

Copyright

by

Kristin Lindsay Savicki

2007

The Dissertation Committee for Kristin Lindsay Savicki certifies that this is the approved
version of the following dissertation:

**Working Alliance, Readiness for Change, and Theory of Change as Predictors of
Treatment Success Among Incarcerated Adolescents**

Committee:

Michele Guzmán, Supervisor

Alissa Sherry

William Koch

Mary Mulvaney

David Springer

**Working Alliance, Readiness for Change, and Theory of Change as Predictors of
Treatment Success Among Incarcerated Adolescents**

by

Kristin Lindsay Savicki, B.A; M.A.

Dissertation

Presented to the Faculty of the Graduate School of

the University of Texas at Austin

in Partial Fulfillment

of the requirements

for the Degree of

Doctor of Philosophy

The University of Texas at Austin

August 2007

UMI Number: 3284683

UMI[®]

UMI Microform 3284683

Copyright 2007 by ProQuest Information and Learning Company.
All rights reserved. This microform edition is protected against
unauthorized copying under Title 17, United States Code.

ProQuest Information and Learning Company
300 North Zeeb Road
P.O. Box 1346
Ann Arbor, MI 48106-1346

Acknowledgements

I would first like to thank the members of my committee for their support and enthusiasm for this project. In particular I would like to thank my dissertation supervisor, Michele Guzmán, for her thoughtful and meticulous feedback throughout the dissertation process. Joshua Westheimer, Michelle Steinley-Bumgarner, Jennifer Hernandez and Jennifer Meuse made the study's qualitative findings possible, contributing invaluable suggestions to shape the coding process and hard labor to execute it. I would like to thank Michele Steinley-Bumgarner further for her indefatigable willingness to share her statistical and design expertise, and Vic Savicki for his unflagging enthusiasm for editing. Finally, my wife Morgan Kelly contributed to this project in countless ways, from her gameness to travel to Texas to follow my education, to her extraordinary ability to offer enthusiastic and insightful comments about delinquent youth even upon the hundredth time I made her discuss them.

**Working Alliance, Readiness for Change, and Theory of Change as Predictors of
Treatment Success Among Incarcerated Adolescents**

Publication No. _____

Kristin Lindsay Savicki, Ph.D.

The University of Texas at Austin, 2007

Supervisor: Michele Guzmán

The working alliance has been defined as a collaborative agreement between therapist and client on the goals and tasks of therapy, together with a bond of mutual trust (Bordin, 1979). The link between a strong working alliance and positive therapy outcomes has received widespread empirical support (Horvath & Symonds, 1991; Horvath & Luborsky, 1993). In light of this robust finding, Duncan and Miller (2000) suggest that, to increase their effectiveness, therapists may attend to and work within “the client’s theory of change.” These findings and suggestions typically concern the adult client willingly attending therapy. This study investigated how they might apply to juvenile delinquents.

The goal of the current study was to examine the relationship between working alliance and treatment outcomes with delinquent youth. In addition, it aimed to

investigate an element of the working alliance suggested to be of particular importance to these youth, their perception that the treatment process “fits” their own theory of change. Given its impact on treatment of mandated clients, readiness for change was also examined for its relationship with working alliance and treatment outcomes.

One hundred and fourteen incarcerated youth were asked to complete a series of surveys at baseline, 2-month, and 4-month follow-up. The relationship between the predictor variables (working alliance, readiness for change, treatment fit with change theory) and criterion variables (staff-rated treatment progress, rule violations, and predicted post-detention success) were examined with multiple regression. Results demonstrated that youths’ baseline ratings of treatment fit with change theory predicted self-reported treatment progress 4 months later, even when controlling for readiness for change. Treatment fit with change theory was related to the working alliance in this sample, and was a better predictor of self-reported treatment gains than the working alliance. Results suggest that treatment fit with change theory may be a productive way to conceptualize the alliance construct in work with incarcerated youth.

Qualitative data on theories of change was elicited from participants and content analyzed for themes. Contributions to the developing field of desistance theory and implications for clinical practice are discussed.

