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University of Alberta

Stage of Change Profiles in Adolescent Clinical Treatment

by

Elizabeth Ruth Pace

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Doctor of Philosophy

in

Counselling Psychology

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DEDICATION

This dissertation is dedicated in memory of my mother, Ruth Evelyn (MacDougall) Pace, 1927-1999.

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ABSTRACT

This study generated stage of change profiles for a sample of 99 adolescents seeking psychotherapy in clinical settings in a large Canadian city. Individuals who participated in the study were either self-referred, or were referred by a parent/guardian, to attend therapy. The individuals who participated in the study ranged in age from 12-years to 18-years, inclusive. The University of Rhode Island Change Assessment Questionnaire (URICA) was utilized to generate pretreatment data regarding the thoughts and opinions of adolescents toward changing a self-identified problem or issue. Cluster analysis was used to produce profiles of participant responses which were examined to determine if distinct and reliable profiles for adolescent change could be generated and interpreted within the context of the Transtheoretical Model. Stage of change profiles were compared with those generated by a sample of adult psychotherapy clients to explore potential similarities/differences of profiles generated by these distinct developmental groups.

This study illustrates that in regard to pretreatment stage of change profiles, adolescent psychotherapy clients demonstrate significant similarity to adult clients. Where differences exist, consideration of the unique characteristics of this developmental period informs the analysis and understanding of distinctive profiles. All of the profiles generated in this study were interpretable within the context of the Transtheoretical Model. These findings support the application of the Transtheoretical Model with adolescent psychotherapy clients.

Findings indicate that adolescent psychotherapy clients did not demonstrate a pervasive resistance to addressing change through psychotherapy on intake. A general

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willingness to consider identified problems and issues was evident. The literature supports the conviction that adolescents manifest resistance to psychotherapeutic intervention and restricted levels of motivation during psychotherapy. In cases where these problems arise, failure to match the client's stage of change with interventions appropriate for that stage might be a contributing factor. This mismatch might hold particular significance for adolescent clients who are developmentally sensitive to issues of autonomy and identity development.

Psychotherapeutic interventions with adolescent clients that consider the stage of change demonstrated by the adolescent hold the potential for improved efficacy in retaining adolescent clients in therapy and improving the general outcomes of psychotherapy.

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The adolescent clients who participated in this study demonstrated a willingness to share their perceptions. To them, a special debt is owed. Without the agreement of their parents/guardians and the cooperation of their therapists the opportunity to learn of these perceptions would not have arisen. Sincere thanks are extended to these individuals.

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Allister Webster has been steadfast in his willingness to provide support throughout the process of completing this degree. Allister never failed to rise to the

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challenge of editing my work, regardless of the timing. His belief that there really was a completion date in the future appears to have been valid. I an indebted to him for his love, understanding, and support.

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CHAPTER 1

Introduction to the Study

In North America, adolescence is generally regarded as a developmental period characterized by emotional upheaval and high stress (Arnett, 1999). Youth is a time for experimentation, and often, particularly if the activities involve an element of risk. A sense of invincibility combined with bravado may increase the appeal of behaviour that is frowned upon by adults (Galambos & Tilton-Weaver, 1998).

Contemporary research confirms that in Canada, the United States, and other Western countries, the teens and early twenties are the years with the highest prevalence of a variety of types of risk behaviour (i.e., behaviour that carries the potential for harm to self and/or others) (Arnett, 1992; Galambos & Tilton-Weaver, 1998; Kazdin, 2000; Kazdin & Johnson, 1994; Moffitt, 1993; Steinberg & Morris, 2001). Of significant concern in this country is the increasing prevalence of certain risk behaviours (e.g., binge drinking, unprotected sex resulting in pregnancy) among Canadian youth aged 15 to 19 years (Statistics Canada, 1999; Wadhera & Millar, 1997). An increase in the prevalence of substance use among adolescents in the United States has been observed since the early 1990s (Weinberg, Rahdert, Colliver, & Glanz, 1998). The variety of ways in which adolescents engage in risk behaviour at greater rates than children or adults, lends further validity to the perception of adolescence as a difficult developmental period (Arnett, 1999).

Most adolescents cope successfully with the demands of this period and do not evidence extremes of maladaption (Cicchetti & Rogosch, 2002; Lerner, 1998). Although it is recognized that the storm and stress of adolescence is neither universal

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nor inevitable, it is widely accepted that these experiences are more likely to occur during adolescence than at other ages. Beyond this, risk behaviour first manifested in adolescence is not necessarily abandoned in adulthood (Galambos & Tilton-Weaver, 1998). For a percentage of the population, the risk behaviours that generally first emerge during this developmental period have important negative implications for the individual's psychological and physical health, both in the short- and long-term (Galambos & Tilton-Weaver, 1998; Lerner, 1998).

Although a propensity to engage in high-risk behaviours poses a significant concern during the adolescent developmental period, this behaviour does not represent the only risk for this developmental group. Many psychological problems typically emerge for the first time during adolescence for those individuals who are predisposed to such issues (Health Canada, 2002; Steinberg, 2001; Strober, 1986; Weisz & Hawley, 2002). In addition, the intensification of various forms of emotional and behavioural disorders that are first evidenced in childhood is not uncommon (Kazdin, 2000; Steinberg, 2002).

The prevalence rate for mental illness in Canadian children and youth has been recently cited at approximately 20% (Canadian Mental Health Association, 2002). A range of 14 to 22% has been consistently reported in studies conducted in the United States, Britain, Puerto Rico, and New Zealand as the estimated prevalence rate of significant developmental, emotional, or behaviour problems among children and adolescents between the ages of four and fourteen years (Costello, 1989; Institute of Medicine, 1989; Rutter, 1989; U.S. Congress, 1991; Zill & Schoenborn, 1990). Consistent with these reports, Willms (2002) cited a figure of 19.1% as the prevalence

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rate of behaviour problems in Canadian children. It is also noteworthy that two thirds of these children and adolescents suffered from more than one disorder (Offord, et al., 1987). These figures translate into approximately 1.5 million Canadian children and adolescents who experience a diagnosable psychiatric disorder. The total economic cost of mental illnesses in Canada (including individuals representing all age groups) was estimated to be at least 7.3 billion dollars in 1993 (Health Canada, 2002).

Strober (1986) indicates serving the clinical needs of adolescents is a pragmatic approach since early intervention holds promise for averting, or reducing the likelihood of, chronic outcomes. Periods of dramatic individual development (i.e., adolescence) are typically periods when interventions can have their greatest impact (Holmbeck & Kendall, 2002; Schmidt, 1996). Adolescence is a period of development during which a maladaptive pathway may be altered in an adaptive direction by exposure to intervention (Holmbeck & Kendall, 2002). The effectiveness of psychological intervention to alleviate mental disorders and to address other problems of adolescents has been supported in the literature (Kazdin & Johnson, 1994; Kovacs & Lohr, 1995; Weisz, Weiss, Alicke, & Klotz, 1987; Weisz, Weiss, Han, Granger, & Morton; 1995). However, Offord et al. (1987) indicates only 20% of Canadian children and adolescents who experience mental illness receive therapeutic intervention. The relative lack of therapeutic intervention with individuals of this developmental age may be moderated by factors either internal to the adolescent (e.g., limited motivation or desire to engage in therapy) or external to the adolescent (e.g., therapist beliefs or attitudes toward adolescent clients), or both.

The pervasive belief among counsellors that adolescents are the most difficult

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clients with which to work (Biever & McKenzie, 1995; Church, 1994; Hanna & Hunt, 1999; Hill, 1983) represents an interaction of internal and external factors. Numerous professionals in the field of psychotherapy have noted adolescents have traditionally provided considerable challenge to their counsellors in regard to frequent reluctance to engage in therapy (Gil, 1996; Liddle, 1995; Oetzel & Scherer, 2003; O'Hare, 1996; Sommers-Flanagan & Sommers-Flanagan, 1995). Among youth who begin treatment, 40 to 60% drop out prematurely, against the advice of the clinician (Kazdin, 1996; Wierbicki & Pekarik, 1993). Consequently, retaining adolescents in treatment remains a special challenge to those who provide therapy to youth (Kazdin, 2000). Therapists may anticipate that therapy with adolescents will be conflictual and frustrating and thus approach adolescents with such expectations. This conceptualization may serve to promote the conflictual relationship that they envision, thus becoming a self-fulfilling prophecy (Biever & McKenzie, 1995).

Difficulties in engaging adolescents in therapy, as well as numerous additional challenges faced by therapists who serve adolescents, can be better understood through analysis of the relationship variables and developmental characteristics unique to this developmental group. Adolescents are dependent on adults and are therefore vulnerable to influences over which they have little control (Cauce et al., 2002; Hill, 1983; Kazdin, 2000). For example, independence and self-determination are important developmental issues for adolescents (DiGiuseppe, Linscott, & Jilton, 1996) yet the very nature of therapy with this developmental group typically involves referral by an adult who is likely to have defined their problem and mandated their involvement in therapy (Koocher, 2003; Oetzel & Scherer, 2003; O'Hare, 1996). Adolescents are

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particularly sensitive to having others' goals imposed on them and typically desire to choose their own way of doing things (DiGiuseppe et al., 1996). In addition, adolescents frequently do not trust adults (Sommers-Flanagan & Sommers-Flanagan, 1995). As a result of these factors, motivation to change may be sullied by ambivalence or reluctance (O'Hare, 1996) and a significant negative impact on the therapeutic relationship may be exerted (Church, 1994).

Therapists have been cautioned in the literature to avoid the practice of applying smaller doses of adult treatments, or larger doses of treatments developed for children, to adolescent clients (Kazdin, 2000). Historically, this has been a common practice within the field of psychotherapy (Eyberg, Schuhmann, & Rey, 1998; Weisz & Hawley, 2002). Considering therapy with adolescents from a developmental perspective represents a relatively new direction in both therapist training (Tate, Reppucci, & Mulvey, 1995) and in research (Cicchetti & Rogosch, 2002; Holmbeck & Kendall, 2002; Kazdin & Johnson, 1994). In a review of 500 American Psychological Association approved clinical and counselling doctoral programs, a meager 1% offered course work in adolescent treatment as a separate developmental group, while 10% included specific practicum work with adolescents (Rubenstein & Zager, 1995). A general lack of training to familiarize preservice therapists with the developmental characteristics of adolescents and the issues unique to providing psychotherapy to this developmental group is likely to play a role in perpetuating the challenges of providing effective therapy to adolescents. A call has been made to the academic community to include training specific to the adolescent developmental group in their programs of study (Holmbeck & Kendall, 2002).

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Although the current body of research on psychotherapy with adolescents has expanded dramatically in recent years, progress in illuminating therapeutic practices that are both appropriate and effective with this developmental group has lagged behind research that focuses on adults and has failed to address concerns in several areas (Cicchetti & Rogosch, 2002; Kazdin, 1993b). Attention to these areas has been identified as a necessary direction for future research.

In general, meta-analytic studies that address therapeutic effectiveness with adolescent clients have calculated the magnitude of effect size as ranging from 0.54 to 0.88 (Kazdin, Bass, Ayers, & Rodgers, 1990; Kazdin & Johnson, 1994; Kovacs & Lohr, 1995; Roberts, Lazicki-Puddy, Puddy, & Johnson, 2003; Shirk & Karver, 2003; Weisz et al., 1987; 1995). Although these numbers are encouraging, closer examination of the outcome studies on which these estimates are based reveal that the conditions under which the research occurred differed markedly from conditions in clinical practice. The bulk of adolescent psychotherapy outcome studies involve adolescent volunteers who are typically recruited from a school setting, exhibit symptoms that may not meet diagnostic criteria, and involve interventions that are narrowly prescribed and delivered by individuals with explicit training in a given type of intervention and direction to adhere to a specific protocol (Kazdin, 1990; Weisz, 2000). These circumstances fall short of replicating clinical interventions in the broader community and hence, their generalizability to clinical practice restricted. Conducting research on adolescent psychotherapy in a clinical setting has been heralded as an essential direction for research by several authors (Kazdin, 1990; Kazdin, 1993b; Kazdin, 2000; Kovacs & Lohr, 1995; Weisz, 2000; Weisz & Hawley,

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2002; Weisz & Jensen, 2001; Weisz et al., 1995).

Kazdin (2000) stressed the need to determine what interventions are effective with which clients under what circumstances. The logic of this call to researchers is difficult to refute; however, a plethora of studies that examine this series of questions from a narrow perspective have proliferated in the literature resulting in serial efficacy studies and a fragmented approach to psychotherapy research with adolescents (Kazdin & Johnson, 1994; Weisz, 2000). A recent review of adolescent therapy research revealed that the bulk of research thus far has focused on evaluating some facet of the treatment technique (Kazdin, 2000). Scant attention has been accorded evaluation of nontechnique variables such as the moderators inherent to the client and the mechanisms of change. Indeed, of the 223 studies examined, only 9.0 % examined adolescent characteristics, while 0.4 % matched adolescent characteristics and treatment. A clear understanding of the factors common to therapeutic change across interventions and of the process of change itself within the adolescent population has not been advanced (Kazdin, 1993b). A broad and integrated approach that seeks to understand the common factors of therapeutic change and the processes of change itself within the adolescent developmental period is both necessary and timely (Kazdin & Johnson, 1994; Kazdin, 2000).

In light of the fact that very different systems of therapy produce common outcomes among adult clients (Asay & Lambert, 1999; Smith, Glass, & Miller, 1980), studies designed to differentiate the common change processes across leading systems of psychotherapy were initiated with this age group (Prochaska, 1999). From this research, the Transtheoretical Model was developed. The Transtheoretical Model uses

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a temporal dimension, the stages of change, to integrate processes and principles of change from different theories of psychotherapy, hence the name "transtheoretical" (Prochaska & Velicer, 1997). This model posits that change involves progress through a series of stages and at different stages people apply particular processes to progress to the next stage (Prochaska & DiClemente, 1982; 1983). Interventions suitable for one stage in this process are likely to be poorly suited, or in fact detrimental, to the change process of individuals who are currently experiencing different stages (Prochaska & Norcross, 1994).

The detrimental outcomes of poorly timed or inappropriate interventions may be understood in light of the therapeutic relationship (Prochaska & Velicer, 1997). Asay and Lambert (1999) estimated that the therapeutic relationship accounts for 30% of improvements achieved by adult psychotherapy clients. Interventions that are well executed by the therapist in regard to timing and appropriateness can enhance the therapeutic relationship (Prochaska & Velicer, 1997). Interventions themselves have been credited with contributing to 15% of positive therapeutic outcome (Asay & Lambert, 1999). To achieve maximum therapeutic benefit, interventions must be well suited to the client's readiness to change (Prochaska & Velicer, 1997). Matching interventions to the stage of change has been reported as the most effective strategy in retaining adults in counselling programs (Prochaska & Velicer, 1997).

Attention has also been given to the therapeutic relationship as an important factor influencing the outcome of adolescent therapy (DiGiuseppe et al., 1996). Hanna, Hanna, and Keys (1999) stressed the crucial nature of the therapeutic relationship in facilitating beneficial change in the lives of adolescents. It is felt that

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counselling interventions are more effective once a relationship is established, and that little therapeutic benefit can be achieved in its absence. The exploration of a model of therapeutic intervention that seeks to enhance the effectiveness of the therapeutic relationship and therapeutic outcomes through attention to clients' readiness to change is attractive to those who engage in therapeutic work with an adolescent clientele. The application of principles inherent to the Transtheoretical Model to this developmental group merits exploration; however, adopting the tenets of this or any other model without first researching its applicability does not respect the developmental approach to psychotherapy research that has been heralded in the literature (e.g., Cauce et al., 2002; Cicchetti & Rogoesh, 2002; Cicchetti & Toth, 1992; Holmbeck & Kendall, 2002; Steinberg, 2002; Weisz & Hawley, 2002). To date, research on investigating the factors common to successful therapy with adolescents in clinical settings has not been explored.

In considering the applicability of the Transtheoretical Model to an adolescent population, it must first be determined if adolescents approach therapy with similar views and/or attitudes to adults who initiate their own therapeutic encounters. Although stage of change profiles have been generated for adults seeking clinical treatment (McConnaughy, Prochaska, & Velicer, 1983) it is both premature and imprudent to assume that adolescents will display similar profiles given their unique characteristics. Determining the stage of change profiles for an adolescent clinical sample addresses issues of considering psychotherapy with adolescents from a developmental perspective, conducting research in a clinical setting rather than a contrived research environment, and potentially informing clinicians' choices of

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appropriate interventions with this developmental group. The development of stage of change profiles is a necessary exploratory procedure upon which the process of adolescent change can be further investigated and interventions tailored to the experience of adolescent change may be developed. Through this and subsequent investigations, an understanding of how to improve the retention of adolescents in therapy may also be advanced. Aspects of treatment that are responsible for, or directly contribute to, therapeutic change can be fostered, maximized, or emphasized and the goal of developing and identifying effective treatments that can be used to understand the bases of therapeutic change in adolescents (Kazdin, 2000) may be achieved.

The purpose of this study is to investigate stage of change profiles in adolescents who seek clinical treatment. This study seeks to address the following questions: 1) Can distinct and reliable profiles for adolescent change be identified for a sample of adolescents seeking treatment in a clinical setting? 2) Do profiles of adolescent change adequately match stage of change constructs? (i.e., Are the profiles interpretable or relevant within the context of the Transtheoretical Model?) 3) Do differences in stage of change profiles exist for adolescents exhibiting different categories of adolescent disorders (i.e., Internalizing, Externalizing, or Substance-Related), and/or other demographic variables (i.e., type of clinical setting, referral source, sex, age, ethnicity, place of primary residence, and medication status)?

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CHAPTER 2

Review of Related Literature

The following document reviews the literature on adolescent development and explores the problems and issues that adolescent clients bring to therapy. Research on adolescent therapy is reviewed from a developmental psychology perspective that seeks to understand both normative and non-normative functioning in adolescents so that interventions can be designed in respect of unique characteristics of this developmental period. To this end, literature relating to the Transtheoretical Model will be explored to provide a framework for the current study. An understanding of the literature in these areas is necessary if we seek to address the salient issue of successfully engaging adolescents in appropriate and effective psychotherapy within the community.

Adolescent Development

In all societies, adolescence is a time of growing up, of moving from the immaturity of childhood into the maturity of adulthood. Although societal differences occur with respect to the duration of adolescence and the behavioural characteristics associated with this developmental period, it is generally agreed that biological, psychological, and social transitions are universal features of adolescence (Kazdin & Johnson, 1994; Spear 2000a; 2000b; Steinberg, 2002; Weisz & Hawley, 2002). The process of differentiating in biological, cognitive, and social/emotional realms is a gradual one which can be quite lengthy (Cicchetti & Rogosch, 2002), thereby giving rise to further differentiation within the adolescent development period. Adolescence has been described as "early" (ages 10 to 14 years) or "late" (ages 15 to 18 years)

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(Arnett, 2004). Other scholars have preferred to view adolescence in three phases represented as "early (ages 12 to 13 years), "mid" (ages 14 to 15 years), and "late" (ages 16 to 18 years) (Piaget, 1972). Age divisions within this developmental period appear arbitrary within the literature, and may serve a more descriptive than definitive purpose.

Several theories have been developed to account for the changes observed during adolescence. Despite recent interest in the developmental period of adolescence, there remains a relative paucity of published research addressing adolescence in general, or adolescent development, in particular (Cicchetti & Rogosch, 2002). Historically, the works of Piaget and Erickson have received widespread recognition and continue to provide the foundation for our understanding of adolescent development. The work of Piaget explores cognitive development, while Erickson's psychosocial theory of development emphasizes social and emotional development. Although both theorists stress the importance of biological changes during adolescence, the interaction of contextual forces in the modification of biological imperatives is taken into account (Erickson, 1968, 1974; Piaget, 1969; Piaget & Inhelder, 1969). More recent work in the area of adolescent development represents a shift away from a focus on generating comprehensive theories of normative adolescent development and a reorganization of the study of adolescents around a collection of "mini-theories" – frameworks designed to explain only small pieces of a larger puzzle. As a consequence, although the field of adolescent development research is certainly significantly expanded, it has been criticized as less coherent and less developmental than it had been in the past (Steinberg, 2001). The

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impact of contextual/environmental factors in the development of adolescents has been recently highlighted in the work of Bronfenbrenner (1977, 1986) and Gilligan (1987). An awareness of Piaget's theory of cognitive development, Erickson's theory of psychosocial development, and the interplay among cognitive development, social/emotional development, and contextual/environmental factors represented by the works of more recent researchers is critical in understanding adolescent issues.

Cognitive Processing

Piaget described the period from adolescence through adulthood as the Formal Operations stage of development. Individuals in this stage of development are capable of abstract and hypothetical reasoning which allows them to use propositional logic—a system based on theoretical, or formal, principles of logic. Formal reasoning can be applied to hypothetical events or real ones, is just as effective in dealing with abstract concepts as with concrete things, and is just as useful for thinking about alternatives to what really exists as it is for thinking about reality itself (Piaget, 1970). Formal operations involve a qualitative change in the young person's ability to think in a logically advanced, hypothetical, and progressively more abstract way (Steinberg, 1987). Piagetian theorists believe that the use of propositional logic is the chief feature of adolescent thinking that differentiates it from the type of thinking employed by children (Piaget & Inhelder, 1969).

It is hypothesized that adolescents differ from children in their cognitions by the development of five core abilities: hypothesis formation, systematic-abstract thought, metacognition, multidimensional talk, and relative rather than absolute thinking (Piaget, 1970; Piaget & Inhelder, 1969). Adolescent thinking is less bound to

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concrete events than is that of the child. Early adolescence signals the arrival of a more complex logic that typically becomes more stable by age 14 to 15 years (Piaget, 1972). Similarly, adolescents are able to move easily between the specific and the abstract and to generate possibilities and explanations systematically. The development of hypothetical thinking allows adolescents to evaluate the points of view of others against other theoretically possible beliefs. This plays an important role in decision-making, as it allows the adolescent to plan ahead and to foresee the consequences of choosing one alternative over another. The application of advanced reasoning and logical processes to social and ideological matters (social cognition) occurs, as does an increase in introspection, self-consciousness, and intellectualization. The ability to think about things in a multidimensional fashion allows more complicated and sophisticated relationships between the adolescent and others to develop. Relative thinking enables adolescents to question "facts" as absolute truths, and to question or doubt things that they previously accepted without question.

