and not a static trait. Primarily, however, Prochaska advocates research using other models of behavioral change with the TTM so that they may verify and/or complement each other (Prochaska et al., 1994) and act as a catalyst for the Stages of Change Scale to be more accepted within psychological assessments (Derisley & Reynolds, 2000).

Alan Kazdin's Barriers to Treatment

Development and change. Alan Kazdin's work contends it is necessary to consider the development of children and adolescents in research, such as how their dependence on parents, teachers and peers changes over time. To do this, however, Kazdin insists it necessary to have an understanding of child and adolescent development

in order to better comprehend changes in their affect, cognitions, and behavior (Kazdin, 1993). To gain this type of an understanding, Kazdin focuses on the complications of development and its biological, psychological, and sociological dynamics. In other words, he examines the what, when and why of change in therapy as well as the influences which might positively promote change in treatment (Kazdin et al., 1997). With resources such as these, Kazdin believes that an understanding between change and treatment completion could be important in the development of therapeutic interventions (Kazdin & Wassell, 1998).

Certainly, Kazdin recognizes that research with children and adolescents is difficult to apply to clinical work, as the conditions for research in the lab are often not the same as those in the real world. This results in a lack of generalization from one setting or group of participants to the other (Kazdin, 1991). Kazdin also attempts to define what is meant by a “clinically significant change” in the first place. Does it mean a large, average or small change in symptoms due to treatment, and do large, average and small translate the same way for all researchers and clinicians, and can outcome measures be connected to clinical significance and goals of treatment? (Kazdin, 1999) In response to his question, Kazdin has stated a belief that “the basic paradigm for risk factor research is a prospective, longitudinal design where the antecedent conditions can be identified, where there is assurance that the outcome has not yet emerged, and where outcome can be assessed and delineated at some later point in time” (Kazdin et al., 1997, p.402).

Researchers versus therapists. Currently, there are over 230 different treatment techniques for children and adolescents, a majority of which have not been studied empirically and/or have answered only a handful of questions, most of which do not often generalize to regular clinical practice (Kazdin, 1993). Kazdin (1990) has referred to this

as a phenomenon in which researchers are not often enough dedicated to or influenced by the direct care of patients and/or clinical work, which significantly impacts research influences. On the other hand, he has also found that those heavily involved in clinical work are not often researchers and do not contribute to the plethora of empirical literature. This is partially because most studies that include therapy utilize cases that have been recruited from mainstream schools, due to the low severity of symptoms and length of treatment. This type of selecting produces a sample that is very unlike treatment in clinical settings (Kazdin et al., 1990).

When asked, many psychologists state that empirical research guides their clinical work and that child and adolescent research is very important; especially the therapeutic processes related to change, and family characteristics related to treatment (Kazdin, Siegel, & Bass, 1990). However, in one of his studies, in which he reviewed 223 cases, Kazdin (Kazdin, 1993) found that only 7.2 % of psychologists looked at child, family and therapist variables as they relate to outcome. He concluded that this may be due to the negatives associated with focusing on an ever changing variable such as development; it costs a great deal of time and money to keep track of and measure a child or adolescent's development over time. Also, post-treatment studies are done at many different times and do not take into account the full impact of natural developmental changes (Kazdin, 1991). To alleviate this issue, Kazdin (1998) suggests a greater knowledge of "which processes underlie treatment affects and which do not...to facilitate efforts to keep treatment streamlined and cost effective" (p.30).

Kazdin (1993) concluded that some important and useful studies have been done to expose progress in treatments for emotionally disturbed children and adolescents. Specifically, he has found that elements such as specifying the clinical population and

selection criteria, the use of large samples and the evaluation of those factors that affect treatment outcome and follow up have been important in more clearly reflecting this process.

Theory and approach. As an important addition to current empirical research, Kazdin (2000) has attempted to answer questions regarding what processes lead to and account for change. Specifically, he has identified three steps required to conduct research on these processes of change; “Specifying a conceptual view of the processes or factors responsible for change, developing measures of these processes, and showing that these processes change during treatment...to establish a time line...since most studies do not provide for assessments during the treatment course to identify how the change process unfolds” (p. 341).

Kazdin (2000, 2003) also recognized the use of theory as a guide to study the mechanisms of change and states that “Theory refers to an explanatory statement that is intended to account for, explain and understand relations among variables, how they operate and the processes involved” (p. 1127) and (p.338). For example, how does one achieve change through the use of a specific treatment? Was it medication, a change in family functioning or perhaps a change in environment? Thus, while approach deals with the problems and techniques of treatment, theory is focused on a specific problem and treatment and is more orderly, helping a researcher identify why a certain factor (such as the characteristics of the child and parent) has an impact on the outcome (such as the stress of the parent and the effectiveness of child therapy) (Kazdin, 2000). Kazdin (2000) finds it unfortunate that most of mainstream treatment is not theory based and is significantly lacking in evidence of utility.

Barriers to treatment model. Consequently, Kazdin developed a barriers-to-treatment model, which suggests that families experience barriers while in treatment, such as obstacles with participation, the belief that treatment is demanding, or is not relevant to their child's problem, and that there is a poor therapist/patient/family alliance. The four major factors that Kazdin has postulated, which predispose parents to experiencing these barriers include parent psychopathology, stress, quality of life, and personal and interpersonal resources. The presence of these factors predicts a decrease in therapeutic change in children referred for disruptive behavior disorders (Kazdin & Wassell, 2000). Kazdin's hypotheses complement the epidemic of children and adolescents being severely underserved and who are at a disadvantage in receiving services due to greater perceived barriers to treatment (Kazdin, Stolar & Marciano, 1995). Most recently, Staudt (2003) suggests that barriers to treatment need to be assessed throughout the course of treatment, as they may change during treatment. This would include clarifying the helping process, establishing a collaborative relationship, focusing on immediate and practical concerns and addressing barriers to help seeking.

To support his theory, Kazdin (2003) has found in empirical studies that many types of stress experienced by parents result in higher levels of externalizing and internalizing behaviors in their children, as well as a decrease in positive interactions. For example, in a study of 242 children referred for treatment at the Yale Child Conduct Clinic (Kazdin, Holland & Crowley, 1997) parents who dropped out of treatment prematurely reported their children to show a greater history of antisocial symptoms. In another study of 127 children from the same clinic, children and their families received parenting skills training, reducing the incidence of attention to their child's deviant behavior and to eliminate its inclusion as a barrier to treatment in post-test assessments

(Kazdin & Whitley, 2003). Thus, perceived stressors can influence treatment attendance and child treatment outcome, or therapeutic change in the areas of child symptoms and functioning, parent psychopathology and stress and family relations. A few of the factors this research considered when evaluating who dropped out of treatment are low socioeconomic status, adverse child rearing, the severity and history of the child's antisocial behavior, the level of intellectual functioning of the child, and the child's contacts with other antisocial youth (Kazdin & Wassell, 1999; Kazdin & Mazurick, 1994).

Kazdin understands that children are very dependent on the adults around them, and their dependency exacerbates the hopelessness of a child who lacks parental support in treatment. Of course, a child has little to no control over some variables such as the parent's health and functioning, the SES of the family, and the culture to which the family belongs. These variables can significantly affect the onset and pattern of dysfunction, the referral source, participation in therapy and therapeutic outcome (Kazdin & Weisz, 1998). Kazdin also recognizes the need for therapists to consider family and parent factors and to end the practice of only evaluating therapeutic change in relation to the child's dysfunction (Kazdin, 1991). He also advocates understanding in more depth why families leave treatment and what could keep them in treatment (Kazdin, Holland, & Crowley, 1997). Kazdin (1994) has focused some of his studies on profiling what types of clients are likely to discontinue treatment. He examined if measurable characteristics—such as the severity of the child's disorder and parental stress—are simply a function of time, and posited that what one really needs to do is to consider difficult treatments needed at different points in time to decrease the rate of dropping out.

Barriers research. In his attempts at strengthening his barriers-to-treatment model, Kazdin (1995, 1997, 1998, 1999, 2000, 2001) completed numerous studies on families in treatment, with a child or adolescent as the identified client. He used clients ranging in age from 2 through 17, and their families, from the Yale Child Conduct Clinic. Typically, his population sample ranged from 56 persons to as many as 405 children and adolescents selected from his clinic. The children were referred for oppositional and aggressive behavior, as well as other antisocial behaviors. Most of the clients were boys (which are typical for the externalizing behavioral disorders) and, on average, approximately 70% were Caucasian.

Assessments were conducted on the identified client, the parent(s) and the therapist in the form of interviews, questionnaires and direct observation, to evaluate pathology, stress level, perceived barriers to treatment, intelligence, severity of symptoms for both the child and parent(s) and socioeconomic status. Assessments were done pretreatment, during treatment, and post-treatment. Pretreatment measures included a general information intake interview to assess SES, parent/guardian status, age of parent, education level of parent, and family history of antisocial behavior. An assessment to measure stress level of the parent(s)/guardian(s) was also completed using the Parenting Stress Index (PSI; Abidin, 1990; Lloyd & Abidin, 1985), a 120 item, 5 scale inventory of perceived sources of stress from life events due to child and parent functioning, while parental psychopathology was measured using the Beck Depression Inventory (BDI; Beck, Steer & Garbin, 1988) and the Hopkins Symptom Checklist (SCL-90; Derogatis & Cleary, 1977). Child and adolescent clients were assessed pretreatment using the Risk Factor Interview (RFI; Kazdin et al., 1993) and the Child Evaluation Inventory (CEI; Kazdin, Bass, Siegel & Thomas, 1989) which used one subscale of eleven items to assess

progress in treatment, while the second subscale of eight items assessed the acceptability of treatment. In addition, parents and/or teachers completed the Child Behavior Checklist (CBCL; Achenbach, 1991) and Child Behavior Checklist-Teacher Rating (CBCL-TR; Achenbach) respectively.

The Barriers to treatment participation scale. The primary measure at post-treatment was the Barriers to Treatment Participation Scale (BTPS; Kazdin, Holland & Breton, 1991). Results on this measure were compared with treatment attendance and were the basis upon which Kazdin tested his hypotheses. This assessment, given to the parent/guardian of the identified client up to one month following treatment completion or dropout by a worker unfamiliar with the family and course of treatment, included two sections. The first was a 44 item, five scale assessment completed by the parent. Rated on a likert scale from 1=never a problem to 5=very often a problem, the BTPS included four themes that related to treatment participation including; stressors and obstacles that interfere with participating in and coming to treatment, such as a conflict with a significant other about treatment or problems with other children interfering with treatment (20 items); treatment demands and issues, in which the client might view treatment as too confusing, too long, costly, difficult or demanding (10 items) (See Appendix G for Treatment Demands and Issues items); perceived relevance of treatment to the child's problems, if treatment is viewed as important, or if treatment met parental expectations (8 items) (See Appendix G for Perceived Relevance of Treatment items); and the relationship with the therapist, including the liking of, feeling of support from, and disclosure with him/her (6 items).

The second section of the BTPS included 15 yes/no questions which assessed the presence or absence of events that are critical in nature and might have interfered with

treatment participation. The internal consistency reliability of the BTPS is .86 in predicting attrition from a child or adolescent's treatment.

Measures of attendance. In all studies done by Kazdin, attendance was determined by coming to appointments on time, showing up late, not showing up at all, or calling to cancel an appointment. Early dropouts were identified as clients and their families who attended six or fewer treatment sessions within a two to three week period, while late dropouts attended seven to fourteen sessions over a span of two to three months (Kazdin & Mazurick, 1994). Typically, twenty sessions were offered on an individual basis for the child for 45 minutes two to three times per week, while 16 sessions were conducted for one to one-and-one-half hours once per week for parents. Dropping out was defined as premature termination that was not advisable by the therapist, while completion of treatment was defined as completing all treatment and termination of sessions agreed upon by both the therapist and the family (Kazdin, Stolar & Marciano, 1995).

Therapeutic techniques. Actual therapeutic techniques used by Kazdin's trained associates included Problem Solving Skills Training (PSST), which combines cognitive and behavioral techniques to teach problem solving skills, Parent Management Training (PMT) and/or Relationship Therapy (RT), which focuses on developing a close relationship, empathy and warmth between the child and the therapist. Specifically, PMT used procedures to train parents to more effectively interact with and alter their child's behavior in the home based on the premise that children with problem behaviors often live in homes with many ineffective parent-child interactions (Kazdin, 1991). Parent training includes helping caretakers learn to identify, define and observe problem

behaviors in new ways through such methods as role play. At times, PMT is used with the assistance of teachers for parent-managed reinforcement programs for behavior and performance of the child at home, school and on the playground. An example of this might be reporting on a child's behavior at school for home based incentives such as token rewards (Kazdin & Weisz, 1998).

