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A Test Of The Transtheoretical Model Of Change With Adolescent Sex Offenders In Treatment

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A TEST OF THE TRANSTHEORETICAL MODEL OF CHANGE WITH ADOLESCENT SEX OFFENDERS IN TREATMENT

A Dissertation

Presented to

The School of Graduate Studies

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In Partial Fulfillment

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by

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ABSTRACT

The rationale for treating adolescent sex offenders is based on the expectation that change will occur. Yet, not all adolescent sex offenders are ready or willing to change. The Transtheoretical model describes a person's readiness for change and predicts the likelihood of change based on level of readiness. While the model has been successfully applied to adults, it has never been applied to adolescent sex offenders in treatment. Thus, one of the goals of the study was to provide descriptive information on the applicability of the model's stage of change to adolescent sex offenders in treatment. A second goal was to examine the relationship between the offenders' stage of change and the processes employed in their endeavor to change. Participants included 53 adolescents currently in therapy dealing with issues of a sex offense. To determine the stage of change, participants responded to the Stage of Change questionnaire. To determine their relative use of different processes of change, participants responded to the Processes of Change questionnaire. The results revealed that the Stage of Change questionnaire separated the participants into the five stages of change as described by the model. This finding supports the theory as well as previous research with people in therapy. Analyses of variance revealed that participants in the contemplation, preparation, and action stages reported no significant differences in use of experiential or behavioral processes of change. This finding suggests that further research is needed before the Transtheoretical model of change is applicable to adolescent sex offenders.

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To Loral,

Thank you for your constant understanding, your flexibility, and your hugs.

To April,

Thank you for your patience, guidance, and constant support. This is only possible because you were always there for me.

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Chapter 1

INTRODUCTION

The process by which people change addictive behaviors is not well understood by behavioral scientists. A comprehensive theory to study the process of change is lacking. One attempt at such a theory is the Transtheoretical model proposed by Prochaska and DiClemente (1984). The model originated from a study of common processes among different therapeutic approaches (Prochaska, 1979), and it provides a framework upon which scientists can begin to understand and quantify how people change. The model offers an integrative perspective on the structure of change and allows a quantitative measure along two dimensions, 1) stages and 2) processes.

The Transtheoretical model suggests that behavioral change progresses through five stages: precontemplation, contemplation, preparation, action, and maintenance. People in the precontemplation stage enter treatment because they want to change others or the environment, or because they feel coerced by the courts, a partner, or a spouse. They do not choose to change on their own. People in the contemplation stage are aware of a stressing life situation and are interested in determining whether the problem is resolvable. People in the preparation stage are characterized as having made a resolution to change but have not yet begun to act. People in the action stage have begun to take action and seek help in implementing change strategies. People in the maintenance stage have made changes and seek treatment to consolidate previous gains.

The process dimension consists of activities, both covert and overt, in which clients engage when attempting to modify problem behaviors. Each process is a broad category encompassing multiple techniques and interventions traditionally associated with different theoretical orientations. Prochaska (1979) identified ten processes: consciousness raising, self reevaluation, self liberation, counterconditioning, stimulus control, contingency management, helping relationship, dramatic relief, environmental reevaluation, and social liberation. According to the Prochaska and DiClemente, people use different processes in each of the five stages.

Research over the last ten years has provided support for these stages and common set of processes used to progress through the stages (Prochaska, Norcross, Fowler, Follick, & Abrams, 1992). The model has been shown to be valid with a variety of populations and a variety of addictive and non-addictive behaviors, including smoking cessation (Prochaska, Velicer, DiClemente, & Fava, 1988; Prochaska, Crimi, Lapsanski, Martel, & Reid, 1982), cocaine use (Belding, Iguchi, Lamb, Lakin, & Terry, 1995), weight control (Rossi et al., 1994), high-fat diets (Prochaska et al., 1994), adolescent delinquent behaviors (Prochaska et al., 1994), condom use (Prochaska et al., 1994), safer sex (Prochaska et al., 1994), sun screen use (Prochaska et al., 1994), radon gas exposure (Prochaska et al., 1994), exercise acquisition (Prochaska et al., 1994), mammography screening (Prochaska et al., 1994), and physicians' preventive practices with smokers (Prochaska et al., 1994). While a recent study with adult survivors of sexual abuse in treatment found the change process of this population reflected the Transtheoretical model (Koraleski & Larson, 1997), the model has not been investigated and validated with adolescent sexual offenders.

Purpose of the Study

Historically, research has directed little attention toward understanding and treating adolescent sex offenders. The magnitude and significance of problems associated with these youth have not been fully recognized or appreciated. Recent statistics show the incidence and severity of adolescent sex offenses are much more serious than previously believed (Barbaree, Hudson, & Seto, 1993). While exact figures representing the scope of the problem are not available, there is evidence that sexual assaults committed by adolescents are widespread in our society (Becker, Cunningham-Rathner, & Kaplan, 1987; Freund, Watson, & Rienzo, 1989). Thomas (1981) found that adolescents committed 56% of all child molestation cases in the Washington, D.C. area. This figure takes on added importance in light of the study by Elliot, Huizinga, and Morse (1985), who reported that the ratio of self-reported sexual offenses to the actual arrests for sexual offenses is 25:1.

The severity of adolescent sex offenders is also of concern. Research by Abel, Mittelman, and Becker (1985) suggests that an average adolescent male sex offender may be expected to have offended against seven children and if allowed to continue into adulthood, will accumulate 380 victims during his lifetime. Researchers report that between 47% and 58% of adult sex offenders began committing sex offenses as adolescents (Cellini, 1995; Cellini, Schwartz, & Readio, 1993; Abel, Mittleman, & Becker, 1985). Snyder and Sickmund (1995) report a rise in the number of juvenile arrests for sexual offenses, and recent statistics indicate that there are more juveniles committing violent sex acts in general than there were one generation ago (Sickmund, Snyder, & Poe-Yamamata, 1997).

Oliver, Nagayama Hall, and Neuhaus (1993) indicate that adolescent sex offenders are much less pathological than adult sex offenders and thus more treatable. Consequently, adolescent offenders need to be identified and treated to lower their risk of becoming adult sex offenders. An obvious need for effective treatment exists for adolescents; however, little is known about the characteristics of these offenders or techniques that result in positive change.

The purpose of the study was to test the application of the Transtheoretical model of change to adolescent sex offenders in treatment. To do so, adolescent sex offenders' stages and processes of change were documented and compared with those described by the Transtheoretical model of change.

Statement of the Problem

Our understanding of adolescent sex offenders is very limited. At present, no empirically validated model exists to explain the development or treatment of deviant sexual behaviors in adolescents. Many options for treating these youths are available, but virtually no empirical evidence exists to support the effectiveness of the most common treatment programs (Camp & Thyer, 1993; Davis & Leitenberg, 1987).

The problem investigated in this study was whether adolescent sex offenders in treatment are represented in each stage of change (Precontemplation, Contemplation, Plan, Action, Maintenance) of the Transtheoretical model of change. In addition, this study examined which processes of change, within the Transtheoretical model, adolescent sex offenders employ in treatment.

The lack of general knowledge about adolescent sex offenders and the sparsity of

evidence to support current treatment options suggest that understanding and treating adolescent sex offenders is relatively new. The Transtheoretical model of change has provided an integrative framework upon which to base treatment for a variety of psychiatric and non-psychiatric populations. This model has not yet been extended to include adolescent sex offenders. This study examined whether the Transtheoretical model of change accurately reflected the change process of adolescent sex offenders in treatment.

Rationale

In their seminal article In Search of How People Change, Prochaska, DiClemente, and Norcross (1992) present an integrative model of the stages and processes of change based on their observations of thousands of self-changers. Table 1 presents a visual characterization of this integration. Prochaska et al. (1992) determined that successful self-change depends on doing the right thing (processes) at the right time (stages).

At the more practical level, the integration of processes into stages is central to this study. If a client's cognitions and behaviors can be easily assessed as characteristic of a particular stage, then interventions can be tailored accordingly. This integrative model would allow for a more efficient, integrative, and prescriptive treatment plan.

Research Questions

Are adolescent sex offenders in treatment found in each *stage of change* (Precontemplation, Contemplation, Plan, Action, Maintenance) of the Transtheoretical model of change?

Table 1

Stages of Change and Corresponding Processes

Precontemplation	Contemplation	Preparation	Action	Maintenance
Consciousness raising (awareness of the issue)				
Dramatic relief (feelings about consequences of behavior)				
Environment reevaluation (relationship of behavior to environment)				
	Self reevaluation (changing understanding of self)			
		Self liberation (belief in one's ability)		
			Contingency-Management (obtaining rewards)	
			Helping relationship (social support)	
			Counterconditioning (substituting alternatives)	
			Stimulus control (altering environment to support change)	
				Social Liberation (belief that environment supports change)

Is the integrative model of stages and processes of adolescent sex offenders in treatment consistent with the integrated model described by the Transtheoretical model of change?

Delimitations

The scope of the study was delimited as follows:

(1) Data were collected from adolescent sexual offenders who were in treatment at the time of participation in the study. Adolescents who had recently been graduated from treatment were also utilized.

(2) Data were collected only from volunteer participants.

(3) Data were collected through members of the Association for the Treatment of Sexual Abusers.

Definition of Terms

For the purposes of this study, the term "adolescent male sex offender" refers to a male between the ages of 12 and 19 years who has been convicted of any offense of a sexual nature. This constitutes only a subgroup of offenders and consists of those who have been caught, brought to the attention of the police, and have either admitted their guilt or have been found guilty in court.

Chapter 2

LITERATURE REVIEW

Adolescent Sexual Offenders

Offense and Victim Characteristics

Over the past 25 years, there has been a surge of interest in adolescent sex offenders. Prior to 1970, there were only nine major articles published on adolescent sex offenders. From 1988 to 1993, over 60 papers were published, and this increase in publications is continuing (Barbaree, Hudson, & Seto, 1993). Similarly, in 1982 there were only 22 treatment programs in the United States available for adolescent sex offenders (Knopp, 1982). By 1991, there were over 600 programs available, and 480 of those were community-based (Roberts & Camasso, 1991).