As individuals move from young adolescence to adulthood, they demonstrate inconsistent use of formal operational thinking (Keating, 1990; Piaget, 1972). In early adolescence, individuals may apply formal operational thinking on selective tasks or in selective circumstances or environments. During middle or late adolescence formal operational thinking becomes consolidated and integrated into the individual's general approach to reasoning (Piaget, 1972). Following consolidation, logical, abstract, and hypothetical thinking, and the ability to plan ahead and to reflect on past behaviour defines the norm (Piaget, 1970). It has been suggested in the literature that this process of consolidation may occur more rapidly than suggested by Piaget. In a review of the

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literature conducted by Furbey and Beyth-Marom (1990), the notion that adolescents make decisions using the same basic cognitive processes as do adults, was widely supported. This finding would suggest that adolescents are cognitively equipped to engage in adult-like decision-making; however, factors such as social/emotional functioning and contextual factors must also be considered.

Emotional Processing

According to Erickson, individuals are presented with a series of psychosocial crises over the course of their development. Each “age” or “stage” of the lifespan is defined by a particular crisis that must be resolved by the individual in the inevitable process of growing older. Establishing a coherent sense of identity is the chief psychosocial crisis of adolescence (Erickson, 1959, 1968; Masten & Coatsworth, 1998); however, establishing a coherent sense of identity is a lengthy, gradual process that is believed to continue well into adulthood (Erickson, 1968). Erickson rarely discussed specific ages in his writings; it now appears that in contemporary society, the bulk of identity development occurs in late adolescence, and perhaps not until young adulthood (Arnett, 2000). Rather than regarding adolescence as an ongoing crisis of identity, it may be prudent to view identity formation as a series of crises that concern different aspects of the young person’s identity that may surface and resurface at different points in time throughout the adolescent and young adult years (Erickson, 1968).

With respect to adolescent identity development, Erickson believed that the successful resolution of the crisis of identity versus identity diffusion depends on how the individual has resolved previous crises of childhood, hence what takes place

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during adolescence is intertwined with what has come before and what will follow (Erickson, 1968). The internal resources that the adolescent has available for resolving the salient developmental tasks of adolescence will depend significantly on the quality of the resolution of stage-salient tasks in childhood (Masten & Coatsworth, 1998). For the early adolescent who has been able to achieve competent resolution of stage-salient tasks in a progressive fashion, the internal organization of developmental domains will be more flexible and integrated, and there will be greater adaptive capacity available for striving to resolve the challenges of the period (Cicchetti & Rogosch, 2002). A healthy sense of trust, autonomy initiative, and industry is needed to facilitate the development of a healthy sense of identity. Erickson placed a great deal of emphasis on the young person's society (specifically, on those individuals who have influence over the adolescent) in shaping the adolescent's sense of self. The adolescent's final identity results from a mutual recognition between the adolescent and society.

Erickson (1968) focused his attention on changes in self-concept, fluctuations in self-esteem, and changes in the sense of identity during the adolescent period. For the adolescent, undergoing the physical changes of puberty may prompt fluctuations in self-image and a reevaluation of who he or she really is. During adolescence a differentiation occurs between an individual's opinion of him/herself and other's opinions of him/herself. For the first time, adolescents recognize that different people may perceive them differently. Adolescents organize and integrate various aspects of their self-image into a more logical, coherent whole. The increased abstraction and psychological complexity of self-conceptions may present some difficulties for middle

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adolescents, who may be able to recognize, but not yet quite able to understand or reconcile, inconsistencies and contradictions in their personality. Conflict and distress over such inconsistencies appears to increase during middle adolescence and then diminish, as individuals develop a more sophisticated understanding of themselves (Harter, 1990). The changes in identity that take place during adolescence involve the first substantial reorganization and restructuring of the individual's sense of self at a time when he or she has the intellectual capacity to fully appreciate just how significant the changes are. Although important changes in identity occur during childhood, the adolescent is far more self-conscious about these changes and experiences them much more acutely (Erickson, 1968).

Contextual/Environmental Factors

Changes in cognitive processing and emotional processing do not occur in isolation over the course of adolescent development, but rather these processes interact and further define the experience of adolescence. Piaget and Inhelder (1969) referred to cognitive and emotional development as "at the same time inseparable and irreducible" (pg. 158). This view has been echoed, and expanded to include factors that are external to the individual, in current views that describe development as interactional in nature (Bronfenbrenner, 1977, 1986; Cauce et al., 2002; Roberts et al., 2003; Schmidt, 1996). An environmental approach proposes that as individuals change and the environments in which they live and grow change, progressive accommodation must occur (Bronfenbrenner, 1977; Eyberg et al., 1998). These accommodations occur throughout the lifespan and consider both immediate environmental settings, as well as the larger social contexts in which these settings are

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embedded. Development is propelled by maturational factors that are then followed by periods of integration and consolidation. Changes occur in cognitive, affective, and social domains and the new ways of functioning entail novel ways of relating to self and others (Schmidt, 1996). Essentially there is a period of reorganization that incorporates new modes of functioning into the previously existing personality structure.

Relationships.

Changes in established relationships and the formation of new relationships illustrates the interaction of newly developed cognitions, changes in emotional processing, and environmental factors. The self can be regarded as an open, dynamic system that can be influenced by the environment and can influence its environment in a bi-directional manner (Eyberg et al., 1998; Schmidt, 1996). Adolescents are embedded within multiple contexts including family, peer group, school, and the workplace - - each of which potentially impacts on, and is impacted by, the adolescent (Weisz & Hawley, 2002). One of the environmental factors that interacts with the developing individual is other people, thus multiple relationships and experiences affect development (Erickson, 1968; Piaget, 1970; Schmidt, 1996). Eyberg et al. (1998) identified interpersonal relationships as the most powerful environmental influence on psychological development during adolescence.

The nature of adolescent relationships differs from the nature of relationships that are characteristic of childhood. Growth in social cognition permits adolescents to establish and maintain more mature relationships characterized by higher levels of empathy, self-disclosure, and responsiveness to each other's thoughts and feelings

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(Lewis, 1993). The increase in interpersonal sensitivity characteristic of adolescence allows relationships to be closer, more personal, and more emotionally charged than those of children. During adolescence, relationships become more intimate. The development of intimate relationships with peers appears to take place sometime between the ages of 11 to 14 years, and assumes an increasingly important role in the individual's social life over the course of adolescence (Erickson, 1968; Forehand & Wierson, 1993). However, the increasing intimacy between teenagers and their friends during the course of adolescence is not generally accompanied by a decrease in intimacy towards parents, with the exception of a brief and temporary period during early adolescence (Forehand & Wierson, 1993; Weisz & Hawley, 2002). Intimacy with parents provides opportunity to learn from someone older and more experienced (Erickson, 1963); intimacy with friends provides opportunities to share experiences with someone who has a similar perspective and degree of expertise. These intimacies serve different purposes that are equally valuable to the process of development.

Intimate friendships during adolescence are used as a safe context in which adolescents confront difficult questions of identity; yet at the same time, the development of an increasingly coherent and secure sense of self provides the foundation upon which adolescents build and strengthen intimate relationships with others. Erickson (1959) stressed the role of friendship in helping the adolescent establish a coherent sense of identity.

By late adolescence, individuals may have developed strong needs for intimacy but may not yet have forged the social relationships necessary to satisfy these needs. The potential for feelings of loneliness and isolation increases over the adolescent

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years as the large cliques and crowds common to early and middle adolescence begin to dissolve (Erickson, 1968). In a review of literature generated by organizational development theorists, Cicchetti and Rogosch (2002) reported the formation of close friendships across gender as a crucial stage-salient task of adolescence.

Autonomy.

Cicchetti and Rogosch (2002) also highlight the importance of becoming an autonomous person as one of the fundamental tasks of the adolescent years. This notion echoes the view of Erickson (1974) and can be best understood from a contextual/environmental perspective. Autonomy is a psychosocial construct that arises in a gradual, progressive fashion in relationship with expanding decision-making abilities. Psychological autonomy during adolescence involves different dimensions including emotional autonomy from childhood dependence on parents, behavioural autonomy in terms of independent functioning and self-reliance, and cognitive autonomy involving self-confidence in decision-making (Collins, Gleason, & Sesma, 1995).

Steinberg (1993) examined autonomy from an emotional, behavioural, and a value perspective. The development of emotional autonomy provides the adolescent with the ability to look at his or her parents' views more objectively. When young people no longer see their parents as omnipotent and infallible authorities, they may seriously reevaluate the ideas and values that they accepted without question as children. Disagreements over autonomy-related concerns are at the top of the list of disagreements between adolescents and their parents (Montemayor, 1986). As the

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adolescent develops an ability to think and reason in complex adult-like ways it may be difficult for parents to exercise previously unquestioned authority, and an increase in conflict between the adolescent and his/her parents may result (Steinberg, 1987). Although adolescents and their parents modify or transform their relationships during adolescence, the emotional bonds are not severed. By the end of adolescence, individuals are far less emotionally dependent on their parents than they were as children. Behavioural autonomy develops as individuals use the cognitive tools of looking ahead at risks and likely outcomes of alternative choices, being able to recognize the value of turning to an independent "expert", and being able to accept that someone's advice may be tainted by his or her own interests. During middle and late adolescence (14 to 18 years), genuine gains in behavioural autonomy generally occur. At this time, conformity to both parents and peers declines. The struggle to clarify values, provoked in part by the exercise of behavioural autonomy, is a large part of the process of developing a sense of value autonomy. Much of the growth of value autonomy can also be traced to the cognitive changes characteristic of the period of adolescent development. An increased ability to reason and to hypothesize is typically accompanied by a heightened interest in ideological and philosophical matters, and a more sophisticated way of looking at them.

Cicchetti and Rogosch (2002) conceptualize many extreme problem behaviours of adolescence as compromised attempts to grapple with establishing psychological autonomy. Conversely, adolescents who do not strive adequately to attain psychological autonomy will be dependent and less prepared to establish their own direction and identity in early adulthood. These authors suggested that in effect,

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autonomy strivings could cut across stage-salient issues of adolescence such as the formation of intimate relationships and the establishment of a cohesive sense of self-identity.

Gender.

The works of Piaget and Erickson have received criticism in the literature for failing to consider the role of gender in adolescent development (Gilligan, 1987). In regard to the work of Piaget, Gilligan highlighted that girls were notably absent from his studies and no rationale to explain cognitive development among those who experience a traditional education was provided (Gilligan, 1987). Erickson's psychosocial theory celebrates the development of an independent identity during the adolescent years in which the interdependence of human life and reliance of people on one another becomes largely unrepresented or tacit (Gilligan, 1987). Promotion of the values of separation and independence fails to represent the interdependence of adult life and has particularly significant consequences for girls (Gilligan, 1987; Ponton, 1993). Gilligan contends that girls and women have a unique way of thinking about relationships – one that often has set women apart from the mainstream of Western thought because of its central premise that self and others are connected and interdependent (Gilligan, 1987). Brown and Gilligan (1993) defined problems central to the psychology of women to include the desire for authentic connection and the experience of disconnection. These issues initially arise in adolescence when a "relational impasse" or "crisis of connection" occurs. Research has indicated that relationships play an extremely important role in the identity formation of adolescent girls (Bukowski & Newcomb, 1983; Ponton, 1993), whereas for boys, identity

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appears to be more strongly rooted in group experience and activities (Bukowski & Newcomb, 1983). Girls may respond to the challenges of establishing meaningful relationships by devaluing themselves and adopting feeling of worthlessness, or by disagreeing publicly and dissociating themselves from those environments that contribute to their sense of being devalued (Gilligan, 1991).

Culture.

Human development occurs within a cultural context, and individuals learn to make sense of the outside world within a cultural framework (Cauce et al., 2002). Hence, culture is one of the contexts from which adolescents emerge. The constructs of culture and context are open to multiple interpretations and are interrelated to a profound extent (Cauce et al., 2002; Roberts et al., 2003). The interrelatedness of these constructs serves to emphasize the importance of considering culture and context in research studies involving minority adolescents (Cauce et al., 2002).

Cultures may be characterized on a continuum ranging from sociocentric (emphasizing community, family, and interconnectedness) to individual (emphasizing individuality, autonomy, and personal achievement) (Schweder & Bourne, 1991). The idea of "self" varies for cultural groups, gender expectations may vary, and the socialization goals that define well-functioning members of the culture will differ (Cicchetti & Rogosch, 2002). The reality of increasingly rapid globalization and associated cultural change increases the need for research on the influence culture exerts on psychological development (Garcia Coll , Akerman, & Cicchetti, 2000). Acculturation pressures may generate stress for youth as they bridge two cultural

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worlds. The meaning they attribute to behaviours and events may be at odds with the mainstream cultural norms (Cicchetti & Rogosch, 2002).

In 1991, Dornbusch, Peterson, and Hetherington called to the research community for increased attention to the development of diverse populations of adolescents, particularly ethnically diverse adolescents. However, the field continues to lag in its empirical consideration of cultural influences on developmental processes (Cauce et al., 2002; Garcia Coll et al., 2000; Roberts et al., 2003; Steinberg, 2001). To date, more is known about the similarities and differences in the outcome between cultures than about the processes that operate and eventuate these outcomes. Our understanding of how culture and cultural change influence developmental process is considered to be in its infancy (Garcia Coll et al., 2000).

Understanding what is normative in adolescent development has tremendous implications for society in general and parents in particular (Holmbeck & Kendall, 2002). The myriad of changes that accompany adolescence create challenges that may disrupt the lives of the individuals experiencing the changes as well as the lives of those around them. In addition to considering developmental changes that are regarded as normative during adolescent development, attention must also be given to the types of issues and/or problems that are prevalent within this developmental group. Clinical phenomena during adolescence must be understood against a backdrop of normative adolescent development and studied with specific reference to the developmental challenges of the period (Cicchetti & Rogosch, 2002; Steinberg, 2002).

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Adolescent Problems and Disorders

Family and Adjustment

Adolescence is a transitional developmental period between childhood and adulthood that is characterized by more biological, psychological, and social role changes than any other stage of life except infancy (Feldman & Elliott, 1990). The rapid and often intense changes that are associated with the adolescent developmental period frequently exert a significant effect on the functioning of the family in which the adolescent lives (Steinberg, 1987). As the adolescent strives toward acquiring independence from parents and the attainment of the perceived rewards of adulthood, parents, recognizing the adolescent's relative lack of preparedness for the assumption of full adult responsibilities, struggle with relinquishing their perceptions of the adolescent as a child (Cicchetti & Rogosch, 2002). Parents must face the challenges of balancing the complicated relationship between providing a sense of connectedness and granting autonomy to their adolescent child (Holmbeck et al., 2002; Weisz & Hawley, 2002). Closeness can become problematic when it crosses the line from concern to overprotection because it may interfere with the adolescent's developing sense of autonomy, and threats to autonomy may result in emotional and behavioural problems (Steinberg, 2002). Consequently, the flux and renegotiation inherent in this developmental period increase the potential for both internal and external conflict (Cicchetti & Rogosch, 2002). Conflict with parents has been identified as a central feature of the adolescent developmental period (Arnett, 1999), and has been cited as taking a toll on the adjustment and mental health of parents (Silverberg & Steinberg, 1990) as well as their adolescent children (Cicchetti & Rogosch, 2002).

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Changes in relationships have been described as periods of family disequilibrium that are likely to be negotiated over relatively long periods of time, and may be a necessary antecedent to the development of more mature patterns of family functioning (Steinberg, 1987). Ultimately all families must make the transition from patterns of relationships appropriate to parents and children to those suitable to parents and young adults. For families that struggle with this transition, interventions to assist the whole family in negotiating the challenges of this period of development have been recommended (Cicchetti & Rogosch, 2002).

Risk Behaviours

As adolescence progresses, a number of activities referred to as "problem" or "risk" behaviours increase (Arnett, 1992; 1999; Galambos & Tilton-Weaver, 1998; Kazdin, 2000; Moffitt, 1993; Steinberg & Morris, 2001). Risk behaviour is defined as any behaviour that increases the potential for harm to self and others (Arnett, 1992; Galambos & Tilton-Weaver, 1998; Kazdin, 2000; Kazdin & Johnson, 1994; Moffitt, 1993; Steinberg & Morris, 2001) (e.g., use of illicit substances, truancy, school suspension, stealing, vandalism, and precocious and unprotected sex). The prevalence of certain risk behaviours among both Canadian youth (Statistics Canada, 1999) and their American peers (Weinberg et al., 1998) has increased sharply in recent years. Over the last three National Population Health Surveys conducted in Canada, the prevalence of binge drinking at least monthly among all teens aged 15 to 19, increased from 13% in 1994/95 to 19% in 1998/99 (Statistics Canada, 1999). This trend was also evident for smoking (Statistics Canada, 1999) and teenage pregnancies (Wadhera & Millar, 1997). The potential repercussions of these behaviours are significant both

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during the adolescent years and in the long-term (Galambos & Tilton-Weaver, 1998; Lerner, 1998).

A number of gender differences are notable in regard to risk behaviours during adolescence and young adulthood. Galambos and Tilton-Weaver (1998) examined the risk behaviours of young Canadians aged 15 to 24. Among those who engaged in a single risk behaviour, 50% of females reported binge drinking while 80% of males in this developmental group identified binge drinking as their most typical risk behaviour. Among 15 to 19 year olds, females smoke at a higher rate than males (i.e., 30% for adolescent females, 28% for adolescent males), adolescent males are more likely to have multiple sexual partners (i.e., 13% of adolescent females, 21% of adolescent males), and among those adolescents who engage in sex with multiple partners, adolescent females are more likely than adolescent males to have intercourse without using a condom (i.e., 51% of females, 29% of males) (Galambos & Tilton-Weaver, 1998). The antecedents of these differences have not yet been explored.

Fortunately, most adolescents pass through adolescence resolving the challenges they face to become competent, productive adult members of society (Cicchetti & Rogosch, 2002; Lerner, 1998). However, a percentage of adolescents do not navigate these risk behaviours well, and an increased likelihood of a variety of adverse psychological, social, and health outcomes results (Galambos & Tilton-Weaver, 1998).

Disorders

It appears that a major role is played by adolescence per se in initiating dysfunction in predisposed individuals (Strober, 1986). It is during the adolescent

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developmental period that the onset of most mental illness occurs (Heath Canada, 2002). Steinberg (2001) reported that antisocial behaviour and depression is typically diagnosed for the first time during adolescence, while mood disorders in general and personality disorders have also been recognized as arising primarily during adolescence (Health Canada, 2002). Depression has been reported to be more prevalent among adolescents than either children or adults (Costello, 1989; Peterson et al., 1993). In addition to adolescence heralding the onset of mental illnesses, a sharp increase in the prevalence rates of a number of disorders seen in childhood also occurs (e.g., eating disorders, conduct disorder, substance abuse, and schizophrenia) (Costello, 1989; Kazdin, 2000; Steinberg, 2002). An increase in the prevalence of social phobia and panic disorder has also been noted (Weisz & Hawley, 2002).

As with certain risk behaviours, the prevalence rates of several disorders differ for adolescent males and females. During adolescence, the prevalence of depression increases more dramatically for females than males, with the rates for adolescent girls eventually doubling those for adolescent boys (Kazdin, 1993a). Although the spike in prevalence rates of depression at adolescence and the emergence of gender differences in depression in adolescence are both well-established, and numerous theories exist, definitive data elucidating why adolescent girls are more likely to manifest depression than adolescent boys are relatively scarce (Steinberg, 2001). The risk of suicide attempts among individuals who are experiencing depression is a persistent concern. Suicide attempts and completion, associated with depression, reaches a peak among 15 to 19 year olds (Cohen, Spirito & Brown, 1996). In Canada, suicide accounts for 24% of all deaths among 15 to 24 years olds (Health Canada, 2002). Suicide attempts are

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more common in girls, with hospital admissions for attempted suicide among adult women occurring at 1.5 times the rate of men (Health Canada, 2002).

Eating disorders (i.e., anorexia nervosa and bulimia nervosa), rare in preadolescence, emerge mostly after puberty and are much more common in adolescent females than males (Health Canada, 2002; Kazdin, 1993a; 2000). Approximately 3% of women will be affected by an eating disorder in their lifetime; since 1987, hospitalizations for eating disorders in general hospitals have increased by 34% among Canadian adolescent girls under the age of 15 years, and 29% among 15 to 24 year old women (Health Canada, 2002).

It is useful to delineate broad categories of disorders when considering adolescent dysfunction. Five categories that represent broader domains of dysfunction are widely recognized as useful because they do not depend on the arbitrary cutoff standards of diagnostic criteria (Kazdin, 2000). The categories include Internalizing Disorders, Externalizing Disorders, Substance-Related Disorders, Learning and Mental Disabilities, and Severe Pervasive Psychopathology. It is useful to note that adolescents commonly manifest symptoms from more than one category concurrently (Kazdin & Johnson, 1994). Psychologists who focus on the development and treatment of psychosocial problems in adolescence typically focus on the categories of Internalizing Disorders and Externalizing Disorders (Achenbach & Edelbrock, 1987), in addition to Substance-Related Disorders (Greenbaum, Prange, Friedman & Silver, 1991; Kazdin, 2000).

Internalizing Disorders are problems directed toward inner experience (Kazdin, 2000). Primary examples include anxiety, withdrawal, and depression (Kazdin, 2000;

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Kazdin & Johnson, 1994), as well as eating disorders (Steinberg, 2002). Externalizing behaviours are those in which the adolescent directs problems toward the environment and others (Kazdin, 2000). Primary examples include oppositional, hyperactive, aggressive, and antisocial behaviours (Kazdin, 2000; Kazdin & Johnson, 1994; Steinberg, 2002). Substance-Related Disorders are defined by impairment associated with a variety of substances including alcohol and illicit drugs (i.e., alcohol abuse and dependence, drug abuse and dependence) (Kazdin, 2000). These disorders are commonly associated with other psychiatric disorders that may be classified as either internalizing disorders (e.g., depression) or externalizing disorders (e.g., conduct disorder) (Greenbaum et al., 1991).