PSST, on the other hand, helps children who struggle in various social situations to improve cognitive processes through the use of a step-by-step system involving modeling, reinforcement, games, academics and stories. It is based on the premise that children often struggle to have their needs met, to perceive the feelings of others, and to recognize the consequences of their actions (Kazdin, 1998).

Typically, therapeutic interventions and goals in Kazdin's research include "reducing symptoms, improving personal relations and role functioning, enhancing self-esteem and confidence, enhancing the capacity to cope with or reconcile a particular situation, crisis or problem, and clarifying or addressing issues related to a past, current or impending situation." (Kazdin, 1999, p. 337). It should be mentioned here that Kazdin (1987) recognized that PMT is not useful for cases of high family dysfunction, parent psychopathology, low SES and for parents uninterested in investing in treatment.

Research results. Through his research, Kazdin found many of his hypotheses to be supported, including the negative impact that perceived barriers to treatment have on completion of treatment. Specifically, he defined barriers as risk factors, or an event associated with increased risk of an outcome over the base rate of the outcome in the general population (Kazdin et al., 1997). Risk factors can affect many domains of a person's functioning to different extents, possibly due to the relationship of parent dysfunction and stress and quality of life (Kazdin & Wassell, 2000), or due to the fact

that an event may be perceived and thus processed very differently for two different people (Kazdin et al., 1997).

First, parent, family and child characteristics that predicted poor participation and early termination in treatment included a low family SES, parental stress and depression, severity of the child's diagnosis, the child's motivation to change, the experience of the child's distress and co morbidity, parental cooperation, parental involvement, stability of the home, parental diagnoses of psychopathology, the therapeutic relationship and the training and experience of the therapist (Kazdin, Siegel & Bass, 1990). These resulted in not attending and terminating treatment early, showing fewer treatment gains, and lack of retention of positive changes at follow up (Nock & Kazdin, 2001).

In addition, parents with lower expectations for treatment tended to identify more barriers to treatment, including a lower SES, single-parent status, more severe child dysfunction, a high level of parental stress and depression (Nock & Kazdin, 2001). Kazdin (1999) suggested that families who perceived increased barriers may not have participated well or consistently, resulting in less change. Barriers which occurred during treatment had the potential to incrementally add to treatment dropout rates (Kazdin, Holland & Crowley, 1997). A low SES, social isolation, poor living conditions, conflict and violence, parental psychopathology, and little social support added to the stress of attending treatment (Kazdin & Whitley, 2003). Young mothers, single parents, and children in homes without the biological parent were more likely to terminate treatment. Early dropouts were also characterized by a greater severity of child impairment, fewer academic abilities and poor social behavior, while the families had high levels of stress and had experienced many negative life events (Kazdin & Mazurick, 1994).

The expectations of the child, parent(s) and therapist also significantly impacted treatment completion. For example, parents with expectancies that were very high or very low attended more sessions and were least likely to terminate treatment prematurely (Nock & Kazdin, 2001). Also, the more that a parent perceived treatment as being too demanding or not relevant to their child's problems, the less therapeutic change was seen in children (Kazdin & Wassell, 1999; Kazdin & Wassell, 2000). Antisocial children who viewed themselves as making progress were rated by their parent(s) as socially competent according to the CBCL (Kazdin et al., 1987). Supporting this statement is a second study done by Kazdin which found that the more children viewed themselves as making progress, the more their parents saw them as socially competent and the more teachers viewed them as less deviant and better adjusted (Kazdin et al., 1989).

Also, alliance in treatment was more likely when the child wanted to cooperate, the family accepted the child's problem and need for treatment and the child's awareness, or lack thereof, of his/her own psychological issues (Lazaratou, Vlassopoulos & Dellatolas, 2000). In a study by Kazdin et al. (2005), child-therapist and parent-therapist alliances were evaluated for predicting therapeutic change in the child and for assessing the level of barriers to treatment participation. The team found that the stronger the alliances, the more change was reported by the parent. In addition, the fewer the barriers documented, the more acceptable treatment was viewed by the parent and child. In an earlier study, results concluded that both parent and therapist perceptions of barriers were good predictors of dropout (Kazdin, Holland & Crowley, 1997). For example, different expectations of the therapist and parent in treatment can influence the outcome (Kazdin & Wassell, 1998). Five variables that seemed to predict treatment completion and improvement included low SES, parent psychopathology and stress, child dysfunction

and impairment, problems in attendance, and perceived barriers. Dropouts had many more reported barriers than completers, such as low SES, harsh child rearing practices by parents, and parents who report that their children have a high level of symptoms (Kazdin, Holland & Crowley, 1997). Influences from the child's severity of functioning, parental stress and dysfunction, and family relations were related to responsiveness to treatment (Kazdin, 1995).

In general, the common trend throughout all of Kazdin's (1999) findings was that increased barriers to treatment resulted in less change from pre treatment to post treatment and that fewer perceived barriers to treatment by children led to greater improvement. In addition, of those families at high risk for dropping out of treatment who perceived fewer barriers to treatment according to BTPS results actually dropped out of treatment less than those at risk who perceived many barriers to treatment (Kazdin, Holland & Crowley, 1997).

Research limitations. Despite his findings that barriers to treatment impacted treatment completion, Kazdin (1993) recognized that his research had limitations. First of all, the combination of children and adolescents into one group can be an impediment in that there are vast developmental differences in four year olds compared with 17 year old adolescents, and there is a significant developmental gap between 10 and 13 year olds due to the different onset times of puberty. Also, the therapist, in his ratings of the client who drops out of treatment may have unintentionally rated a higher number of barriers (Kazdin, Holland & Crowley, 1997). Kazdin's (1997) subjects dealt with only children with externalizing behaviors. He also felt that assessments such as the BTPS, which were done following treatment, may be susceptible to bias when asking parents and children to

recall their experiences of treatment, especially when treatment has been lengthy and follow up measures are done more than a month post treatment (Kazdin et al., 1997).

Kazdin (1990) takes responsibility in his research for contributing to the rift between clinical practice and empirical research applications such that he recognizes that his treatments focused on behavioral interventions, where in clinical practice there is individual therapy, family therapy, and eclectic therapy. Also, Kazdin's study results of children in the Yale Child Conduct Clinic using one type of intervention may not extend to non-hospitalized youths (Kazdin et al., 1987; Kazdin, Stolar & Marciano, 1995; Kazdin & Wassell, 2000). When considering facts about risk factors, Kazdin (1997) believes they can better determine if something is going to happen, but not what is likely to happen. Thus, a high risk group may not show the expected outcome, while low risk groups will. Although analysis was done at post treatment follow up and did not take into consideration the changes that could occur later on (Kazdin, 1995). Often, when children are referred for externalizing behaviors, such as those in Kazdin's studies, there tends to be a prevalence of parental psychopathology, stress and a history of antisocial behavior in the parent (Kazdin & Wassell, 2000).

Regression analyses identify variables as predictors or independent variables and others as outcomes or dependent variables. This can result in a misconception of the time line; the written results may make the reader assume that one came before the other, for example, that child "A" is antisocial, gets treatment and shows less symptoms, when in fact, we do not know when in treatment the symptoms changed or if they changed because of treatment. Kazdin and Nock (2003) suggest that in this case, it might be useful to provide an assessment during treatment instead of limiting them to pre and post treatment, to close in on the time line. This might help to clarify whether barriers to

treatment were the mediators that accounted for change in Kazdin's studies. They provide further insight into this phenomenon with the statement that the correlation of barriers to treatment and outcome is not necessarily stating that barriers cause poor treatment outcomes:

Correlation is not causation but oh boy does the case get stronger when the time line is established, when the association is strong, when there is some specificity so that the correlate/mechanism is not associated with many outcomes, when manipulation of the correlate leads to change and there is a dose response relation, when this relation has been replicated, and when there is a plausible and coherent explanation for the relation (p. 1121).

In other words, sometimes we can say that "X" causes the outcome "Y" and that "X" is necessary for "Y"; however it is not that simple in developmental psychology where things happen at different times and levels. In addition, many influences can lead to the same outcome, such that a factor may seem like a risk factor, but is not and may actually be due to some unknown or unconsidered factor. Thus, it is difficult to establish a time line for events occurring such as trying to figure out what came first; both could be right (Kazdin et al., 1997).

Complimenting this thought is the statement made by Kazdin regarding the attempt to classify children who have been diagnosed in relation to their non-diagnosed, control, peers. He specifies that cognitive treatment for children has led to increased behavioral changes in home, school and community settings, which are still observable up to one year later. However, no matter how much treatment a child receives, it should not be expected that children with conduct disorders will ever be placed in the same functional category as their non-diagnosed peers (Kazdin, 1991). More specifically, an argument can be made against using a norm group in research, such that when evaluating treatment outcome, a researcher typically uses control groups to compare improvement in

functioning. For example, just because a depressed person after treatment falls into the normal range of someone never diagnosed, it is not realistic and, in fact, a diagnosed depressed client is still going to be different from a control who was never diagnosed. One needs to be careful to not neglect impairment and long term functioning, such as rates of relapse (Kazdin, 1999). In 2006, Kazdin expanded on this idea with his Range of Possible Changes Model. This model was proposed to guide the study of change in intervention research to develop hypotheses and to determine which interventions do or do not influence certain behaviors, which are or are not evidence based. He states that his model encourages researchers to not only hypothesize correlations and change due to an intervention, but to hypothesize the extent to and specific instances in which an intervention creates change.

Future research needs. When reviewing Kazdin's efforts in research success, as well as his analysis of limitations in the findings, he has made many suggestions towards the direction of future research. He has proposed challenges to research on child psychology such as providing a good example of clients who stay in treatment so that it can be carried out to completion, and that follow up is conducted to measure long-term impact. Also, it is very important to consider developmental changes and to more clearly understand base rates of behavioral problems, as well as to understand how these problems change at different ages (Kazdin, 1991). Kazdin (1993) also believes that we need to ask more questions about the components of treatment that contribute to change, parameters of treatment, treatment effectiveness and treatment combinations, the role of treatment processes and the impact of the client, family and therapist characteristics on treatment. More specifically, "How do treatments work?" Through what processes, in what ways and for whom and why? Kazdin feels that once this can be answered for just

one, or a few, treatments, we will know a great deal more about many treatments and how humans develop and change (Kazdin, 2000). He has found that we lack explanatory research about how, when and why, but are overwhelmed with descriptive research, which only identifies relations between treatment and control with outcomes. Explanatory research can help us with improving our interventions and in relating child and family characteristics to outcome (Kazdin et al., 1989).

For example, in studies on cigarette smoking, it was found to be correlated with lung cancer. Using a time line/longitudinal study with smokers and non-smokers, researchers found that smokers had a higher incidence of cancer, identifying smoking as a risk factor. Then, through further controlled studies with animals, it was found that smoking and cancer were linked and that smoking actually caused cancer. What needed to be done next was to determine HOW smoking caused lung cancer. Research on this question revealed that a chemical in cigarettes caused a mutation in DNA consistent with the damage done to smokers' lungs due to lung cancer cells (Kazdin, 2000). This is a strong example of the processes involved in answering how, when and why in research; a difficult and much needed approach to be incorporated into child and adolescent developmental psychology to meet the need for research to be more applicable to clinical practice and the understanding of change processes in treatment (Kazdin & Nock, 2003).

Also, Kazdin notes that improvements of clinical significance do not always reflect improvements in functioning in everyday life, and that a useful measure (outcome predictor) is needed to show the extent to which positive change has been made (Kazdin, 1999) even up to two years after treatment (Kazdin, 1993). Finally, as Kazdin and his colleagues (1997) have focused on the Yale Child Conduct Clinic to recruit clients, they

have identified a need to study across treatment types and settings and child populations to further generalize barriers and dropout risk.