Table of Contents

List of Tables and Figures	ix
Chapter 1: Introduction	1
Juvenile Delinquency	1
Working Alliance	2
The Client's Theory of Change	4
Readiness for Change	6
Current Study	7
Hypotheses	9
Significance of the Study	10
Chapter 2: Review of the Literature	14
Juvenile Justice in the United States of America	14
Working Alliance	20
Theories of Change	26
Readiness for Change	34
Chapter 3: Method	42
Design	42
Participants	42
Procedures	47
Instrumentation	48
Analysis	57
Chapter 4: Quantitative Results	62
Descriptive Statistics	62
Analyses	63
Other Findings	70
Summary	73
Chapter 5: Discussion of Quantitative Findings	75
Relationship Between the Working Alliance and Treatment Fit With Change Theory	76
Role of Readiness for Change	79
Treatment Fit with Change Theory as an Early Predictor of Treatment Gains ... 81	81
Strengths and Limitations	86
Chapter 6: Qualitative Findings	90
Descriptive Findings	90
Analysis of Qualitative Findings	104
Summary of Findings	111
Discussion of Findings	113

Final Thoughts	127
Appendices	129
Appendix A: Consent Forms	130
Appendix B: Demographic Questionnaire	136
Appendix C: Adolescent Working Alliance Inventory	137
Appendix D: Theory of Change Survey, Original Version	138
Appendix E: Theory of Change Survey, Expanded Version	139
Appendix F: Contemplation Ladder	140
Appendix G: Post-Detention Likelihood to Succeed Scale	141
References	142
Vita	159

List of Tables and Figures

Figure 1 : Hypothesized relationships among variables	9
Figure 2 : Treatment fit with change theory as a moderator of the relationship between readiness for change and treatment gains	10
Table 1 : Crimes resulting in current incarceration, by self-report.....	44
Table 2 : Descriptive statistics for predictor and criterion variables	63
Table 3 : Intercorrelations among variables, baseline	64
Table 4 : Intercorrelations among variables, 2-month follow-up	64
Table 5 : Intercorrelations among variables, 4-month follow-up	64
Table 6 : Correlations between predictor variables (measured at baseline) and treatment gains at 4-month follow up	65
Table 7 : Results of the simultaneous regression analyses: Prediction of concurrent treatment success	66
Table 8 : Results of the simultaneous regression analyses: Prediction of treatment gains at 2-month follow-up.....	68
Table 9 : Results of the simultaneous regression analyses: Prediction of treatment gains at 4-month follow-up.....	69
Table 10 : Youth ratings of “fit” between their change theories and help provided by specific types of treatment and staff – 2-month follow up	71
Table 11 : Youth ratings of “fit” between their change theories and help provided by specific types of treatment and staff – 4-month follow up	71
Table 12 : Theories of change among incarcerated youth	92
Figure 3 : Sources of action indicated in participants’ theories of change	100
Table 13 : Personally controllable, in-treatment tasks related to change	102
Figure 4 : Major categories of change theory, separated by racial/panethnic category	106

[Figure 5](#): Major categories of change theory, separated by sex of participant 107

[Figure 6](#): Major categories of change theory, separated by offense type 108

Chapter 1: Introduction

Juvenile Delinquency

Juvenile delinquency – crime committed by minors – presents a number of problems for society. First, there is the damage done by the delinquent behavior itself: property vandalized and stolen, people victimized, assaulted, and killed. Second, there is the problem of what to do with delinquents themselves. In response to adults who commit crimes, society alternates between the goals of punishment and rehabilitation. This conflict in goals is all the more difficult to resolve when we are dealing with adolescents, whose young age inspires both the hope that they can change and the reluctance to “write off” lives which have barely begun (Office of Juvenile Justice and Delinquency Prevention [OJJDP], 1999).

Myriad systems and programs have been developed to respond to these two concerns: preventing the harm to society posed by juvenile delinquency, and rehabilitating the delinquent adolescent so he or she can become a productive, legitimate member of society. Unfortunately, in the task of rehabilitating juvenile delinquents, both researchers and clinicians have a great deal of work still ahead. This is particularly true for serious, violent offenders. A recent meta-analysis concluded that serious juvenile offenders who underwent treatment showed only small average decreases in their re-offending (Lipsey & Wilson, 1998). While some interventions are effective for some youth, practitioners are still unable to help many youth desist from crime. Juvenile delinquency researchers have explored numerous factors that might predict what interventions work and for whom. Despite a good deal of research on treatment- and

client-related factors, we are still unable to predict well who will benefit from which interventions (Davidson, Redner, Amdur, & Mitchell, 1990; Kazdin, 1997; Walters, 2002).

Working Alliance

The struggle to predict what treatments will be effective for which individuals is a familiar one for psychotherapy researchers. A major result of psychotherapy outcomes research in the past several decades has been the repeated finding that very different types of therapies produce similar levels of therapeutic effect (Luborsky, Singer, & Luborsky, 1975; Smith & Glass, 1977; Stiles, Shapiro, & Elliott, 1986). Many researchers have taken this finding to mean that factors common to all therapies may be responsible for much of clients' improvement (Horvath & Luborsky, 1993). In the search for "common factors," a highly robust finding which has received a great deal of attention is the importance of the *working alliance* (Horvath & Luborsky, 1993). In adult psychotherapy, a widely reported finding is that the client's perception of the working alliance is one of the best predictors of therapeutic success (Bachelor & Horvath, 1999).