While interest in this population has a long history (Atcheson & Williams, 1954; Cook, 1934), society's perception of the significance and intensity of destructive behavior has undergone a significant change. Prior to the 1980s, the predominant view of adolescents who acted out sexually against others was reflected in the "boys-will-be-boys" attitude, which discounted the severity and impact of their behaviors. In fact, society as a whole held the view that sexually assaultive behavior by adolescents was actually just experimentation and rather innocent. Their behavior was seen as a by-product of the naturally occurring aggressiveness of sexually maturing male adolescents (Finklehor, 1979; Gagnon, 1965). Often, sexual assaults committed by adolescents were

not seen as problems in their own right. Instead, they were seen as a reflection of a larger, more general problem of antisocial behavior, such as juvenile delinquency, conduct disorder, and substance abuse. Underlying this misperception was the lack of current understanding of social and psychological aspects of sexual development in adolescence. Knopp (1982) suggests that yet another reason adolescent sex offending was minimized was because a significant number of victims were family members, and the parents involved did not want this kind of information about their family released. Also, people did not report offenses because there was a notion that adolescent offenders rarely re-offended. All of these factors enabled society to dismiss the problem.

Several issues have been raised during the past decade that have forced society to reevaluate its perception of adolescents who commit sex crimes. First, there has been an increase in the awareness of the numbers of adolescent sex offenders. Knopp (1982) suggested that 450,000 sexual assaults were committed by adolescents in the United States in 1976. Second, a substantial proportion of all sex offenses can be attributed to adolescents. Several studies estimate that 20% to 30% of rapes and 30% to 50% of child molestations are committed by adolescents (Davis & Leitenberg, 1987; Becker, Kaplan, Cunningham-Rathner, & Kavoussi, 1986; Fehrenback, Smith, & Monastersky, 1986). Finally, professionals working with adult offenders have become increasingly aware that many of these individuals began molesting children while they were adolescents. Studies report that 47% to 58% of adult sex offenders committed their first offense as adolescents (Cellini, 1995; Abel et al., 1985).

If treatment were effective at reducing deviant behaviors among juvenile offenders, then treatment could significantly reduce the impact of sexual assaults in

society. The literature describes a progression from less to more severe offending (Longo & Groth, 1983) and that sexual assaults by these adolescents causes damage to society (Abel et al., 1985). There is evidence that treatment should be directed toward these young offenders because they are less pathological than adult offenders (Oliver, Nagayama Hall, & Neuhaus, 1993), and their deviant behaviors are much less entrenched than in adulthood (Green, 1987; Stenson & Anderson, 1987). In addition, adolescent sex offenders as a group manifest developmental adjustment problems and often have histories of traumatic adjustments to their own victimization experiences, which makes them a high-risk group for psychological interventions independent of their offense histories (Smets & Cebula, 1987).

Type of Offense

Adolescent offenders seem to show the same variation of sexually abusive behaviors as do adult sex offenders. Fahrenbach, Smith, Monastersky, and Deisher (1986) found that the most common offenses in a group of 279 offenders was indecent liberties (fondling) (59%), rape (23%), exhibitionist (11%), and other non-contact offenses such as voyeurism (7%). The incidence of intercourse increases as the age of the perpetrator and victim increases. Groth (1977) found that when the victim was much younger than the offender, rape occurred in about 20% of the cases compared to 67% when the victim was the same age or older than the offender. Similarly, in a sample of offenders with relatively young victims (female average age = 5, male average age = 7), Awad and Saunders (1989) found that the majority of offenses consisted of fondling, whereas Smith, Monastersky, and Dreisher (1987) found that rape or attempted rape was

much more common when the offenders targeted older victims (mean age = 11).

Coercion

Levels of coercion and amount of force in sexual offenses vary as a function of who is doing the reporting and the age of the victim. In general, Davis and Leitenberg (1987) reported that offenders under-estimate or minimize the use of force as compared to victim reports or reports from observers. In a sample of adolescent sex offenders (n = 26, total of 81 sexual offenses) reported by Groth (1977), 43% of offenses against a peer or older victim involved a weapon (knife or blunt instrument), but when the victim was more than four years younger than the perpetrator, no weapon was used. Wasserman and Kappel (1985) also found a low rate of weapon usage (4%) in their sample. Fahrenbach et al. (1986) reported an 8% weapon use for their sample of 173 juvenile offenders. They also reported that 33% of the offenses involved some physical force, 12% involved the verbal threat of physical harm or threat of use of a weapon, and 28% involved intimidation or bribery. Only 23% of offenses reported by victims were without threat or intimidation.

National Crime Survey data from 1973 to 1977 reported by McDermott and Hindelang (1981) compared the levels of coercion involved in sexual assaults between adolescent and adult sex offenders against victims 12 years old and older. They stratified the groups three ways: adolescents, young adults (18 to 20 years old), and adult offenders. In general, less violence is used by adolescents than by adults. When the assault involved rape, 39% of the young adults and adult offenders used a weapon compared to 11% of adolescents. Fifty-five percent of the victims of sexual assaults by

adults reported some kind of physical injury during the assault, 47% incurred injury by young adult offenders and 33% from adolescent offenders.

In summary, adolescent offenders use weapons and threats of violence less often than do adult offenders. The use of such tactics increases as the age of the victim increases, and offenders tend to significantly under-report such tactics.

Single and Multiple Offenders

Research is scarce on the issue of lone versus multiple offenders involved in adolescent sexual offenses. Groth (1977) reported that 93% of sexual assaults committed by adolescents in his sample involved a lone assailant. McDermott (1979) reported on data from rapes committed in 26 U.S. cities during 1975 and found 29% of rapes committed by young adults 20 years old or younger involved multiple perpetrators. The Uniform Crime Report of the Federal Bureau of Investigation for the entire United States during 1981 found that between 25% and 31% of sexual assaults committed by men 21 years of age and younger involved more than one perpetrator (Brown, Flanagan, & McLoen, 1984). The little evidence available suggests that group rape may be more common among adolescents than adults.

Locale of Offense

The place where the offense occurs has not received much attention, but research does suggest that most offenses take place indoors and frequently in the victim's home. Wasserman and Kappel (1985) found that 75% of offenses occurred in a home: fifty-five percent of these offenses occurred in the victim's home, 22% in the offender's home, and

15% in a place shared by both the victim and the offender. Fahrenbach et al. (1986) reported that 40% of rapes of children younger than seven years and 39% of rapes of children older than seven years occurred in the victim's home. Forty-seven percent of sexual assaults not involving rape also occurred in the victim's home.

Relationship between Offenders and Victims

The Safer Society (National Council of Juvenile and Family Court Judges, 1993) conducted a study in 1991 and found that over 90% of offenses were perpetrated against a youth the offender knew. Similarly, Fahrenbach et al. (1986) reported that 87% of the offenders in their sample of 279 sexually assaulted their victims while babysitting them.

Use of Drugs and/or Alcohol at the Time of the Offense

The data are conflicting concerning use of illicit substances at the time of offenses. Fehrenbach et al. (1986) report that only 6% of their sample of 279 offenders acknowledged being under the influence of such substances at the time of their offenses. Wasserman and Kappel (1985) and Groth (1977) reported similar findings, 10% and 11% respectively. Several other studies have reported substance use to be minimally involved during offenses (Awad & Sanders, 1989; Awad, Saunders, & Levene, 1984). However, Van Ness (1984) reported that as many as 55% of her sample reported being "drunk" or "stoned" at the time of their offense. Davis and Lietenberg (1987) stated that this type of claim is one way in which the offender tries to evade responsibility. In a more recent study of 63 adolescent rapists, Vinogradov, Dishotsky, Dory, and Tinklenberg (1988) found that a large majority of offenders in their sample reported regular use of alcohol

and other drugs. Seventy-two percent of their sample reported they were under the influence of one or more psychoactive drugs at the time of the offense, and 15% reported taking the drug just minutes prior to the offense. Several other studies seem to support the finding that substance use is a significant factor involved in adolescent sexual offenses (Hsu & Starzynski, 1990; Hawkins, Lishner, Jenson, & Catalano, 1987; Mio, Nanjundappa, Verleur, & De Rios, 1986; Tinklenberg, Murphy, Murphy, & Pfefferbaum, 1981).

The Transtheoretical Model

The Transtheoretical approach is an attempt to identify the change process. The model was developed over a 12-year period by Prochaska, DiClemente, and Norcross (1992). Their research program was dedicated to examining how people intentionally change their behavior, with or without psychotherapy. They examined the basic structure of change and focused on the phenomenon of self-change as opposed to societal, developmental, or imposed change. There are three main constructs used in the theory: stages of change, processes of change, and levels of change. In this section, the stages of change and processes of change will be described individually, then the interaction between these two constructs will be examined, and finally, the levels of change construct will be discussed.

Stages of Change

One of the primary findings was a realization that not all clients suffering from an addiction improve. The question posed was "when" does change occur? Change has been

postulated to involve a linear progression through several stages (Prochaska & DiClemente, 1982). In their study of smokers attempting to quit on their own or through professional treatment programs, they found that participants progressed through five stages: 1) precontemplation, 2) contemplation, 3) preparation, 4) action, and 5) maintenance. They also found that when relapses occurred during the action or maintenance stage, the result was a reentry into one of the earlier stages. Thus, recycling through the stages before lasting behavior change is achieved is an assumption of the model.

Stage 1: Precontemplation. Precontemplation is the stage where the individual has no intention of changing behavior in the foreseeable future. These people are often unaware of having a problem, although family, friends, neighbors, and employers are often aware of a problem. Precontemplators are sometimes naively uninformed about their problem or actively resist being informed about the problem. When precontemplators present for psychotherapy, they often do so because of pressure from others. They may be coerced into therapy by a spouse who threatens to leave, an employer who threatens to fire them, or the courts that threaten to incarcerate them. If going to therapy removes the pressure from others, they may be content to remain passively in therapy without changing. If it becomes necessary to actually change their behavior, then a temporary change may occur, such as reducing their drinking, but only until the pressure is removed.

Precontemplators may believe that they are taking action by entering therapy, but the action is to change others, not themselves. They do whatever is necessary to pacify those in authority.

Resistance against awareness of one's problematic behavior is typical. Becoming aware of a personal problem risks lowering one's self-esteem. Individuals have a strong need to believe that they are in control of their behavior. Admitting that they are not psychologically healthy is acknowledging that some part of their life is out of control. To think about participating in therapy, one must admit that part of one's life is outside of one's control. Psychotherapy with precontemplators is difficult because they tend to be very defensive, which prevents them from confronting their problematic behavior.