Conclusion

Certainly, strides have been made in child and adolescent empirical literature, including developmental measures (diagnostic interviews), standardized measures, and better descriptions of normative levels of functioning of peers of clinically referred youth and treatment manuals for carrying out techniques and maintaining a consistent treatment method (Kazdin, 1993). However, a thorough overview and synthesis of various theorists and researchers has yet to be done. In fact, it might be feasible to state that Kazdin and Prochaska complement each other in their efforts to understand the best and worst candidates for treatment.

For example, it seems that as Kazdin has focused on the barriers to treatment in predicting dropout rates among clients, Prochaska has focused on predicting the stage at which one is most likely to successfully complete treatment. Also, while Prochaska focuses on problem behaviors such as smoking cessation, he encourages use of his model used with other populations, such as clients with antisocial behavior; a population on which Kazdin has placed great efforts to understand. Further, Kazdin wishes to understand better how an adolescent develops through treatment, as well as how treatment can be adjusted for the developing client. Perhaps it would be worthwhile to study this phenomenon by looking at the stage progressions of children and adolescents as they begin treatment, during treatment, and after treatment. More importantly, Kazdin and Prochaska could combine their research in determining the relationship of barriers to treatment and progression through stages of change as clients participate in treatment.

CHAPTER III

RESEARCH METHODOLOGY

This methods chapter is divided into four subsections. First, the participants are introduced, including the approximate number, their characteristics, how they were selected and where they were obtained within the target population. Next, the instruments, used at set intervals throughout the study are explored, including a brief description of what each measured, and reliability and validity estimates. The procedures for data collection section are described, chronologically, the steps taken during each phase of this study from induction to termination. Finally, a statistical analysis section provides the research design to answer the questions and hypotheses under study, to determine the relationship between the Barriers to Treatment and Transtheoretical Models.

Participants

The sample included 153 adolescent clients (81 boys and 71 girls; 1 participant did not provide gender information) and their families from a community mental health center in a midsize city in the Midwest United States. Of the 153 participants, the mean

age was 15.52 years ($SD=1.26$). One participant did not specify his/her age or gender. Based on parent identification of ethnicity, 133 (86.9%) of the adolescents were Caucasian, 5 (3.3%) were African American, 3 (2.0%) were Hispanic, 10 (6.5%) were Biracial, 1 (0.7%) was Hispanic/African American, and 1 (0.7%) participant did not disclose his/her race. In addition, the primary caretaker of each adolescent included one parent (60.8%), both parents (26.1%), or some other relative or guardian (12.4%).

Clients at this agency, an outpatient counseling center for children, adolescents, and their families, have typically been referred by parents/guardians or school personnel due to symptoms such as those documented in the DSM-IV-TR (APA, 2000). While any clinical disorders included on Axis I that are first diagnosed in infancy, childhood or adolescence were reported by the primary caretaker in this study, only personality disorders, and not Mental Retardation (MR), were reported on Axis II. Clients diagnosed with Mental Retardation are referred out to a separate agency specializing in the MR population. See Table I for a summary of diagnostic distribution among participants. See Table II for a summary of counseling services utilized by each client.

Further information from this sample included whether the client was (27.5%) or was not (71.9%) currently on probation, whether they chose to pay for services with private insurance (26.0%), Medicaid (65.4%), court services (2.6%), Title 20 (0.7%), or self pay (7.0%), and if their method of transportation to services was public transportation (9.2%), the family car (91.0%), or friend/other (1.4%).

These adolescents and their parents, while not randomly selected, represented a naturalistic sample of adolescent clients at a mental health agency who have been in treatment from one session to 432 sessions ($M = 56.96$, $SD = 85.17$), or from 1 month to 156 months ($M = 31.92$, $SD = 37.05$).

Table I

Diagnostic Distribution Among Participants

Diagnostic Category	% of Adolescents Diagnosed
Bipolar Disorder	10%
Depression	24%
Attention Deficit Hyperactivity Disorder (ADD/ADHD)	27%
Chemical Dependency	5.2%
Oppositional Defiant Disorder (ODD)	19%
Anxiety Disorder	10%
Mood Disorder	0.7%
Dyslexia	0.7%
Asperger's Disorder	4%
Obsessive Compulsive Disorder (OCD)	2%
Conduct Disorder	0.7%
Post Traumatic Stress Disorder (PTSD)	3%
Attachment Disorder	2%
Adjustment Disorder	1.3%
Sexual Offender	0.7%
XYY Syndrome	0.7%
No Response	1.3%

Table II
Current Counseling Services Utilized By Participants

Counseling Service	% Utilized
Outpatient Counseling Psychotherapy	62.7%
Psychiatric Services	20.9%
Case Management	8.5%
Group Therapy	12%
Partial Hospitalization/ Day Treatment	5.9%
Respite Care	1.3%

Procedures

Following completion of Institutional Review Board (IRB) forms (in Appendix A), adolescents (ages 14-17) and their families, who attend the Northeast Ohio community agency where this research took place, were asked if they would like to be involved in a study on tracking client progress through treatment. All participants who agreed to be a part of the study were considered in the data collection to provide the most naturalistic sample for this community agency. Measures were taken at one time, although each participant started treatment within the agency at various times. For example, some participants had already attended 4 sessions, whereas others were just starting treatment. Again, this provided for a more naturalistic look into this mental health agency and the ways its clients progress through treatment.

Letters were distributed to counselors within the agency (See Appendix H for Letter to Counselor), offering information on their role and time needed throughout the

study. If the counselor was not interested, the researcher did not request that he/she attempt to directly solicit his/her clients. Clinicians indicating an interest in participation were asked to provide the number of packets they felt they could distribute to their clients. In addition, some clients requested packets at the receptionist window, eliminating the need for the clinician to become involved in the packet collection process. Those clients and parents/guardians who agreed signed a consent form (See Appendix I for Parent Consent Form) explaining that the assessments (CBCL, SoC and BTPS) measure symptoms severity, readiness for treatment, and the obstacles experienced throughout the treatment process, respectively. Parent(s)/Guardian(s) of clients were asked to complete the Child Behavior Checklist (Achenbach, 1991)(See Appendix J for information on obtaining the CBCL Assessment), The Barriers to Treatment Participation Scale (Kazdin, Holland, Crowley & Breton, 1997), and the demographics sheet (See Appendix K for the Demographics Sheet). Adolescent clients completed the Stage of Change Assessment (McConnoughy, Prochaska & Velicer, 1983). The participants were informed that the study places them at no known risk and that they may withdraw at any time. Participants were also told that their participation is anonymous; that their responses will not be revealed to the counselor, or agency personnel other than this researcher. Once the client and parent/guardian completed the assessments, they were asked to return them to their counselor or to front office staff in a provided sealed envelope to be placed in my mailbox. At the end of the study, no participants requested a research results abstract.

Design

The design of this research study was ex post facto using a Simple Regression statistical analysis. A simple regression allowed for the prediction of scores on one

variable (the dependent variable) based on the scores of two or more other variables (predictor or independent variables) (Aron & Aron, 1994). Although it was not selected for this research study, a stepwise regression would be worthwhile to explore at some point to determine the extent to which a score on a *specific* independent variable predicts the score of the dependent variable. This would allow the researcher to eliminate any variables in the study that do not facilitate determining the predictability of the dependent variable.

The data analysis tested the hypotheses centered around the relationship between the dependent variable: the Total Problems Scale of the Child Behavior Checklist (CBCL; Achenbach, 1991), and the independent variables: Stage of Change in treatment (McConaughy, Prochaska & Velicer, 1983), Barriers to Treatment Participation (Kazdin, 1997), the number of treatment sessions attended over time and the length of time in treatment.

The first independent variable, Stage of Change, included four scales: Precontemplation, Contemplation, Action and Maintenance (Prochaska & DiClemente, 1982). The second independent variable, Barriers to Treatment, contained the scales, Perceived Relevance of Treatment and Treatment Demands and Issues (Kazdin, Holland, Crowley & Breton, 1997).

Instruments

Following consent from parents and assent (See Appendix L) from minor clients to participate in the study, assessments distributed included the Child Behavior Checklist (CBCL; Achenbach, 1991), Barriers to Treatment Participation Scale (BTPS), by Kazdin

(1997), and the Stages of Change Scales developed by McConaughy, Prochaska and Velicer (1983).

The Child Behavior Checklist

The Child Behavior Checklist (Achenbach, 1991) is a paper and pencil assessment, administered to parent(s)/guardian(s), which includes 118 items rated on a scale from 0 (not true) to 2 (very true), used to assess the severity of a client's dysfunction across a broad range of symptom domains. It is primarily used at intake and for the evaluation of children referred for mental health services. It can be self administered or administered by an interviewer and is designed to be self explanatory for parents with reading levels at the fifth grade level (Achenbach, 1991). The assessment includes two scales; Competence Scales and Problem Scales.

The total scale score from the Problems Scales is the only measurement of theoretical interest for this study due to its relationship with premature termination from treatment (Kazdin & Wasell, 1999), treatment attendance (Kazdin, 2000) and treatment outcome and amount of change in treatment (Kazdin & Wassell, 1999). In addition, through his research on the CBCL, Achenbach (1991) has found that the total problem score can be used as a basis for assessing change as a function of time.

The Competence (level of ability) Scales include fifteen items across three separate scales inquiring about the number of Activities (5 items) a child is involved in, as well as the amount of time spent participating in each and level of skill (5 items); Social Involvement (6 items), including number of club memberships, friends and behavior with others; and School Functioning (4 items), including performance, class level/difficulty and problems. Activities Scale items consider: the number of sports the

identified child is involved in, the mean of participation and skill in sports, the mean of participation and skill in activities, the number of jobs a child has and the mean job quality. A sample item of the Activities Scale includes “Please list the sports your child most likes to take part in” followed by “Compared to others of the same age, about how much time does he/she spend in each (don’t know, less than average, average or more than average).”

The Social Scale items review the number of organizations the identified child is involved in, the mean amount of participation in these organizations, the number of friends a child has, the frequency of contact with these friends, behavior with others, and behavior alone. An example of a Social Scale item includes “Please list any organizations, clubs, teams or groups your child belongs to” and “Compared to others of the same age, how active is he/she in each (don’t know, less active, average, more active).” Finally, the School Scale items analyze mean performance in school, involvement in special classes, repeated grades and school problems. An example of a School Scale item includes “Is your child in a special class or special school?” and “Has your child had any academic or other problems in school?”

The total competence score is computed by summing the totals of the three scales and recording the T-score based on the age of the child being scored (ages 6-11 or 12-18). A child who only takes part in one sport will get a low score for the number of sports, but can still get a high score for participating more often or more effectively in that sport than his/her peers. Computer scoring programs can do this automatically, although if more than one item is missing from the Activities Scale and Social Scale and if any items are missing from the School Scale, then the total competence score cannot be computed. The Total Competence Scale scores for the CBCL normative samples include

a mean of 50.3 for boys ages 6-11, 50.3 for boys ages 12-18, 50.2 for girls ages 6-11 and 50.4 for girls ages 12-18. T-scores below 37 are in the clinical range, while T-scores from 37-40 are in the borderline clinical range (Achenbach 1991).

The Problems Scales (behaviors and emotions that are of concern to parents and mental health professionals) include 91 items rated from 0 to 2 and are broken down into three scales and nine syndromes subscales (problems that tend to occur together). The Internalizing Scales (behaviors and emotions not easily noticed by parents and mental health professionals) include syndrome subscales of Withdrawn (9 items), Somatic (health) Complaints (9 items), and Anxious/Depressed (14 items). Items such as “would rather be alone,” “won’t talk,” “shy” and “sulks” comprise the Withdrawn Syndrome subscales, while “dizzy,” “tired,” “headaches,” “nausea” and “stomach aches” comprise the Somatic Complaints Syndrome subscale items. Finally, Anxious/Depressed Syndrome subscale items include “lonely,” “cries” and “feels unloved.”

The Neither Internalizing nor Externalizing Scale (behaviors and emotions easily seen by parents and mental health professionals) includes the following syndrome subscales; Social Problems (8 items), Thought Problems (7 items), and Attention Problems (11 items). Examples of items from the Social Problems Syndrome Subscale includes, “acts young,” “gets teased” and “clumsy,” while the Thought Problems Syndrome Subscale consists of items such as “hears things,” “repeats acts,” “sees things” and “strange behaviors.” The Attention Problems Syndrome Subscale is comprised of items such as “acts young,” “daydreams,” “impulsive” and “twitches.”