Regardless of the classification used to describe adolescent dysfunction, the need to address the dysfunction with the goal of alleviating symptoms is clear (Kazdin, 2000). Steinberg's statement, claiming that the list of clinical phenomena that is not primarily associated with adolescence (e.g., bipolar disorder, autism, dementia) is very likely shorter than the list of clinical phenomena that is associated with this developmental group, illustrates the need to identify and implement effective therapeutic interventions for adolescents (Steinberg, 2002). The continuity of many dysfunctions, including psychiatric disorders, across the lifespan heightens the significance of early intervention, not only to reduce the suffering of adolescents, but also to prevent or attenuate impairment in adulthood (Kazdin & Johnson, 1994; Strober, 1986). Serving the clinical needs of adolescents becomes a pragmatic choice for averting or reducing the likelihood of chronic outcomes (Strober, 1986).

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Adolescent Psychotherapy

Treating adolescents in psychotherapy presents a number of unique challenges that differ from those of adult therapy (Kazdin, 2000). Multiple, adolescent, parent, family, and contextual factors may influence responsiveness to treatment (Kazdin, 2002). In the vast majority of cases, adolescents do not identify themselves as experiencing stress, symptoms, or problems and therefore do not refer themselves for treatment (Kazdin, 2000). Referrals typically originate from a parent or other adult, and Externalizing Disorders (i.e., conduct and oppositional disorders, and hyperactivity) represent the most frequently referred problems in clinical treatment (Kazdin & Johnson, 1994; Kazdin, Siegel & Bass, 1990). In such cases, adults commonly perceive the adolescent's behaviour or presentation as disturbing, rather than the adolescent him/herself perceiving a problem. Consequently, one or both primary caregivers, most often mandate the adolescent son or daughter to attend therapy. The absence of a felt problem on the part of the adolescent affects the motivation for seeking and remaining in treatment (Kazdin, 2000). Oetzel and Scherer (2003) suggested that many adolescents associate a stigma with psychotherapy. This is further exacerbated by the threat to adolescent autonomy that is likely to result from having an adult in an authority position define the problem for the adolescent and mandate therapy (O'Hare, 1996). The desire for autonomy characteristic of the adolescent developmental period may cause adolescents to rebel against the notion of engaging in therapy, simply because it was suggested by an adult (DiGiuseppe et al., 1996). Therapists who work with adolescents must be aware of the negative effect that these factors can have on the adolescent's motivation to change (O'Hare, 1996; Oetzel

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& Scherer, 2003) and the ability to form and sustain a positive therapeutic relationship (Church, 1994; Weisz & Hawley, 2002).

The importance of the therapeutic relationship as a critical factor influencing the outcome of adolescent therapy has been stressed in the literature (DiGiuseppe et al., 1996; Hanna et al.,1999; Kazdin, Siegel et al., 1990). It is felt little therapeutic benefit can be achieved in its absence, and that counselling interventions are more effective once a relationship is established (Hanna et al., 1999). Establishing a therapeutic alliance between the therapist and the client is generally more challenging in situations where individuals lack motivation to change (Weisz & Hawley, 2002). In addition, a counselling intervention performed by a therapist without first establishing an empathic and trusting relationship is most often interpreted by defiant adolescents to be a threat to their integrity, and interpreted as another covert or overt adult attempt at manipulation (Hanna et al., 1999). Thus, assessing the adolescent client's motivation to change prior to treatment and addressing low motivation, where it is detected, is likely to enhance involvement in therapy and to support the development of a working alliance (DiGiuseppe et al., 1996; Weisz & Hawley, 2002). Strategies cited as useful in establishing a strong therapeutic alliance with adolescents include the expression of empathy by the therapist, addressing the stigma, and increasing the choice in therapy (Oetzel & Scherer, 2003).

Another potential source of conflict arises in adolescent therapy when the therapist urges the adolescent to adopt adult norms of behaviour rather than respecting norms that are associated with this developmental group (Biever & McKenzie, 1995). Therapists may attempt to lead adolescents to the conclusion that they, as adults,

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believe to be correct (e.g., attend school, quit using substances, etc.) while overtly stating that they respect the adolescents' right to make their own choices in these crucial areas. Therapists who attempt to impose their own beliefs about "healthy" actions and attitudes on adolescents are likely to meet with ambivalence and/or opposition from their adolescent clients (Biever & McKenzie, 1995).

Treating adolescents in psychotherapy presents unique ethical challenges as a result of their dependence on adults (Kazdin, 2000; Koocher, 2003). It cannot be assumed that the behavioural and/or emotional difficulties that are identified by the referring parent reside totally within the adolescent client. Adolescents live in families that may include other people with emotional difficulties. If the adult(s) in the family exhibit mental health difficulties, the adolescent child is vulnerable to these influences and has a reduced capacity to exert control over these circumstances (Kazdin, 2000). Ignoring parent and family factors that may need to be addressed, can impact negatively on the retention of adolescents in treatment (Prinz & Miller, 1994; Szapocznik et al., 1988). In situations when the parents' goals for therapy are unlikely to serve either the adolescent's or the family's best interests, the therapist is faced with the sensitive task of attempting to retain the family's interest in resolving issues within the home, while endeavouring to recontract with the parents to explore more appropriate goals for therapy (DiGiuseppe et al., 1996). Although goal conflict is a common problem in adolescent therapy, research has yet to identify which strategies are most effective in reaching agreement on goals (DiGiuseppe et al., 1996).

Factors inherent to the practice of psychotherapy itself also contribute to the challenge of engaging adolescents in psychotherapy. Most psychotherapy models are

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based on treatments that work with adults; however, these methods are not conducive to engaging adolescents because scant attention has been given to the cognitive and emotional capacities available to adolescents to make use of an intervention (Holmbeck et al., 2000; Kovacs & Lohr, 1995; Oetzel & Scherer, 2003; Shirk, 1988; Toth & Cicchetti, 1999). The social maturity of adolescents also puts constraints on the topics that can be explored and the therapeutic strategies that can be utilized (Kovacs & Lohr, 1995).

Adolescent psychotherapy has only recently been seriously regarded as distinct from either child or adult psychotherapy (Rubenstein, 2003). Cognitive changes may make adolescents less responsive than children to therapeutic influence; enhanced powers of reasoning may strengthen adolescent's convictions regarding their own behaviour and may also make them adept at circumventing or sabotaging a therapist's efforts (Weisz et al., 1987). When adolescents are the recipients of psychotherapy, the process of providing treatment must reflect knowledge of the characteristics inherent in this population (Kazdin, 2000). Adolescents must be approached in ways that are meaningful to them and that empower them to make adaptive choices as they negotiate the adolescent era (Cicchetti & Rogosch, 2002). Interventions that are developmentally appropriate must be identified and utilized (Oetzel & Scherer, 2003). This includes proper timing of interventions and the recognition of culture and context among the critical factors in therapeutic work with adolescents (Cauce et al., 2002, Eyberg et al., 1998; Hanna and Ottens, 1995).

Effectiveness of Psychotherapy

In 1957, Levitt published an article in which he concluded that clinically

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referred youths who did not receive psychotherapy fared just as well as the ones who did (Levitt, 1957). This article has proven to be the greatest impetus to research on the psychological treatment of adolescents (Kovacs & Lohr, 1995). Levitt's conclusion prompted extensive debate within the literature for decades thereafter (Kazdin & Johnson, 1994; Kovacs & Lohr, 1995). Specifically, Steinberg (2001) stated that the empirical study of adolescence barely existed prior to 1975. Several meta-analytic reviews of adolescent research in recent years have refuted Levitt's claim and concluded that indeed psychotherapy with adolescents appears to be better than no treatment, and report effect sizes that range from 0.54 to 0.88 (Kazdin, Bass, et al., 1990; Kazdin & Johnson, 1994; Kovacs & Lohr, 1995; Roberts et al., 2003; Shirk & Karver, 2003; Weisz et al., 1987; 1995). Closer examination of both the work of Levitt and the subsequent literature of treatment effectiveness with an adolescent population give rise to several methodological concerns.

Initial works that targeted the effectiveness of psychotherapy with adolescents typically grouped a much broader age range of individuals than is widely accepted as defining the adolescent developmental period in contemporary society, or failed to report findings differentiated by developmental group (Weisz & Hawley, 2002). Levitt (1957) included a range of individuals from preschool age to 21 year olds in the study that generated the initial debate on psychotherapeutic effectiveness with adolescents, and did not differentiate his findings. Indeed, Weisz and Hawley (2002) were able to identify only two meta-analyses of treatment outcome research that assessed treatment effects for adolescents separately from children across a broad range of treatments (e.g., behavioural, client centered, psychodynamic) and treated problems (e.g.,

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aggression, depression, anxiety). One of these studies (Weisz et al., 1987) reported a mean effect size of .58, indicating that the average treated adolescent, after treatment, was at the 72nd percentile of the untreated control group; averaging across all outcome measures. The second study reported a mean effect size of .82 with a corresponding untreated control percentile rank of 79 (Weisz et al., 1995). The treatment effect sizes from these studies may provide a more accurate reflection of treatment outcome with adolescent clients; however, it appears that within these studies, adolescents were underemphasized. Only 38% of the studies in the Weisz et al. (1987) meta-analysis covering ages 4-18 years and 25% of the studies in the Weisz et al. (1995) meta-analysis covering ages 1-17 were undertaken with predominantly adolescent samples (Weisz & Hawley, 2002). Kazdin, Bass et al. (1990) reported that the majority of the studies reviewed in their meta-analytic study covering ages 4 to 18 years were with 6 to 11 year-olds, not with adolescents. The generalizability of these results to adolescent clinical psychotherapy must be viewed cautiously for this reason and the lack of clinical studies represented in the literature.

The body of evidence on child and adolescent psychotherapy outcomes has been conservatively estimated at over 1500 controlled studies (Kazdin, 2002). Research generally supports the notion that psychotherapy treatment with adolescents is effective under the conditions addressed in outcome studies (Kazdin & Johnson, 1994; Kovacs & Lohr, 1995; Shirk & Karver, 2003; Weisz & Hawley, 2002; Weisz & Jensen, 2001) and that the strength of the outcome associations is quite similar to the results obtained from meta-analysis of adult outcome studies (Shirk & Karver, 2003). However, the conditions under which this research occurred differed markedly from

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conditions typically found in clinical practice (Weisz, 2000). The bulk of adolescent psychotherapy outcome studies involve adolescent volunteers who are typically recruited from a school setting, exhibit symptoms that may not meet diagnostic criteria, and involve interventions that are narrowly prescribed and delivered by individuals with explicit training in a given type of intervention and direction to adhere to a specific protocol (Kazdin, 1990; Weisz, 2000). Research has infrequently evaluated treatments among clinical samples of adolescents in settings where treatment is usually conducted (Kazdin, 1990). In a recent review of the literature conducted by Weisz and Hawley (2002) a meager 13% of their reviewed articles were generated from research with adolescents accessed in a clinical setting. Adolescents who seek clinical treatment (and the families in which they live) are likely to have both a greater range and more diverse type of dysfunction than evident in school volunteer samples (Kazdin, 2000).

Weisz and Weiss (1989) conducted a rare outcome study that involved a clinical sample of individuals between the ages of 6 and 17 years. A markedly different conclusion regarding the effectiveness of treatment was generated by this study as compared to controlled outcome studies. Weisz and Weiss generally found no evidence that the children who completed therapy improved any more than those who dropped out after intake (Weisz & Weiss, 1989). Although, once again, this study failed to examine the data for possible differences in outcome for children and adolescents, it indicates that the generalizability of controlled outcome studies to clinical practice may be restricted. Although research is sparse on the effectiveness of treatment in clinical practice (Weisz & Jensen, 2001), available evidence suggests that

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the outcomes for adolescent samples from clinics are significantly poorer than those from research studies (Weisz & Jensen, 2001; Weisz, Weiss, & Donenberg, 1992). Due to methodological flaws in the existing research, psychotherapy outcome research with adolescents has not yet demonstrated indisputable evidence for the effectiveness of individual psychotherapy in clinical settings (Hendren, 1993; Kovacs & Lohr, 1995; Roberts et al., 2003). Conducting research on adolescent psychotherapy in clinical settings has been heralded as an essential direction for research by several authors (Kazdin, 1990; Kazdin, 1993b; Kazdin, 2000; Kovacs & Lohr, 1995; Weisz, 2000; Weisz & Hawley, 2002; Weisz & Jensen, 2001; Weisz et al., 1995). Developing treatments to meet the needs of clinical samples is likely to generate new hypotheses and procedures that may address clinical exigencies more fully and effectively (Kazdin, 1990).

In an attempt to demonstrate that psychotherapy with adolescents is indeed effective, researchers turned their attention from global concerns to specific problems (Kovacs & Lohr, 1995). A focus on what particular treatment is effective for certain youths with a specific problem, under a certain set of circumstances was developed (Kazdin, 1991). This line of inquiry mirrors the line of research inquiry evidenced in the literature on psychotherapy for adults (Kovacs & Lohr, 1995).

Specific Interventions

The literature to date has not generated a clear picture of the effective age range of adolescent treatments (Weisz & Hawley, 2002). As with the literature on global effectiveness of psychotherapy with adolescent clients, the literature that addresses specific treatment interventions for this developmental period is also

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obscured by the failure of most studies and reviews to differentiate children and adolescents (Kazdin, 1993b). Few treatment outcome studies have examined the effectiveness of specific treatments at different ages (Eyberg et al., 1998; Kazdin, 1993b; Weisz & Hawley, 2002). Three recent exceptions to this trend are the works of Durlak, Fuhrman, and Lampman (1991), Dishion and Patterson (1992), and Ruma, Burke, and Thompson (1996). Durlak et al. conducted a meta-analysis of the effect size of cognitive-behaviour therapy with individuals representing various ages. The effect size of this treatment with older youth was determined to be approximately twice as great as the effect size demonstrated by younger age groups. The works of Dishion and Patterson, and Ruma et al. addressed the question of relative effectiveness of behavioural parent training with children and adolescents, and found that this intervention was less effective in reducing behaviour problems with adolescents than with younger children. These findings illustrate the importance of considering the interaction of client age and treatment selection as potential moderators of outcome (Eyberg et al., 1998).

Adolescent treatment research has given unequal attention to various adolescent problems and/or disorders (Weisz & Hawley, 2002). To date, the literature has devoted more attention to the treatment of Externalizing Disorders than to problems and disorders that are more prevalent and represent greater risk to the individual (Kazdin, Bass, et al., 1990; Weisz & Hawley, 2002). Societal concerns over behaviours that often prove harmful to the public in general (e.g., aggression, violence, crime) warrant a response by the treatment research community; however, a recent review of the literature conducted by Weisz and Hawley (2002) suggested that the

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response has been excessive. Weisz and Hawley's review examined treatment studies, published between 1963 and 2000, which involved individuals between the ages of 11.0 and 17.9 years. Of the 114 studies examined in this pool, 36.8% were devoted to treatment of conduct problems (Weisz & Hawley, 2002). By contrast, only twelve studies (10.5%) investigated treatments for adolescent depression, six studies (5.3%) investigated treatments for substance use and abuse among adolescents, and one study focused on adolescent Anorexia Nervosa. Treatment studies that targeted Bulimia Nervosa were absent in the literature reviewed by Weisz and Hawley. Treatment effectiveness research on adolescent depression, substance use and abuse, and eating disorders is disproportionately low relative to the prevalence within this developmental group and the potential for dire immediate consequences (e.g., suicide, overdose) and the significant health risks associated with these disorders (Weisz & Hawley, 2002). Too few studies are available in most problem areas (e.g., depression, bulimia) to provide the basis for firm statements about what treatments are appropriate for adolescents with specific types of clinical dysfunction (Kazdin, 1993b).

There is a prevailing consensus in the literature that individual treatment techniques in use with adolescents (i.e., specific treatments within a broad class) have not been found to differ from each other (Kazdin & Johnson, 1994; Shirk & Karver, 2003); this finding is consistent with the literature on adult treatment outcomes (Smith et al., 1980). Treatment differences, when evident, tend to favour behavioural rather than nonbehavioural techniques (Weisz et al., 1987; Weisz et al., 1995). However, concerns with underrepresentation of nonbehavioural approaches in these studies and the confounding influence of measures used to assess treatment effects allow this

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conclusion to be disputed (Kazdin & Johnson, 1994). It has been suggested that disproportionate attention to behavioural and cognitive behavioural therapies by researchers has occurred as a result of the relative ease with which these therapies can be standardized, a criterion that has been emphasized in recent treatment outcome research (Kovacs & Lohr, 1995). In keeping with the finding that treatment techniques for adolescents produce largely similar results, no difference in treatment response between Internalizing and Externalizing Disorders has been evidenced in the literature (Kazdin & Johnson, 1994; Weisz et al., 1987; Weisz et al., 1995). Despite an active effort on the part of researchers to clearly identify superior treatment interventions for specific issues, with certain aged clients, under particular circumstances, the general consensus in the literature remains that individual treatment techniques (i.e., specific treatments within a broad class) have not been found to differ from each other (Kazdin & Johnson, 1994; Shirk & Karver, 2003). Hence conclusions about which treatments to apply to whom for what problems await further research (Kazdin, 1993b).

The vast majority of treatments for adolescent clients have not been subjected to outcome research (Kazdin & Johnson, 1994), and therefore psychotherapy with adolescents has proven to be a ripe field in which unsupported approaches have flourished (Roberts et al., 2003). Although the evidence base for the various psychotherapies for adolescents is relatively narrow, there is a growing body of evidence that empirically supports various types of interventions as effective for different presenting problems (Roberts et al., 2003; Weisz & Hawley, 2002). In a review of the literature conduced by Weisz and Hawley (2002), 14 treatments were shown to have beneficial effects with adolescents (defined as a sample 11.0 years or

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older) in the 4 broad categories of depression; fears, phobias, and anxiety disorders; Attention Deficit Hyperactivity Disorder; and conduct problems/ Conduct Disorder. This encompasses the depth and breadth of the research in this area to date; however, findings are encouraging given that these four broad categories include the majority of adolescent clinical referral issues (Weisz & Hawley, 2002). Although the results of adolescent therapy outcome studies are encouraging, the challenge of transferring treatment research findings to clinical settings remains an impediment to advancing psychotherapeutic practice. Weisz (2000) stated that empirically tested treatments continue to be used almost exclusively in university settings while the majority of adolescents seen in clinical practice receive interventions that have never been tested in a clinical trial.

The range of questions that have guided treatment research has been somewhat limited (Kazdin, 1993b). The majority of studies of adolescent therapies focus on the impact of treatment techniques on particular problems or disorders (DiGiuseppe et al., 1996; Kazdin, Bass et al., 1990). Although a problem-based focus is useful for highlighting targets for treatment, it limits the field of adolescent psychotherapy in a very significant way (Weisz & Hawley, 2002). Treatment technique is one source of influence and is likely to operate in conjunction with a host of other factors that also contribute to change (Kazdin 1993b). A major limitation in the treatment research as a whole has been the tendency to focus on single problems or diagnosis, despite the extensive evidence that suggests that adolescent problems are unlikely to present in one-diagnosis units, but in bundles (Weisz & Hawley, 2002). Rates of comorbidity are markedly higher in clinical samples of referred youth (Angold, Costello, & Erkanli,

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1999). Simply testing treatment after treatment for disorder after disorder has generated a large number of treatments and a very limited understanding of how they actually work (Kazdin, 2000; Kazdin & Weisz 1998).

Researchers of adult therapeutic change have interpreted the consistency of treatment outcomes across therapies to indicate that variables common to all forms of psychotherapy may be responsible for a large part of a client's improvement (Horvath & Luborsky, 1993; Prochaska, 1979). Recently, researchers in the field of adolescent psychotherapy have echoed this interpretation for adolescents (Kazdin, 2002) and called for studies that seek to understand the mechanisms or processes through which therapeutic change occurs (Huey, Henggeler, Brondino, & Pickrel, 2000; Kazdin, 1999; 2000; 2002; Kazdin & Nock, 2003; Kazdin & Weiss, 1998). Rather than attempting to determine what specific interventions will work in a specific case, developmental psychotherapy research suggests that there is greater merit in determining the range of options that should be available for therapists and adolescents to try (Weisz & Hawley, 2002). This approach will require an understanding of why and how treatment with adolescents works (Kazdin & Nock, 2003).

Therapeutic Change

Therapeutic change processes in adolescents have yet to be identified in the literature (Kazdin, 2000; Kazdin & Nock, 2003). Kazdin (2002) identified the greatest single limitation of adolescent research as the inattention and seeming disinterest in the questions of why or how therapy works. What processes or characteristics within the child, parent, or family can be mobilized to foster therapeutic change (Kazdin,

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2002)? The answer may involve basic psychological processes (e.g., memory, learning, information processing) or a broader theory (e.g., motivation) (Kazdin, 2000). Developing an understanding of the basis of therapeutic change holds potential for allowing therapists to optimize the effectiveness of treatment for adolescent clients (Kazdin, 1999; 2000; 2002). Nonetheless, hypotheses regarding how treatments work and the mechanisms involved in therapeutic change are sparse in the treatment literature in general (Kazdin, 2000).

In light of the finding that very different systems of psychotherapy produce common outcomes among adult clients (Asay & Lambert, 1999; Smith et al., 1980), studies designed to differentiate the common change processes across leading systems of psychotherapy were initiated with this age group (Prochaska, 1999). From this research, the Transtheoretical Model was developed. The Transtheoretical Model uses a temporal dimension, the stages of change, to integrate processes and principles of change from very different theories of psychotherapy, hence the name "transtheoretical" (Prochaska & DiClemente, 1982; 1983). The Transtheoretical Model was generated from data obtained from the adult change process, and to date, its exploration with adolescent clients has been limited. Initial exploration of the Transtheoretical Model for its applicability to the adolescent therapeutic change process is merited. Should this model demonstrate the ability to describe adolescent change, the potential to inform interventions to optimize their efficacy with this developmental group develops.