Stage 2: Contemplation. Contemplation is the stage in which people become aware that a personal problem exists. They are seriously thinking about addressing the problem but have not yet decided to take action. Contemplators are usually more distressed than precontemplators because they are admitting that something is wrong. They are struggling to understand the problem, its causes and cures, and to understand what went wrong. This stage often takes several months to years to complete. Clients who become stuck in this stage may require a push from the counselor to move them into the next stage. The longer these people remain in this stage, the less depressed and stressed they become because they have admitted to themselves and others that a problem exists.

Contemplators tend to ruminate on the pros and cons and possible solutions to the problem (Prochaska & DiClemente, 1984). These people tend to struggle with a positive evaluation of the problem behavior and the amount of effort and energy it will take to overcome the problem.

People in the contemplation stage are characterized as eager to talk about their problem. They seek reassurance that their problem can be overcome. Their anxiety and

stress is associated with what they might have to give up in taking action and whether they will in fact be able to overcome the problem.

Stage 3: Preparation. Preparation is a stage that combines both intentional and behavioral criteria. Individuals in this stage are intending to take action to change their problem behavior in the next month and may have unsuccessfully taken action in the past year. In general, these individuals are making minor behavioral changes in the right direction, but they have not yet met the criterion for effective action, such as abstinence from drinking (DiClemente et al., 1991). However, they are intending to take such action in the near future. Preparation is the least understood of the stages.

Stage 4: Action. During the action stage, individuals actively change their overt behavior and the environment that contributes to the problem. This stage requires a considerable commitment of time and energy. Behavioral change in the action stage is the most visible and tends to elicit external recognition from friends and family. People in the action stage tend to become impatient if too much time is spent trying to understand the origins of their problem. They often have a sufficient understanding of their problem and want to do something about it. They tend to seek out behavior therapists or other action-oriented therapists. If therapists do not take action soon enough, these clients tend to drop out of therapy or begin the change process on their own. If this occurs, some may experience a worsening of the problem because they misapply the action process, or they experience a slow progress because they believe that willpower is all they need to overcome their problem. When the person progresses, self-esteem is generally high because the individual is acting on beliefs in personal self-efficacy.

The action stage is usually the fastest to move through, yet represents the stage

where the most progress is made. Individuals in this stage expend a significant amount of energy for a brief period of time, usually lasting up to three months and sometimes as long as six months (Prochaska & DiClemente, 1982).

Stage 5: Maintenance. The maintenance stage occurs when individuals work to continue the changes attained while in the action stage. The focus in this stage is on preventing a relapse back to the problem behavior. Traditionally, maintenance is viewed as a static state; however, in the Transtheoretical model of change, it is not an absence of change but a continuance of change. Many people in the maintenance stage appear afraid of change. They may respond in a rigid and structured style, afraid that any change will result in a relapse. For people who fear a relapse, change is considered a threat, so they strive to maintain the structure that keeps them from relapsing. This can lead to a lifetime of fear of relapse in which a person adopts a lifestyle that is extremely rigid. Some maintainers develop superstitious thoughts and behaviors, thinking that avoiding a relapse is contingent upon repeating the same habits, following the same diets, or avoiding a variety of situations.

For many behaviors this stage extends from six months to an indeterminate period past the action stage (Prochaska, DiClemente, & Norcross, 1992). Being able to remain free of the problem behavior and being able to engage consistently in incompatible behavior for more than six months are the criteria for being in the maintenance stage. For many individuals such as alcoholics, this stage can last a lifetime (Prochaska & DiClemente, 1984).

The five stages are seen to be additive in a sense that adjacent stages are posited to be more highly correlated to each other than are non-adjacent stages (McConnaughy et

al., 1989). Movement through the stages is seen to progress in the order listed, although the theorists acknowledge that relapse and recycling through the stages is more common than is a strict linear progression (Prochaska et al., 1992).

Processes of Change

Processes of change are basic coping activities that the individual engages in to modify or change a behavior. More than 200 systems of psychotherapy exist; however, Prochaska and DiClemente (1982) have identified 10 independent processes of change. The processes of change represent a middle level of abstraction between a complete theory and the techniques proposed by the theory. These 10 processes come from a comparative analysis of the 18 leading systems of psychotherapy (Prochaska, 1979). Most of these systems theoretically use only two or three processes of change. In the Process of Change Test (Prochaska & DiClemente, 1983) involving 500 self-changers trying to quit smoking, principle component analysis was performed on 13 processes of change to determine how many independent processes were used. The analysis yielded 10 independent processes of change. A detailed description of these 10 processes is provided to help the reader understand the constructs.

Consciousness raising. This process is the most frequently applied process of change. Sixteen of the 18 systems of psychotherapy use some form of consciousness raising (Prochaska, 1979). Consciousness raising is a process that increases the fund of information made available to the client regarding a particular problem and can occur in or out of therapy. The goal is to help the individual make the most effective responses to the stimuli impinging on him/her. Consciousness raising is defined in two separate but

related ways: feedback and education. When the information given to the individual is contained in the stimulation generated by the individual's own actions, then it is labeled *feedback*. When the information given to the individual is contained in stimulation generated from the environment or events in the environment, then it is labeled *education*. Observations, confrontations, interpretations, and bibliotherapy are all techniques that raise consciousness.

Dramatic relief. This process involves a cathartic reaction. It involves a change in behavior as a result of a strong emotional reaction to a witnessed event in the environment. Role-playing, psychodrama, and grieving losses can all cause a cathartic reaction.

Social reevaluation. This process involves an appraisal of how the problem behavior impacts others. Community values are in conflict with the individual's problem behavior. The behavior may be illegal, or simply go against the values and expectations of the community as a whole. The person considers how the world would be a better place if he/she were to change the particular behavior. Empathy training is involved in social reevaluation.

Self reevaluation. Self reevaluation involves an affective and cognitive revaluation of a problem and of one's identity. The individual feels and thinks that life would be better without the problem but recognizes the costs of changing the problem behavior. It involves a recognition that the individual's essential values are in conflict with particular behaviors or experiences. It involves an appraisal of the pros and cons of trying to overcome the problem. Value clarification, imagery, and corrective emotional experiences are all processes involved in self reevaluation.

Self liberation. Self liberation represents an increase in the individual's ability to choose. It involves changes at an experiential level that help the client become aware of new alternatives. Creating new alternatives for living requires a belief that one can be an effective force in making new alternatives succeed. This belief involves accepting that the act of committing to an alternative increases the chance of the alternative succeeding. It also recognizes the limits of personal freedom and requires the courage to accept the anxiety associated with the choices. Decision-making and commitment enhancing techniques serve to increase self liberation.

Contingency management. Behavior theory has shown that if a desired reinforcement is made contingent upon a particular response, then the probability is increased that the reinforced response will be manifested. By contrast, if a particular punishment is made contingent on a particular response, it is likely that the response will not be manifested. By changing the contingencies that govern behavior, it is assumed that behavior change will result. If changes in behavior are made as a result of changing the contingencies that control the problem behavior, then contingency management is said to occur. Contingency contracts, overt and covert reinforcement, and self-rewards are all examples of contingency management.

Helping relationship. Different systems of psychotherapy disagree about the importance of a therapeutic relationship between the individual and therapist. At one end of the continuum are the radical behaviorists. They view the relationship as holding no theoretical importance in the process of change (Kazdin, 1984). At the other end are those client-centered therapists who believe that this relationship is an essential process that produces change (Rogers, 1957). According to the Transtheoretical model, the helping

relationship is both a precondition for change and a process of change. The term *helping relationship* is used because the relationship is not necessarily between a client and therapist; the relationship can occur in the natural environment as well. The helping relationship is defined in Rogerian terms as including positive regard, genuineness, and accurate empathy. Therapeutic alliance, social support, and self-help groups all fall under the process known as the helping relationship.

Counterconditioning. When critical changes in the conditional stimuli that control responses are made, these changes are labeled "counterconditioning." When an individual's behavior is either elicited by classically conditioned stimuli (CSs) or when stimuli are discriminable (Sds) occasions for individuals to emit responses that are instrumentally conditioned, then changes in conditional stimuli are necessary. Individuals can either change the way they experience or respond to particular stimuli, or they can change the environment to minimize the probability of the stimuli occurring. Changing the experiences or responses to the stimuli is referred to as counterconditioning. Techniques like relaxation, desensitization, assertion, and positive self-statements fall under the label of the counterconditioning process of change.

Stimulus control. Stimulus control involves a restructuring of the environment so that the probability of a particular conditioned stimulus (identified as a problem) occurring is reduced. It can also involve a restructuring of the environment so that stimuli are more likely to occur which serve as a cue to respond in more positive or appropriate ways. Leaving signs on the refrigerator door that suggest moderate eating is an example of stimulus control.

Social liberation. Social liberation is closely related to self liberation except that it

involves creating changes at the environmental level which lead to increasing alternatives. Advocating for the repressed, joining groups like MADD, and policy interventions are social liberation processes.

The Transtheoretical model assumes a relationship between the stages of change and processes of change. Eight of the processes are characterized according to the stage in which they are predicted to be most used. Specifically, the model predicts that Precontemplation stage clients do not significantly use any of the processes of change. Contemplation stage clients use more Consciousness Raising than do members of the other stages. The Preparation stage is conceptualized as a period where the individual is not yet committed to making change but is aware that a problem exists. Individuals in this stage typically use an equal combination of processes found in the Contemplation and Action stages. Action stage members use Counterconditioning, Contingency Management, Stimulus Control, Self Liberation, and Helping Relationship more than members of the other stages. People in the Maintenance stage continue to use Contingency Management, Helping Relationship, Counterconditioning, and Stimulus Control. The theory has not made predictions about the stage in which the other processes of change would be most used. These differential uses of processes of change are thought to shed light on how people can be helped more from stage to stage during therapy.