Finally, the Externalizing Scales include the Syndrome Subscales of Delinquent Behaviors (13 items) and Aggressive Behaviors (20 items). Examples of Delinquent Behaviors Syndrome Subscale items include “no guilt,” “lies,” “cheats,” “sets fires” and

“uses alcohol/drugs.” Aggressive Behaviors Syndrome Subscale items include “argues,” “brags,” “destroys own and others property,” “fights,” “attacks” and “teases” (Achenbach, 1991).

The Total Problems Score is computed by summing all 118 problem items. If the parent has listed any other problems in the spaces provided at the end of the assessment, only the problem receiving the highest score is counted toward the total problem score. Determining the scores for the Internalizing Scales, Externalizing Scales and Neither Internalizing Nor Externalizing Scales are computed by summing their corresponding subscales. For the total problem score a T-score of 67 to 70 marks the borderline clinical range, while a T-score above 70 is considered to be in the clinical range (Achenbach, 1991).

The Total Problems Score has a high test-retest reliability of .92 ($p < .05$, mean $r = .90$) for boys and .94 ($p < .05$, mean $r = .88$) for girls. Interparent agreement reliability for total problems includes .77 for boys 12-18 ($p < .01$, mean $r = .75$), .74 for girls 12-18 ($p < .01$, mean $r = .69$). Good validity is demonstrated by the correlation between CBCL Problem Scales and the Connors Parent Questionnaire (.82, Connors, 1973) while the correlation between Total Problems and the Quay-Peterson Revised Behavior Problem Checklist is .81 (Quay-Peterson, 1983). Finally, the probability of a Total problem T score being from the referred sample versus the non referred group of boys ages 12-18 in the clinical range were .63 (T score 60-63), .77 (T score 64-67), .83 (T score 68-71), .92 (T score 72-75) and .95 (T score 76-100). For girls ages 12-18, the scores were .59 (T score 60-63), .78 (T score 64-67), .82 (T score 68-71), .93 (T score 72-75) and .95 (T score 76-100) (Achenbach, 1991).

The Stages of Change Assessment

The Stages of Change Assessment (McConaughy, Prochaska & Velicer, 1983; McConaughy, DiClemente, Prochaska & Velicer, 1989) is a 32-item rational scale with eight items measuring each of four stages of change reflecting the behavioral change processes an individual goes through while in treatment. The questionnaire has a five-point Likert-type scale in which a score of 1 indicates a strong disagreement and a score of 5 shows strong agreement. This assessment is based on the Stages of Change Model for psychotherapy, developed by James O. Prochaska (1982). Of the five stages of change originally developed by Prochaska (Precontemplation, Contemplation, Preparation, Action and Maintenance), the SoC scale measures just four stages including Precontemplation (client is not ready to recognize that his/her current behavior is a problem), Contemplation (client might be aware of a problem but is not ready to commit to change the problem), Action (others can see a behavior change in the client as he/she invests in treatment for a period of 1 day to six months) and Maintenance (client continues to change his/her behaviors out of treatment to avoid relapse). Preparation was eliminated as a sample stage as nine of its ten items loaded on both contemplation and action (McConaughy, Prochaska & Velicer, 1983).

An example of an item from the Precontemplation Scale is “As far as I am concerned, I don’t have any problems that need changing.” The Contemplation Scale includes statements such as, “I have a problem and I really think I should work on it.” An example of an Action Scale item is “I am doing something about the problems that had been bothering me,” while an example of a Maintenance Scale item is “It worries me that I might slip back on a problem I have already changed, so I am here to seek help.”

The scores are the unweighted sum of each of eight items forming the individual scales rating from 8 to 40 (McConnaughy, Prochaska & Velicer, 1983).

The SoC scale has demonstrated good internal consistency reliability: Precontemplation (.88), Contemplation (.88), Action (.89) and Maintenance (.88) (McConnaughy, Prochaska & Velicer, 1983). In addition, this highly reliable assessment's adjacent stages correlate more highly with each other than with any other stage (McConnaughy, Prochaska, & Velicer, 1983). The Stages of Change Scales were designed to be a continuous measure. This means that testees can score high on more than one stage, although theoretically they should be adjacent stages. For example, hypothetically, one would not score high on Precontemplation and Action, but instead on the adjacent stages of Precontemplation and Contemplation (retrieved on 5/26/02, from www.uri.edu/research/cprc/measures/smoking04urica.htm).

Also, the Stage of Change assessment enables the testing of predictions based on the Transtheoretical Model of Change. These predictions state that certain processes of change are more effective with clients working in a specific stage of change. It is also suggested that resistance to therapy increases if the therapist is working on a different stage of change than what the client is in. Also, it is believed that premature termination and/or length of therapy is related to the stage of change a client is in at the beginning of treatment and that matching stages and processes can optimize the usefulness of therapy (McConnaughy, Prochaska & Velicer, 1983).

In a study by Rogers et al. (2001), readiness for change was examined among a sample of persons with severe mental illness who were about to participate in a vocational education program to find whether stage of change showed evidence of ability to predict compliance in treatment and actual change. Using 163 subjects, the researchers

found that the Means and Standard Deviations of their measurement with Prochaska's original sample of 310 people who did not have mental illness but were trying to quit smoking met the same level of internal consistency found by Prochaska in all stages except Precontemplation, which barely met a satisfactory level. For Precontemplation, Prochaska's sample had a mean of 1.63, a standard deviation of .61 and coefficient alpha of .77. Roger's sample had a mean of 2.31, a standard deviation of .65 and coefficient alpha of .67. Prochaska's sample showed a mean of 4.33, standard deviation of .49 and coefficient alpha of .75 for Contemplation, while Roger's results included a mean of 4.06, standard deviation of .63 and coefficient alpha of .78. The Action Stage revealed a mean of 4.03, a standard deviation of .70 and coefficient alpha of .87 for Prochaska, compared to Roger's sample mean of 3.93, standard deviation of .70 and coefficient alpha of .85. Finally, Prochaska's Maintenance Stage sample had a mean of 3.83, standard deviation of .67 and coefficient alpha of .76 compared to Roger's sample mean of 3.41, standard deviation of .75 and coefficient alpha of .76. One suggested explanation for the difference in the Precontemplation Subscale is that persons with severe mental illness may not be as aware of their need to change, resulting in greater involvement in the Precontemplation Stage.

In another study by Rochlen, Rude and Baron (2001), 3214 clients from a counseling center at a community college in Texas were interviewed using the Stages of Change Scale to determine the relationship between stages of change and duration in counseling. They found that the relation between the stages of change and attendance at one session, 2-3 sessions or 4 or more sessions was $X^2 = 12.87, p < .001$, between the two variables. The greatest association was between Precontemplators and having had only one session of counseling ($X^2 = 8.48, p < .005$) (Rochlen, Rude & Baron, 2001).

In a follow up study by McConaughy, DiClemente, Velicer and Prochaska (1989) the means and standard deviations were closely reproduced, despite a different clinical sample. The sample consisted of 327 adult outpatients being treated for psychiatric disturbances. Analysis of the completed Stage of Change assessment revealed a coefficient alpha of .79 for Precontemplation, .84 for Contemplation, .84 for Action and .82 for Maintenance, compared to Prochaska's measurements of .88, .88, .89 and .88 for Precontemplation, Contemplation, Action and Maintenance respectively.

The Barriers to Treatment Participation Scale

The Barriers to Treatment Participation Scale (Kazdin, Holland, Crowley & Breton, 1997) is an instrument that consists of 44 items rated on a five-point Likert-type scale ranging from 1 (never a problem) to 5 (very often a problem). It can be administered in person or by telephone. The items of the scale make up four total subscales related to treatment participation. These subscales are: Stressors and Obstacles That Compete with Treatment (events that interfere with participating in and coming to treatment), Treatment Demands and Issues (reflecting concerns and complaints about treatment), Perceived Relevance of Treatment (extent to which treatment seemed relevant and important) and Relationship with the Therapist (alliance and bonding with the therapist) (Kazdin & Wassell, 1999). The assessment also contains a Critical Events Scale in which specific events that may lead to treatment termination are considered.

The first subscale includes twenty items related to stressors and obstacles that compete with coming to treatment. Examples of a Stressors and Obstacles Subscale item include "Treatment was in conflict with another of my activities," "During the course of treatment, I experienced a lot of stress in my life," and "My job got in the way of coming to a session" (Kazdin, Holland, Crowley & Breton, 1997).

The Treatment Demands and Issues Subscale consists of ten items that reflect concerns and complaints about treatment and the extent to which treatment was confusing, too long, costly, difficult or demanding (Kazdin & Wassell, 1999). Examples of the Treatment Demands and Issues items are “My child refused to come to the sessions,” “Information in the session and handouts seemed confusing,” and “I did not feel I had enough to say about what goes on in treatment” (Kazdin, Holland, Crowley & Breton, 1997).

The third subscale, Perceived Relevance of Treatment, includes eight items related to the extent to which treatment was seen as relevant to the child’s problems, was viewed as important, and met with parent’s expectations (Kazdin & Wassell, 1999). Statements in this subscale include “Treatment did not seem necessary,” “My child now has new or different problems,” and “Treatment did not seem to be working” (Kazdin, Crowley, Holland & Breton, 1997).

Fourth, the Relationship with the Therapist Subscale contains six items involving the parent’s alliance and bonding with the therapist, including liking of, perceived support from and disclosure with the therapist (Kazdin & Wassell, 1999). These items include “I did not like the therapist,” “I do not feel the therapist supported me or my efforts,” and “The therapist did not call often enough” (Kazdin, Crowley, Holland & Breton, 1997).

The Critical Events Scale has fourteen items answered in yes/no format that were typically likely to occur only once during the course of treatment (Kazdin & Wassell, 1999). Sample items include, “My medical insurance did not cover this treatment,” “My child moved out of the house,” and “My child was put into an inpatient program or residential program.” Also, while common in families who drop out, these events were

not seen as barriers that account for the high rates of dropping out that characterize child and adolescent therapy. Kazdin developed this subscale to establish that barriers during treatment are not the same as or better explained by major life events that impede participation in treatment (Kazdin, Holland, Crowley & Breton, 1997).

For the purposes of this study, the two subscales found in research to most closely relate to therapeutic change, the Treatment Demands and Issues Subscale and the Perceived Relevance of Treatment Subscale, were used.

Kazdin et al. (1997) measured perceived barriers to participation in treatment for a group of 260 children and adolescents. An examination of the internal consistency of the BPTS pertaining to the total of the 44 barrier items of the scale revealed a .86 (coefficient alpha and Spearman Brown coefficient) for the parent completed BPTS and .93 (coefficient alpha) and .89 (Spearman-Brown coefficient) for the therapist completed BPTS. In addition, Kazdin et al. (1997) found that families who scored high [Hotelling's $T^2(3, 56) = 42.27$] on perceived barriers were more likely to drop out of treatment, were in treatment for a shorter period of time and had a high cancellation and no-show rate prior to dropping out. The relation between perceived barriers and measures of participation in treatment gives evidence of convergent validity. The measurements of low and high total barriers scores with percentage of dropouts, weeks in treatment, cancelled sessions and no show sessions were significantly related ($p < .001$) with Pearson product moment correlations of .41, .35, .16 and .21, respectively. An examination of the internal consistency of the BPTS as it pertains to the total barriers score revealed a .86 (coefficient alpha and Spearman Brown coefficient) for the parent completed BPTS. The effect size subscales for parent measures were: Stressors and

Obstacles (.72); Treatment Demands (.12); Relevance of Treatment (1.10) and Relationship with the therapist (.43).

When comparing high and low barriers groups, from parent or therapist versions of the BTPS, on weeks in treatment, cancellations and no shows, there were significant effects [Hotelling's $T^2(3, 56) = 10.42$ and 42.27 , respectively, both $p < .001$] (Kazdin & Wassell, 1999). The parent total barriers scores revealed significance in the prediction of treatment termination (F change = 8.20 , $p < .01$). The effect system for the subscales for the parent and therapist measures respectively were: stressors (.72 and 1.26); treatment demands (.12 and .65); relevance of treatment (1.10 and 1.67) and relationship with the therapist (.43 and .61). Thus, Perceived Relevance of Treatment was the Subscale that had the largest effect size in distinguishing dropouts and completers in treatment (Kazdin & Wassell, 1997).