Development of the Transtheoretical Model

In the 1970s, the field of adult psychotherapy was fragmented by various

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approaches to assisting adults in the resolution of psychological issues, yet the superiority of any one technique over the others had not been demonstrated (Prochaska, 2000). Research attention turned to determining if common processes of adult change could be abstracted from the major systems of psychotherapy. Although 30 years later, this research direction is being reconstituted in aid of potential advancements in adolescent psychotherapy. Pioneering work by James Prochaska involved analysis of the major systems of psychotherapy and the identification of ten change processes from diverse systems of psychotherapies including Psychoanalytic, Gestalt, Cognitive, Cognitive Behavioural, Existential, Rogerian and Behavioural approaches (Prochaska, 1979). The processes of change include consciousness raising from Psychoanalytic Therapy, dramatic relief from Gestalt Therapy, environmental reevaluation from Cognitive Behavioural Therapy, social liberation and self-liberation from Existential Therapy, self-reevaluation from Cognitive Therapy, counterconditioning, reinforcement management, and stimulus control from Behavioural Therapy, and helping relationships from Rogerian approaches. Prochaska and his colleagues next assessed how frequently adults used the various processes of change to overcome an addiction to cigarettes, either with the assistance of professional therapies, or on their own. Results of this study indicated that individuals used different processes of change at different times in their attempts to quit smoking, and led to the insight that adults' experiences with struggling to overcome their addictions had unfolded through a series of stages of change (Prochaska, 2000). The foundation for the development of the Transtheoretical Model had been revealed. Understanding change as a series of steps and/or stages marked a significant departure

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from the traditional understanding of change based on an action-oriented paradigm that recognized change solely in behavioural terms (Prochaska & Velicer, 1997). The action paradigm construed change as an "event" that can occur quickly, immediately, discretely and dramatically (DiClemente & Prochaska, 1998) such as quitting smoking, drinking, or overeating.

The Transtheoretical Model understands therapeutic change as a process involving progress through a series of six stages (Redding et al., 1999). An understanding of these stages and the change processes that are associated with the stages allows therapists to appreciate growth in their clients without the need for overt behaviour change. Therapists are not limited by the action-oriented paradigm. Moreover, once a client's state of change is evident, the therapist would then know which processes to appeal to in order to assist the client in his/her progression to the next stage of change (Prochaska & Norcross, 1994).

Foundations of the Transtheoretical Model

Research designed to explore the Transtheoretical Model with an adult population has found remarkable similarities across different kinds of behaviour change (Prochaska et al., 1994; Redding et al., 1999; Velicer, Hughes, Fava, Prochaska, & DiClemente, 1995; Velicer, Rossi, Prochaska, & DiClemente, 1996). The consistency of the findings supports the assumption that the Transtheoretical Model applies to a broad range of problem behaviours, although often requiring modification to reflect the unique aspects of the behaviour in question (Velicer et al., 1996). The stages of change have been repeatedly found to have predictable relationships with the advantages and disadvantages of behaviour change (decisional

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balance), confidence in behaviour change and temptation to relapse (self-efficacy), and the ten processes of change (Prochaska & Velicer, 1997; Redding et al., 1999). According to the model, these processes employed at particular stages are responsible for movement through the stages of change (DiClemente & Prochaska, 1998).

Prochaska and Norcross (1994) posit that therapists who are limited in their understanding of change as a process often erroneously equate action with change (i.e., those that adhere to an action paradigm). As a consequence, the requisite work that prepares changers for action is overlooked, as are the important efforts necessary to maintain changes following action. The Transtheoretical Model recognizes incremental steps or stages in the process of change (Redding et al., 1999). It is not necessary, or even desirable, to witness overt behavioural change as a result of therapeutic encounters. Relapse tends to be the rule when action is taken for most health behaviour problems (Prochaska & Velicer, 1997). Clients must be understood in regard to their stage of change and encouraged to move forward in a gradual fashion. Prior to implementing behavioural change, both awareness of the need for change and acceptance of this need are promoted (Willoughby & Perry, 2002).

Although a linear progression through the stages of change is possible for problem behaviours, many chronic problems such as addictions (DiClemente & Prochaska, 1998; Prochaska & Norcross, 1994) follow a spiral path (DiClemente et al., 1991). Typically, chronically addicted individuals move forward one or more stages and then cycle back to a previous stage before moving forward once again, in a pattern known as relapse. Attempting to modify or cease addictive behaviours typically involves one or more periods of relapse followed by recycling through the

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stages (Prochaska & Norcross, 1994). In most instances, relapsers do not regress all the way back to the initial stage of change (DiClemente et al., 1991) but recycle back to an intermediate stage (Prochaska & Norcross, 1994). It is believed that even when individuals do recycle to a stage that they have previously occupied, they may still have learned from their previous experiences (Prochaska & Norcross, 1994; Redding et al., 1999), which may facilitate their progress during future attempts. It is reasonable to hypothesize that behaviours that are deeply engrained in an individual will follow a similar pattern in regard to the process of change.

The stages most commonly employed by changers across research areas include precontemplation, contemplation, preparation, action, maintenance and termination (Prochaska & Norcross, 1994; Redding et al., 1999).

Stages of Change

Precontemplation.

Individuals in the precontemplation stage of change have no intention of changing their behaviour in the foreseeable future (Prochaska & Norcross, 1994). A six month time frame is used to quantify "the foreseeable future" as this is assumed to be about as far in the future as most people plan a specific behaviour change (Velicer et al., 1996). Many individuals at this stage are unaware or under-aware of their problems. Families, friends, neighbours, or employees, however, are often very aware of the existence of a problem. Precontemplators usually feel coerced into changing by a spouse who threatens to leave, employers who threaten to dismiss them, parents who threaten to disown them, or courts who threaten to punish them (Prochaska & Norcross, 1994). These individuals may even demonstrate behavioural change as long

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as pressure is applied. Once the pressure subsides, however, they often quickly return to their previous patterns of behaviour.

Those in the precontemplation stage may remain there for many years with little impetus to change (Velicer et al., 1996). Individuals may remain in a precontemplative stage for diverse reasons. Their entrenchment may be because they are simply unaware of the problematic nature of the situation, or conversely the behaviours in which they engage may serve a distinct purpose, causing the individual to be reluctant to change (Prochaska & DiClemente, 1988). It is also possible that at some level, change may represent a threat to the individual (Eagle, 1999). Typically, these individuals avoid reading, talking, or thinking about their high risk behaviours (Prochaska & Velicer, 1997). These individuals are invested in making their own decisions and are resistant to advice and direction from others (Prochaska & DiClemente, 1988). Individuals who exhibit these characteristics have been described as "rebellious precontemplators" and may appear hostile, argumentative, and oppositional to change (Prochaska & DiClemente, 1988) and are frequently described as unmotivated, resistant, or not ready for therapy (Prochaska & Norcross, 1994). Clinical experience suggests that adolescents may most likely fit a rebellious profile, presumably because an essential task of this developmental period is to successfully establish independence (DiGiuseppe et al., 1996). A fourth presentation for individuals who remain in a precontemplative state is remarkable for lack of investment and energy, and a demonstrated resignation to one's plight. These individuals have been described as "resigned precontemplators" (Prochaska & DiClemente, 1988). Resigned precontemplators may fail to conceptualize alternate ways of being or lack insight into

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change itself. Adolescents with a primary or comorbid diagnosis of depression often fit this pattern (DiGiuseppe et al., 1996).

Individuals in the precontemplation stage use change processes significantly less than individuals in any other stage (Prochaska & Norcross, 1994). They process less information regarding their problems, spend less time and energy reevaluating themselves, experience fewer emotional reactions to the negative aspects of their problems, are less open with significant others about their problems, and do little to shift their attention or their environment in the direction of overcoming their problems. In order to move ahead, they need to acknowledge or "own" their problem and engage in an honest evaluation of the negative implications and/or repercussions of continuing to ignore its existence. Interventions for those in the precontemplative stage of change that meet with success are provision of choices and paradoxical interventions (DiGiuseppe et al., 1996). In regard to high-risk behaviours, life events can also move precontemplators emotionally, and facilitate movement from the precontemplative stage of change. For example, disease or death of a friend or loved one, especially if such events are problem related, can serve to promote self-reflection and examination of one's lifestyle (Prochaska & Norcross, 1994).

Prochaska and Velicer (1997) reported that 40% of adults terminate therapy prematurely (as judged by their therapists). Closer examination of the stage of change evidenced by these individuals revealed that the entire 40% were in a stage of precontemplation on intake to therapy. DiGiuseppe et al. (1996) indicated that most, if not all adolescent clients, enter therapy in the precontemplative stage of change. This

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finding may prove salient in understanding the phenomenon of premature termination among adolescents who seek counselling.

Contemplation.

During contemplation individuals are aware that a problem exists and are seriously thinking about overcoming it, but have not yet made a commitment to take action (Prochaska & Norcross, 1994). However, these individuals intend to take action within the next six months (Redding et al., 1999). A profound ambivalence is associated with this stage of change (Prochaska & Velicer, 1997), because individuals may know where they want to go, but are not quite ready to go there (Prochaska & Norcross, 1994). While both the positives and negatives of changing are considered (Velicer et al., 1996), contemplators are acutely aware of the disadvantages of changing (Prochaska & Velicer, 1997). Although awareness of the benefits to changing might provide some impetus to change, a person could remain in this stage for a long period of time (Prochaska & Norcross, 1994). Individuals who linger in the contemplation stage may be referred to as experiencing "chronic contemplation" or "behavioural procrastination" (Prochaska & Velicer, 1997).

Clients in the contemplation stage are evaluating options (Prochaska & Norcross, 1994). The more central the problem behaviours are to their core values, the more will their reevaluation involve changes in their sense of self. Contemplators also reevaluate the effects their behaviours have on their environment, especially the people they most care about. They are most open to consciousness raising interventions, such as observations, confrontations and interpretations. These individuals are more likely to use bibliotherapy and other educational interventions

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than individuals in other stages of change. To move on they must avoid the trap of excessive rumination and make a firm decision to begin to take action.

Preparation.

Individuals in the preparation stage of change have the intention to take action immediately (within 30 days) and have taken some behavioural steps in this direction (Prochaska & Norcross, 1994). They are likely to have made some reductions in their problem behaviours and typically achieve high scores on measures of both contemplation and action. Individuals in the preparation stage of change need to choose a specific plan of action and dedicate themselves to it. Often they are already engaged in change processes that would increase self-regulation and initiate behaviour change (Prochaska & Norcross, 1994). Interventions focused on goals and priority setting are well suited for individuals in the preparation stage of change.

Action.

Prochaska and Norcross (1994) describe the action stage as the period of time in which individuals modify their behaviours, experiences, and/or environments to overcome their problems. Action involves the most overt behaviour changes and requires a considerable commitment of time and energy. Modifications of a problem behaviour made in the action stage tend to be most visible and receive the greatest external recognition. Examination of the demographics of a variety of mental health difficulties revealed that 20% of clients terminated therapy quickly but appropriately (Prochaska & Velicer, 1997). These clients initiated therapy while in the action stage of change.

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The action stage is considered to be very unstable (Velicer et al., 1996). Highly volatile changes are possible and therefore control of the environment is crucial. Interruption of habitual behaviour patterns is needed in concert with the adoption of more productive patterns. An individual is considered to be in the action stage if the overt change in behaviour has persisted for less than six months (Prochaska & Norcross, 1994). Beyond six months, the new behaviour is felt to have increased stability, and the next stage of change is reached (Velicer et al., 1996). In contrast, failing to maintain the new behaviour for a minimum of 6 months is indicative of relapse. Individuals in the action stage require skills to use action-oriented change processes, such as counterconditioning, stimulus control, and contingency management (Prochaska & Norcross, 1994). These individuals must become aware of the pitfalls that might undermine continued action, whether they are cognitive, behavioural, emotional, or environmental in nature. In this way, effective strategies for preventing minor lapses or slips from becoming complete relapses are acquired.

Maintenance.

Traditionally seen as a static stage, maintenance is now understood as a continuation, not an absence, of change (Prochaska & Norcross, 1994). In this stage, people work to prevent relapse and to consolidate gains attained during action. Being able to remain free of the chronic problem and/or to consistently engage in a new incompatible behaviour for longer than six months is the criterion for considering someone to be in the maintenance stage. Maintenance is a very stable stage and may last a lifetime (Velicer et al., 1996). Successful maintenance builds on each of the

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processes that has come before, and also involves an open assessment of the conditions under which a person is likely to be coerced into relapsing. Perhaps the most important sense for an individual in maintenance is that one is becoming more of the kind of person one wishes to be (Prochaska & Norcross, 1994).

Termination.

Termination occurs when individuals no longer experience any temptation to return to those behaviours that had troubled them in the past. No longer do these individuals need to make any effort to keep from relapsing (Prochaska & Norcross, 1994). Since termination may not be a practical reality for the majority of people, it has not received much emphasis in research (Prochaska & Velicer, 1997). Psychotherapy frequently ends before serious problems terminate entirely. Consequently, it is expected that, for many clinical problems, clients will return for booster sessions, typically when they feel they may be slipping back from previous gains (Prochaska & Norcross, 1994).

Decisional Balance

Decisional balance reflects the individual's relative weighing of the advantages and disadvantages of changing (Prochaska & Velicer, 1997). The advantages and disadvantages are assumed to assess the individual's internal representations of the actual consequences of changing behaviours. Those representations are clearly related to the individual's stage of change (Prochaska, 1994). Shifts in the decisional balance are crucial for progress across the first four stages of change (Prochaska, 1994).

Prochaska et al. (1994) investigated the pattern of advantages versus disadvantages for adult clients who exhibited difficulties in 12 different problem areas

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(smoking, cocaine addiction, weight control, high-fat diets, delinquent behaviour, unsafe sex, condom use, sunscreen use, radon testing, acquisition of exercise, mammography screening, and physicians' preventive practice with smokers). Regardless of the behaviour in question, the same pattern of advantages versus disadvantages was revealed. For all 12 problem behaviours, the advantages of changing the problem behaviour were higher for individuals in the contemplation stage than for those in the precontemplation stage. However, there was no consistent pattern of differences between individuals in contemplation and those in action on the advantages of changing (Prochaska, 1994). A logical procedure might then be to target the advantages of changing for intervention with individuals in the precontemplation stage (Prochaska & Velicer, 1997). As might be expected, a reversal of sorts was found in this pattern when the disadvantages of changing were examined. There was no consistent pattern of differences between the precontemplation and contemplation stages on the disadvantages of changing, however, for 12 of the 12 behaviours, the disadvantages were lower for participants in action than for those in contemplation. Targeting the disadvantages of not changing for intervention after an individual has reached the contemplation stage would make use of this finding (Prochaska & Velicer, 1997). For the majority of problem behaviours, the balance between the advantages and disadvantages of changing could be clearly interpreted as having reversed before action occurred (Prochaska, 1994; Prochaska & Velicer, 1997).

Individual change processes like consciousness raising and self-reevaluation (Prochaska, Velicer, DiClemente, & Fava, 1988) can be used to highlight the perceived advantages of behaviour changes without altering the actual number of

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advantages. Similarly, helping individuals to become aware of the multitude of negative consequences of not changing the behaviour can increase the perceived disadvantages of not changing for these individuals (Prochaska et al., 1994). Consensus on whether it is better to raise the advantages (perceived or actual) of healthy behaviour changes, to raise the disadvantages of not changing, or to raise both, has not been reached. The results of this comparative study did suggest, however, that whatever intervention strategies are applied, in most cases the increase in the advantages must be twice as great as the decrease in the disadvantages to assist at risk individuals to move from precontemplation to action.

Self-Efficacy

Prochaska and Velicer (1997) define self-efficacy as the situation-specific confidence that individuals hold that they can cope with high risk situations without relapse to their unhealthy or high-risk habit. This construct was integrated from Bandura's self-efficacy theory (Bandura, 1977; 1982). For change to occur, individuals must believe that they have the autonomy to change their lives in key ways, yet they also need to accept that coercive forces are as much a part of life as autonomy (Prochaska & Norcross, 1994).

Temptation reflects the intensity of urges to engage in a specific habit when in the midst of difficult situations (Prochaska & Velicer, 1997). Velicer et al. (1996) analyzed the pattern of change in temptation over the stages of change. Results of this research indicate that risk for temptation is greatest during precontemplation and remains high through contemplation. Individuals in preparation show a decrease in

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temptation, with a further drop in the action stage. A dramatic drop was revealed in individuals who had moved into the maintenance stage of change.

Processes of Change

The processes of change are the engines that facilitate movement through the stages of change (DiClemente & Prochaska, 1998). Prochaska and Velicer (1997) liken change processes to the independent variables that people need to apply to move from stage to stage. Processes are the covert or overt activities that people engage in to alter affect, thinking, behaviour, or relationships related to particular problems or patterns of living (Prochaska & Norcross, 1994).

Research has demonstrated that successful behaviour change depends upon the use of the right processes at the right stage (Marcus, Rossi, Selby, Niaura, & Abrams, 1992; Prochaska, DiClemente, Velicer, & Rossi, 1993; Prochaska & Norcross, 1994; Prochaska & Velicer, 1997). In the early stages, individuals apply cognitive, affective, and evaluative processes to progress through the stages (Prochaska & Norcross, 1994; Prochaska & Velicer, 1997) while experiential processes peak in the contemplation stage (Velicer et al., 1996). Behavioural processes of change peak in the action and maintenance stages (Prochaska, Velicer, DiClemente, Guadagnoli, & Rossi, 1991). In later stages of change, individuals rely more on commitments, conditioning, reinforcements, environmental controls, and social support for progressing toward termination (Prochaska & Velicer, 1997). It is worthy to note that there is evidence in the literature that with some behaviours fewer change processes may be used than with other behaviours. The ten processes of change that have received the most empirical support to date are: consciousness raising, dramatic relief, environmental reevaluation,

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social liberation, self-reevaluation, counterconditioning, helping relationships, reinforcement management, stimulus control, and self-liberation (Prochaska & Norcross, 1994; Redding et al., 1999).

Consciousness raising.

An increased awareness of the causes, consequences, and cures for a particular problem constitutes consciousness raising (Prochaska & Velicer, 1997). Redding et al. (1999) described this construct as finding and learning new facts, ideas, and tips that support the idea of a healthy behaviour change. Consciousness raising occurs predominantly in the precontemplation and contemplation stages of change (Prochaska & Velicer, 1997). Prochaska and Norcross (1994) indicated that consciousness raising has wide support as a central factor in change, among various psychotherapeutic approaches. Interventions that can increase awareness include feedback, education, confrontation, interpretation, and bibliotherapy.

Dramatic relief.

Experiencing the negative emotions (fear, anxiety, worry) that go along with behavioural risks defines dramatic relief (Redding et al., 1999). This increase in emotional experiencing is typically followed by reduced affect if appropriate action can be taken (Prochaska & Velicer, 1994). Dramatic relief is most closely associated with the precontemplation and contemplation stages of change (Prochaska & Velicer, 1997). Psychodrama, role playing, grieving, and personal testimonies are examples of interventions that can move people emotionally.

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Environmental reevaluation.

Environmental reevaluation combines affective and cognitive assessments of how the presence or absence of a personal behaviour affects one's proximal social and/or physical environment (Prochaska & Velicer, 1997; Redding et al., 1999). It may include awareness that one can serve as a positive or negative role model for others (Prochaska & Velicer, 1997). Precontemplators and contemplators typically employ this process of change (Prochaska & Velicer, 1997). Empathy training, documentaries, and family interventions can lead to such reassessments.

Social liberation.

Realizing that the social norms are changing in the direction of supporting the behaviour change is the hallmark of social liberation (Redding et al., 1999). An increase in social opportunities or alternatives is required, especially for individuals who are relatively deprived or oppressed (Prochaska & Velicer, 1997). Advocacy and empowerment interventions are most appropriate for the promotion of social liberation.

Self-reevaluation.

Realizing that change is an important part of one's identity as a person constitutes self-reevaluation (Redding et al., 1999). Assessments of one's self-image with and without a particular behaviour occur on both cognitive and affective levels (Prochaska & Velicer, 1997). Self-reevaluation is most strongly associated with contemplation, preparation, and the initial period of the action stage (Prochaska & Velicer, 1997; Redding et al., 1999). Value clarification, healthy role models, and imagery are interventions that can move people evaluatively.

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Counterconditioning.

Counterconditioning involves the substitution of healthier alternative behaviours and/or thoughts for the unhealthy behaviour (Prochaska & Velicer, 1997; Redding et al., 1999). Individuals in the action and maintenance stages of change employ this change process more frequently than individuals in other stages of change (Prochaska & Velicer, 1997; Redding et al., 1999). Relaxation used to counter stress, and assertion used to counter peer pressure are examples of counterconditioning (Prochaska & Velicer, 1997).

Helping relationships.

Individuals who seek and use social support for their change employ the helping relationship process of change (Redding et al., 1999). This process combines caring, trust, openness, and acceptance (Prochaska & Velicer, 1997). Individuals in the action and maintenance stages of change frequently employ helping relationships (Prochaska & Velicer, 1997; Redding et al., 1999). Interventions such as rapport building, counsellor calls, and buddy systems can be sources of social support. The therapeutic alliance is particularly important in helping relationships (DiGiuseppe et al., 1996; Hanna et al., 1999; Prochaska & Velicer, 1997).

Reinforcement management.

This change process involves increasing the rewards for the desired behaviour change and/or decreasing the rewards of the unhealthy behaviour (Redding et al., 1999). Individuals in the stages of action and maintenance frequently employ this process of change (Prochaska & Velicer, 1997). Overt and covert reinforcements,

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positive self-statements, and group recognition are appropriate interventions for increasing reinforcement and the probability that healthier responses will be repeated.

Stimulus control.

Stimulus control removes reminders or cues to engage in the unhealthy behaviour and adds prompts for healthier alternatives (Prochaska & Velicer, 1997; Redding et al., 1999). Stimulus control is an effective change process for individuals in the action or maintenance stages of change (Prochaska & Velicer, 1997). Avoidance, environmental reengineering, and self-help groups can provide stimuli that support change and reduce risk for relapse.

Self-liberation.

Prochaska and Velicer (1997) define self-liberation as both the belief that one can change and the commitment and recommitment to act on that belief. Self-liberation is a firm commitment to change (Redding et al., 1999). Self-liberation is employed as a change process in the final period of the preparation stage, and continues to be used during the action and maintenance stages (Prochaska & Velicer, 1997, Redding et al., 1999). Interventions that emphasize multiple choices enhance self-liberation (Prochaska & Velicer, 1997).