Levels of Change

While the change processes described above propose a simple model of how people change, the Transtheoretical theory also acknowledges a third dimension of this change process. While looking at the various psychotherapies, one notices that some

focus on behavioral interventions, some on cognitive interventions, others seem more focused on interpersonal or family system relationships, while others target intrapsychic motivations. Each approach has its adherents and claims some success (Prochaska & DiClemente, 1984), so an adequate integrative theory would need to be able to accommodate all of them. Prochaska and DiClemente (1984) suggested that most therapies could be seen as addressing one or more of five different levels of change. They called these levels the following:

1) Symptom/situational
2) Maladaptive cognitions
3) Current interpersonal conflicts
4) Family/systems conflicts
5) Intrapersonal conflicts

Prochaska and DiClemente (1984) suggested that the order of these levels is important for three reasons. First, they suggested that resistance to change seems to increase as one moves through the levels of change hierarchy from symptom/situational to intrapersonal conflict. Second, they observed that the length of therapy tends to increase as one moves through these levels of change. Third, they believe that sensitivity to a client's perception is important. They suggested that clients are very vulnerable when entering therapy and that they ascribe great authority to the opinion of the therapist. Since it is difficult to predict success of a given course of treatment for a given client, the theorists suggested that it seemed more responsible to address the least serious attribution of a problem first rather than to attribute the problem to a deep-seated intraspychic problem which could leave the client feeling neurotic and in need of long-term therapy.

Following this reasoning, Prochaska and DiClemente (1984) proposed that therapists start at level one, symptoms/situation, and move across the five stages of change using the processes most helpful at each stage. If the goal of symptom reduction is not met, the therapist would drop to level two, maladaptive cognitions, and move across the five stages of change, and so on. Movement would then been seen as a zigzag movement through the stages and levels.

In addition to mapping progress through a process of change, Prochaska and DiClemente thought the Transtheoretical approach would help therapists choose which of the many available therapies to use at a given time. With the large number of therapists describing themselves as eclectic in orientation, Prochaska and DiClemente (1986) proposed that the Transtheoretical approach could offer a theoretical basis for eclectic therapists to choose which technique or method to use at a particular time. They felt that most therapies could be included within the Transtheoretical theory, but that some seemed better suited to particular levels or stages of change.

Chapter 3

METHOD

Sample

Fifty-nine adolescent sex offenders from Alaska, Florida, Idaho, Illinois, Indiana, Georgia, Oregon, and North Carolina participated in the study. All participants were males between 12 and 19 years of age and at the time of their participation were involved in out-patient, community-based, or in-patient treatment for their sexual offending behavior. Originally, all five stages of change were to be included in the study; however, since only one participant scored in the Precontemplation stage and only two in the Maintenance stage, a decision to include only the three middle stages was made. Six participants were eliminated from the study: two because they scored equally on two stages, one because he was categorized as being in the Precontemplation stage, two because they were categorized as being in the Maintenance stage, and one because he indicated that he was 20 years old. Of the remaining 53 participants, 37 were Caucasian, 10 were African American, two were Latino/Hispanic, two were Native American, one was bi-racial, and one person did not indicate ethnicity. Their mean age was 15.3 years (SD = 1.5), and Table 2 presents expanded demographic information on the participants' age. They had been in therapy for an average of 39 weeks (SD = 35). There were 17 Freshmen, 10 Sophomores, 7 Juniors, 3 Seniors, and 16 who did not fit within the traditional grading system.

Table 2

Age Distribution of Participants

Age in Years	N	Percentage
11-11.9	1	1.9
12-12.9	1	1.9
13-13.9	9	17.1
14-14.9	14	26.5
15-15.9	9	17.1
16-16.9	12	22.8
17-17.9	7	13.3
Total	53	100.0

Instruments

Demographic Questionnaire

A demographic questionnaire (Appendix B) containing six items was administered to participants. In order to describe thoroughly and accurately the sample and for data analysis purposes, participants were asked to provide the following information: date, racial identity, age, birth date, level of education, and duration in treatment.

Stages of Change Questionnaire (SCQ)

The Stages of Change Questionnaire (Appendix C) (McConnaughy, Prochaska, & Velicer, 1983) assesses clients' readiness for involvement in change and is a 32-item 5-point Likert-type scale with each item ranging from 1 (strong disagreement) to 5 (strong

agreement). Participants are asked to indicate how frequently each item applied to them during the past month.

Evidence supporting the construct validity of the SCQ comes primarily from factor analysis that resulted in a four-factor solution indicating four distinct stages of change in populations of clients in therapy. Principal components analysis and a replication study (McConnaughy, Prochaska, & Velicer, 1983; McConnaughy, DiClemente, Prochaska, & Velicer, 1989) yielded four highly robust and statistically well defined subscales. Each of the subscales contains eight items representing one of the stages of change (Precontemplation, Contemplation, Action, and Maintenance). The highest averaged score for each subscale is used to determine the participant's endorsement of a particular stage. If the subscale scores are tied on Contemplation and Action, the participant is considered to be in the Preparation stage (Prochaska, DiClemente, & Norcross, 1992). The four components accounted for 45% to 58% of the total variance. Internal consistency reliability coefficients Cronbach Alphas were .88 and .79 for Precontemplation, .88 and .84 for Contemplation, .89 and .84 for Action, and .89 and .82 for Maintenance. Cluster analysis revealed nine distinct client profiles that accounted for 90% of the original sample. No convergent or discriminant validity data have been reported. The SCQ has a readability level of 5.5 on the Flesh-Kincaid Grade Level formula (Corel, 1996).

Processes of Change Questionnaire-Offense Form (PCQ-OF)

The Processes of Change Questionnaire-Offense Form (Appendix D) was adapted from the original Processes of Change Questionnaire (Prochaska, Velicer, DiClemente, &

Fave, 1988) and was designed to measure self-change processes used by individuals to cope with the problem of sexual offending. Adaptation was described by the original authors in the following way: "Adaptation of the items to new problem areas is direct for most processes, but translation occasionally requires a degree of creativity" (Prochaska, Velicer, DiClemente, & Fava, 1988, p. 527). The Processes of Change Questionnaire is a 40-item 5-point Likert-type scale with a score on each item ranging from 1 (strong disagreement) to 5 (strong agreement). Participants are asked to indicate how frequently each item applied to them during the past month. A summary rating for each of the subscales is calculated, with higher scores indicating more use. The original PCQ was validated on a sample of smokers and ex-smokers (Prochaska & DiClemente, 1985) and a sample enrolled in a behavioral weight control program at the work site (Prochaska et al., 1992). For the original sample of subscales, the Cronbach coefficient alphas were as follows: consciousness raising .88, counterconditioning .88, helping relationship .84, contingency management .78, self liberation .89, self reevaluation .87, stimulus control .81, dramatic relief .91, social revaluation .87, social liberation .81. For the sample enrolled in a behavioral weight control program, Cronbach coefficient alphas were calculated to be between .69 and .92. Most estimates were .80 or above, with only Social Liberation and Contingency Management scales producing estimates consistently in the .70 to .80 range (Prochaska, Velicer, DiClemente, & Fava, 1988). In addition, the within-method correlations among the ten processes were generally in the low .30 range, suggesting limited overlap between the scales. The resulting inventory was composed of ten processes of change subscales, consisting of four items each.

Prochaska and DiClemente (1985) conducted a study in which they adapted the

original PCQ for people who experience overeating and again for people who experience psychological distress. They created items for the ten common processes of change as described previously and added items for two other processes: substance use and interpersonal systems control. Principal component analysis of these two adapted versions of the PCQ yielded 11 components accounting for 70.2% and 68.9% of the total variance. Coefficient alphas ranged from .68 to .96 with a mean alpha of .81 for the overeating adaptation and from .67 to .91 with a mean of .87 for the psychological distress form.

The questionnaire has a readability level of 8.9 using the Flesh-Kincaid Grade Level (Corel, 1996). This seems elevated for the population under investigation; however, one of the ways the formula calculates readability levels is by examining word length (Standal, 1987). The longer a word is, according to the formula, the more difficult it is to read, which elevates the overall reading level. The PCQ-OF contains several long words like "offending," "fantasizing," and "inappropriate" that serve to inflate the readability level. These words may be unfamiliar to some populations, but sex offenders in treatment use them on a daily basis and therefore reading difficulty may be lower than indicated.

Design and Procedure

The research design was an Ex Post Facto criterion group design. Participants were recruited through treatment providers across the United States. These treatment providers were in some way connected with the Association for the Treatment of Sex Abusers (ATSA) and had expressed interest in participating in research related to sexual

offenders. Treatment providers were initially contacted by letter and informed of the purpose of the study, and the client characteristics under investigation were explained. Treatment providers who agreed to participate in the study were provided prestamped packets that each contained a demographic sheet and consent form (Appendix A), along with the SCQ and the PCQ-OF in randomized order. Instructions to the participants included the purpose of the study. Efforts were made to control for honesty and validity of responses given by participants by assuring them that their responses would be kept confidential from the treatment center administration, the staff, and their therapist/counselor. Participants' anonymity was protected by avoiding solicitation of any identifying information, by asking that surveys be completed outside of therapy, and by having the survey packets and signed informed consent forms returned in separate envelopes. Institutional approval was established from each site, and consent of parents or guardian and participant was obtained prior to the adolescent's participation in the study.

Hypotheses

For the purpose of this study, the following hypotheses (stated in null form) were tested:

(1) Adolescent sex offenders in treatment are not represented in the five stages of change as described by the Transtheoretical model.

(2) The processes of change endorsed by adolescent sex offenders in treatment are not reflective of the integrative model proposed by Prochaska, DiClemente, and Norcross (1992).

The alpha level needed for rejection of the null hypotheses was $\leq .05$.

Data Analysis

Descriptive statistics were used to describe the data obtained from the SCQ and the PCQ-OF. Since the purpose of this study was to investigate whether the processes of change can identify adolescents in the different stages of the Transtheoretical model they endorse, a discriminant analysis was proposed to analyze the data. Discriminant analysis is a statistical technique that provides an understanding of group differences by predicting the likelihood that an individual will belong to a group based on multiple independent variables (Hair, Anderson, Tatham, & Black, 1995). Discriminant analysis can be used when the research is looking at two or more groups. When two classifications are used, it is referred to as a two-group discriminant analysis. When three or more groups are identified, the technique is referred to as a multiple discriminant analysis. Multiple discriminant analysis is used in situations where the main purpose is to identify the group to which a person or object belongs (Hair et al., 1995). A multiple discriminant analysis is the appropriate statistical technique for discriminating between dependent variables (stages of change) based on a set of independent variables (processes of change). The test for statistical significance is computed by comparing the distribution of the discriminating scores for the multiple groups. If the overlap is large, there is poor discrimination between the groups (Hair et al., 1995).