In a study of treatment outcome and change from pre- to post-treatment of 169 children referred to outpatient treatment for oppositional, aggressive and antisocial behavior, improvement was reflected by reductions in total symptoms on Achenbach's (1991) CBCL (Kazdin & Wassell, 1999; Kazdin, 2000). Treatment attendance correlated significantly with total barriers scores, however perceived barriers did not contribute to treatment acceptability once the severity of child dysfunction was controlled (Kazdin, 2000). In addition, parent perceived relevance of treatment and treatment demands and issues were two facets of perceived barriers that made significant contributions to therapeutic change ($F(1,162) = 19.10$, $p < .001$; $R = .32$, $R^2 = .11$) (Kazdin & Wassell, 2000). Finally, higher levels of child dysfunction per CBCL scores were significantly related with lower parent expectations about child improvement, and parents with lower

expectancies perceived more barriers to treatment ($r = -.20$ to $-.25$; $p < .001$) (Nock & Kazdin, 2001).

In another study examining treatment completion and therapeutic change among 304 children ages 3-13 years who were referred for oppositional, aggressive, and antisocial behaviors, Kazdin and Wassell (2000) found that as the level of perceived barriers increased among families, the amount of therapeutic change and the proportion of children who made a marked change decreased. Also, they found that parent perception of the relevance of treatment and treatment demands and issues contributed significantly to the relation between perceived barriers and therapeutic change. Specifically, a multiple regression analysis was used in which perceived barriers predicting therapeutic change revealed a significant effect, $F(1, 162) = 19.10$, $p < .001$, $R = .32$, $R^2 = .11$. Children in families that experienced higher barriers to treatment participation improved less over the course of treatment. When investigating which facets of treatment barriers were more related to therapeutic change, only two scales, Treatment Demands and Issues and Perceived Relevance of Treatment were significantly related to therapeutic change ($t = 2.81$ and $t = 3.21$, respectively, both $p < .01$) (Kazdin & Wassell, 2000).

Treatment Attendance

For the purposes of this dissertation research, in order to further distinguish between clients, information was collected to determine how many therapy sessions each participant had attended as well as how long each client had been in treatment and treatment history. For example, two participants may have attended four sessions, but the first may have attended these sessions over the past month, while the second attended them sporadically for the past seven months. In addition, one client may have been in

treatment one or more times in the past, while another was experiencing treatment for the first time. This information was obtained on the demographic sheet

Demographic Information

Demographic information including gender, age, grade in school, race/ethnicity, method of payment for services (Medicaid, private insurance, self-pay), juvenile court involvement, probation status, DSM IV-TR (2000) Axis I and /or Axis II diagnosis, parent/guardian status (single parent, two parents, other relative, residential facility), substance abuse history and involvement in other therapeutic groups or medical services in the agency was considered.

Hypotheses and Research Questions

Both Kazdin (1997) and Prochaska (1983) have presented Barriers to Treatment Participation and The Transtheretical Models respectively in an attempt to understand what makes one remain in treatment and experience the right combination of variables to assure the successful completion of treatment for a client. Research cited in Chapter 2 suggests that one's readiness for therapeutic change (reflected by Stage of Change) as well as the real and perceived barriers one experiences during treatment have an impact on whether one successfully completes treatment or drops out prematurely.

As depicted in Table III, the research hypotheses were as follows, including which scales addressed each hypothesis:

1. Clients in higher stages of readiness for change will exhibit fewer behavior problems. The data to support this hypothesis will be as follows:
 - a. Precontemplation Stage scores will be significantly positively related to the Total Problems Scale scores of the CBCL (Achenbach, 1991).

- b. Contemplation Stage scores will be significantly positively related to the Total Problems Scale scores of the CBCL (Achenbach, 1991).
 - c. Action Stage scores will be significantly negatively related to the Total Problems Scale scores of the CBCL (Achenbach, 1991).
 - d. Maintenance Stage scores will be significantly negatively related to the Total Problems Scale scores of the CBCL (Achenbach, 1991).
2. The Treatment Demands and Issues Subscale of the Barriers to Treatment Participation Scale will be significantly positively related to the Total Problems Scale of the CBCL (Achenbach, 1991).
3. Higher scores on the Perceived Relevance of Treatment Subscale will be significantly positively related to the Total Problems Scale of the CBCL (Achenbach, 1991).
4. Number of sessions attended will be significantly negatively related to the Total Problems Scale of the CBCL (Achenbach, 1991).
- It is hypothesized that, as the number of sessions attended increases, the Total Problems Scale score (Achenbach, 1991) will decrease.
5. Length of time in treatment will be significantly negatively related to the Total Problems Scale score of the CBCL (Achenbach, 1991). It is hypothesized that as the length of time in treatment increases, the Total Problems Scale score of the CBCL (Achenbach, 1991) will decrease.

Identification of research hypotheses by number and the measurement used to address each question.

Note. SoC=Stage of Change (Precontemplation, Contemplation, Action, Maintenance), Dem. Of Trt.=Demandingness of Treatment scale of the Barriers to Treatment Questionnaire, Rel. of Trt.=Relevance of Treatment Scale from the Barriers to Treatment Questionnaire, # Sessions=Number of Sessions attended by client, Time in trt.=Total time in treatment, Total Bx. Prob.=Total Problems Scale from the Child Behavior Checklist (CBCL).

The data from this study were analyzed using simple regression analysis with the Total Problems Scale scores as the dependent variable, while the Stages of Change (Precontemplation, Contemplation, Action, and Maintenance), Barriers to Treatment (Perceived Relevance of Treatment and Perceived Demandingness of Treatment), number of treatment sessions attended and length of time in treatment were the independent variables. In order to perform the above analysis, SPSS 14.0 for Windows was used.

CHAPTER IV

RESULTS

This results chapter describes and summarizes the statistical analyses used to evaluate the research questions and hypotheses established in the previous chapters. The reliability coefficients, intercorrelations among the variables and descriptive statistics are provided in Table IV.

Regression Analysis

Because a low number of participants responded to the question regarding the number of treatment sessions attended (N=117, 23.5% of respondents missing), this variable was not included in the regression analysis. In future studies, this variable might prove to be invaluable in distinguishing if a client has not made progress due to sporadic attendance over a period of time, or due to some other factor, such as maladaptive cognitions in an adolescent diagnosed with Oppositional Defiant Disorder. A simple regression was conducted to investigate the relationship between Perceived Relevance of Treatment, Treatment Demands and Issues, time in treatment and Stage of Change, and the Total Problems Scale scores on the CBCL (Achenbach, 1991). The results were statistically significant $F(7,136) = 8.41, p < .001$. The adjusted R squared value was .266. This indicates that 27% of the variance in total problems scores for the CBCL (Achenbach, 1991) was explained by the independent variables (Perceived Relevance of

Treatment, Treatment Demands and Issues, Stage of Change and length of time in treatment) as shown in Table V.

Table IV
Pearson Product Moment Correlations, Means, Standard Deviations and Cronbach's Alphas of Variables

Scale	Time Trt	# ses	CBCL	P	C	A	M	TrtDem	PerRel
Time in Trt.	-----								
# sessions	.792**	-----							
CBCL	.260**	.183*	-----						
Precontemplation	-.066	-.128	.149	-----					
Contemplation	.117	.140	.210*	-.399**	-----				
Action	.070	.198*	-.056	-.387**	.662	-----			
Maintenance	.127	.174	.304**	-.162	.682**	.524**	-----		
Trt. Demands	.192**	.055	.218**	.261**	-.166*	-.070	-.132	-----	
Perceived Rel.	.162	.039	.275**	.256**	-.188*	-.111	-.111	.716*	-----
Mean	32.4	56.9	47.3	19.9	29.0	28.8	24.5	14.3	12.6
SD	37.2	85.2	27.1	6.4	6.6	6.2	6.3	4.4	4.6
Alpha			.96	.80	.88	.87	.80	.72	.75

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

Time Trt= Length of time in treatment; CBCL= total problems scale score on the Child Behavior Checklist; P= Precontemplation subscale score; C= Contemplation subscale score; A= Action subscale score; M= Maintenance subscale score; Trt Dem= Treatment demands and issues score; Per Rel= Perceived relevance of treatment score; Tot Bar= Total Barriers score; # ses= Number of sessions attended

Table V
Predictor Variables for Total Problems Scale Scores

Variable	(Unstandardized Coefficients)		(Standardized Coefficients)	t	Sig
	B	Std. Error	Beta		
Perceived Relevance	1.165	.612	.197	1.904	.059
Treatment Demands	.291	.650	.047	.447	.655
Time in Treatment	.124	.054	.171	2.289	.024*
Precontemplation	.590	.357	.139	1.655	.100
Contemplation	1.372	.482	.333	2.849	.005**
Action	-1.559	.430	-.359	-3.629	.000***
Maintenance	1.266	.439	.293	2.886	.005**

Note: Perceived Relevance= Perceived Relevance of Treatment; Treatment Demands= Treatment Demands and Issues; * $p < .05$; ** $p < .01$; *** $p < .001$

Consistent with predictions, contemplation scores were significantly positively related to total problem scores on the CBCL, and action scores were significantly negatively related to the total problem scores on the CBCL. This suggests that for those individuals who are thinking about engaging in treatment within the next six months, the parent also reported more behavioral issues for their child. It also suggests that for adolescents who reported they are actively working on their issues and making behavior changes, their parents endorsed fewer items related to behavioral problems for their child.

Inconsistent with predictions, maintenance scores were found to be significantly positively related to total problems scores on the CBCL. This suggests that for participants reporting that they were maintaining positive behavioral changes, their parents reported more behavioral issues and concerns. Also inconsistent with predictions, precontemplation scores were not significantly related to total problems reported on the CBCL. This suggests that there was no relationship between individuals who reported that they had no issues or need for treatment, and parents' reports of behavioral problems.

Also inconsistent with predictions, the Treatment Demands and Issues Scale scores of the Barriers to Treatment Participation scale were not significantly related to total problems scores on the CBCL. This suggests that there was no relationship between barriers related to treatment demands and issues and total problematic behaviors reported by parents.

Although the relationship between Perceived Relevance of Treatment and Total Behavior Problems approached significance ($p=.059$), they were not significantly related. This suggests that there was no relationship between parent reported perceptions of the relevance of treatment, and problematic behaviors and issues. Inconsistent with predictions, time in treatment was found to be significantly positively related to total problems scores on the CBCL. This suggests that for those adolescents who spent more time in treatment, their parents reported a high level of behavioral issues and concerns.

Summary

Following are the hypotheses of this investigation and the relevant general findings:

1. Stage of change scores (Precontemplation, Contemplation, Action and Maintenance) in treatment will be related to the Total Problems Scale Scores of the CBCL (Achenbach, 1991) in theoretically predictable ways as follows:
 - a. Data analysis revealed that Precontemplation scores were not significantly related to the Total Problems Scale scores of the CBCL (Achenbach, 1991). This did not support the hypothesis under study.

- b. Data analysis revealed that Contemplation scores were significantly positively related to the Total Problems Scale scores of the CBCL (Achenbach, 1991). This supported the hypothesis of this study.
 - c. Data analysis revealed that Action scores were significantly negatively related to the Total Problems Scale scores of the CBCL (Achenbach, 1991). This supported the hypothesis of this study.
 - d. Data analysis revealed that Maintenance scores were significantly positively related to the Total Problems Scale scores of the CBCL (Achenbach, 1991). This did not support the hypothesis of this study, as it was expected that the Maintenance scores would be significantly negatively related to the Total Problems Scale scores of the CBCL (Achenbach, 1991).
2. The Treatment Demands and Issues Scale scores of the Barriers to Treatment Participation Scale will be significantly positively related to the Total Problems Scale scores of the CBCL (Achenbach, 1991). Data analysis revealed that the Treatment Demands and Issues Scale scores were not significantly related to the Total Problems Scale scores of the CBCL (Achenbach, 1991). This did not support the hypothesis.
3. Perceived Relevance of Treatment Scale scores of the Barriers to Treatment Participation Scale will be significantly positively related to the Total Problems Scale scores of the CBCL (Achenbach, 1991). Data analysis revealed that the Perceived Relevance of Treatment Scale scores were not significantly related to the Total Problems Scale scores of

the CBCL (Achenbach, 1991). Although the relationship approached significance ($p=.059$), this hypothesis was not supported.