Application of the Transtheoretical Model with Adolescent Clients

An extensive body of empirical evidence has accumulated supporting the Transtheoretical Model for adult clients, in a variety of problem areas (Prochaska, DiClemente, Velicer, Ginpil, & Norcross, 1985; Prochaska, DiClemente, & Norcross, 1992; Smith, Subich, & Kalodner, 1995; Velicer et al., 1995). To date, studies investigating this model in adolescent populations have examined delinquent

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behaviours (Hemphill & Howell, 2000; Prochaska et al., 1994), violent youth (Willoughby & Perry, 2002), exercise behaviours (Metzker, 2000; Nigg, 2003), dietary fat reduction (Rossi et al., 2001), adolescent drinking (Migneault, Pallonen & Velicer, 1997), smokeless tobacco use (Lowry, 2000), smoking cessation (Pallonen et al., 1998; Stevens, 2001), sexual risk reduction (Smith & DiClemente, 2000), sexual abstinence (Hulton, 2001), and psychiatric inpatients (Greenstein, Franklin, & McGuffin, 1999). Interventions were based on the ten processes of change described by Prochaska and Velicer (1997). These studies supported the effectiveness of interventions based on the principles of the Transtheoretical Model in a wide variety of settings and endorsed the applicability of the Transtheoretical Model to adolescent populations.

In contrast, Aveyard et al. (2001) examined the efficacy of a smoking reduction program based on the tenets of the Transtheoretical Model with a sample of British adolescents and found little evidence for the effectiveness of their program. Suggested reasons for the reported failure of the program included reliance on a relatively restricted number of interventions, complicated presentation and delivery of program material, and the possibility that the Transtheoretical Model does not provide a valid description of smoking acquisition or cessation among adolescents.

Although practitioners have applied the Transtheoretical Model to populations of adolescent clients in both research environments and clinical settings, foundation work in establishing stage of change profiles for adolescents who seek therapy in clinical settings has not been conducted. Further investigation of the Transtheoretical Model in relation to adolescents provides the potential for an increased understanding

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of adolescent change.

Purpose of the Study

Conducting psychotherapy with adolescents presents challenges in the area of therapeutic engagement/motivation (Gil, 1996; Liddle, 1995; Oetzel & Scherer, 2003; O'Hare, 1996; Sommers-Flanagan & Sommers-Flanagan, 1995), as well as the more fundamental issue of retaining adolescent clients in a therapeutic relationship without premature self-termination (Kazdin, 1996; Kazdin, 2000; Wierzbicki & Pekarik, 1993). In their meta-analysis of 125 psychotherapy studies, Wierzbicki and Pekarik reported a dropout rate of between 40 and 60% among adolescents who sought counselling. Dropout rate was found to be unrelated to most of the variables examined in the study, including client characteristics such as demographics, and problem characteristics such as duration and intensity.

There are now several studies in the adult psychotherapy literature on psychotherapy dropouts from a stage model perspective. These studies addressed a wide variety of issues including substance abuse, smoking, obesity, and a broad range of psychiatric disorders (Prochaska et al., 1985; Prochaska et al., 1992; Smith et al., 1995) and found that stage-related variables predicted dropouts better than demographics, type of problem, severity of problem, and other problem-related variables (DiClemente & Prochaska, 1998). These studies demonstrated that interventions matched with the stage of change that the client was experiencing achieved the greatest positive impact. For example, applying interventions designed to promote reinforcement management, counterconditioning, or stimulus control in individuals currently in the precontemplation stage represents a theoretical, empirical,

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and practical mistake; however, for individuals in the action stage, such strategies would represent optimal matching (Prochaska & Velicer, 1997). DiClemente and Prochaska (1998) identified the pitfalls of treating adults in the precontemplation stage as if they are starting in the same place as those in the action stage and expecting them to continue in therapy. These authors found that when treatment is matched to stage of change, adults who enter smoking cessation programs in a precontemplative stage of change continued engagement in the program at the same high rate as those who started in the preparation stage.

In the case of adolescents, questions arise concerning the appropriateness of current interventions. The low retention rates characteristic of adolescent psychotherapy may arise in part from action oriented interventions that pressure adolescents into action when they are not yet ready for overt behavioural change. Prochaska (2000) cautioned that therapists can demoralize their clients and themselves by trying to move to action with a population of clients who are not prepared for it. This may be particularly relevant for adolescent clients, as it has been reported that most, if not all, enter therapy in the precontemplative stage of change (DiGiuseppe et al., 1996). In addition, this point may be particularly salient for adolescent psychotherapy clients who are highly invested in their independence and self-determination, as part of normal development (DiGiuseppe et al., 1996). The Transtheoretical Model may have important implications for how practitioners may best intervene with adolescents to promote therapeutic engagement and increase retention.

Developing a therapeutic approach grounded in the tenets of the

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Transtheoretical Model for use with adolescents who seek therapy could potentially serve to optimize treatment outcomes for adolescents. Willoughby and Perry (2002) defined reluctant youth as merely clients who do not share the therapist's goals. When therapists match their interventions to adolescents' readiness to change, clients are more likely to be compliant, exhibit greater behavioural changes, and remain in treatment longer (Willoughby & Perry, 2002). It is hypothesized that this approach conveys respect for adolescent autonomy, thereby increasing the potential to forge a strong therapeutic alliance and consequently retain adolescents in therapy.

The purpose of this study is to investigate stage of change profiles in adolescents who seek clinical treatment. Although stage of change profiles have been revealed for adult populations experiencing a number of clinical issues (Carney & Kivlahan, 1995; DiClemente & Hughes, 1990; McConnaughy et al., 1983; McConnaughy, DiClemente, Prochaska & Velicer, 1989), the study of stage of change profiles has not been undertaken with a similar adolescent population. The stage of change profiles for adolescents may mirror that of adults, or conversely, unique profiles may emerge. Greenstein et al. (1999) generated stage of change profiles for a sample of adolescents admitted to a psychiatric inpatient program. Their study produced a restricted number of profiles, as compared with the profiles generated in McConnaughy et al.'s (1983) adult study; however, the profiles produced were interpretable within the Transtheoretical Model. Three distinct profiles were produced in this study.

A strong case has been presented for the use of clinical samples in adolescent research (Kazdin, 1990; Kazdin, 1993b; Kazdin, 2000; Kovacs & Lohr, 1995; Weisz,

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2000; Weisz & Hawley, 2002; Weisz & Jensen, 2001; Weisz et al., 1995). Individuals typically recruited for treatment research differ from those seen in clinical settings. Adolescents recruited for and included in research tend to have less severe problems, reduced chronicity of problems, and fewer comorbid disorders than adolescents seen in clinical settings. Selecting a highly heterogeneous sample from clinical settings increases the clinical relevance of the study, as clients exhibiting an array of disorders are included. The bulk of adolescent research to date does not speak to clinically referred cases (Kazdin, 1990; 2000; Weisz, 2000; Weisz & Hawley, 2002; Weisz & Jensen, 2001). The knowledge arising from this study has the potential to inform the practice of clinicians interested in maximizing the effectiveness of therapeutic interventions with adolescent populations.

In summary, the literature on the effectiveness of psychotherapy with adolescent clients was surveyed, as well as the literature that addresses the application of the Transtheoretical Model with adult psychotherapy clients. Ongoing concerns regarding the therapeutic engagement/motivation and premature termination of adolescent psychotherapy clients were identified in the literature. The literature that examined the Transtheoretical Model's application with adult psychotherapy clients revealed that interventions matched to stage of change resulted in improved therapeutic outcomes and higher retention rates. A similar line of inquiry targeting adolescents is noticeably absent in the literature. This study will begin the process of exploring the Transtheoretical Model for use with adolescent psychotherapy clients. Specific targets for exploration have been identified. This study has been designed to address the following questions: 1) Can distinct and reliable profiles for adolescent

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change be identified for a sample of adolescents seeking treatment in clinical settings? 2) Do profiles of adolescent change adequately match stage of change constructs? (i.e., Are the profiles interpretable or relevant within the context of the Transtheoretical Model?); 3) Do differences in stage of change profiles exist for adolescents exhibiting different categories of adolescent disorders (i.e., Internalizing, Externalizing, or Substance-Related), and/or other demographic variables (i.e., type of clinical setting, referral source, sex, age, ethnicity, place of primary residence, and medication status)?

The following section outlines the design of the study including a description of the sample, the data collection procedure, and a description of the statistical procedures employed to address the research questions.

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CHAPTER 3

Methodology and Research Design

Sampling Procedure

The sample was comprised of adolescents between the ages of 12 and 18 years (inclusive) seeking therapy in urban, clinical settings. These adolescents exhibited an identifiable and presumably controllable behaviour issue, for which counselling had been sought either by the individual or his/her parents. Individuals included in the study did not manifest mental disabilities or pervasive developmental disorders. None of the individuals involved in the study had been mandated by external agencies (i.e., court ordered or school mandated) to attend therapy.

Demographic information for each respondent was collected in the following areas: type of clinical setting (i.e., agency or private practice), referral source (i.e., self-referred or parent-referred), category of issue (i.e., Internalizing, Externalizing, or Substance-Related), sex, age, ethnicity, place of primary residence, and medication status (i.e., currently prescribed psychotropic medication versus unmedicated). Variables were chosen for their ability to contextualize potential variation that might exist within the sample. An ethical review of this study was undertaken at the University of Alberta prior to the initiation of data collection.

Data Collection

The first stage in establishing the study involved obtaining permission from various agencies to conduct research within each organization. The nature of this procedure varied in accordance with the structure of the organization. In private psychological practices, permission involved agreement on the part of the practitioner

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to approach their clients with an invitation to participate. In contrast, agencies that reflected a developed organizational structure typically required presentation and description of the study to various stakeholders including directors, office managers, and program managers. If permission to proceed was obtained at this level, the next step involved approaching the clinicians employed at the agency to explain the study and encourage their cooperation in inviting clients to participate. Thirty-seven percent of the sample was obtained from private practices, while sixty-three percent was obtained from agency settings.

Prior to the collection of data, therapists were given a general introduction to the study by the researcher. In particular, the steps involved in inviting client participation and instructions for questionnaire administration were thoroughly reviewed with clinicians. As a reminder, written directions for inviting client participation and standardized instructions for directing participants in the completion of questionnaires were made available in each package of research materials. Potential participants were introduced to the study by their therapists during the first session of psychotherapy. For those clients who agreed to participate in the study, administration of the questionnaires was conducted by the attending therapist.

The study involved surveying an adolescent population and thus the majority of cases required both the informed assent of the participants and the informed consent of their parents/guardians. Five of the research participants attended the initial, and subsequent, therapy sessions without a parent/guardian escort. Three of these clients were 17 years of age, while two were 18 year-olds. For the purposes of this study, the 17 year-old clients were regarded as mature minors by the therapists and invited to

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participate in the study without the informed consent of their parent(s)/guardian(s). The 18 year-old clients provided informed consent to participate in the study.

The majority of participants attended the initial psychotherapy session with one or more parent(s)/guardian(s). In these instances, therapists introduced the study to the adolescent and his/her parent/guardian simultaneously and invited participation in the study. In situations where interest in participating was indicated by both parties, informed consent forms were provided to the parent/guardian and client assent forms were provided to the adolescent. The option of discontinuing participation at any time, without penalty, was articulated both during the conjoint adolescent and parent/guardian discussion, and later when the adolescent and the therapist were alone. This procedure was followed to respect the decision of the adolescents who did not wish to participate in the study, but did not feel comfortable expressing their desire to abstain in the presence of their parent(s)/guardian(s).

The directions for completing the research package was explained to the adolescent by the therapist, after the parent/guardian had provided consent and left the room. The adolescent was asked to identify a therapeutic issue that he/she wished to focus on for the purpose of the questionnaire. Although this was not restricted to the issue identified on referral, in all cases the issue chosen mirrored the referral issue. The adolescent was encouraged to seek clarification from the therapist on the content of questions, as required. In an effort to encourage truthful responding, adolescents completed the questionnaire anonymously while their therapist focused on completing demographic information for inclusion with the questionnaire. The completed questionnaire and supporting documents were sealed in an envelope by the adolescent

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and returned to the therapist for collection by the researcher. If the adolescent did not initiate discussion of his/her questionnaire responses with the therapist, no attempt was made by the therapist to pursue this information. However, if the client wished to discuss the content of questionnaire with the clinician, the therapist facilitated this discussion. Administration of the questionnaire including the introduction of the study and informed consent procedures required approximately 10 minutes to complete.

Participants

In total, one hundred and two adolescents completed questionnaires. Of these, three research packages were incomplete, and thus were discarded from the analysis. To ensure confidentiality, consent to participate forms were separated from the questionnaire and demographic information by the researcher upon confirmation that the required signatures were obtained. Of the 99 individuals who engaged in the research, 88% of the sample was referred to counselling by a parent/guardian, while 12% were self-referred. Sixty-two percent were females and thirty-eight percent were males. Fifty-one percent identified an Externalizing issue for the focus of their questionnaire, while forty-nine percent identified an Internalizing issue. No respondents chose a Substance-Related issue for the purpose of completing the questionnaire. The age break-down of respondents was as follows: 4% 12-year-olds, 15% 13-years-olds, 19% 14-year-olds, 13% 15-year-olds, 20% 16-year-olds, 19% 17-year-olds, and 10% were 18 years of age. The respondents were primarily Caucasian (80%), resided in an urban setting (94%), and were not taking psychotropic medication at the time of their participation (74%).

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Measure

The University of Rhode Island Change Assessment questionnaire (URICA) is a 32-item self-report instrument that provides a continuous measure of the attitudes representing each of the stages of change constructs defined in the Transtheoretical Model (Precontemplation, Contemplation, Preparation, Action, and Maintenance) (McConnaughy et al., 1983). The URICA questionnaire uses a 5-point Likert-type response format for each item (see Appendix A). Participants rate statements that describe how they feel as they initiate therapy or as they approach problems (McConnaughy et al., 1989). The items are written so that they are relevant to a "problem" that is determined by the participants (DiClemente & Hughes, 1990). This instrument has been identified as being particularly well suited to situations when the behaviour in question is illegal or there are perceived consequences for acknowledging lack of readiness (Prochaska & DiClemente, 1998). The URICA questionnaire has the advantages of being subtle and not inclined to misreport under these circumstances (Carney & Kivlahan, 1995; DiClemente & Hughes, 1990).

The URICA questionnaire was constructed by generating items based on behavioural definitions of the stages of change constructs. An interrater reliability of 100% was used to select 125 initial items; factor analysis was then used to reduce these items to 32. The retained items comprise four subscales; each with eight items. Subscales correspond to the stages of change constructs of Precontemplation, Contemplation, Action, and Maintenance (McConnaughy et al., 1983). The construct of Preparation is not represented by questionnaire items that are discrete to this stage of change. For the construct of Preparation, client scores on the constructs of

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Contemplation and Action are examined and compared to the scores generated for the constructs of Precontemplation and Maintenance. Internal consistency reliabilities for subscales ranged from 0.79 to 0.84 (Precontemplation, 0.79; Contemplation, 0.84; Action, 0.84; and Maintenance, 0.82). Subscale intercorrelations range from 0.52 for Precontemplation and Contemplation to 0.53 for Contemplation and Action. As expected, adjacent stages are most highly correlated (McConnaughy et al., 1989). The measure is deemed to have sound psychometric properties and has been considered to support the validity of the stages of change model among general psychotherapy clients (McConnaughy et al., 1983; McConnaughy et al., 1989), smokers (Prochaska et al., 1985), alcoholics (Carney & Kivlahan, 1995; DiClemente & Hughes, 1990), and people seeking to change a variety of health-risk behaviours such as weight loss and sun exposure (Prochaska et al., 1992; 1994).

It has been recommended in the literature (Hemphill & Howell, 2000; Petrocelli, 2002) that a dimensional approach to understanding stages of change be undertaken. Cluster analysis of the URICA data, which assigns scores to all stages (dimensional approach), has been found to be preferable to categorizing individuals to one discrete stage (DiClemente & Hughes, 1990). This classification scheme allows individuals to endorse a broader range of thoughts and behaviours and appears to explain a greater proportion of the variability among URICA items than a single-stage classification scheme (Carney & Kivlahan, 1995). Researchers have typically used cluster analysis to create subgroups for the URICA scale (DiClemente & Prochaska, 1998).

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Cluster Analysis

The early stages of research in any given area are usually marked by an emphasis on the development of typologies (Diekhoff, 1992). Cluster analysis is an ex post facto, descriptive, multivariate data analysis procedure that starts with a data set containing information about a sample of participants and organizes these entities into relatively discrete, homogeneous subgroups or clusters (Diekhoff, 1992; Norusis, 1985; Velicer et al., 1995). Cluster analysis is traditionally used to uncover the underlying structure of a set of cases by identifying groups of homogenous cases (Diekhoff, 1992; Kaufman & Rousseeuw, 1990) and hence is exploratory in nature. Generally, cluster analysis serves four principle goals: the development of a typology or classification; hypothesis generation for future investigations; investigation of useful, non-empirical conceptual schemes for grouping participants; and hypothesis testing or verification of types defined through other procedures. Cluster analysis does not impose any preconceived structure on the data, and therefore is favourably suited for this research. In this study, cluster analysis was used to address the first two research questions: 1) Can distinct and reliable profiles for adolescent change be identified? 2) Do profiles of adolescent change adequately match the stage of change constructs?

The process of cluster analysis involves systematic organization of data into meaningful groups. A Hierarchical Cluster Analysis procedure using a between groups linkage method and a Euclidean distance interval was employed for the purposes of this study. Initially, all participants were assigned to a single class that did not reflect the unique characteristics of the questionnaire responses. The classification criteria

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were then gradually increased in relatively small increments, and data was re-classified into increasingly smaller groups that included individuals with similar patterns of responding. A hierarchical structure was produced from this process. Any number of groups (clusters) can be produced for a given data set, ranging from one large cluster containing all of the individuals in the sample, to an individual cluster for each participant. Analysis of data is required to determine the optimum number of clusters to organize data in a meaningful fashion. This analysis consisted of examination of the data from a statistical standpoint (i.e., clusters of a sufficient size to be interpretable) as well as, from a clinical standpoint (i.e., clusters that are clinically relevant). Data was considered from both perspectives to arrive at a meaningful cluster solution.

Data was further explored using analysis of variance procedures to examine the demographic variables involved in the study. Specifically a one-way analysis of variance was used to address the third research question: 3) Do differences in stage of change profiles exist for adolescents exhibiting different categories of adolescent disorders (i.e., Internalizing versus Externalizing), and/or context (i.e., type of clinical setting, referral source, sex, age, ethnicity, place of primary residence, and medication status)?

Descriptive data for the full sample, results of the Cluster Analysis procedure, and findings of the Analysis of Variance method are presented in the following section.

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CHAPTER 4

Analysis of Data

Descriptive Statistics

The data analysis focused on the exploration of participant responses to determine if distinct and reliable profiles of adolescent stages of change could be generated. The initial step of data analysis involved generating descriptive data for each of the four stage of change constructs targeted by the questionnaire (i.e., precontemplation, contemplation, action, maintenance). At this stage, the full sample was utilized. Results of this analysis are presented in Table 1.

Table 1

Full Sample[a] Means for Stage of Change Constructs

Stage of Change	M	SD	α	SEM	Range
Precontemplation	-4.87	6.17	0.84	2.49	-16 → 14
Contemplation	5.61	5.77	0.87	2.09	-16 → 15
Action	3.75	5.34	0.84	2.14	-15 → 15
Maintenance	0.70	6.31	0.84	2.47	-16 → 12

[a]N = 99

Descriptive data for the full sample provided distinct means for each of the four stage of change constructs. The mean for the construct of contemplation provided the highest score (5.61). The mean score for the action construct (3.75) was the second

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highest mean generated, followed by the mean for maintenance (0.70) and precontemplation (-4.87). Constructs with higher means reflected stronger endorsement of thoughts and feelings associated with those constructs, as compared with the other stages of change. Descriptive data for the full sample revealed means that reflected a sample of clients who were generally aware that a problem existed, and who were willing to contemplate change. Beyond this, their pattern of endorsement indicated that they had begun to take steps to address the problem in some behavioural way (i.e., attending counselling), resulting in a relatively large positive mean on the construct of action (3.75). The individuals who were included in the sample marginally endorsed items that comprised the maintenance construct. Their marginal endorsement is indicated by a relatively low, yet positive mean (0.70) on this construct. Clearly these individuals did not embrace the notion that they had made significant change in regard to their identified issue, and were not seeking counselling to prevent relapse or to consolidate gains. The lowest mean for the stage of change constructs was generated for precontemplation (-4.87). In general, the individuals who comprised the sample appeared to have a well-established awareness of the need to address issues that, to date, had not been resolved.

Internal consistency reliability scores ($\propto$) for the sample ranged from 0.84 (precontemplation, action, and maintenance constructs) to 0.87 (for the construct of contemplation). These scores compare favourably to the internal consistency reliabilities reported by McConnaughy et al. (1989) for a sample of adults seeking psychotherapy in a clinical setting. In addition, the standard error of the measure (SEM) was calculated for each of the constructs. These scores varied between 2.09

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(contemplation) and 2.49 (precontemplation) and indicate that the measure used in this study (University of Rhode Island Change Assessment Questionnaire) demonstrated consistently low variability across constructs.

For each of the stage of change constructs reflected in the content of the questionnaire, scored responses could potentially range from –16 to +16. Results depicted in Table 1 indicate that participants utilized a wide range of responses in their patterns of endorsement. A marginally restricted range of item endorsement was revealed for the maintenance construct (-16 to +12). Specifically, participants failed to endorse questionnaire responses that reflected a strong belief that their issue was adequately addressed and/or resolved. This finding is not unexpected given that the sample utilized in this study was comprised of individuals initiating psychotherapy.

Cluster Analysis

The second analysis examined whether the full sample could be subdivided into a smaller number of homogenous subgroups or clusters. For the purpose of cluster analysis, data was standardized by the conversion of raw scores to z-scores. Data was then classified using a Hierarchical Cluster Analysis. This procedure calculated the Euclidean Distance between each cluster and divided clusters that had the greatest distance at each stage. Output was generated for a range of clusters (2 through 20), and each solution was investigated for its ability to subdivide the data in an interpretable manner.