Upon a reliability analysis of the ten processes of change, it became evident that a multiple discriminant analysis would be inappropriate. Cronbach's coefficient alphas ranged from .38 to .74, with seven processes below .65. An alternative way of looking at

the PCQ was introduced by Prochaska et al. (1988). They found that an exploratory factor analysis of the PCQ resulted in ten processes of change that were shown through structural equation modeling to be subsumed under two higher order factors, an Experiential factor and a Behavioral factor. Bellis (1994) also found two similar higher order factors. Subsumed under the Experiential factor are Consciousness Raising, Dramatic Relief, Environmental Reevaluation, Social Liberation, and Self Reevaluation. Subsumed under the Behavioral factor are Helping Relationship, Stimulus Control, Counterconditioning, Contingency Management, and Self Liberation. For this study, the 20 items from the five experiential scales and the 20 items from the five behavioral scales were summed to create two higher order sum scores that were called PCQ-OFE (Experiential) and the PCQ-OFB (Behavioral). The internal consistency in this sample was .88 for the Experiential factor and .79 for the Behavioral factor. The correlation between the two higher order factors in this sample was .74, which is consistent with past research (Bellin, 1994; Koraleski & Larson, 1997; Prochaska et al., 1988). Exploratory and confirmatory analysis provided evidence of construct validity for the processes of change (Bellis, 1994; Prochaska et al., 1988). Koraleski and Larson (1997) examined 83 sexually abused adults in therapy in a similar fashion.

Internal consistency reliability coefficients and principal component analyses were calculated for both instruments. To test the first hypothesis, descriptive statistics were calculated to determine if the participants were represented in each of the five stages of change. Other demographic data were used to clarify the specific characteristics of the participants in the various stages. A three-factor model of the SCQ was also examined based on findings from the item principal component analysis.

To test the second hypothesis, two one-way analyses of variance (ANOVAs) were performed with the three stage groups (Contemplation, Preparation, and Action) as the independent variables and the PCQ-OFE and PCQ-OFB as the dependent variables. Precontemplation and Maintenance were dropped from the analysis because of low membership. Two additional ANOVAs were also computed using the three stage groups as the independent variables and different versions of the PCQ-OFE and PCQ-OFB as the dependent variables. This new version of the PCQ was based on the results from the varimax rotated component analysis. From this analysis, three new stages were created using only those items that were found to be significantly contributing to the individual factors.

Limitations

The study was subject to the following limitations:

(1) Generalization of the results may only be applicable to adolescent sex offenders in treatment or recently graduated from treatment.

(2) As a result of the subjectivity inherent in self-report measures coupled with the sensitive nature of the questionnaires, the extent of the validity of responses cannot be verified.

(3) The validity of the *Processes of Change Questionnaire-Offense Form* may be criticized because of the lack of validity and reliability data available for this particular form of the questionnaire.

Chapter 4

RESULTS

The purpose of the study was to test the application of the Transtheoretical model of change to adolescent sex offenders in treatment. The hypotheses were (1) Adolescent sex offenders in treatment are not represented in the five stages of change as prescribed by the Transtheoretical model, and (2) the processes of change endorsed by adolescent sex offenders in treatment are not reflective of the integrative model proposed by Prochaska, DiClemente, and Norcross (1992). The results will be presented in a systematic fashion addressing each hypothesis.

Hypothesis 1

Adolescent sex offenders in treatment are not represented in the five stages of change as prescribed by the Transtheoretical model.

This hypothesis was not supported by the findings. Table 5 illustrates that there was at least one participant in each stage of the model. However, with membership being so low in the first and last stage, it is possible that the hypothesis was supported. A more in-depth look at the data is presented to further determine if Hypothesis 1 is supported or rejected.

Table 3 presents the internal consistency reliability coefficients for the Stages of Change Questionnaire. Data for the current study are presented with data from previous

Table 3

Reliability of Internal Consistency Coefficients Reported for the SCQ

Stage	1994* (n = 150)	1989** (n = 327)	1983*** (n = 155)	Current Study (n = 53)
Precontemplation	.77	.79	.88	.70
Contemplation	.75	.84	.88	.79
Action	.87	.84	.89	.77
Maintenance	.76	.82	.88	.58

* Bellis, 1994
** McConnaughy et al., 1989
*** McConnaughy et al., 1983

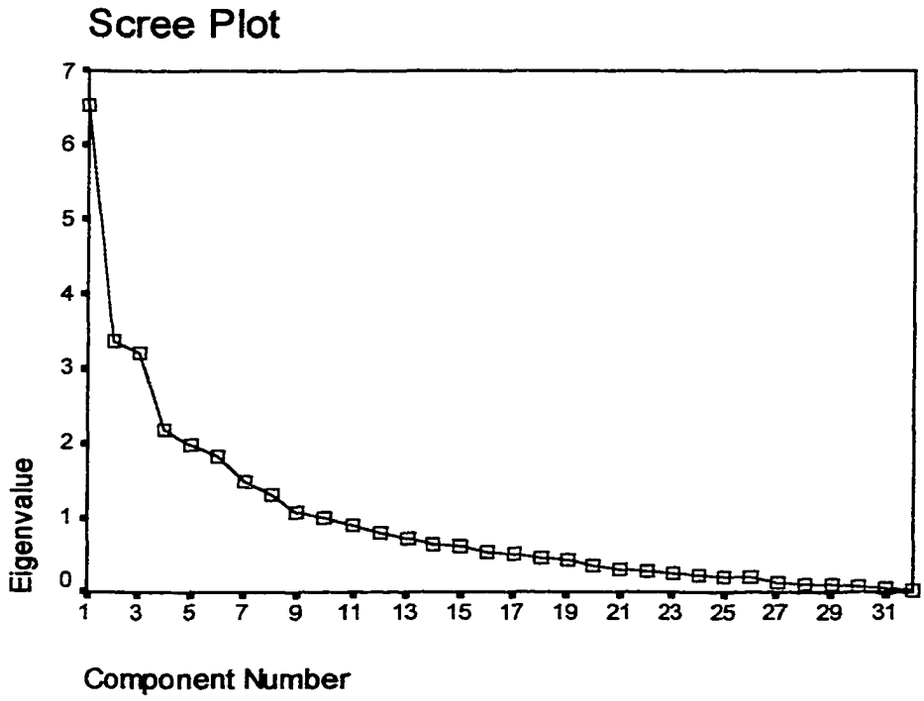

Figure 1. Scree Plot for Stages of Change Questionnaire.

Table 4

Varimax Rotated Component Pattern for the Stages of Change Questionnaire

Item Number	Component 1	2	3	4
Precontemplation				
1	-.61			
5	-.63			
11	-.56			
13	-.73			
23	-.49			
26				-.59
29			.41	
31			.42	
Contemplation				
2	.51			
4	.55			
8	.66			
12			.40	
15	.66			
19			.73	
21				.46
24		.40	.40	
Action				
3		.64		
7		.68		
10				.64
14		.73		
17		.58		
20				.60
25		.77		
30		.72		
Maintenance				
6				.68
9				.63
16			.66	
18			.54	
22	.47		.68	
28			.62	
32 **				

** no values above .30

studies as a means of comparison.

A principal component analysis was performed on the 32 X 32 matrix or inter-item correlations from the 32-item SCQ. An examination of the scree plot (Figure 1) indicated that a three-component model best fit the data and accounted for 48% of the variance. Table 4 presents the varimax rotated component pattern that indicates a four-factor model. The scree plot is used as a preliminary analysis and is not always an accurate reflection of the number of factors. It determines the number of factors based on percentage of contribution to the equation. The varimax rotated component is a much more accurate analysis because it allows examination of each item.

Table 5 represents the breakdown of the participants for each stage of change.

Table 5

Membership of Stages of Change Derived from the SCQ

Precontemplation	Contemplation	Preparation	Action	Maintenance
1	31	12	10	2

Although the number of participants in the various stages is consistent with the model, a better indicator of whether the SCQ accurately reflects the change process of adolescents in treatment is to look at the correspondence between the identified stage and the amount of time in treatment. Since the Transtheoretical model describes the temporal aspect of change, in theory, the longer one is in treatment, the farther along in the change

process one should be. A look at Table 6 illustrates the average time participants had been in treatment.

Table 6

Averaged Total Time in Weeks of Treatment

Stage	Precontemplation	Contemplation	Preparation	Action	Maintenance
Mean (SD)	4	38 (33.9)	33 (26.2)	48 (44.8)	36
Range		2-155	4-77	1-156	

Unfortunately, analysis of the first and last stages of the model is of limited interpretability because of the low membership. However, a look at the three middle stages seems to indicate that membership in a stage is random. A one-way ANOVA with the amount of time in treatment as the dependent variable and stage of change membership as the independent variable indicated no significant differences in the SCQ scores among participants in the Precontemplation, Contemplation, and Action stages, (F (2, 50) = 6.16, p = .544).

Although a three-component model was suggested based on the scree plot, a more accurate way of determining the number of components is to look at the varimax rotated component pattern. According to the data presented in Table 4, it appears that a three-component model, with Preaction, Newaction, and Newmaintenance as the three stages better describes the model. The items included in the three stages were chosen on the

basis of their individual contribution to one of the components. The items included in the Preaction stage include 1, 5, 11, 13, 23, 2, 4, and 8. The items included in the Newaction stage are 3, 7, 14, 17, 25, and 30. The items included in the Newmaintenance stage include 16, 18, 22, and 28. Cronbach's coefficient alphas for the three new stages are .82 for Preaction, .82 for Newaction, and .67 for Newmaintenance. The correlation between Preaction and Newaction was .20, between Preaction and Newmaintenance was .14, and between Newaction and Newmaintenance was .02. A one-way ANOVA with the amount of time in treatment as the dependent variable and the new stages of change as the independent variable indicated no significant differences in the SCQ scores among participants in Preaction, Newaction, and Newmaintenence stages (F (2, 45) = 1.452, p = .245).

Although the hypothesis was supported, a more sophisticated examination of the data and the Stages of Change Questionnaire suggest that the questionnaire, as is, is not a reliable instrument to use when studying adolescent sex offenders in treatment.