4. Number of sessions attended will be significantly negatively related to the Total Problems Scale scores of the CBCL (Achenbach, 1991).

As mentioned previously, this variable was not utilized in the analysis due to the low number of respondents to this question.

5. Length of Time in Treatment will be significantly negatively related to the Total Problems Scale scores of the CBCL (Achenbach, 1991).

This hypothesis was not supported as the variable Length of Time in treatment was significantly positively related to the Total Problems Scale scores of the CBCL (Achenbach, 1991).

A discussion of these results, together with their implications, limitations and directions for future research is offered in the following chapter.

CHAPTER V

DISCUSSION

The purpose of this chapter is to summarize the current findings and to integrate them with previous research. Implications for education and training of mental health professionals, counseling practice, and future research are offered.

Overview

This investigation examined the relationship between Stage of Change (Precontemplation, Contemplation, Action and Maintenance), Barriers to Treatment (Treatment Demands and Issues and Perceived Relevance of Treatment), attendance in treatment (length of time in treatment) and the CBCL (Total Problems Scale) in an effort to add to and expand on existing research aimed at facilitating the successful completion of psychotherapy among adolescents.

Contrary to predictions, the data revealed no significant relationship between an adolescent client's report of no problems to work on in treatment, and parent's report of problematic behaviors. However, consistent with expectations and previous research (Prochaska, 1993, 1994; Prochaska et al., 1994) as adolescent clients report that they are thinking about making behavioral changes within the next six months, their parents are

reporting more behavioral issues. Also consistent with expectations, adolescents who reported actively working on their issues, also had parents who reported fewer behavioral concerns. Contrary to predictions, adolescent clients who reported that they had made significant behavioral changes and were maintaining them, had parents who reported more behavioral issues.

Contrary to predictions and previous research (Prochaska, 1993; Prochaska, 1994; Prochaska et al., 1994), the findings in this study suggested that as an adolescent entered the stage of maintaining positive changes in behavior, the parent reported *more* problematic behaviors. It is unclear from this study why parents viewed their adolescent's behaviors as more problematic when the adolescent reported maintenance of positive behavioral changes. One possibility might be that the diagnosis of Oppositional Defiant Disorder was identified in twenty percent of the participants in this study.

Adolescents diagnosed with ODD consistently struggle with taking responsibility for their problem behaviors and might be more prone to dishonestly answer questions about their effort and willingness to change in treatment. For example, an adolescent with ODD might endorse more of the maintenance stage statements on the Stages of Change questionnaire, when the client should be endorsing more of the precontemplation statements. It might be worthwhile to perform an analysis with separate diagnostic categories in a future study to explore their impact on Stage of Change Assessment results. This might provide greater efficiency for therapists in recognizing and attending to clients who might struggle with addressing where they are in the treatment process.

Prochaska and DiClemente (1983) believe that a client in the Precontemplation stage processes less information about their problem behaviors. Also, in their research the amount of progress made in treatment following an intervention tended to be a

function of the pretreatment stage of change. When reviewing the data from this study, the precontemplation scores were higher than the contemplation, action, and maintenance scores for almost 75% of the participants. This might suggest that a higher number of participants in this study started at precontemplation, resulting in less progress than participants starting at the contemplation or action stages. With this information, one might question why there was no significant relationship found between participants endorsing more items for the precontemplation stage and parents' reports of behavioral issues. Kazdin (1997) believes that a high risk group can be studied and researchers can determine if something is going to happen, but not what is *likely* to happen. Thus a high risk group may not show the expected outcome, while a low risk group will. In this study, 60% of the participants came from a single parent household and 65% were on Medicaid. Both single parent households and low socioeconomic status are identified in research as high risk factors (Kazdin, 1999; Kazdin & Weisz, 1998; Kazdin, Holland & Crowley, 1997; Kazdin & Mazurick, 1994). This might offer a reason about why adolescents who reported that they had no problems (precontemplation) were contradictory to parents' reports of behavioral problems. For future research, it might be helpful to utilize demographic data identifying high risk participants with a better balanced data set of precontemplators, contemplators, actors and maintainers to attempt to replicate prochaska's findings in previous research. If Prochaska's findings cannot be replicated with a high risk population utilizing a balanced data set, this might provoke a closer analysis of the differences between high risk and low risk populations to better understand the impact of this variable on treatment outcomes.

The significant relationships found between adolescents who reported thinking about working on their problems within the next six months (contemplation) and parental

reports of behavioral concerns, as well as adolescents who reported actively working on their issues (action) and parental reports of behavioral concerns might provoke questions as to why there was not a relationship between precontemplation scores and behavioral concerns. Kazdin et al. (1987, 1989) have found that antisocial children who view themselves as making progress are rated by their parents and teachers as more socially competent, less deviant and better adjusted according to the CBCL. As mentioned previously, the data from this study revealed that 20 % of the participants had a diagnosis of ODD. This information, coupled with previous research by Kazdin (1997) might provide further insight regarding the rejection of one hypothesis related to precontemplation scores and behavioral concerns, and the acceptance of two hypotheses related to contemplation and action scores with behavioral issues. Thus, while the high risk group that represented 60-65 % of respondents may have impacted the rejection of one hypothesis, the 20 % of adolescent participants with antisocial behaviors may have impacted the acceptance of two hypotheses. Future research that explores the impact of diagnostic categories and stage of change scores on reports of behavioral issues might be helpful. For example, one might consider looking at the impact of stage scores on behavioral issues among families in low SES, single parent households with an adolescent diagnosed with ODD. Parenting status, SES, and the diagnosis of the adolescent could be evaluated individually and in combination, in order to more thoroughly understand their influence on stage scores and behavioral concerns.

Norcross and Prochaska (1985) identified that conduct problems are both externally and internally driven, with varying levels of symptoms, including maladaptive cognitions, altering the way a child explains his experiences and its effects on thoughts, emotions, and behaviors. The data in this study also revealed that as the adolescents

reported maintenance of behavioral changes, their parents reported an increase in behavioral concerns. One possibility for this might be that the adolescents' maladaptive cognitions promoted more endorsements of statements related to functioning well, while the parents' observations of dysfunctional behavior in their adolescent remained problematic. Future research might identify diagnostic categories, as previously mentioned, to determine their impact on the relationship between stage of change and parental reports of behavioral issues to potentially further our understanding of change in treatment.

Parents also reported that as their adolescent spent more time in treatment, behavioral issues increased. This did not support the hypothesis that as the adolescent spends more time in treatment, their parents would report fewer problematic behaviors. Kazdin and his colleagues (Kazdin, 1994, 1999; Kazdin & Mazurick, 1994; Kazdin, Holland & Crowley, 1997; Kazdin & Weisz, 1998; Kazdin & Wassell, 1999; Kazdin & Whitley, 2003) stated that parents with low expectations for treatment such as low SES, single parent status, significant child impairment and high stress in the parent often results in a family not participating well or consistently in treatment, resulting in less change. As mentioned before, the number of sessions attended was a variable that was not included in this study due to the low number of respondents to the question. As a result, there was no way of knowing if an adolescent client who had been in treatment for one year had attended sessions weekly, monthly, or less. It has previously been established that 60 to 65 % of the families in the sample were likely in the high risk category. It is possible that parents reported more problems with behaviors over time in treatment due to inconsistent attendance or low expectations as a result of being in a high risk group. Future research needs to include both time in treatment and number of

sessions attended to get a clearer picture of this dynamic in treatment. An understanding of the relationship between sporadic versus consistent attendance on behavioral changes in treatment might help provide direction for focus on high risk populations.

In addition to lacking data related to the number of sessions attended, this study did not include those who have already dropped out of treatment. Kazdin, Siegel and Bass (1990) stated that parent, family and child characteristics that predict poor participation and early termination in treatment include low SES, parent stress, severity of the child's behaviors and the child's motivation to change. Kazdin and Weisz (1998) stated that these risk factors can also impact therapeutic outcome. Future studies should include those who have already dropped out of treatment, with number of sessions attended and length of time in treatment to determine how each variable impacts parental reports of behavioral changes. An understanding of variables that have the greatest impact on early dropout could provide a focus for future dropout prevention programs.

There was no relationship found between reports by parents of treatment demands experienced and behavioral issues and concerns, which did not support the hypothesis. Also, while the relationship between parent reports of treatment relevance and behavioral problems approached significance, the prediction was not supported. Kazdin, Holland and Crowley (1997) stated that dropouts in treatment have many more barriers than completers, such as low SES and parents who report that their children have a high number of behavioral symptoms. Again, this study did not look at dropouts, nor did it look at treatment completers. Future research should include these variables to determine if previous research results can be replicated. It might be found that when data from dropouts, completers, and participants in treatment are all utilized, a significant relationship occurs between time in treatment and parent reports of problematic

behaviors. This could provide a guideline for when to look for behavioral changes to begin, or when to address why changes have not begun to occur.

Kazdin (2001) stated that high scores on the CBCL (Achenbach, 1991) are significantly related to lower parent expectations about client improvement and higher perceived barriers to treatment. Although it was expected that as parents reported more barriers such as “treatment is too difficult,” “too much work” or “not working” they would also endorse more problem behaviors by their adolescent, data revealed no significant relationship between these two variables. In addition, treatment issues and demands reported by the parent were not significantly related to total behavior problems. Kazdin, Holland and Crowley (1997) found that high risk families who perceive fewer barriers actually drop out of treatment less than those at high risk who perceive high barriers. Since this study did not account for dropouts from treatment, one might question if the high risk families involved in this study perceive fewer barriers, which impacts the relationship between barriers and problem behaviors. Future research should include dropouts to determine if Kazdin, Holland and Crowley’s (1997) findings can be replicated to provide additional information about the extent of the relationship between barriers reports and problem behaviors in adolescents in treatment. This might provide data on the extent to which a family can tolerate barriers and behavioral issues before dropping out of treatment.

Implications for Education and Training

It might be important for counselors to be educated about the impact of risk factors on the treatment process over time, being aware that it is possible to have a client in treatment for a long period of time without a decrease in reports of behavioral concerns from the parent. Specifically, the counselor should be aware of as many resources as

possible for providing a reprieve from certain risk factors such as low SES, parent level of stress and severity of the adolescent's behaviors. Examples of this might be the practice of connecting a parent to financial resources for housing, food and transportation, as well as offering respite care and similar services that provide the parents and adolescents with a break from each other.

Also, closely monitoring the adolescent's severity of symptoms and behaviors might highlight "red flags" for a clinician if an adolescent has made few positive behavioral changes, or has gotten worse over time. This might indicate a need for a psychiatric evaluation for medication, or a thorough physical exam to rule out biological factors. In extreme cases, the clinician might need to consider the need for an adolescent in treatment to go to a more restrictive residential placement setting. When the counselor considers that the goal of treatment for a family is to successfully achieve the treatment goals identified, the consideration of the above mentioned options for an adolescent who is not making positive behavioral changes over a significant period of time may ultimately increase the odds for successfully completing treatment.

It might be important for a counselor to learn how to administer and score the SoC Assessment and the CBCL, as well as to understand the relationship between the contemplation and action stages with parent reports of behavioral concerns. This knowledge might help a clinician with understanding the progress of an adolescent through treatment, as well as the trend for parents to report high levels of behavior concerns for a child in contemplation and lower levels of behavior concerns for a child in action. As mentioned previously, understanding the relationship between stage scores and behavioral issues might help guide a clinician with helping a parent understand both similarities and differences in their reports of problematic behaviors and their child's

perception of changes in behavior. Simply put, the clinician can encourage the parent to “not give up” when they are noticing continued behavioral concerns as well as continue to support the adolescent in making continued positive behavioral changes.

A clinician might also benefit from understanding the complexities of adolescent development, as well as the internal and external drives, that exacerbate symptoms such as maladaptive cognitions, which ultimately have the potential to interfere with successful treatment completion. A better understanding of the developmental milestones of the adolescent with mental illness might promote the use of treatment techniques that more closely match his/her needs.

Implications for Practice

Counselors currently in practice with the adolescent population might find it helpful to utilize the stage of change assessment with the CBCL for parents, to address change, or lack of change, in treatment. For example, an adolescent client in the contemplation stage may be likely to have a parent reporting a high number of behavioral issues and concerns. The counselor may want to discuss with the parent that as their adolescent continues in treatment and enters the action stage, a decrease in problematic behaviors will likely be observed. This information from the counselor might prevent unnecessary pessimism in the parent regarding the usefulness of treatment, possibly preventing early termination.