Cluster solutions produced from the full sample ($N = 99$) revealed the presence of five participants who demonstrated distinct patterns of responding that did not approach the profiles generated by larger clusters of participants. Given the small

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percentage of individuals who generated these distinct patterns of responding (5.0% of the full sample) these participants were classified as outliers and omitted from further cluster analysis.

The process of generating cluster solutions and sequentially examining each solution's ability to subdivide the data into a parsimonious number of interpretable clusters was then repeated for the remaining participants (n = 94). This procedure produced a series of solutions from two clusters through nine clusters that effectively subdivided the data into potentially meaningful groups; however, further division of the data (solutions involving 10 through 20-clusters) resulted in splintering of small numbers of participants from larger clusters and failed to contribute to an understanding of the data.

Cluster solutions (2-clusters through 9-clusters) were then examined from a clinician's perspective to determine which of the solutions maximized the ability to describe the data in a meaningful manner. A sequential approach was adopted to examine each solution's ability to contribute additional meaning to the previous, more parsimonious solution. This analysis revealed the presence of three relatively small clusters (n = 3, n = 3, and n = 2) that were notable in their similarity of containing individuals with scores on the construct of precontemplation which were greater than one standard deviation from the full sample mean. Although the means on the remaining constructs demonstrated variation that resulted in the formation of three distinct clusters, these means were also similar in that they closely approached or exceeded one standard deviation below the full sample mean. From a clinical perspective, the similarity of these individuals on the construct of precontemplation

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warranted the collapse of these three clusters into one cluster (n = 8). Means for each of the clusters in the 9-cluster solution are found in Appendix B. The practice of combining clusters considered to be subgroups of individuals who demonstrate highly precontemplative thoughts and feelings has been supported in the literature (Migneault et al., 1999).

The results of the cluster analysis revealed a 7-cluster solution that was deemed the most appropriate configuration for describing the data generated in this study. The number of adolescents in each of the seven clusters is reported in Table 2.

Table 2

Frequency of Participants[a] by Cluster: 7-Cluster Solution

Cluster	Frequency	Percent	Cumulative Percent
1	37	37.4	37.4
2	27	27.3	64.7
3	8	8.1	72.8
4	8	8.1	80.9
5	6	6.1	87.0
6	4	4.0	91.0
7	4	4.0	95.0

[a] n = 94

Of the clusters produced in the 7-cluster solution, five contained 6.0% of the data or

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greater and were arbitrarily classified as major clusters. These five clusters (Clusters 1 through 5) comprised a total of 87% of the total sample. Two clusters each contained 4.0% of the data and were classified as minor clusters. These clusters (6 and 7) comprised a total of 8% of the total sample. All clusters yielded distinct profiles for interpretation. The remaining 5.0% of the data was considered uninterpretable for cluster analysis; however, the patterns of responding that characterized these individuals were explored as individual cases.

The data was then standardized by the transformation of construct means to z-score means for each of the clusters generated in the analysis. Transformation of the data in this manner allowed for differences between cluster means and the mean of the full sample to become readily apparent during analysis of cluster profiles. Z-score means for each cluster are displayed in Table 3, followed by stage of change profiles for each of the clusters (Figures 1- 7).

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Table 3

Z-score Means[a] for Stage of Change Constructs, 7-Cluster Solution

		Mean (SD)			
Cluster	n	Precontemplation	Contemplation	Action	Maintenance
1	37	-0.50 (0.44)	0.46 (0.44)	0.43 (0.45)	0.82 (0.41)
2	27	0.22 (0.56)	-0.09 (0.53)	-0.08 (0.44)	-0.36 (0.42)
3	8	-1.18 (0.20)	1.02 (0.29)	1.12 (0.38)	-0.29 (0.51)
4	8	1.88 (0.82)	-2.42 (0.97)	-2.22 (1.09)	-1.77 (0.65)
5	6	-0.62 (0.33)	-0.25 (0.43)	0.08 (0.61)	-1.51 (0.52)
6	4	0.99 (0.08)	-0.06 (0.83)	0.37 (0.39)	1.20 (0.24)
7	4	2.17 (0.28)	-0.93 (0.43)	-0.98 (0.56)	-0.19 (0.49)

[a]n = 94

Figure 1 displays the stage of change profile for the participants comprising Cluster 1.

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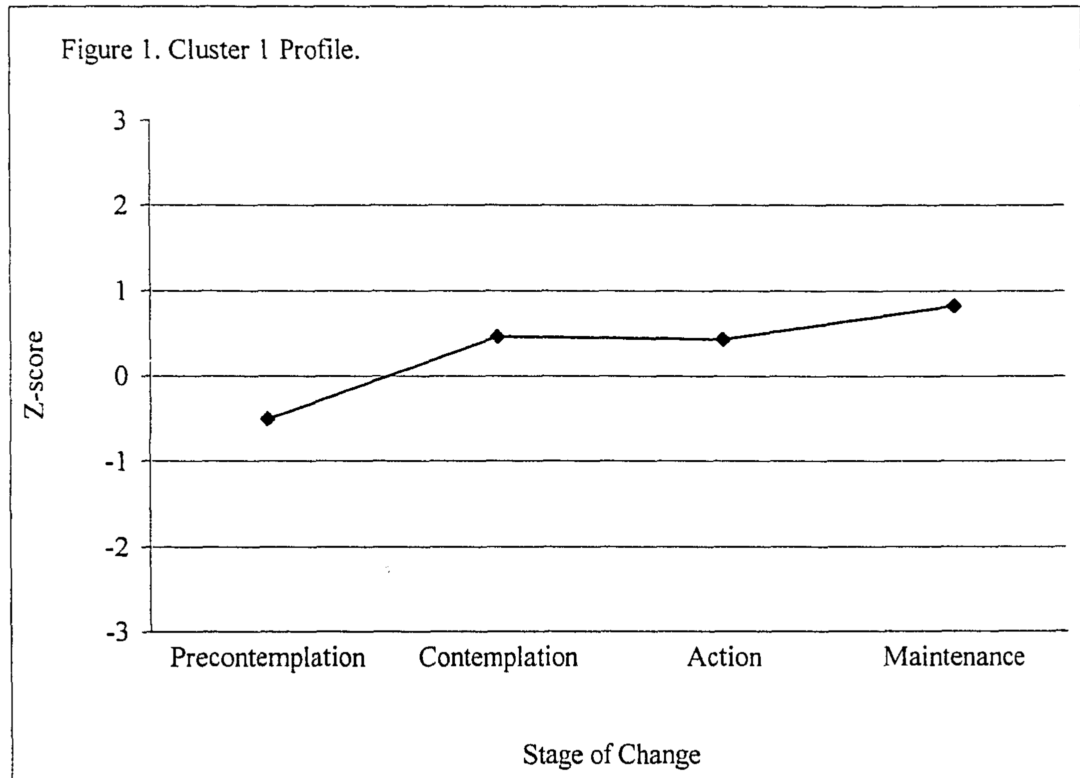

The 37 participants in this cluster scored slightly below the full-sample mean in the area of precontemplation (M =-0.50, SD = 0.44), and slightly above the full-sample mean on contemplation (M = 0.46, SD = 0.44) and action (M = 0.43, SD = 0.45). Their score on maintenance was well above the mean (M = 0.82, SD = 0.41). The profile displayed in Figure 1 indicated that the respondents in Cluster 1 were not resistant to considering the problem. These individuals were actively engaged in thinking about making changes and had begun to do some things differently in regard to the problem. These individuals were also active in maintaining the changes that they had already made.

Figure 2 illustrates the stage of change profile for Cluster 2.

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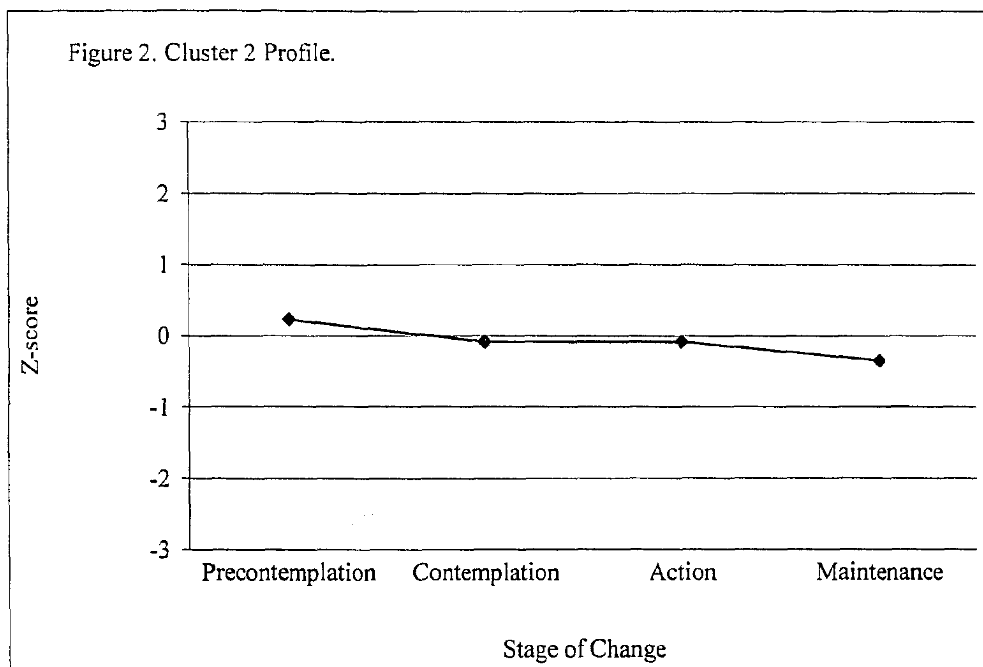
Figure 2. Cluster 2 Profile.



Twenty-seven of the respondents were subgrouped into Cluster 2. These individuals scored very close to the full-sample mean on scores of precontemplation (M = 0.22, SD = 0.56), contemplation (M = -0.09, SD = 0.53), and action (M = -0.08, SD = 0.44). Their score in the area of maintenance fell slightly below the full sample mean (M = -0.36, SD = 0.42) These individuals tended to devote little thought to the problem, and were disposed to ignore the issue. These individuals took minimal action to do things differently, and did not maintain any changes that they might have already made.

Figure 3 illustrates the stage of change profile for Cluster 3.

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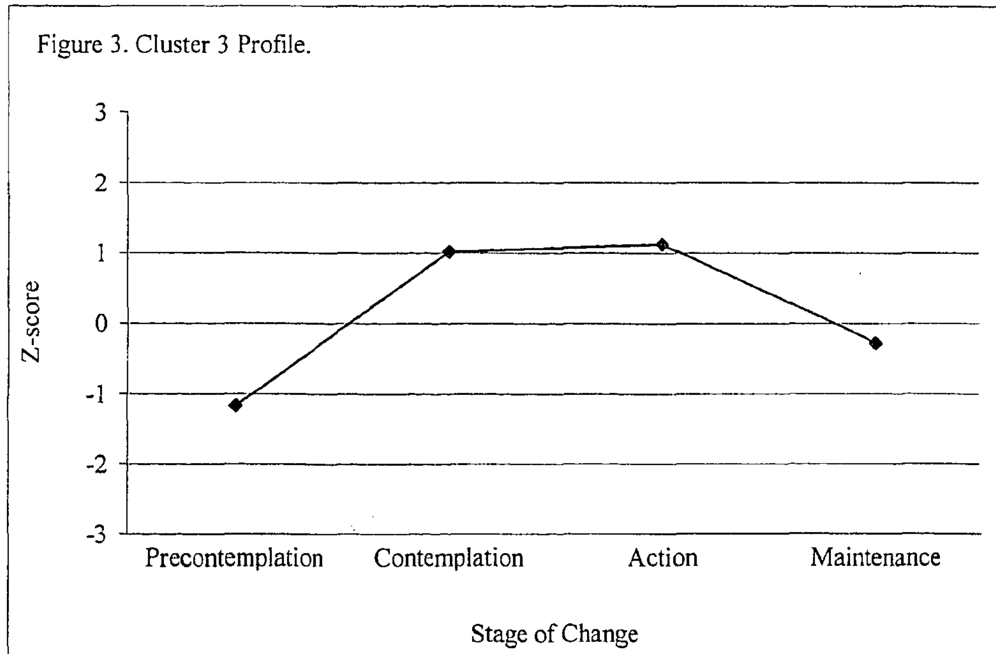
Figure 3. Cluster 3 Profile.



The eight respondents who comprise Cluster 3 demonstrated below average means on precontemplation (M = -1.18, SD = 0.20) and maintenance (M = -0.29, SD = 0.51) and scores well above the full sample mean on contemplation (M = 1.02, SD = 0.29) and action (M = 1.12, SD = 0.38). These adolescents were very involved in thinking about the problem and were actively engaged in new behaviours to address the problem. Commitment to change was evidenced by this profile.

Figure 4 illustrates the stage of change profile for Cluster 4.

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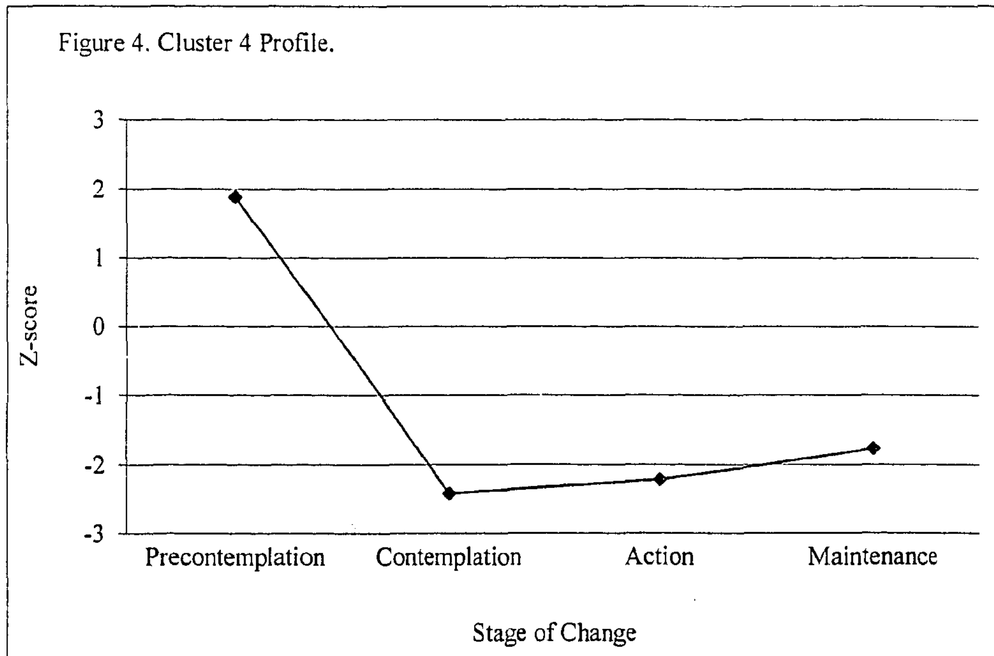
Figure 4. Cluster 4 Profile.



The eight individuals that form Cluster 4 had an above average score on precontemplation (M = 1.88, SD = 0.82), and below average scores on contemplation (M = -2.42, SD = 0.97), action (M = -2.22, SD = 1.09), and maintenance (M = -1.77, SD = 0.65). These respondents actively ignored the problem in question, refused to contemplate making change, did not engage in new behaviours, or sustain any changes that they may have initiated in the past. Adolescents with this profile generally lacked insight into the problem and were not interested in developing understanding in the identified area. These adolescents demonstrated resistance to the change process.

Figure 5 illustrates the stage of change profile for Cluster 5.

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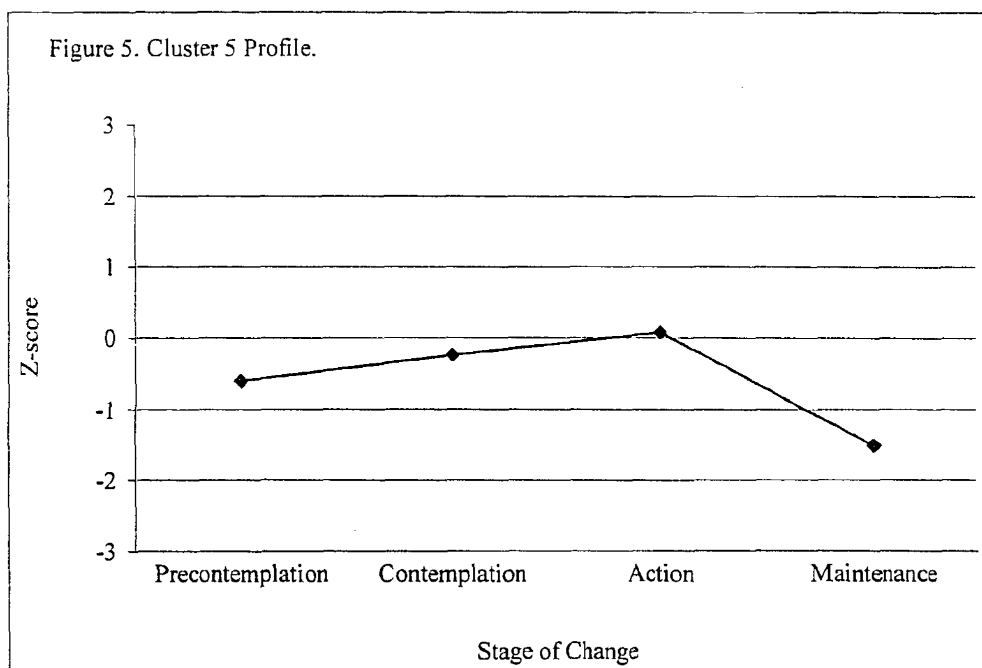
Figure 5. Cluster 5 Profile.



Six participants formed this cluster. These adolescents had below average scores on precontemplation (M = -0.62, SD = 0.33), contemplation (M = -0.25, SD = 0.43), and maintenance ((M = -1.51, SD = 0.52), and an average score on action (M = 0.08, SD = 0.61). These individuals were not actively avoiding the problem; however, they were not considering it either. They were resolved to changing their behaviour in some small way, yet they were uninterested in devoting further thought to the problem. Any changes that had been made in the past were not being followed-through by individuals in this cluster.

Figure 6 illustrates the stage of change profile for Cluster 6.

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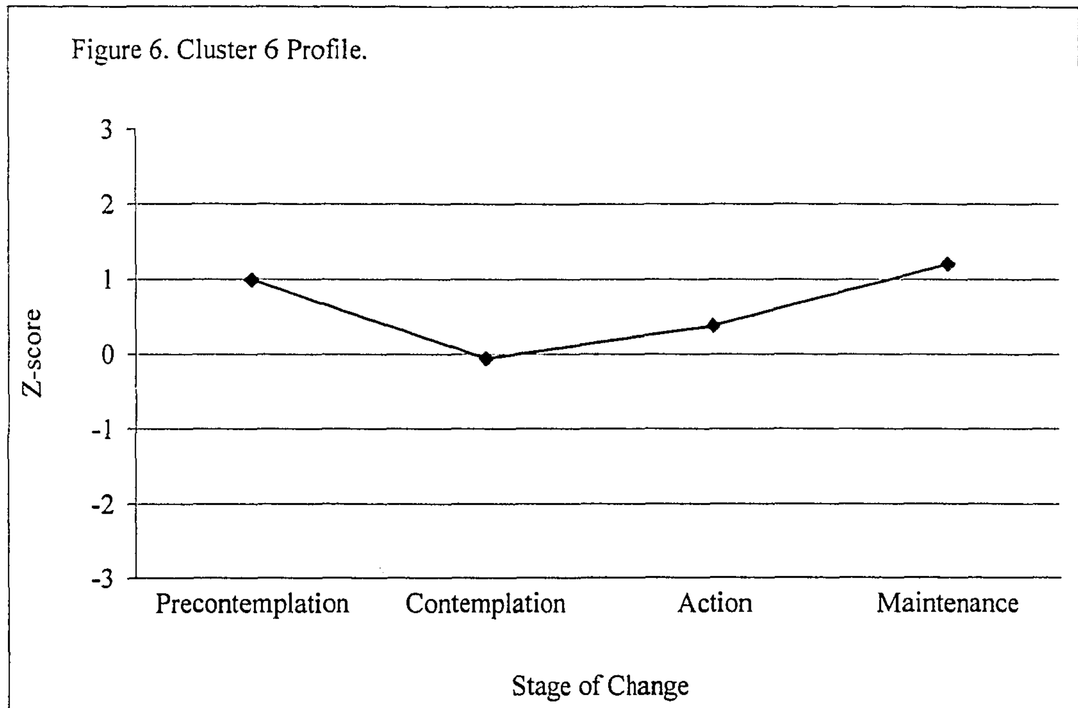
Figure 6. Cluster 6 Profile.



The four individuals who comprised Cluster 6 had above average scores on precontemplation (M = 0.99, SD = 0.08) and maintenance (M = 1.20, SD = 0.24), while their scores on contemplation (M = -0.06, SD = 0.37) and action (M = 0.37, SD = 0.39) were close to average. They demonstrated commitment to the behavioural changes that they had decided upon, and were actively maintaining the changes that they had already put in place; however, these individuals did not embrace ongoing consideration of the problem. In fact, their relatively high score in the area of precontemplation indicated an active resistance to considering the issue further.

Figure 7 illustrates the stage of change profile for Cluster 7.