Hypothesis 2

Processes of change endorsed by adolescent sex offenders in treatment are not reflective of the integrative model proposed by Prochaska, DiClemente, and Norcross (1992).

This hypothesis is supported by the data. Although there are limitations in the data set, it is clear that the model does not integrate the processes of change with the stages of change.

Table 7 presents the internal consistency reliability coefficients for the Processes

Table 7

Internal Consistency Reliability Coefficients Reported for the PCQ

Process	1996* (n = 516)	1985** (n = 872)	Current Study (n = 53)
Consciousness Raising	.79	.88	.70
Counterconditioning	.76	.88	.75
Helping Relationship	.69	.84	.71
Contingency Management	.69	.78	.66
Self Liberation	.81	.81	.42
Self Reevaluation	.82	.87	.38
Stimulus Control	.77	.81	.39
Dramatic Relief	.89	.91	.60
Social Reevaluation	.85	--	.69
Social Liberation	.57	.81	.58

* O'Connor, Carbonari, & DiClemente, 1996
** DiClemente & Prochaska, 1985

of Change Questionnaire-Offense Form. Data for the current study are presented with data from previous studies as a means of comparison.

A principal component analysis was performed on the 40 X 40 matrix or inter-item correlations from the 40-item PCQ-OF. An examination of the scree plot (Figure 2) indicated that a two-component model best fit the data and it accounted for 36% of the variance. Table 8 presents the varimax rotated component pattern.

Cronbach's coefficient alphas for the various processes of change ranged from .38 to .74 with seven processes below .65. This suggests that a multiple discriminant analysis would be an inappropriate statistic for this analysis. An alternative way of examining the

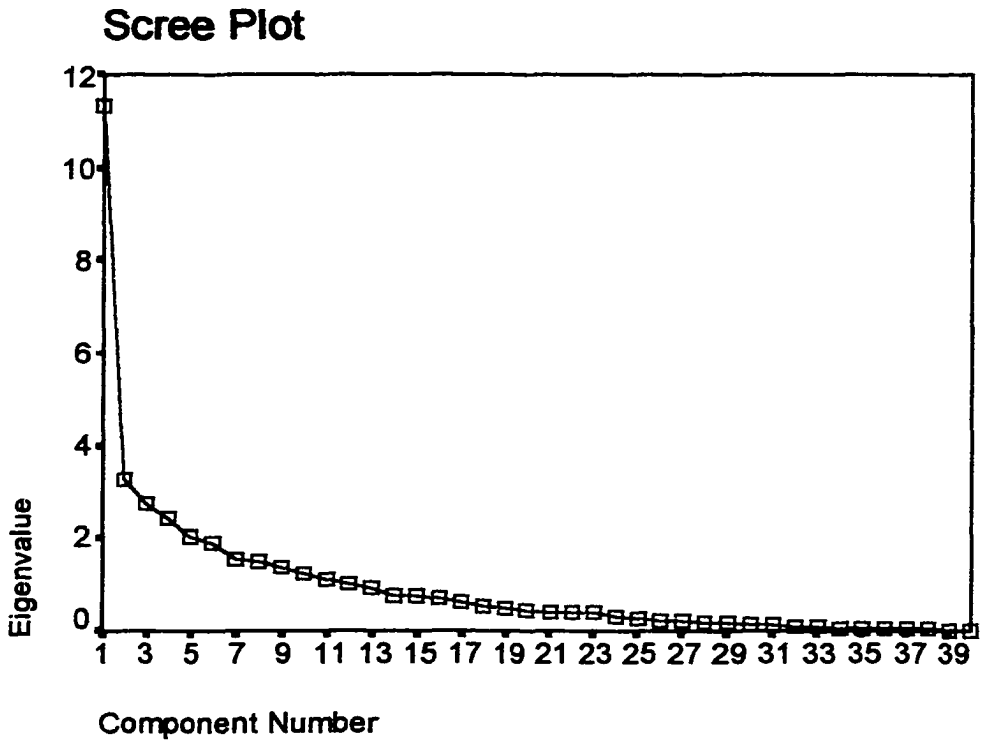

Figure 2. Scree Plot for Processes of Change Questionnaire-Offense Form.

Table 8

Varimax Rotated Component Pattern for the Processes of Change Questionnaire-Offense Form

	Item Number	Component 1	Component 2
Experiential (CS)	4		.54
	22	.71	
	34	.50	
	38		.51

Table 8 (continued)

Item Number		Component 1	Component 2
Experiential			
(SR)	8	.57	
	10		.56
	32		.41
	37		.55
(DR)	6		.65
	9		.58
	24		.37
	36	.52	
(ER)	5		.55
	21		.49
	25		.48
	30		.62
(SL)	2		.67
	19		.41
	26		.47
	28	.47	.46
Behavioral			
(C)	12	.71	
	16	.63	
	27		.60
	39	.45	
(HR)	11	.45	
	14	.45	
	20	.75	
	35	.67	
(CM)	7		.35
	13	.70	
	15	.71	
	33	.76	
(SL)	3		.40
	18	.52	
	23		.58
	31	.33	
(SC)	1	**	
	17	.62	
	29		.50
	40	**	

** no value above .30

data was originally proposed by Prochaska et al. (1988). They suggested doing an exploratory factor analysis of the instrument and extracting two higher order factors, one Experiential and one Behavioral. Bellis (1994) was able to factor analyze his data set, which resulted in two higher order factors each comprised of the same processes as found in Prochaska et al.'s analysis. Therefore, examining the data in terms of two higher order factors, Experiential and Behavioral, seemed a more appropriate means of analysis (Bellis, 1994; Prochaska et al., 1988). Since the number of factors to be analyzed is reduced from ten (processes) to two (higher order factors), the multiple discriminant analysis was replaced with analyses of variances.

Internal consistency in this sample was .88 for the Experiential factor and .79 for the Behavioral factor; similar results were reported by Cooney (1996): .83 for the Experiential factor and .82 for the Behavioral factor.

A one-way analysis of variance (ANOVA) was performed with the three stage groups (Contemplation, Preparation, and Action) as the independent variables and the PCQ-OF-Experiential as the dependent variable. The ANOVA indicated no significant difference among participants in the three stage groups on the Experiential factor, F (2, 50) = .038, p = .962.

A one-way analysis of variance (ANOVA) was performed with the three stage groups (Contemplation, Preparation, and Action) as the independent variables and the PCQ-OF-Behavioral as the dependent variable. The ANOVA indicated no significant difference among participants in the three stage groups on the Behavioral factor, F (2, 50) = .497, p = .611.

This analysis was repeated after removing the items that did not contribute to the

individual factors. Items 8, 22, 28, 34, and 36 were discarded from the analysis of the Experiential factor, and items 1, 3, 7, 23, 27, 29, and 40 were discarded from the Behavioral factor. The internal consistency in this new sample was .85 for the Experiential factor and .89 for the Behavioral factor. The correlation between the two higher order factors in this sample was .54.

A one-way analysis of variance (ANOVA) was performed with the three stage groups (Contemplation, Preparation, and Action) as the independent variables and the new PCQ-OF-Experiential as the dependent variable. The ANOVA indicated no significant difference among participants in the three stage groups on the Experiential factor, $F(2, 50) = .125, p = .883$.

A one-way analysis of variance (ANOVA) was performed with the three stage groups (Contemplation, Preparation, and Action) as the independent variables and the new PCQ-OF-Behavioral as the dependent variable. The ANOVA indicated no significant difference among participants in the three stage groups between the Behavioral factor, $F(2, 50) = .248, p = .781$.

A one-way analysis of variance (ANOVA) was performed with the three new stage groups (Preaction, Newaction, and Newmaintenance) as the independent variables and the new PCQ-OF-Experiential as the dependent variable. The ANOVA indicated no significant difference among participants in the three new stage groups on the Experiential factor, $F(2, 45) = 3.02, p = .059$.

A one-way analysis of variance (ANOVA) was performed with the three new stage groups (Preaction, Newaction, and Newmaintenance) as the independent variables and the new PCQ-OF-Behavioral as the dependent variable. The ANOVA indicated no

significant difference among participants in the three stage groups between the Behavioral factor, $F(2, 45) = .505, p = .607$.

Discussion

Stages of Change

The distribution of participants across the five stages (Table 5) clearly supports the theoretical construct of the Transtheoretical stages of change model with adolescent sex offenders. The significantly lower membership in the Precontemplation and Maintenance stages in this study is due to its inclusion requirements. With participation in sex offender treatment as an inclusion condition for this study, it seems reasonable that only one participant was categorized as a precontemplator. It is expected that all participants have at some level accepted that they have a problem. In fact, the precontemplator was only in his fourth week of treatment. Lerner (1990) found that participants in the precontemplation stage comprised the smallest group of participants in her sample of adolescent delinquents. The precontemplators in her sample distinguished themselves from the other groups by their lack of commitment to change. If one considers the group profiles as characterized by a lack of involvement and commitment to the change process, the present findings are clearer. It is also likely that selection bias is present in the voluntary nature of participation. Therefore, those who chose not to participate or quit after entry in the study may have been more likely to be precontemplators.

The theory would also suggest that few participants would be in the maintenance stage of the model simply because they are still in treatment. The maintenance stage

occurs when individuals work to continue the changes already attained while in the action stage. The focus in this stage is on preventing a relapse back to the problem behavior. As with the precontemplators, inclusion in this study required participants to be in treatment, and most individuals in the maintenance stage are no longer in treatment. For behaviors like sex offending, this stage extends from six months to an indeterminate period past the action stage (Prochaska, DiClemente, & Norcross, 1992). The results of this data set are similar to the one reported by Koraleski and Larson (1997). In their sample of 83 adults in therapy for childhood sexual abuse, they found two people in the Precontemplation stage and four in the Maintenance stage. The rest of the participants were distributed among the three middle stages of the model.