Bordin (1979) proposed a pantheoretical formulation of the working alliance in response to its apparent importance in therapies based on a wide range of theoretical orientations. In his formulation, the working alliance has three elements: goals, tasks, and bond. To have a strong working alliance, therapists and clients must both value and agree on the goals of treatment, perceive the tasks undertaken to achieve those goals to be relevant and effective, and experience a bond of mutual trust, acceptance, and confidence. Horvath and Greenberg (1989) describe this conceptualization of the working alliance as

one of mutuality: “Bordin's concepts of bond, goal, and task involve collaboration and hinge on the degree of concordance and joint purpose between the counselor and client. No previous conceptualization had emphasized client-counselor interdependence to this extent” (p. 225). This conception has interesting implications for therapy; it suggests that it is not enough for a therapist to present certain expert techniques, because clients’ own beliefs and expectations about therapy play an important role. The therapist must engage the client’s commitment by communicating the important links between therapy-specific tasks and the overall goals of treatment (Horvath & Luborsky, 1993).

As in most psychotherapy research, these empirical findings have generally been developed in relation to “typical” research clients: often White adults being seen voluntarily at college counseling centers. How do these findings apply to other populations? Juvenile delinquents comprise a population of great interest to treatment researchers, and are different from the “usual” research participant on many counts. First of all, they are adolescents, and they are more likely to be male, members of historically disadvantaged ethnic groups, and of lower socioeconomic status. In addition, their participation in treatment is mostly if not completely involuntary. Findings from general psychotherapy research cannot be generalized a priori to this group, but must be tested separately.

The shift to a more collaborative approach based on the working alliance has been slow in coming to work with juvenile delinquents for good reasons. When we, as a society, lock up or mandate treatment to a juvenile offender, the concern is with stopping crime and maintaining public safety. Society is not then generally interested in these

offenders' ideas: from their perceptions of their counselors, their opinions about interventions, to their own theories of change. Secondly, much of the research on working alliance in general psychotherapy has been driven by interest in increasing client satisfaction, engagement, and retention in therapy. These concerns at first appear irrelevant when treatment is mandated, especially when youth are incarcerated and do not have the option of “dropping out” of treatment. However, engagement with treatment may be more relevant to juvenile delinquents than it appears at first glance. Even incarcerated youth have a choice about their involvement in treatment. They may be required to attend, but their levels of engagement may vary widely. Inspiring youth engagement with treatment – by providing treatment that youth perceive to be relevant and effective – may be a prerequisite to achieving positive results (Adams, 1997). In the area of juvenile delinquency, there is a much at stake in client engagement with a treatment program. Juveniles will not be in state custody forever. When they are released, they will have a great deal of autonomy over their choice to continue following treatment values and goals, or to revert to pre-treatment behaviors. Therefore, low levels of engagement may be related to low internalization of treatment goals and thus to continued criminal offending post-treatment. Treatment engagement may be an important factor in ultimately reducing juvenile delinquency, and thus it is important to consider how clinicians might increase treatment engagement in correctional settings.

The Client's Theory of Change

How can clinicians build effective alliances with delinquent youth? DiGiuseppe, Linscott, and Jilton (1996) argue that “traditional theories of child and adolescent

psychotherapy appear to have overly focused on the bond as necessary and sufficient...they have neglected the goals and tasks aspect of the alliance” (p. 87). Indeed, forming a relational bond may be difficult with delinquent youth in particular, as the ability to form a bond is generally reduced in clients with interpersonal difficulties (Moras & Strupp, 1982) or with a history of maltreatment (Eltz, Shirk, & Sarlin, 1995), both of which are common characteristics of delinquent youth (Glueck & Glueck, 1950; Greenwald, 2002). So where can treatment providers make a start at engaging these youth in a productive working alliance, such that treatment gains can be made and sustained? When a bond is difficult to establish, it may be that the remainder of the working alliance – agreement on the goals and tasks of treatment – takes on greater importance.