Counselors who find that their adolescent client is reporting maintaining positive behavioral changes on the Stage of Change Assessment, while the parent is reporting high numbers of behavioral problems on the CBCL, might find it necessary to address diagnostic information and antisocial behaviors in treatment. They may find it necessary to adjust their treatment approach to promote changes due to the possibility that the

adolescent is using maladaptive cognitions. There also exists a developmental component to parent's views of what their children's problems are. For example, the parent of a 13 year old may report behavioral issues related to hormone changes and puberty, while a parent of a 16 year old may be reporting behaviors such as stealing the family car. When considering the above variables, one might find that even small adjustments could increase the chances that the adolescent will complete treatment successfully.

When an adolescent has been in treatment for an extended period of time and the parent is continuing to report a high level of behavioral problems and concerns on the CBCL, it might be important to review the number of risk categories the family is in, such as low SES and parent stress level. These factors could be contributing to the lack of progress and may lead to a greater risk for dropout. The counselor might recommend additional services such as case management, which is often free of charge to families, and can provide access to food, clothing, and social support.

Directions for Further Research

This study involved reports from the parent(s)/guardian(s) of the adolescent client's problem behaviors and symptoms. There are other CBCL (Achenbach, 1991) assessments for children, adolescents, teachers, and counselors to complete for evaluating total behavioral problems and symptoms in an identified client. Further research could involve the client's self report of symptoms, as well as the counselor's report of behavioral issues and symptoms. Use of the adolescent self report, the clinician report and parent/guardian reports of problematic symptoms as dependent variables, along with barriers to treatment, stage of change, and time in treatment as independent variables, might provide information needed to further tailor treatment goals and needs for the individual client and the client within his/her family system. It might be found that when

utilized as an additional dependent variable, a different format of the CBCL might be more significantly influenced by stage of change, barriers to treatment participation, time in treatment and number of sessions attended. For example, if research outcomes indicate a significant relationship between child reports on the CBCL and barriers to treatment, and child reports on the CBCL and stages of change measures, it might make sense to utilize the child report CBCL measure as opposed to the parent report of behavioral problems on the CBCL. Should this be the case, one might find it more effective to monitor child reports on the CBCL as treatment progresses for better odds at a successful treatment outcome.

In a study by Kazdin (1991), he explored parent psychopathology, child pathology, and barriers experienced in treatment. He concluded that there is a need to address how barriers change, as well as how child and parent functioning changes throughout treatment. In this study, parent pathology was not assessed as an additional variable. It might be helpful to utilize a measure for parents, such as the Parenting Stress Index (PSI; Abidin, 1990), which measures parental stress levels, in addition to the Stage of Change assessment, Barriers to Treatment Assessment, length of time in treatment and number of sessions attended to develop a better understanding of these independent variables on the dependent variable; CBCL Total Problem Scale scores. It might be found that as parent stress increases, total problem behaviors also increase. This might also help provide a better understanding of parent and adolescent dynamics in relation to transitioning through the stages of change.

Because this study was based on measurements taken at one point in time, it does not provide a clear picture of what might have happened before, during and after the treatment of the adolescents in this study. Kazdin (1991) suggests that some treatments,

especially cognitive behavioral interventions, can show changes up to one year post treatment. He also stated that barrier measurements also change over time. Thus, it might provide a more accurate picture of the journey of the adolescent and the family through treatment to take measures of barriers, stage of change, adolescent symptoms, parental stress and attendance before, during and after treatment, or until dropout. This might provide answers to how and why adolescents and families do and do not make changes in treatment, as well as the positive and negative impacts that adolescents, parents and the family system have on the treatment process.

Limitations of This Study

One limitation of this study was the population sampled. This study was limited to counselors, parents/guardians and adolescent clients in one outpatient community mental health agency in Northeast Ohio. These same results might not be found in counseling settings such as schools, private practice, or inpatient mental health facilities. This impacts the research's generalizability.

As mentioned previously, the results of some of the assessments, such as the Stage of Change Assessment were heavily weighted towards adolescent clients identifying themselves in the Precontemplation and Contemplation Stages. This created an uneven sample for comparing with the other variables in the study. This may have impacted the analysis of the stages in relation to the total behavior problems reported by the parents/guardians of the adolescent clients in this study. This also may have had an impact on the relationships found that were the opposite of what was hypothesized. For example, the finding that length of time in treatment was significantly positively related to total problems scores may be due to part of the sample representing a cluster of clients with more severe diagnoses, requiring a longer period of time in treatment before an

alleviation of symptoms is reported. In this study, diagnostic criteria were not included in the analysis, requiring further study.

Another limitation in this study is the length and number of assessments required to be completed. The 113 items on the CBCL (Achenbach, 1991) may have deterred several potential participants from the study. In addition, it is possible that some participants completed their assessments without careful consideration of each item, or dishonestly, as they were filled out independently, rather than with a helping professional's guidance, to ensure confidentiality. Thus, if the adolescent client filled out the shorter Stage of Change Assessment dishonestly, and/or the parent became fatigued during the process of completing the CBCL and Barriers to Treatment Assessments, it might compromise the data analysis.

Next, this study involved obtaining measurements at just one moment in time using a regression analysis. It was discussed earlier that clients make changes at many different points during treatment, including post-treatment changes. Kazdin (2003) stated that regression analysis does not take into account a time line of when changes occurred. He stated that there is a need to develop time lines in treatment research to determine which changes came first. Having measurements at varying points in time for this study might provide further clarification of the findings that did not support the hypotheses, such as the significant positive relationship between time in treatment and total problems scores, as well as the significant positive relationship between Maintenance Stage scores and total problems scores. It might be found that the original hypotheses are supported when looking at measurements throughout the treatment process, not solely at one point in time, more accurately portraying the impact of the independent variables on problem behaviors.

Although this researcher intended to collect data at one point in time, it took approximately two and one-half years to collect the data from participants. This is a limitation to this study due to constantly changing socioeconomic variables that might have impacted how a participant responded to assessment questions. For example, in the changing economy, a participant who completed an assessment packet in the first year of data collection may not have been feeling the residual effects of budget cuts and crises, such as parental job loss and foreclosures, that can impact the stress levels and functioning within a family system. These stressors may have been more noticeable in packets completed within the past 6 months, possibly resulting in more pessimistic responses, including frequent endorsements of behavioral problems and barriers experienced. Other factors related to history (i.e., the passage of time) may have also influenced the data.

Another area of limitation for this study was the use of the Stages of Change assessment with an adolescent population. Prochaska has typically used this assessment for research with adults attempting to change a problematic behavior. He has used adolescents in just a handful of studies investigating behavioral changes through stages (Prochaska, 1994; Prochaska et al., 1994).

Summary

This study examined the relationship between Stage of Change (Precontemplation, Contemplation, Action and Maintenance), Barriers to Treatment (Perceived Treatment Demands and Issues and Perceived Relevance of Treatment), the CBCL (Total Problems Scale) and attendance in treatment (number of sessions attended and length of time in treatment), in an effort to replicate previous findings and provide

new insights into ways to facilitate adolescent therapeutic change and treatment completion.

A great deal of research exists on the topics of progression through stages of change in treatment (Prochaska, 1993; Prochaska & DiClemente, 1983, 1986, 1992; Prochaska, DiClemente & Norcross, 1992; Prochaska & Norcross, 1999), as well as the impact of barriers on the completion of treatment (Kazdin, 1991, 1993, 1995, 1999, 2000; Kazdin, Hollan & Crowley, 1997; Kazdin & Mazurick, 1994; Kazdin & Nock, 2003; Kazdin & Wassell, 1998, 1999, 2000). However, no research has been conducted that investigates the combination of these two variables. While the majority of the hypotheses under study here were not supported, there were significant relationships found that were not hypothesized in this research, including the significant positive relationship between maintenance scores and total reported behavior problems in the adolescent clients, and the significant positive relationship between time in treatment and total behavior problems in adolescent clients. In addition, there were hypotheses within this research that *were* supported, which reflect previously established findings that as an adolescent progresses from thinking about changing within the next six months to actively working on changing problem behaviors, their parent reports fewer problem behaviors (Prochaska, 1994). This provides a potential framework from which to pursue future research, as well as to develop new research questions related to the impact of the stages one goes through while changing problematic behaviors in treatment, as well as the barriers impeding that change and successful completion of treatment.

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APPENDICES

APPENDIX A

IRB Approval Forms



Cleveland State University

College of Graduate Studies and Research
Office of Sponsored Programs and Research
Institutional Review Board (IRB)

Memorandum

To: Elizabeth R. Welfel
Counseling

From: Patrick Murray,
Graduate Assistant for Compliance,
Institutional Review Board

Date: September 8, 2005

Re: Results of IRB Review of your project number: 26014-WEL-HS
Student/Co-Investigator: Heidi M. Sliter
Entitled: Barriers and stages of change in treatment: The relationship between adolescent response to treatment

The IRB has reviewed and approved your application for the above named project, under the category noted below. Approval for use of human subjects in this research is for one year from today. If your study extends beyond this approval period, you must again contact this office to initiate an annual review of this research.

By accepting this decision, you agree to notify the IRB of: (1) any additions to or changes in procedures for your study that modify the subjects' risk in any way; and (2) any events that affect that safety or well-being of subjects.

Thank you for your efforts to maintain compliance with the federal regulations for the protection of human subjects.

Approval Category:**Date: 9/6/2005**

- ☐ Exempt Status: Project is exempt from further review under CFR 46.101
- ☐ Expedited Review: Project approved, Expedited Category
- ☒ Regular IRB Approval

cc: Project file

Mailing Address: 2121 Euclid Avenue, KB 1150 • Cleveland, Ohio 44115-2214
Campus Location: Keith Building, Room 1150 • 1621 Euclid Avenue • Cleveland, Ohio
(216) 687-3630 • Fax (216) 687-9382

APPENDIX B

Letter to James Prochaska

Heidi M. Sliter
17033 Madison Avenue #309
Lakewood, OH 44107

Dr. James O. Prochaska
Department of Psychology
University of Rhode Island
Kingston, RI 02881

Dr. Prochaska:

I am a doctoral student of urban studies at Cleveland State University in Cleveland, Ohio, working on a research project under the supervision of Dr. Elizabeth Welfel. The purpose of my research is to determine if there is a relationship between Alan Kazdin's Barriers to Treatment model and your Stages of Change Model and treatment completion. I intend to study fourteen to seventeen year old adolescents and their families in a child and adolescent community mental health agency. I am writing for permission to use your Stages of Change questionnaire as a measurement in my research. I intend to use the instrument only once for the purpose of this study, of which I will send you a copy of my findings. I hope that the data I collect with this adolescent population will be of use to you.

Sincerely,

Heidi M. Sliter, MA-ATR, PC

APPENDIX C

Letter to Alan Kazdin

(sent by e-mail)

Dr. Kazdin:

I am a doctoral student of urban studies at Cleveland State University in Cleveland, Ohio, working on a research project under the supervision of Dr. Elizabeth Welfel. The purpose of my research is to determine if there is a relationship between James Prochaska's Stages of Change model and your Barriers to Treatment model and treatment completion. I intend to study 14-17 year old adolescents and their families in a child and adolescent community mental health agency. I am writing for permission to use your Barriers to Treatment questionnaire as a measurement in my research. I intend to use the instrument only once for the purpose of this study, of which I will send you a copy of my findings. I hope that the data I collect with this adolescent population will be of use to you.

Sincerely,

Heidi M. Sliter, MA-ATR, PC

APPENDIX D

Approval From James Prochaska

A general release to use the Stages of Change Assessment for research purposes only can be found on James Prochaska's website: <http://www.uri.edu/research/cprc/measures.htm>

APPENDIX E

Approval Letter From Alan Kazdin

Subj: Greetings

Date: 9/30/04 1:03:03 PM

From:

To:

Dear Ms. Sliter,

Your recent letter was delayed in reaching me (I am at a different address from the one you used in your letter). Please feel free to use the Barriers To Treatment Participation Scale as you requested in your letter. Good luck with your work.