Although the distribution of participants across the five stages appears supported by the theory and previous research with adult participants, it is inconsistent with the few studies that have applied the model to adolescent participants. Greenstein (1997) found that pre-adolescent and adolescent participants admitted to a psychiatric hospital were distributed equally across the five stages. In addition, Prochaska et al. (1994) found that 46% of their sample of adolescent delinquents and students at a special high school for children with behavior problems were in the beginning stages of the change process. Blum and Phares (1996) reported that approximately 40% of their sample of adolescents in a day treatment setting were in the Precontemplation stage of the change process. The dissimilarity between the present study and previous studies with adolescents is that the current sample of adolescents had all been found guilty of an offense or had admitted their guilt voluntarily. The legal processes involved are in fact quite lengthy so the individuals had time to move beyond the denial phase and begin to address the fact that

they did commit the offense. Adolescents sampled in the other studies did not require court intervention and would have been relocated to the hospital or school setting or day treatment setting shortly after acting out. Also, sex offender treatment programs tend to address denial issues immediately upon admission to the program, whereas other settings may not be as quick to respond to denial (Green, 1995).

Nigg (1996) reported the only study including adolescents that has a relatively similar distribution of participants across the stages. In that study investigating adolescents and exercise motivation, only 2% of the participants were found to be in the Precontemplation stage. The results of Niggs' (1996) study differ from the current study in that they reported almost 50% of participants in the Maintenance stage compared to 5% in this study. Nigg reported that the sample of adolescents was drawn from a relatively small high school where after-school sports were very popular and available to all students. Also, Nigg reported that this sample was unusually active in sports and that participation was voluntary, and a selection bias may have occurred. Although the results of this study are generally dissimilar to those reported with adolescent populations, they are similar to those reported with adults (Koraleski & Larson, 1997). Their sample consisted of 83 adults in therapy for dealing with issues of childhood sexual abuse. Pallonen (1998) found a similar distribution across the stages of change among adolescent and adult smokers, suggesting that when looking at the same behavior target, the two groups are similar.

Although the number of participants in the various stages is consistent with the model, a better indicator of whether the SCQ accurately reflects the change process of adolescents in treatment may be to look at the correspondence between the identified

stage and the amount of time in treatment. A look at the amount of time in treatment of participants in the three middle stages seems to indicate that membership in a stage is random. Koraleski and Larson (1997) reported that in their sample of 83 adults, no correlation was found between number of therapy sessions and stages of change score. It may be that participants move in a temporal fashion across the stages but experience frequent relapses into a previous stage, which would account for the lack of correlation between time in treatment and stage of change. For example, an individual could be in the contemplation stage of the model, beginning to accept that he has caused great pain to his victim and beginning to consider participating in the change process. Following a visit with his victim, he may decide that his victim was not impacted by the sex offense and would therefore regress to the earlier precontemplation stage. One third of the adolescents admitted to a psychiatric hospital in Greenstein's (1997) sample actually regressed by at least one stage. She also found a significant difference between those who actually progressed one stage and those who did not. More participants failed to progress even a single stage before discharge. These findings are not inconsistent with the theory. The model fully acknowledges the possibility of a lack of progress and/or relapsing through the stages. In fact, there is research that has explored the progress through the stages over time and revealed forward movement, backward movement, and a lack of movement through the stages.

It is also possible that most of the participants were actually in a later stage of change when they began treatment for their offense(s). Given the possibility of a significant time lapse between their arrest for a sexual offense and actually starting treatment, it is possible that the participants entered treatment beyond the contemplation

stage. McConnaughy et al. (1989) reported that most people entering therapy have already moved beyond the precontemplation stage.

The present results could also be affected by the social desirability theory. Although anonymity and confidentiality were addressed prior to completing the questionnaires to reduce a socially desirable response set, participants may have responded in such a way that was not an accurate reflection of their actual stage of change. Although researchers have shown a low correlation between the Jackson Social Desirability Scale and the SCQ (Prochaska et al., 1988, 1990), Lerner (1990) found that adolescent delinquent participants tended to respond to the SCQ in a socially desirable manner. Results indicated moderately significant correlations (+/- .25) between the Jackson Social Desirability Scale and the scale scores for stages Precontemplation and Action. Despite efforts to increase honesty of responses through procedures and administration, it is possible that the results of the present study are consistent with a socially desirable response set. The present findings suggest that in future application of the model with adolescent sex offenders, socially desirable responses must be assessed with an empirical questionnaire.

Another possible factor in the present findings is that participants may have had difficulty understanding the items of the SCQ. Although the SCQ has a reading grade level of 5.5 (Corel, 1996), 30% of participants indicated that they did not consider themselves to be ranked within the conventional educational system, selecting "other" on the demographic questionnaire. It is possible that these participants had difficulty reading and/or understanding the items on the questionnaire, resulting in an inaccurate assessment of the participants' stage of change membership. A pilot study was conducted and item

comprehension was not an issue raised by the participants who were all enrolled in a regular high school. Given the nature of this population, it is possible that adolescent sexual offenders have educational difficulties as well as social and legal problems. A comprehensive assessment of participants' reading ability and comprehension should be considered when using the SCQ with this population.

Finally, people who are trying to change multiple, possibly severe, symptoms may differ in how they score on both the stages of change measures and the processes of change measures compared to clients with only one problem. The current theory reflects the fact that it was developed using clients who were targeting a specific behavior change, namely smoking. Koraleski and Larson (1997) suggested modifying the theory so that it may be more applicable to multifaceted psychotherapy problems such as sex offending.

Processes of Change

The Transtheoretical theory posits that during the Precontemplation, Contemplation, and Preparation stages, individuals employ processes of change subsumed under the Experiential factor. During the Action and Maintenance stages, individuals employ processes of change subsumed under the Behavioral factor. The current study failed to differentiate between the three stages of change used in the analysis (Contemplation, Preparation, and Action) based on the Experiential or Behavioral factors. Even when specific items that failed to contribute to the higher order factors were removed, thus increasing the internal consistency of the individual components, no significant differences were found between the three stages.

Koraleski and Larson (1997) found no difference between participants in the Contemplation, Preparation, and Action stages based on the Experiential factor but did based on the Behavioral factor. They found that participants in the Action stage had significantly higher Experiential scores than those in the Contemplation and Preparation stages. One fundamental difference between the present sample and Koraleski and Larson's sample is that in the latter sample, participants sought out treatment, while the majority of participants in the present sample were forced into treatment. Koraleski and Larson's results are consistent with the theory in that participants/clients entering therapy do so with the motivation to make changes. They enter therapy at a later stage and employ processes that enable actual change. Participants in the present study are more externally motivated and may be less willing to make significant changes.

When looking at the different processes of change with adolescents and exercise behaviors, Cooney (1996) found the processes effective only in differentiating between adolescents in the Precontemplation stage from those in the Maintenance stage. She concluded that the processes of change measure needs further refinement and adjustment before it can be efficaciously used with an adolescent population. Adolescents do not have the same degree of control over things occurring in their lives as do adults, especially adolescents within the juvenile justice system. Some of the items may have been irrelevant or out of the control of the participants, and this may have caused responses across the four items for each process to vary considerably. The lower alpha coefficients of the various processes of change may also be suggestive of the fact that adults and adolescents are different on the processes and strategies that are relevant to them or within their control. Cognitive development theory would also support these

findings, in that adolescents may have difficulty differentiating between some of the processes due to maturational limitations in domain-specific knowledge and the acquisition and use of metacognitions.

Nigg (1996) found only three processes useful in discriminating among the different stages of change in an adolescent population: Counterconditioning, Self-Efficacy, and Environmental Reevaluation. Unfortunately, the three processes illustrate a mix of both higher order factors. Finally, Lerner (1990) reported that as the delinquent adolescents progressed from the Precontemplation stage toward the Maintenance stage of change, they employed more processes of change.

Chapter 5

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

Summary

There is a fundamental lack of knowledge about the etiology and treatment of adolescent sex offenders. Despite the increased interest in treating this population, no comprehensive theory or model exists to help guide treatment interventions. Although the number of treatment programs has increased by almost 800 percent each decade since 1980, providers are still working with offenders without the benefit of a guiding theory (Roberts & Camasso, 1991). The purpose of this study was to apply the Transtheoretical model of change to adolescent sex offenders in treatment and to determine the utility of the model as a tool in treating adolescent sex offenders in treatment. The Transtheoretical model of change was developed because a comprehensive theory of the change process was lacking. The model offers an integrated perspective of where individuals are in the change process and how they are changing. The model has been successfully applied to many different problem behaviors with the adult population, including adult survivors of childhood sexual abuse (Koraleski & Larson, 1997). It has also been successfully applied to adolescents when examining delinquent behaviors (Prochaska et al., 1994), exercise acquisition (Nigg, 1996), and adolescents participating in a day treatment center for psychiatric issues (Blum & Phares, 1996). However, the model has never been tested on adolescent sex offenders in treatment. In order to assess the usefulness of the model with

this population, 53 adolescent sex offenders volunteered to participate in the present study. They represented eight states and ranged in age from 12 to 19 years. They consented to completing a demographic form and the Stages of Change and Processes of Change Questionnaires.

The results of this study lend limited support to the applicability of the Transtheoretical model of change in work with adolescent sex offenders in treatment. Participants were categorized into the five different stages based on their scores on the Stages of Change Questionnaire. The theory and other research looking at people in therapy support the distribution of participants from this study into the five stages. The tenant of the theory that individuals differentially used processes of change depending on their stage of change was not supported. The ten processes were reorganized into two higher order factors, one experiential and one behavioral. The participants in the three middle stages did not differentially use the higher order factors as described by the theory and as supported by past research.

Conclusions

The following conclusions are derived from the results of this study:

(1) Adolescent sex offenders in treatment are not represented in the Precontemplation and Maintenance stages of the model due to the operational definition of the two stages. Precontemplation means that the individual is not yet aware that a problem exists, and Maintenance means that the problem no longer exists.

(2) Progression through the stages of change is based on a temporal model. Membership in stage of change for adolescent sex offenders is not predictable based on

amount of time the adolescent has been in treatment. Adolescent sex offenders entering treatment do not necessarily endorse items belonging to an early stage of change.

(3) When the Stages of Change Questionnaire is statistically reconfigured to include items that support a three-stage change model as compared to the original five-stage model, the stage of change does not vary based on the length of time the adolescent has spent in treatment.

(4) Adolescent sex offenders in the three stages of change did not differentially use the experiential processes or the behavioral processes. This finding is partially consistent with previous research. Koraleski and Larson (1997) reported that their sample of adult sex abuse survivors differentially employed behavioral processes depending on their stage of change membership but did not for the experiential processes.