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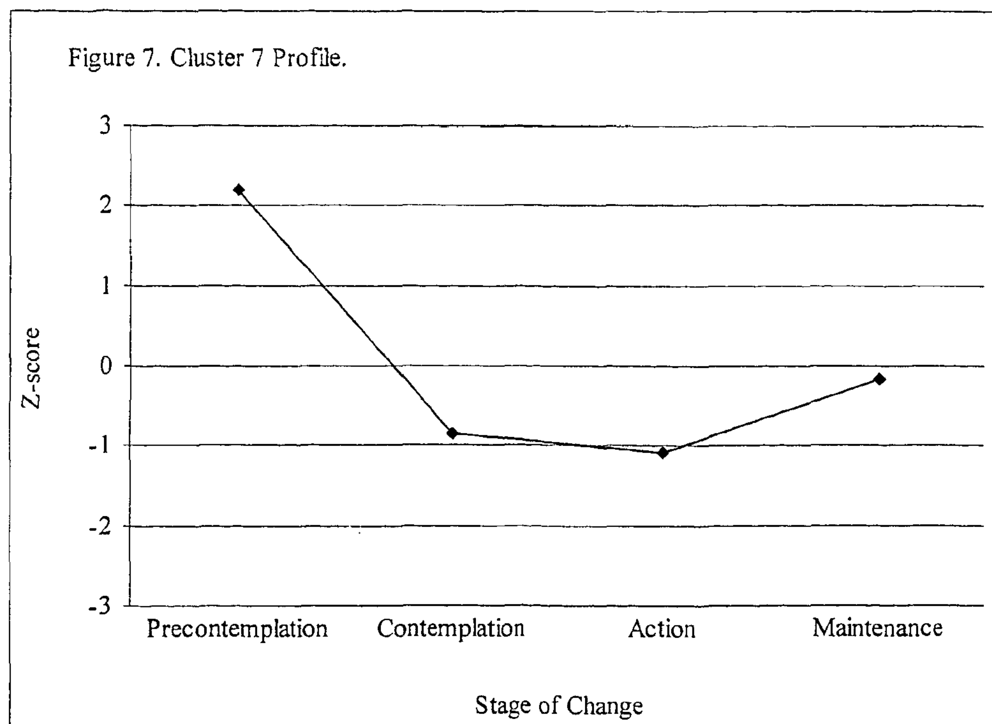

Figure 7. Cluster 7 Profile.

Four individuals comprised Cluster 7. These individuals had an above average score on precontemplation (M = 2.17, SD = 0.28) below average scores on contemplation (M = -0.93, SD = 0.43) and action (M = -0.98, SD = 0.56), and an average score on maintenance (M = -0.19, SD = 0.49). These individuals strongly refused to think about the problem, contemplate change, or to further alter their behaviour in any way. These individuals might have made changes in the past; however, they were no longer active in maintaining these changes. They were not willing to devote further thought or effort to the problem. These individuals could be described as disengaged from the change process.

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Individual Cases

Five of the adolescents who participated in this study generated clusters that were deemed uninterpretable due to the restricted number of individuals represented by each of the clusters. Although not included in the cluster analysis procedure, these five individuals produced distinct response patterns. Two individuals endorsed questionnaire items that generated an average mean on the construct of precontemplation ($M = -0.02$, $SD = 0.23$), below average scores on contemplation ($M = -0.80$, $SD = 0.24$) and action ($M = -1.73$, $SD = 0.13$), and an above average score on maintenance ($M = 0.68$, $SD = 0.22$). These individuals were active in maintaining the changes that they had made; however, they were no longer actively contemplating the problem or initiating new behaviours in regard to the problem. Two individuals generated z-score means that fell below average in the areas of precontemplation ($M = -0.83$, $SD = 0.46$), action ($M = -0.70$, $SD = 0.79$), and maintenance ($M = -1.14$, $SD = 0.34$). In contrast, the mean of these two individuals for the construct of contemplation fell above the full sample mean ($M = 1.19$, $SD = 0.61$). This pattern of responding indicated that these two individuals spent considerable time thinking about the problem, yet they had not taken action toward resolution of the issue. There had been no behavioural changes made to warrant maintenance. The final individual produced a response pattern with a slightly below average score on precontemplation (-0.35) and above average scores on contemplation (1.11), action (2.10), and maintenance (1.63). This individual was involved in thinking about the problem, taking action to resolve it, and maintaining the changes that had already been made.

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Analysis of Variance

The fourth step in the statistical analysis of the data involved conducting analysis of variance to determine if differences in stage of change profiles existed within the sample based on the categorization of the issue addressed in the questionnaire (i.e., Internalizing versus Externalizing), and/or contextual factors (i.e., type of clinical setting, referral source, sex, age, ethnicity, place of primary residence, and medication status). The distribution of data for each demographic variable was initially examined to determine if the assumption of normality of data distribution for analysis of variance (ANOVA) was met. Four variables (referral source, ethnicity, place of primary residence, and medication status) presented highly skewed distributions and were therefore omitted from analysis of variance.

For data that were normally distributed, means for the stage of change constructs were subjected to a one-way analysis of variance procedure to determine if significant variation in the sample was present for demographic variables. The sample provided no participants who focused on a Substance-Related issue, thereby limiting the analysis for the "type of issue" demographic to Internalizing and Externalizing issues. ANOVA's were generated for the following variables: setting (private practice versus agency), type of issue (Internalizing versus Externalizing), sex and age. The demographic variable of age was explored after sorting participant responses based on the relative age of the participants. Two groups were generated by this procedure: early adolescence (ages 12 – 14 years) and late adolescence (ages 15 – 18 years). Results of ANOVA are depicted in Table 4.

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Table 4

Statistical Results (ANOVA) by Demographic Variables for Full Sample[a]

Source	df	F	p
Setting			
Precontemplation	1	0.017	.897
Contemplation	1	2.861	.094
Action	1	0.563	.455
Maintanance	1	1.271	.262
Issue			
Precontemplation	1	10.122***	.002
Contemplation	1	1.114	.294
Action	1	4.497*	.037
Maintenance	1	0.541	.464
Sex			
Precontemplation	1	3.746	.056
Contemplation	1	0.414	.522
Action	1	0.010	.921
Maintenance	1	0.021	.884
Age Group			
Precontemplation	1	2.627	.108
Contemplation	1	3.418	.068

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Source	df	F	p
Action	1	0.161	.689
Maintenance	1	0.223	.638

[a]N=99 $^{*}p<.05$. $^{***}p<.001$.

Significant differences were absent in all of the analyses with the exception of the area of client issue, where significant differences were revealed for two of the constructs. Specifically, those individuals classified as manifesting internalizing disorders and those exhibiting externalizing disorders produced means that were significantly different, for the constructs of precontemplation ($p<.001$) and action ($p<.05$). Individuals who focused on an internalized issue were significantly less precontemplative (M = -6.78, SD = 4.56) than those whose focus during completion of the questionnaire was on an externalized problem (M = -3.00, SD = 6.98). In contrast, those individuals with an internalizing issue generated a mean that was significantly higher on the construct of action (M = 4.88, SD = 3.82) than those individuals with an externalizing issue (M = 2.64, SD = 6.35). No other significant differences were revealed among the demographic variables considered in the study.

Analysis of the descriptive statistics illustrated in Table 1 revealed findings that refute claims made in the literature regarding adolescents who seek therapy. The sorting of data into clusters revealed several profiles that were similar in appearance to those produced by adults seeking psychotherapy, as well as numerous distinct profiles

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that did not mirror those produced from adult questionnaire responses. Analysis of variance procedures revealed contextual differences restricted to the demographic variable of client issue. Further exploration of the findings of these analyses, the implications for practice, limitations of the study, and directions for future research are explored in the following discussion.

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CHAPTER 5

Discussion, Recommendations, and Conclusion

Full Sample

This study examined the stage of change profiles for a sample of adolescents aged 12 to 18 (inclusive) that either self-referred, or were referred by a parent/guardian, to attend therapy in a clinical setting. Comparison of full sample means for each of the constructs targeted by the University of Rhode Island Change Assessment questionnaire (URICA) (precontemplation, contemplation, action, and maintenance) revealed that the sample most strongly embraced thoughts and feelings associated with the construct of contemplation, followed by action, maintenance, and precontemplation. This indicates that, on intake, the adolescent participants in this study were relatively open to the change process; a finding that contrasts with the prevailing societal attitude that adolescents are not insightful about, or interested in considering, their issues. The adolescents in this sample did not display the reluctance to engage in therapy identified by Gil (1996) and Liddle (1995). Beyond this, the individuals that comprised this study generated the lowest mean score in the area of precontemplation, which directly contradicts the claim advanced by DiGuiseppe et al. (1996) indicating that most, if not all, adolescent clients enter therapy in the precontemplative stage of change.

The design of this study might provide a possible explanation for the discrepancy of the results of this research in comparison to the literature. This study included only individuals who had requested counselling themselves (12%) or who had been referred by a parent or guardian (88%). The literature suggests that

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adolescents who are referred to attend psychotherapy by a parent/guardian typically share a reluctance to engage in counselling with adult clients who have been mandated by an external agency to seek psychotherapy (DiGuiseppe et al., 1996; Koocher, 2003; Oetzel & Scherer, 2003; O'Hare, 1996; Sommers-Flanagan & Sommers-Flanagan, 1995). However, these findings indicate that, in general, the adolescents included in this study did not feel at odds with their parent's/guardian's decision to seek counselling for them. It can be assumed that in situations where the adolescent client was referred to counselling by the parent/guardian, initial conversation(s) regarding the adult's perception of the problem (and potentially the adolescent's perception as well) would have occurred prior to the referral being made. The adolescents who comprised this sample might have benefitted (in a change promoting respect) from preparatory conversations with their parent/guardian with respect to the adult's desire to see them receive counselling. Whereas the literature generally supports the notion that adolescents who are referred to therapy by a parent or guardian are sensitive to imposition of the goals of others (DiGuiseppe et al., 1996) and prone to ambivalence and/or reluctance to engage in therapy (Church, 1994), it would appear that this was not the case for the adolescents who comprised this study. Unfortunately, the literature that presents discrepant claims to the findings of this study is silent in regard to the relative percentages of self-referred versus parent/guardian-referred adolescents on which their conclusions have been based. Similarly, no distinction is made regarding the therapeutic setting(s) explored in these studies. Thus the potential impact of setting on adolescents' openness to considering, or engaging in, the change process has not been illuminated in the literature.

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The second greatest mean generated for the sample arose from items that addressed the action stage of change. Results indicate that the sample embraced the notion that they had begun to make changes to address the issues that they identified, indicating a notable level of motivation. This finding again contrasts with the literature that suggests that motivation is commonly lacking in adolescents who seek psychotherapy (Gil, 1996; Liddle, 1995; Oetzel & Scherer, 2003; O'Hare, 1996; Sommers-Flanagan & Sommers-Flanagan, 1995). Kazdin (2000) attributed deficits in motivation to seek and remain in treatment to the absence of a perceived problem on the part of the adolescent. The sample of adolescent participants in this study were active in the process of contemplating their identified issue (as indicated by the full sample mean for the contemplation construct) and had begun to take action on the issue (as indicated by the full sample mean for the action construct), hence lack of motivation was clearly not of concern for this sample of adolescents. These adolescents appeared to have a clear picture of why they were initiating therapy and, in the case of parent/guardian referred adolescents, seem to have reached an agreement on the goals of therapy with the referring adult.

The adolescent clients who participated in this study marginally endorsed questionnaire items that reflected thoughts or feelings that indicated a belief that the identified issue was resolved. A relatively low mean for the maintenance construct suggests this attitude. This response pattern is not remarkable given that the participants comprised a sample of adolescents initiating psychotherapy, and once again promotes the notion that these individuals were open to the potential for change, rather than believing that the issue had been adequately addressed when they began

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the psychotherapeutic process.

Willoughby and Perry (2002) noted a predominance of precontemplative attitudes toward the change process within populations of adolescent psychotherapy clients who had been mandated by the courts or school officials to attend therapy to address anger issues. It should be noted that the adolescents who were included in this research were not mandated to attend counselling by external agencies. This is also believed to have had an impact on the openness of the adolescent participants in this study to contemplate change. Whereas mandated adult clients frequently arrive for their initial session, and often subsequent sessions, of psychotherapy resistant to considering an issue that has been defined for them (DiGuiseppe et al., 1996; Willoughby & Perry), the adolescents in this study did not display a similar attitude toward the counselling process upon their initiation of psychotherapy. The potential of a mandating agency external to the immediate family (and in some instances within the immediate family) to negatively impact on the motivation of adolescent clients to engage in therapy is indicated.

It is notable that the relative weighting of endorsed questionnaire items in this study did not mirror the pattern of endorsed items in the adult psychotherapy study conducted by McConnaughy et al. (1983). Psychotherapy clients in the adult study most frequently displayed thoughts and feelings that were precontemplative in nature, followed by endorsement of items that indicated they were maintaining changes that they had already made (maintenance). The construct of action received the third lowest mean, while items that comprised the contemplation construct were most rarely endorsed. Based upon the literature that generally describes adolescents as difficult

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and unmotivated clients (Biever & McKenzie, 1995; Church, 1994; Hanna & Hunt, 1999; Hill, 1983) the relative weighting of the adult means could be anticipated for adolescent clients as well. The relative means generated from adolescent responses in this study sharply contrast the relative weightings generated in the adult study, and imply that, as a group, adolescents in these settings are more open to contemplating change and engaging in new behaviours than their adult counterparts.

Several researchers have indicated that a dimensional approach to understanding the stages of change be undertaken rather than limiting categorization of individuals to one discrete stage of change (Carney & Kivlahan, 1995; DiClemente & Hughes, 1990; DiClemente & Prochaska, 1998; Hemphill & Howell, 2000; Petrocelli, 2002). Although the examination of the relative full-sample mean scores for each of the constructs provides a general overview of the sample in question, the patterns that are discovered by such analysis are comparatively crude, and do not reveal sufficient information to draw meaningful conclusions regarding the stages of change demonstrated by the adolescent participants. Cluster analysis of URICA scale results provided a method to further explore the variability within the sample.

Clusters

Cluster analysis of the data produced distinct and interpretable clusters on which to produce stage of change profiles for the sample. The data portrayed in Table 2 reveal the frequencies of participants found in each cluster of a seven-cluster solution for subdividing the sample. In total, 95% of the sample was classified into five major and two minor clusters. Each of the clusters produced in the seven-cluster solution was interpretable within the context of the Transtheoretical Model. Five

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percent of the data formed clusters that were deemed uninterpretable due to their restricted size, and were therefore examined as case studies.

A higher percentage of interpretable clusters resulted from this study in comparison to that of McConnaughy et al. (1983) in which 155 adult outpatients comprised the sample. McConnaughy et al.'s study generated an 18-cluster solution that was deemed to most appropriately subdivide the data into distinct groupings. However, only nine of the resulting clusters yielded profiles that were interpretable within the context of the model; these nine clusters accounted for only 90% of McConnaughy et al.'s sample. The seven-cluster solution generated in this study demonstrates seven interpretable clusters that contain 95% of the sample of adolescents who participated in the study. This indicates that the adolescent sample was relatively more homogenous than the adult sample. In addition, those adolescents who were excluded from the cluster analysis demonstrated patterns of responding that could be described within the Transtheoretical Model. Both the results of the cluster analysis and the interpretation of case studies support the Transtheoretical Model as a framework for understanding adolescent's thoughts and feelings upon initiating psychotherapy.

Of the seven clusters generated in the analysis of the sample, four closely resembled the interpretable clusters described in McConnaughy et al. (1983) (clusters one, two, three, and six), while three clusters (clusters four, five, and seven) produced profiles unique to the adolescent sample. Those clusters that bear resemblance to the adult profiles will be discussed prior to the clusters unique to this study.

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Profiles mirroring adult profiles.

Cluster 1 data produced a profile very similar to the adult profile of "pre-participation" generated in McConnaughy et al.'s (1983) study. The "pre-participation" profile reflected one of the two largest clusters in McConnaughy et al.'s study, comprising 17% of the adult sample. Similarly, Cluster 1 contained the largest subgrouping of adolescents in the current study (37%). These individuals are generally open to change and are becoming increasingly involved in the change process. It is anticipated that these adolescents would respond favourably to a therapist's efforts to evoke behavioural changes, as these individuals are ready to try new behaviours to address their problem.. These individuals are likely to be involved in re-evaluating their behaviours (Prochaska & Velicer, 1997; Redding et al., 1999) and will be encouraged to continue to make advances in their change process by employing interventions that encourage consciousness raising, dramatic relief, environmental reevaluation (Prochaska & Velicer), and self-reevaluation (Prochaska & Velicer; Redding et al.). Interventions that target consciousness raising include provision of feedback, education, confrontation, interpretation, and bibliotherapy (Prochaska & Norcross, 1994). Psychodrama, role playing, grieving, and the use of personal testimonies are interventions frequently employed to impact clients emotionally to facilitate dramatic relief (Prochaska & Velicer, 1997). Environmental reevaluation processes are targeted through the use of interventions that encourage an empathic understanding of the impact of one's behaviours on others. The use of documentaries and family interventions can be effective in evoking environmental reevaluation (Prochaska & Velicer). Prochaka and Velicer indicated that individuals who generate a

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pre-preparation profile may be encouraged to re-evaluate their identity through the use of values clarification, identification of healthy role models, and the use of imagery.

The profile produced by the 27 individuals that comprised Cluster 2 bears resemblance to the "uninvolved" profile described by McConnaughy et al. (1983). These individuals produced a profile that indicates they have not considered changing, are not currently inspired to change, and are not engaged in behaviours to initiate or maintain change. They are not involved in the change process and would be unlikely to respond well to interventions targeting behavioural change, as there is no concern with their behaviours. Hence, increasing awareness of the problem and inspiring an interest in change must be the target of interventions with adolescents who exhibit this profile. Therapists who approach these adolescents from an action-oriented paradigm risk alienating their clients and contributing to the perception supported by the adolescent psychotherapy literature that adolescent psychotherapy clients are reluctant and/or unmotivated (Church, 1994; Gil, 1996; Liddle, 1995; Oetzel & Scherer, 2003; O'Hare, 1996; Sommers-Flanagan & Sommers- Flanagan, 1995).

Interventions designed to raise consciousness in the individual, such as provision of feedback, education, confrontation, interpretation, and bibliotherapy are recommended for clients with this profile. In addition, the use of dramatic relief and environmental reevaluation processes are considered appropriate for individuals who generate this stage of change profile (Prochaska & Velicer, 1997). Therapists who work with these adolescents must employ interventions that are likely to increase the adolescents' perception that change is desirable. Targeting the advantages for

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changing is considered to be an effective strategy to employ in promoting a shift in the decisional balance of those individuals who generate an "uninvolved" profile (Prochaska & Velicer, 1977).

Cluster 3 data generated a profile of adolescents who are strongly committed to thinking about the problem and are actively engaged in new behaviours to address the problem. Commitment to change is clearly evident and these individuals are commonly described as being in the preparation stage of change (Prochaska & Norcross, 1994). This profile resembles the "decision-making" cluster described by McConnaughy et al. (1983). Counsellors working with these adolescents would typically encounter little resistance to suggestions of thinking about one's actions and trying new behaviours. Interventions that encourage reevaluation of one's identity, emphasize personal choice, the development of a strong therapeutic alliance, and both overt and covert reinforcement for new behaviours would provide the most appropriate therapeutic direction for these individuals. Targeting the disadvantages of failing to make changes is considered an effective strategy in shifting the decisional balance of individuals who are preparing to make changes in the desired direction (Prochaska & Velicer, 1977).

The four individuals who were included in Cluster 6 produced a profile that is similar to the "maintenance" profile generated from adult outpatient data (McConnaughy et al., 1983). These individuals appear to have reached a level of comfort in regard to the problem. Although they continue to implement new behaviours, they are most active in maintaining the changes that they have already made. This cluster differs from the adult cluster in the area of precontemplation. The

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adolescents who comprise this cluster are resistant to thinking about further changes as evidenced by a precontemplation score that is well above the mean. The corresponding adult profile did not reveal a similar elevation on this construct. Whereas the adult profile indicates that the individuals who comprise it tend not to be involved in rethinking the problem (McConnaughy et al., 1983), the adolescent profile clearly indicates a well-developed resistance to do so. These adolescents feel that they have taken action to address the issue and they are comfortable continuing to work to ensure that the changes they have made remain in place, yet they do not wish to consider the problem further. Therapeutic interventions deemed to be most appropriate for these clients include stimulus control to reduce the environmental triggers for undesirable behaviours and counterconditioning strategies to assist with stress management (Prochaska & Velicer, 1997).

Profiles unique to the adolescent sample.

The eight individuals who comprised Cluster 4 generated a stage of change profile that did not mirror any of the adult clusters described by McConnaughy et al. (1983). The Cluster 4 profile indicated strong resistance to the change process in regard to the identified problem. These clients would be highly likely to offer the "considerable challenge" and "reluctance to engage in therapy" cited by Gil (1996) and Liddle (1995) as traditional of adolescent psychotherapy clients. Prochaska and DiClemente (1988) described individuals who demonstrated a high investment in making their own decisions and who demonstrate resistance to advice and direction from others, as "rebellious precontemplators". These authors further identified these clients as appearing hostile, argumentative, and oppositional to change. The profile

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demonstrated by the adolescents contained in Cluster 4 implies the enhanced need for independence and self-determination (DiGuiseppe et al., 1996) and mistrust of adults (Sommers-Flanagan & Sommers-Flanagan, 1995) identified as characteristic of the adolescent developmental period.

Kazdin (2000) stated that adolescents do not typically self-refer to therapy, but rather are referred by a parent or other adult who perceives the adolescent's behaviour or presentation as disturbing. Accordingly, adolescents are most commonly referred to treatment for issues classified as Externalizing Disorders (Kazdin, Bass, et al., 1990). In light of these findings, it would not be unreasonable to assume that the adolescents who comprise Cluster 4 have been brought to therapy unwillingly by their parent/guardian as a result of an externalized issue or problem. However, review of the demographic information for this cluster revealed that only six of the eight individuals were referred by their parent/guardian. The percentage of parent-referred individuals in Cluster 4 (75.0%) falls below the percentage for the full sample (82.0%). In regard to the prevalence of an externalized issue within the cluster, only half of the respondents in Cluster 4 focused on an externalized issue for the purpose of completing the questionnaire, a percentage consistent with the full sample demographic. Although the profile produced by individuals comprising Cluster 4 is clearly interpretable within the Transtheoretical Model, it is prudent to evoke caution in the critique of previous studies due to the restricted size of the subgroup.