Best Wishes,

Alan Kazdin

APPENDIX F
Stages of Change Questionnaire

This questionnaire is to help us improve services. Each statement describes how a person might feel when starting therapy or approaching problems in their lives. Please indicate the extent to which you tend to agree or disagree with each statement. In each case, make your choice in terms of how you feel right now, not what you have felt in the past or would like to feel. "Here" refers to the place of treatment or the program.

There are five possible responses to each of the items in the questionnaire: (1=strong disagreement, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree).

1. As far as I'm concerned, I don't have any problems that need changing. _____
2. I think I might be ready for some self improvement. _____
3. I am doing something about the problems that had been bothering me. _____
4. It might be worthwhile to work on my problem. _____
5. I'm not the problem one. It doesn't make sense for me to be here. _____
6. It worries me that I might slip back on a problem I have already changed, so I am here to seek help. _____
7. I am finally doing some work on my problems. _____
8. I've been thinking that I might want to change something about myself. _____
9. I have been successful in working on my problem but I am not sure I can keep up the effort on my own. _____
10. At times my problem is difficult, but I am working on it. _____
11. Being here is pretty much a waste of time for me because the problem doesn't have

- to do with me. _____
12. I'm hoping this place will help me to better understand myself. _____
13. I guess I have faults but there is nothing that I really need to change. _____
14. I am really working hard to change. _____
15. I have a problem and I really think I should work on it. _____
16. I'm not following through with what I had already changed as well as I had hoped, and I'm here to prevent a relapse of the problem. _____
17. Even though I'm not always successful in changing, I am at least working on my problem. _____
18. I thought once I had resolved the problem I would be free of it, but sometimes I still find myself struggling with it. _____
19. I wish I had more ideas on how to solve my problem. _____
20. I have started working on my problems but I would like help. _____
21. Maybe this place will be able to help me. _____
22. I may need a boost right now to help me maintain the changes I've already made. _____
23. I may be part of the problem, but I don't really think I am. _____
24. I hope that someone here will have some good advice for me. _____
25. Anyone can talk about changing; I'm actually doing something about it. _____
26. All this talk about psychology is boring. Why can't people just forget about their problems? _____
27. I'm here to prevent myself from having a relapse of my problem. _____

28. It is frustrating, but I feel I might be having
a recurrence of a problem I thought I had resolved. _____
29. I have worries but so does the next person.
Why spend time thinking about them? _____
30. I am actively working on my problem. _____
31. I would rather cope with my faults than
try to change them. _____
32. After all I had done to try to change my problem,
every now and again it comes back to haunt me. _____

APPENDIX G

Barriers to Treatment Participation Scale

(Perceived Relevance and Treatment Demands and Issues Subscales)

Each statement describes how a person might feel about treatment demands and issues when attending treatment. Please indicate the extent to which you feel that each statement is a problem for you and/or your child. Make each choice in terms of how you have felt since you began treatment.

There are five possible responses to each of the items in the questionnaire: (1= never a problem, 2=rarely a problem, 3=sometimes a problem, 4=often a problem, 5=very often a problem)

1. My child refuses to come to the sessions. _____
2. Treatment is lasting too long. _____
3. Treatment does not seem necessary. _____
4. I feel that treatment costs too much. _____
5. I was billed for the wrong amount. _____
6. Treatment is not what my child/I expected. _____
7. Information from the session and handouts seem too confusing. _____
8. My child has trouble understanding the treatment. _____
9. My child lost interest in coming to sessions. _____
10. I feel treatment does not seem as important as sessions continue. _____
11. I feel this treatment is more work than my child/I expected. _____
12. The atmosphere at the clinic makes it uncomfortable for appointments. _____
13. I feel treatment does not focus on my child's life and problems. _____
14. My child now has new or different problems. _____
15. My child's behavior seems to have improved, therefore, treatment no longer seems necessary. _____
16. Treatment does not seem to be working. _____
17. I do not feel I have enough to say about what goes on in treatment. _____
18. The assigned work as part of this treatment is much too difficult. _____

APPENDIX H

Counselor Informed Consent Form

My name is Heidi Sliter and I am currently conducting research in fulfillment of the requirements of my degree in the Urban Studies Doctoral Program at Cleveland State University. I am also a full time counselor/art therapist here at Crossroads and can be reached Monday through Friday from 8:30AM to 4:30 PM at extension 209. The research I am conducting involves an exploration of the relationship between a client's readiness to change, their perceived barriers to treatment and treatment completion.

Currently, I am looking for counselors who are willing to solicit their adolescent clients and parents/guardians to participate in this study. Your client (age 14-17 only) will be asked to complete a Stage of Change questionnaire (how ready they are to make changes through the treatment/counseling process), which should take approximately 5 minutes to complete. Your client's parent/guardian will be asked to complete a Child Behavior Checklist and a Barriers to Treatment Participation Scale. The barriers scale should take approximately 5 minutes to complete and asks questions about struggles with coming to treatment, such as no transportation, non-supportive family member, no health insurance, etc. The assessments do not need to be completed during the counseling session. Your client and his/her parent can complete them either before or following a session.

Although you are not required to intervene with the questionnaires that are completed by your clients and/or parents/guardians, if for any reason they disclose discomfort or confusion over the research process, please contact me at extension 209 or you may contact the Institutional Review Board at Cleveland State University (216) 687-3630.

Participation in this study is strictly voluntary. Your name will not be used in any portion of this study and clients will be identified by a random number between 1 and 150. There will be no way of tracing completed surveys back to specific individual clients. In addition, participation in this study will not result in any type of compensation, monetary or otherwise. There are no foreseeable risks to participating in this study beyond the time expenditure. Through this research, I am hoping to find a connection between client success in treatment, client readiness to make positive changes in treatment and parent perceived barriers to having their child in treatment. With a greater understanding of these factors, I hope to shed some light on ways the agency, counselors, parents/guardians and clients can identify and problem solve issues regarding treatment compliance and completion.

Once I have collected all of my data, you will receive a summary of the findings at your request

Thank you,

Heidi M. Sliter MA-ATR, PC

I understand that if I have any questions about my rights as a research subject I can contact the CSU Institutional Review Board at (216) 687-3630.

Participant Signature/ Date

APPENDIX I
Participant Letter and Consent Form

Dear Research Participant:

My name is Heidi Sliter and I am a counselor at this agency. I am currently conducting a research project in an effort to help this agency both understand your child's progress and to meet your and your child's needs while in treatment. I also hope to learn more about your understanding of therapy and the impact of obstacles you might encounter on your ability to attend sessions and complete treatment. It is my hope that by using the data collected, this agency might be able to better understand some of the parental challenges encountered when your child is in treatment.

Data collection will consist of parent completion of the Child Behavior Checklist and Barriers to Treatment scales. Your child will be asked to complete the Stage of Change scale. It should take approximately 15-20 minutes to complete the parent scales, and only 5 minutes to complete the Stage of Change scale. Also, at this time, I will only be accepting Stage of Change scales filled out by adolescents ages 14-17 years old. Once you have completed the questionnaires, you will need to return them in the provided sealed envelope to your counselor.

Participation in this study is voluntary and you may drop out at any time. In addition, your name will not be used in any portion of this study, as your answers will be identified by a random number between 1 and 150. You will receive no compensation, monetary or otherwise for participating in this study. On the other hand, I feel that with a greater understanding of some of the struggles experienced by parents in their efforts to obtain mental health services for their child/children, this agency might gain insight into methods for alleviating obstacles. Once the research has been completed, and upon request, you will receive a summary of my findings and suggestions.

If you would like to participate and/or have any questions or concerns, you may contact me Monday through Friday 8:30AM to 4:30PM at 440-255-1700 (ext 209), or you may contact the Institutional Review Board at Cleveland State University.

Thank you for your time.

Sincerely,

Heidi M. Sliter, MA-ATR, PC

Client and Parent/Guardian Informed Consent Statement

My name is Heidi Sliter and I am a doctoral student at Cleveland State University working on my dissertation in fulfillment of a degree requirement. I am also a full time counselor at this agency and can be reached Monday through Friday from 8:30AM-4:30PM at 440-255-1700 (ext. 209). My research topic is an exploration of how clients successfully complete treatment and the barriers involved with those clients who drop out of treatment early. For example, some clients might find it difficult to comply with sessions due to difficulties with finding reliable transportation. In addition, I am looking at the relationship, if any, between a client's readiness for change in treatment and the above mentioned barriers encountered during treatment.

In an effort to collect data for my research, I am asking for volunteers to complete three questionnaires. The first two questionnaires, the Child Behavior Checklist and the Barriers to Treatment Scale, take approximately 30-40 minutes to complete by a parent/guardian. The Stage of Change scale is to be filled out by your 14-17 year old child, and should take approximately 5 minutes to complete.

By collecting this information, I am hoping to highlight some of the more significant challenges faced in the adolescent's counseling process. Through a greater understanding of these obstacles, it might be easier to detect and resolve them, in an effort to increase your child's success in treatment.

There are no foreseeable risks to participating in this research project, although the use of your minor child in data collection does require your permission as well as the assent of your child and his/her total understanding of the processes involved. Also, there may be some discomfort in the completion of the Child Behavior Checklist as it covers both the strengths and problem areas of your child's functioning. All information gathered will be confidential, through the use of a random number between 1 and 150. At no point will you or your child be asked to provide your name or other obvious identifying information. Should the research process become problematic for you or your child at any time, please do not hesitate to call me at the number listed above. In addition, if you have any questions about your rights as a research participant you can contact the CSU Institutional Review Board at 216-687-3630.

Sincerely,

Heidi M. Sliter, MA-ATR, PC
Crossroads therapist

I understand that if I have any questions about my rights or my child's rights as a research subject, I can contact the CSU Institutional Review Board at (216) 687-3630.

parent/guardian signature

date

child signature

date

APPENDIX J
Child Behavior Checklist

The Child Behavior Checklist (CBCL, Achenbach, 1991) and other materials from Thomas M. Achenbach can be obtained from the following address:

Thomas M. Achenbach
Department of Psychiatry
University of Vermont
Burlington, VT 05401

APPENDIX K

Demographic Information

Please answer the following questions to the best of your ability. Do not include your name anywhere on this form.

Age: _____ Sex: M F Race: _____

Grade level: _____

Are you currently on probation? Yes No

Do you live with: (circle one)

one parent both parents other guardian/relative

What is your current diagnosis? _____

Approximately how long have you been in treatment? _____

Approximately how many sessions have you attended? _____

Are you involved in med-som or other groups or services in this agency? Please list.

Method of payment for services: (circle one)

Medicaid private insurance self pay

Method of transportation to appointments: (circle one)

Public transportation Family car Other: _____

APPENDIX L

Client Assent Form

My name is Heidi Sliter and I am a doctoral student at Cleveland State University working on my dissertation in fulfillment of a degree requirement. I am also a full time counselor at this agency and can be reached Monday through Friday from 8:30AM-4:30PM at (440) 255-1700 (ext. 209). My research topic is a study of how clients complete treatment successfully, as well as barriers for those clients who drop out of treatment early. For example, some clients might find it difficult to come to their appointments because of problems with getting a ride to the counselor's office. I am also looking at how aware client's are of any issues or problems they are currently struggling with, such as depression, anger outbursts, non-compliance and/or struggles with mood.

In an effort to collect data for my research, I am asking adolescents ages 14-17 years old to complete the Stages of Change Questionnaire. This assessment takes approximately five minutes and is a paper and pencil test. Some examples of questions on this assessment include "As far as I am concerned, I don't have any problems that need changing" and "It might be worthwhile to work on my problem".

By collecting this information, I am hoping to highlight some of the more difficult challenges the adolescent client faces when attending treatment. Through a greater understanding of these obstacles, I am hoping that it will be easier to detect and resolve them to avoid their interference in your treatment.

There are no foreseeable risks to participating in this study, although it may be difficult to rate some of the statements on the assessment, or to address struggles with coming to treatment. At no time will you need to put your name on the assessment and instead, you will be identified by a number between 1 and 150. This will help to maintain your confidentiality and privacy, as only you, your parent and your counselor will know if you are participating. Please understand, however, that if the research process becomes uncomfortable at any time, you may drop out of the study. This study is strictly voluntary. In addition, if you have any questions or concerns, you may voice them with the Institutional Review Board at Cleveland State University.

Thank you,

Heidi M. Sliter, MA-ATR, PC

I understand that if I have any questions about my rights as a research subject, I can contact the Cleveland State University Institutional Review Board at 216-687-3630.

Client participant signature/date