(5) When items that did not load on the individual factors were discarded from the analysis, adolescent sex offenders in the different stages of change did not differentially use the experiential or behavioral processes. This suggests that the instruments are inadequate in their present form with adolescent sex offenders in treatment.

(6) The adolescent change process does not follow a linear progression as described by the Transtheoretical model of change.

(7) The Transtheoretical model of change is not applicable to clinicians working with adolescent sex offenders in treatment. This does not mean, however, that the Transtheoretical model of change is without promise. A number of recommendations are discussed that should ameliorate the reliability and validity of the model with respect to adolescent sex offenders.

(8) Adolescents utilize a different, unidentified process of change.

(9) It is possible that adolescent sex offenders represent a unique population. Given the lack of etiological understanding of the development of sex offenders, it is possible that sexual offending behavior is more biologically based than other more common problems. The Transtheoretical Model of Change has shown promising results with a host of common problem behaviors. Smoking, weight gain, and lack of exercise all represent behaviors that are well understood etiologically, and the Transtheoretical Model of Change has been useful in understanding the change process. This same model may be lacking in the sophistication needed to accurately describe adolescent sexual offenders' change process.

Implications

The implications of the present study are the following:

(1) The current Transtheoretical model is not valid for adolescent sex offenders in treatment.

(2) Therapists working with adolescent sex offenders might expect more forward and backward movement within the stages of change.

(3) Lack of significant results may be related to the developmental levels of the participants: cognitive and intellectual functioning as well as reading level.

Recommendations for Future Research

(1) The number of participants was small (n = 53) and is reflective of the difficulty in accessing adolescents in the juvenile justice system. Increasing the number of participants would help increase the internal consistencies of the processes as well as

increase the overall power of the study. It would be recommended that the researcher be part of a system or organization and have easy access to difficult populations like those in the present study. The most difficult component of this study was accessing the participants. Having a system already in place would serve the researcher well.

(2) The self-report nature of the instruments may create inherent methodological problems, namely a social desirability bias. Using an instrument that assesses for a social desirability response set like the Jackson Social Desirability Scale would be useful. Although such a measure is rarely used with adult populations, it would seem appropriate with a population like adolescent sex offenders. These youths are usually involved with the legal system and would be invested in appearing more socially desirable than they actually are.

(3) The measures used (SCQ and PCQ-OF) were developed using an adult population. The items may be more relevant to adults than adolescents. To ensure appropriateness of the items for adolescents in general and adolescent sex offenders specifically, it is suggested that the same process in creating the original questionnaires be used to create questionnaires that are more relevant and appropriate for adolescents. Making the items more relevant to the adolescent population might increase the internal consistency of each process and perhaps result in greater differentiation between the five stages.

(4) The Processes of Change Questionnaire used in this study was modified to make it relevant to participants in treatment for a sex offense. Therefore, there is no empirical support for the instrument as it was administered.

(5) Given the developmental changes that occur during adolescence, it is

recommended that the participants be regrouped by age and the data analyzed taking these developmental differences into account.

(6) Cognitive development, intellectual functioning, and reading levels need to be assessed and considered when studying adolescent sex offenders.

Recommendations for Practice

The data suggest that the instruments used to assess the stages and processes of change are not valid for the population investigated in this study. Although the theory may lend therapists some theoretical framework to conceptualize the change process of their clients, this is all it can offer at this time.

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APPENDIX A

Informed Consent

This is a study designed to try to speed up the treatment of teenage sex offenders. Specifically, I am trying to develop a tool for your counselor that will help him/her better treat you for your offenses. If you are interested in participating in this study, please read and sign the informed consent below and seal it in one of the envelopes. Then fill out the next three pages and seal them in the other envelope and mail everything to me. This way, your answers on the questionnaires cannot be linked to your name.

Informed Consent

You must read, sign, and return this sheet separately from the rest of this packet.

I, _____, give permission to participate in the research done by Stephen Mailloux, M.S., and Reece Chaney, Ph.D. (Department of Counseling, Indiana State University, Terre Haute, IN 47809, Tel. [812] 237-2868), on the date of _____.

I have been fully told of the nature of the research, any risks that participation may involve, and the uses of any personal information that I will be asked to write. I am aware that I may stop participating in the study at any time, and that I will not be penalized in any way for not participating. I am aware that my responses are confidential (secret) and that no one will have access to them or read them other than the researchers. I am aware that my responses will in no way be used by any individual for the purposes of making a decision about my future and that I have a right to examine the overall results of the research. I understand that the researchers are in no way responsible for any behavior that may occur as a result of participating in this study.

I sign below to indicate that I give permission to participate freely, having completely read this document.

Signed: _____

Printed name: _____

Parent or Guardian when appropriate:

Signed: _____

Printed name: _____

APPENDIX B

Demographic Questionnaire

This form will ask you some personal information. Please complete it as **honestly** and **thoroughly** as you can. Do NOT put your name anywhere on this form. All information will be kept strictly confidential. Thank you for your time and effort.

Today's date: _____

Racial Identity: (check one)
_____ White/Caucasian _____ Black/African-American
_____ Latino/Hispanic _____ Asian
_____ Native American _____ Bi-Racial
_____ Other (please specify)_____

Age: _____ What month were you born? _____

What grade are you in: _____ Freshman _____ Sophomore _____ Junior _____ Senior
_____Other

Is this the first time you have been in treatment for a sex offense? ___ Yes ___ No

How long have you been in treatment this time? _____

If you are no longer in treatment, how long have you been out of treatment? _____

Thank you for completing these questions. Please continue with the rest of the packet. When you are finished, put the packet in the envelope and mail it back to me.

APPENDIX C

Stages of Change Questionnaire

Listed below are a number of statements concerning a personal problem. Read each item and decide how you feel about the statement. It's best to go with your first judgment and not spend too long thinking about one question. Circle your response (the number) in the space next to each question.

1 - Strongly Disagree
2 - Slightly Disagree
3 - Agree
4 - Really Agree
5 - Strongly Agree

For example: 1 **2** 3 4 5 I like to make cookies.
(In the example above this person does not really like to make cookies; had this person really liked to make cookies, he would have circled number 4.)

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1 2 3 4 5 As far as I'm concerned, I don't have any problems that need changing.
1 2 3 4 5 I think I might be ready for some self-improvement.
1 2 3 4 5 I am doing something about the problem that had been bothering me.
1 2 3 4 5 It might be worthwhile to work on my problem.
1 2 3 4 5 I'm not the problem one. It doesn't make sense for me to be here.

1 2 3 4 5 It worries me that I might slip back on my problem I have already changed, so I am here to get help.
1 2 3 4 5 I am finally doing some work on my problems.
1 2 3 4 5 I've been thinking that I might want to change something about myself.
1 2 3 4 5 I have been successful in working on my problem but I'm not sure I can keep up the effort on my own.
1 2 3 4 5 At times my problem is difficult, but I'm working on it.

1 2 3 4 5 Being here is pretty much a waste of time for me because the problem doesn't have to do with me.
1 2 3 4 5 I'm hoping this place will help me to better understand myself.
1 2 3 4 5 I guess I have faults, but there's nothing that I really need to change.
1 2 3 4 5 I am really working hard to change.
1 2 3 4 5 I have a problem and I really think I should work on it.

1 2 3 4 5 I'm not following through with what I had already changed as well as I hoped, and I'm here to prevent a relapse of the problem.
1 2 3 4 5 Even though I'm not always successful in changing, I am at least working on my problem.
1 2 3 4 5 I thought once I had resolved the problem I would be free of it, but sometimes I find myself struggling with it.
1 2 3 4 5 I wish I had more ideas on how to solve my problem.
1 2 3 4 5 I have started working on my problems but I would like help.

1 2 3 4 5 Maybe this place will be able to help me.
1 2 3 4 5 I may need a boost right now to help me maintain the changes I've already made.
1 2 3 4 5 I may be part of the problem, but I don't really think I am.
1 2 3 4 5 I hope that someone here will have some good advice for me.
1 2 3 4 5 Anyone can talk about changing; I'm actually doing something about it.

1 2 3 4 5 All this talk about psychology is boring. Why can't people just forget about their problems?
1 2 3 4 5 I'm here to prevent myself from having a relapse of my problem.
1 2 3 4 5 It is frustrating, but I feel I might be having a recurrence of a problem I thought I had resolved.
1 2 3 4 5 I have worries but so does the next person. Why spend time thinking about them?
1 2 3 4 5 I am actively working on my problem.

1 2 3 4 5 I would rather cope with my faults than try to change them.
1 2 3 4 5 After all I had done to try to change my problem, every now and again it comes back to haunt me.

APPENDIX D

Processes of Change Questionnaire-Offense Form

Listed below are a number of statements concerning a personal problem. Read each item and decide how you feel about the statement. It's best to go with your first judgment and not spend too long thinking about one question. Circle your response (the number) in the space next to each question.

1 - Strongly Disagree
2 - Slightly Disagree
3 - Agree
4 - Really Agree
5 - Strongly Agree

For example: 1 2 3 4 5 I like to make cookies.
(In the example above this person does not really like to make cookies; had this person really liked to make cookies, he would have circled number 4.)

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1 2 3 4 5 I remove things in my room that remind me of my sex offenses.
1 2 3 4 5 I am learning how to control my sexual behavior.
1 2 3 4 5 I tell myself that I can keep from re-offending.
1 2 3 4 5 I remember information people have personally given me on how to control my sexual behavior and keep it appropriate.
1 2 3 4 5 I am beginning to understand how sexual abuse is hurting our society.

1 2 3 4 5 I react emotionally when I think about what I have done to my victim.
1 2 3 4 5 I am rewarded by others when I do well in treatment.
1 2 3 4 5 I figure that being happy with myself includes remaining offense free.
1 2 3 4 5 Reading a story about a sexual abuse victim would make me feel sad.
1 2 3 4 5 I struggle with the issue that sex offending goes against my view of myself as a caring and responsible person.

1 2 3 4 5 I have someone who supports me in my effort to graduate from sex offender treatment.
1 2 3 4 5 I find that keeping my mind busy is a good substitute for thoughts related to sex offending.
1 2 3 4 5 I did something nice for myself in return for progressing in treatment.
1 2 3 4 5 I can be open with at least one special person about my sexual offending experiences.
1 2 3 4 5 I rewarded myself for doing well in treatment.