Regardless of the source of their resistance to consider change, clients who embrace a high degree of precontemplation are unlikely to engage in therapy in the absence of a shift in their thinking that would facilitate contemplation of the issue (i.e.,

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decisional balance). Prochaska and Velicer (1997) identified consciousness raising, dramatic relief, and environmental reevaluation as processes best targeted for intervention during therapy with precontemplative clients. Diguiseppe et al. (1996) echoed the need to encourage adolescents who present in therapy with a highly precontemplative focus to evaluate the consequences of the target behaviour and alternatives to this behaviour to facilitate a shift in their thinking. These authors identified the use of emotional scripts, social problem-solving, motivational interviewing, and strategic family interventions as mechanisms by which a therapist might encourage such a shift. Diguiseppe et al. identified consciousness raising as a common mechanism inherent in these interventions. Without a shift in these individuals' perceptions of the issue and an increased willingness to consider change, premature termination of the therapeutic relationship would be expected.

The respondents depicted in Cluster 5 appear to be resigned to taking some degree of action in regard to the identified problem; however, they are not interested in thinking about the problem. These individuals could be described as "unenthusiastic compliers". They are likely to adopt new behaviours as a direct result of being mandated to do so by an authority figure such as their parent/guardian; however, these individuals do not wish to critically evaluate their situation. These adolescents do not appear to be psychologically minded (i.e., they do not wish to spend time considering their behaviours from a cognitive and/or emotional perspective). These adolescents generated a profile that might be reflective of a lack of psychological autonomy (Cicchetti & Rogoesh, 2002). An appropriate degree of autonomy initiative and industry required to develop an age appropriate sense of identity might be lacking in

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these individuals. It is anticipated that therapists working with clients who display this profile will achieve positive therapeutic outcomes if a concrete approach to therapy is adopted. Attempts to foster insight in these adolescents are likely to be met with frustration by both the client and the therapist. Reinforcement management interventions are likely to be appropriate for these individuals (Prochaska and Velicer, 1997). In addition, these adolescents might eventually benefit from therapeutic interventions that encourage development of a stronger sense of personal identity, such as self-liberation and social liberation (Prochaska & Velicer). Family interventions to assist in the transitions necessary to encourage identity formation in adolescent clients while supporting parents in the redefinition of parenting roles necessary to promote this process have been recommended for the families of these adolescents (Cicchetti & Rogosch, 2002).

The adolescents who comprise the subgroup depicted in Cluster 7 can be described as “disengaged”. Although a close to average score on the maintenance construct indicates that change may have occurred in the past, these adolescents are now inactive in maintaining these changes. It is possible that this cluster consists of individuals who may feel that they have made their share of changes in the past, and now perceive someone else as contributing to the problem. In essence, these adolescents may embrace responsibility for part of the problem; however, they hold that others must now meet their efforts in a compromise. A similar profile was not generated for the adults in McConnaughy et al’s (1983) study.

Piaget (1972) indicated that the development of more complex logic is evidenced during adolescence. Multidimensional thinking gives rise to the

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development of increased complexity and sophistication in relationships. The adolescents who comprise Cluster 7 may provide an illustration of the conflict described by Arnett (1999) that arises in adolescent/adult relationships when "facts" that had previously been accepted without question begin to be both covertly and overtly challenged by the adolescent. Interventions at the family level hold potential for clarifying the issue and determining the most appropriate direction for therapeutic intervention. Considering the contextual influences of parent and family factors, when providing treatment to adolescents, was supported by Kazdin (2000), Prinz and Miller (1994), and Szapocznik et al. (1988). Therapists who work with adolescents who exhibit this profile might achieve greater therapeutic gains by approaching the issue from a systemic perspective that considers and/or involves additional family members.

Individual Cases

Two adolescents who participated in this study generated a response pattern with an above average scores on the maintenance construct, an average score on precontemplation, and below average means on contemplation and action. One participant was a 13-year old female who focused on an internalizing issue while completing the questionnaire, while other adolescent who responded in this fashion was a 15-year old male who presented with an externalizing issue. Both individuals were referred to psychotherapy by parents/guardians. These individuals did not present as resistant to further change; however, they may have felt as if they had already resolved their issues. In essence, they were maintaining the status quo at the time of questionnaire completion. These individuals responded in a manner which most closely resembles the "immotive" profile generated by McConnaughy et al. (1983).

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Individuals who demonstrate these characteristics may seek therapy periodically to receive encouragement for their efforts to date (Prochaska & Norcross, 1994). Counterconditioning, helping relationships, reinforcement management, and stimulus control are processes most often employed by individuals who seek to maintain change (Prochaska & Velicer, 1997).

Two adolescent females (14-years of age and 16-years of age) generated a pattern of responding that did not mirror patterns of responding generated by the adult sample in McConnaughy at al's (1983) study. Both of these individuals identified an externalizing issue as their focus during questionnaire completion and both were referred to therapy by a parent/guardian. These individuals can be described as "ruminators", given their high scores on the construct of contemplation and low scores on each of the remaining three constructs. These adolescents expend a great deal of energy thinking about the problem and are involved in excessive self-reflection; however, they appear to be stalled in the process of change. Behavioural changes have not been forthcoming for these adolescents. Prochaska and Norcross (1994) put forth that individuals must believe they have the autonomy to change their lives in key ways, in order for change to occur. The adolescents who display this pattern of responding might lack the sense of self-efficacy described by these authors.

Therapeutic intervention in the area of self-reevaluation would be recommended for the clients who enter therapy displaying these thoughts and feelings. Specifically, clarification of values, identification of healthy role models, and use of imagery have been recognized as interventions that promote the self-reevaluation process (Prochaska & Velicer, 1997). Targeting the disadvantages of failing to take

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further action on the issue is recommended to shift the decisional balance of these clients (Prochaska & Velicer). These clients are likely to require significant therapeutic reinforcement for any movement toward implementing action that may be undertaken, if they are to be guided forward in the change process.

One adolescent male responded to questionnaire items in a manner that clearly displays enthusiasm for the change process. This 17 year old participant targeted an internalizing issue for attention during questionnaire completion and was referred to therapy by a parent/guardian. This adolescentl was involved in thinking about the problem, taking action to resolve it, and maintaining the changes that had already been made when the questionnaire was completed. This individual's highest score was on the action construct, indicating that doing things differently was not a threatening idea for this individual. This individual has become more involved in behavioural changes than the individuals portrayed in Cluster 1. It could be suggested that he/she has moved closer to the resolution of the problem, from a behavioural standpoint. This cluster resembles the "participation" profile described by McConnaughy et al. (1983). Interventions that support the behavioural changes introduced by such individuals, such as social liberation, helping relationships, and reinforcement management are most appropriate for individuals with this profile (Prochaska & Velicer, 1997).

Contextual Factors

Analysis of variance procedures were employed to examine the data for potential variation on demographic variables. In general, little variation existed within the sample in terms of the demographic variables included in the study. Specifically, no significant differences were revealed for adolescents seen in various types of

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clinical settings, between adolescent males and females, or among adolescents of various ages or age groups for each of the stage of change constructs.

The literature supports the notion that adolescent males and females differ significantly in regard to relationship factors (Brown & Gilligan, 1993; Gilligan 1987; 1991; Ponton, 1993), and in the prevalence of various disorders between the sexes (Galambos & Tilton-Weaver, 1998; Health Canada, 2002; Kazdin, 1993a; 2000). The lack of significant difference between the mean scores of adolescent males and females in this study was therefore not anticipated. Although Brown and Gilligan (1993), Gilligan (1987; 1991) and Ponton (1993) have made a compelling case supporting fundamental differences in relationships factors between adolescent females and their male counterparts, a similar difference was not revealed in the thoughts and feelings that these individuals hold in relation to the change process. Similarly, although differences in the prevalence rates of various problems exists within the adolescent population, these differences do not extend to the change attitudes embraced by these individuals when they approach therapy.

The lack of significant differences among the means generated for adolescents of various ages whether examined chronologically, or placed in groups to reflect early or late adolescence was also unexpected. The literature clearly stated that the use of complex logic is relatively unstable during early adolescence and gradually increases in stability by the age of 14 to 15 years (Piaget, 1972). Young adolescents are restricted in their use of formal operational thinking to selective tasks or in selective circumstances or environments (Keating, 1990; Piaget, 1972). However, the adolescents who comprised this sample appear to have mastered the ability to think in

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a relatively complex manner (as indicated by their willingness to contemplate change) regardless of their age. It appears that the adolescents in this sample uniformly applied formal operational thinking in regard to the issue they identified for consideration. This finding does not negate the claims of Keating and Piaget; however, it does indicate that when initiating psychotherapy, adolescents may consistently apply complex cognitive processes to the enterprise.

A statistically significant difference was discovered in the means for two of the constructs addressed in the questionnaire between adolescents who focused on an internalized issue versus those who focused on an externalized issue. Specifically, adolescents who identified an internalized issue for consideration were significantly less precontemplative and generated a greater mean on the construct of action than their peers who defined an externalized issue for consideration while completing the questionnaire. Kazdin (2000) defined Internalizing Disorders as problems directed toward inner experience. It is not remarkable that individuals who experience concerns of this nature are likely to be relatively eager to move toward behavioural changes that may alleviate their symptoms. Hence, low scores in the area of precontemplation, and high scores on the construct of action are supported for these individuals. In contrast, the literature defined Externalizing Disorders as those problems directed toward the environment and others (Kazdin, 2000). Individuals who manifest these problems frequently disturb others, and less frequently perceive a problem themselves. It is intuitive that these individuals would have relatively high scores on the construct of precontemplation and relatively low scores on the construct of action. In the absence

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of a perceived problem, these adolescents are quite comfortable to maintain the status quo rather than considering making changes in their lives.

Externalizing Disorders have been identified in the literature as the most frequently referred problems in clinical treatment settings (Kazdin & Johnson, 1994; Kazdin, Bass, et al., 1990). In contrast to this claim, the adolescents who comprised this sample were evenly split in regard to the classification of the issue that they identified on their questionnaire (i.e., 51% identified an externalized issue while 49% identified an internalized issue). This data indicates a potential shift in the type of issue for which parents/guardians refer their adolescent children, and may reflect a more widespread awareness of, and desire to address, Internalizing Disorders (i.e., depression) within the general population.

Implications for Practice

Kazdin (2000) presented a strong case for the identification of effective interventions for adolescents who seek therapy. Beyond maximizing the positive impact that effective interventions can have on the mental health functioning of this developmental group, other benefits could be realized. Several authors have cited the need for advancing our knowledge of how to more effectively engage adolescents in therapy and how to reduce the significantly high premature dropout rate that characterizes this population (Kazdin, 1996; Tate et al., 1995; Wierbicki & Pekarik, 1993). In adult populations, matching interventions to stage of change has been reported to be the most effective strategy in retaining individuals in counselling (Prochaska & Velicer, 1997).

The findings of this study offer insights into the pretreatment stage of change

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profiles exhibited by a group of self-referred or parent-referred adolescents seeking therapy in a clinical setting. The profiles generated from this sample closely mirrored the profiles generated from a similar sample of adults (McConnaughy et al., 1983). This indicates that in regard to pretreatment stage of change, more similarities exist between the adolescent population and the adult population than differences. Furbey and Beyth-Marom (1990) cited a trend in the literature supporting the notion that adolescents make decisions using the same basic cognitive processes as adults. It is therefore logical to assume that the cognitive processes of change active in adults during movement through the stages of change (DiClemente & Prochaska, 1998) might also be active within the adolescent population. Hence, when treating adolescents, matching therapeutic interventions to stage of change in a similar fashion to the matching process that has proven effective in adult populations is prudent.

Although the literature is silent on exploration of the underlying mechanisms that might influence the use of the Transtheoretical Model with adolescent clients attending psychotherapy in a clinical setting, numerous studies have supported the applicability of the Transtheoretical Model to adolescent populations (Hemphill & Howell, 2000; Hulton, 2001; Lowry, 2000; Metzker, 2000; Migneault et al., 1997; Nigg, 2003; Pallonen et al., 1998; Prochaska et al., 1994; Rossi et al., 2001; Smith & DiClemente, 2000; Willoughby & Perry, 2002). Studies have explored the use of the Transtheoretical Model to encourage the adolescent change process in school settings (Hulton; Rossi et al.), college environments (Migneault et al.), community outreach programs (Nigg; Smith & DiClemente), youth correctional facilities (Prochaska et al.; Willoughby & Perry), mental health facilities (Willoughby & Perry), and inpatient

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forensic psychiatric facilities (Hemphill & Howell). These studies matched interventions with the stage of change demonstrated by each client as suggested by the Transtheoretical Model and obtained positive outcomes from the therapeutic encounters. The findings of this study inform our understanding of why application of this model has been found to be effective in the psychotherapeutic treatment of adolescents by demonstrating that the stage of change profiles produced by a clinical sample of adolescent psychotherapy do not differ markedly from the profiles produced by adults seeking psychotherapy in a clinical setting.

Although a great deal of similarity existed between the stage of change profiles generated from this study and those generated in McConnaughy et al.'s (1983) study involving adults, 20% of the adolescent sample produced profiles that were unique to the adolescent sample. It is essential to consider the implications of this discrepancy when providing treatment within an adolescent clinical milieu. Kazdin (2000) identified the inappropriateness of administering smaller doses of adult treatments to youth without considering the distinctive characteristics of this developmental group. Unique adolescent profiles suggested resistance (Cluster 4), unenthusiastic compliance (Cluster 5), and disengagement from the change process (Cluster 7), respectively. The interpretation of the unique adolescent profiles benefited from an understanding of the cognitive and emotional characteristics associated with the adolescent developmental period. Consequently, therapists who work with adolescents from a Transtheoretical Model perspective must develop and retain an awareness of these developmental differences to maximize their therapeutic effectiveness.

Implications for counsellor training arise from this study. It is imperative that

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preservice counsellors receive education regarding the characteristics of the adolescent clients whom they are likely to encounter. Specifically, preservice counsellors should have a thorough understanding of the cognitive and emotional characteristics of adolescents. In addition, knowledge of the Transtheoretical Model and its implications for intervening therapeutically with individuals within this developmental group would provide a solid grounding on which pre-service counsellors could further enhance their therapeutic style.

Delimitations

Delimitations of this study include a specific age range (12 to 18 years inclusively), individuals seeking treatment in a clinical setting, and examination of behaviours generally deemed to be under the control of the participant. In addition, the adolescents included in the study were self-referred or referred by a family member. A further delimitation of this study is the examination of the Transtheoretical Model's ability to describe the change process of adolescents to the exclusion of other models of behaviour change.

The potential for a biased sample arises as a result of the optional nature of client participation. Individuals were invited to participate in the study; however, the decision to participate in questionnaire completion rested with the client. It is possible that clients who were less open to the counselling process omitted themselves from the data collection process through a refusal to participate in the study, resulting in a sample of participants who demonstrated generally more positive views of the counselling process than is truly representative of the population of adolescents who seek psychotherapy in a clinical setting.

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Limitations

This study is limited by the use of a self-report measure that does not include a means to assess the degree to which social desirability influences a participant's responding. A high degree of confidentiality was provided by the method of data collection in an attempt to alleviate any need felt by participants to respond in a socially desirable manner. This study is limited in its generalizability to adolescents who are mandated to attend therapy by a source beyond the immediate family. It is anticipated that the profiles produced by a sample of adolescents mandated to attend therapy would differ in their presentation.

In addition, the number of participants limits this study. Several clusters were generated from the sample that contained very few individuals (e.g., Clusters 8, 9, and 10). The limited number of participants impacts the credibility of small clusters to represent persistent trends in adolescent psychotherapy clients. Similarly, the size of the sample limited the analysis that could be undertaken to detect possible variation within the sample in regard to several of the demographic variables included in the study (i.e., parent/guardian referred versus self-referred, ethnicity, place of primary residence, and medicated versus unmedicated). A larger sample size might have produced a non-skewed distribution for these contextual variables and allowed further analysis to be undertaken.

For the purposes of this study, chronological age was used as a measure of maturity in the classification of participants. Although the use of chronological age represents a logical empirical beginning to evaluating whether variation exists in regard to maturity, it limits the study by failing to adequately address potential

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differences as a result of developmental level. It cannot be strictly assumed that as individuals age, their chronological maturity increases. The inclusion of a measure of developmental status designed to assess biological maturity, cognitive maturity, and type of life experience would enhance this research.

This study examined the pretreatment stage of change profile for an adolescent sample. A limitation of the study arises from collecting data only during the initial session. Although useful in identifying the thoughts and feelings of adolescents at this juncture, the study is limited in its usefulness by this restriction.

Further Research

This study demonstrated that the majority of adolescents hold similar views regarding change, as do their adult counterparts, when they initially initiate psychotherapy. However, the study does not directly clarify the change processes utilized by adolescents during the change process. Although the mounting evidence accumulating in the literature that the Transtheoretical Model is effective for adolescent psychotherapy (Greenstein et al., 1999; Hemphill & Howell, 2000; Hulton, 2001; Lowry, 2000; Metzker, 2000; Migneault et al., 1997; Nigg, 2003; Pallonen et al., 1998; Prochaska et al., 1994; Rossi et al., 2001; Smith & DiClemente, 2000; Stevens, 2001; Willoughby & Perry, 2002), the interventions employed at various stages have been derived from adult psychotherapy research. Additional research to explore the relationships between adolescent change and the change processes identified by the Transtheoretical Model as salient to the process of change, is warranted.

Use of the URICA questionnaire as a screening tool on intake has the potential

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to inform therapeutic interventions with adolescent clients. Additionally, post-treatment completion of the questionnaire could provide a measure of the degree of change that occurred over the course of therapy. Expanding the data collection process to include additional administrations of the URICA questionnaire throughout the therapy process would be a logical next step in research. The examination of retention rates for adolescent clients, who are approached from a stage-matched perspective, is also a direction for future research.

Due to the restricted size of the sample, numerous questions persist regarding the potential of various cultural factors to impact on the thoughts and feelings of adolescents who initiate psychotherapy. Expansion of the data collection process to generate the numbers of participants required to adequately assess potential variability in regard to these cultural factors remains to be undertaken.

Conclusion

The results of this study reveal that significant similarity exists between the stage of change profiles generated for adult populations seeking psychotherapy and adolescents who seek therapy or are referred by their parents/guardians for counselling. Specifically, 80% of the adolescents who took part in the study were subgrouped into clusters that mirrored those generated from a similar study of adult clients conducted by McConnaughy et al. (1983). This study lends support to the applicability of the Transtheoretical Model to describe the characteristics of adolescents who initiate counselling.

Twenty percent of the adolescent respondents who were involved in this study generated profiles or patterns of responding that were unique to the adolescent sample.

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Their profiles, although distinctive to this developmental group, could also be explained in relation to the Transtheoretical Model. Beyond this, the unique profiles generated were interpretable in light of the cognitive and emotional characteristics of adolescents.

This study suggests that on intake, adolescent clinical clients are more similar to adult psychotherapy clients, than different. The difficulties cited repeatedly in the literature regarding therapeutic work with adolescent clients may well be more a function of the therapists' approach to these individuals, rather than a function of a resistance inherent to the adolescents themselves. Adults who are approached from an action-oriented paradigm may demonstrate a level of maturity that allows them to remain somewhat committed to the process of therapy even when they are not yet ready to make behavioural changes. In contrast, adolescents who are implored to take action in a behavioural way when they have not reached that stage of change are likely, due to developmental characteristics, to balk at the notion of continuing in therapy. The results of this study indicate that while therapists must remain mindful of the cognitive and emotional characteristics unique to adolescent populations, the potential to retain clients in therapy, and their ability to intervene effectively, might be enhanced by informing their interventions by the notions inherent in the Transtheoretical Model.

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CHAPTER 6

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APPENDIX A

University of Rhode Island Change Assessment Questionnaire

Step # 1 Write the name of the problem or issue that you are going to focus on in the blank below. (This should be the same one as you wrote on the page that you just passed to your counsellor.)

____

Step # 2 Complete the questionnaire below.

	STRONGLY DISAGREE	DISAGREE	UNDECIDED	AGREE	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 much sense for me to be here.					
6. It worries me that I might slip back on a problem I have already changed, so I'm here to seek help.					
7. I am finally doing some work on my problem.					
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'm not sure I can keep up the effort on my own.					
10. At times my problem is difficult, but I'm 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.					

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	SD	D	U	A	SA
14. I am really working hard to change.					
15. I have a problem and I really think I should work at it.					
16. I'm not following through with what I had already changed as well as I had hoped, but I'm here to prevent a relapse of the problem.					
17. Even though I'm not always successful at changing, I'm at least working on my problem.					
18. I thought once I had resolved my 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 the 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 recurrance of a problem I thought I had resolved.					
29. I have worries but so does the next guy. 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 change my problem, every now and again it comes back to haunt me.					

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Step # 3 If you would like to, please comment on your reactions to this questionnaire.

____

____

Step # 4. When you are finished the questionnaire, ask your counsellor to give you:

1) the Demographic Information form that he/she filled out,
2) your parent's/guardian's informed consent letter, and
3) your informed assent letter.

Place all of these papers and your questionnaire in the envelope, seal it, and return it to your counsellor.

Thank you for taking the time to participate in this study.

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APPENDIX B

Z-score Means[a] for Stage of Change Constructs, 9-Cluster Solution

		Means (SD)			
Cluster	n	Precontemplation	Contemplation	Action	Maintenance
1	37	-0.50 (0.44)	0.46 (0.44)	0.43 (0.45)	0.82 (0.41)
2	27	0.22 (0.56)	-0.09 (0.53)	-0.08 (0.44)	-0.36 (0.42)
3	8	-1.18 (0.20)	1.02 (0.29)	1.12 (0.38)	-0.29 (0.51)
4	6	-0.62 (0.33)	-0.25 (0.43)	0.08 (0.61)	-1.51 (0.52)
5	4	0.99 (0.08)	-0.06 (0.83)	0.37 (0.39)	1.20 (0.24)
6	4	2.17 (0.28)	-0.93 (0.43)	-0.98 (0.56)	-0.19 (0.49)
7*	3	1.11 (0.58)	-1.78 (0.36)	-0.95 (0.29)	-1.48 (0.64)
8*	2	2.57 (0.49)	-3.45 (0.36)	-3.01 (0.47)	-2.33 (0.59)
9*	2	2.00 (0.57)	-1.84 (0.98)	-2.95 (0.00)	-1.38 (0.22)

[a]n = 94 *clusters subsequently combined

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