DiGiuseppe, Linscott, and Jilton (1996) assert that the involuntary nature of most adolescent psychotherapy in general, as well as adolescents’ developmental need for self-determination, makes agreement on goals and tasks a more prominent concern in work with this population. Adolescents with conduct disorders often fail to perceive the relevance of treatment and are more likely to drop out when treatment does not meet their expectations (Kazdin & Wassell, 1999). Delinquent youth in treatment programs may be incarcerated or in an alternative to incarceration. As involuntary clients, they may disagree with their need for treatment in the first place. In order for treatment to work, then, treatment providers must undertake the difficult task of somehow forging an agreement with youth about what goals are acceptable and what tasks will credibly lead to their achievement.

It has been suggested that one of the best ways to forge agreement on the goals and tasks of therapy is for the therapist to pay attention to the beliefs and expectations which clients bring with them; what Duncan and Miller (2000) refer to as “the client’s theory of change.” By awareness and communication about the client’s theory of change, the therapist-client dyad can craft goals and tasks that the client will perceive as relevant and effective. This idea is not new: Wile (1977) asserted that "many of the classic disputes which arise between clients and therapists can be attributed to differences in their theories of cure" (p. 437). Attention to the client’s theory of change, then, is intended to cut through such disputes, allowing therapist and client to build a strong working relationship towards agreed-upon goals.

“Disputes which arise between clients and therapists” are a fundamental part of the relationship between juvenile delinquents and the staff and programs which detain and attempt to treat them. Attending to the client’s theory of change in the determination of the goals and tasks of treatment may be an easier place to begin the work of forming an alliance when working with delinquent youth.

Readiness for Change

The involuntary nature of juvenile correctional treatment has another major impact on the way treatment operates with this population: many youth in the correctional system may not want or be ready to make a change in their criminal behavior. It could be argued that readiness for change is the real factor determining which youth benefit from treatment and which do not. In fact, assessing readiness for change has been suggested as a method of more accurately targeting interventions to

individuals for whom they will have the most impact (Andrews, Bonta, & Hoge, 1990; Williamson, Day, Howells, Bubner, & Jauncey, 2003). However, recent research with offenders suggests a more complex picture. Studies conducting wide-scale interviews with offenders have found high levels of reported *motivation* to desist from crime among offenders, but low levels of perceived *ability* to do so (Burnett, 1992; Maruna, 2001). Farrall (2002) studied long-term outcomes among ex-offenders on probation, and found that offenders' initial claims of motivation to live a crime-free life did not have a simple effect on their eventual success or failure, but interacted with their perception of obstacles in their lives, and amount of collaborative help they received from probation officers. In other words, readiness for change worked hand in hand with offenders' perceptions of intervention; offenders had to not only be motivated to desist from crime, but also believe that the intervention they were offered provided a credible means of helping them to overcome obstacles and become more capable of successful desistance from crime. The current study proposes that although readiness for change may have its own, direct effect on engagement with treatment and reduction in criminal behavior, it can produce even stronger effects if treatment providers "harness" juvenile offenders' readiness for change by providing treatment that youth perceive to "fit" within their own theories of change.

Current Study

The current study examined the relationship between incarcerated youths' ratings of the working alliance and gains they made in treatment in following months. The study also contained a qualitative component in which youth were asked about their own theories of change.

The study first attempted to replicate findings in the general psychotherapy literature that show a relationship between the working alliance and therapeutic gains. Then, the study tested a specific hypothesis about this relationship: that the working alliance precedes therapeutic gains, and thus can be used to predict future progress even when current treatment success is not yet evident.

The current study also proposed a new construct related to the working alliance, which we refer to as “treatment fit with change theory.” Based on theoretical work by Duncan and Miller (2000), it was proposed that one way to bring about agreement with the goals and tasks of therapy (a key aspect of the working alliance) is to tailor treatment goals and tasks to “fit” within the client’s own theory of change. Based on a number of characteristics common to delinquent adolescents and correctional treatment settings, it was proposed that “treatment fit with change theory” would be a productive way to understand and measure a working alliance-like construct among incarcerated youth.

The current study examined the ability of two variables to predict delinquent youth’s success in correctional treatment – 1) youth-rated working alliance, 2) youth-rated treatment fit with change theory. Youth-reported readiness to change was controlled as a possible confound. Treatment success was operationalized by three criterion variables: two staff-observed measures of behavior (1) treatment phase level, and 2) number of rule violations) and one youth-rated self-report measure of future behavior (3) youths’ own predictions of whether or not they are likely to succeed after incarceration).

Hypotheses

Hypothesis 1. It was hypothesized that the two alliance-related variables (working alliance and treatment fit with change theory) would be correlated, as treatment fit with change theory was meant to tap a working alliance-like construct with particular relevance to incarcerated youth.

Hypotheses 2. Secondly, it was hypothesized that treatment fit with change theory would be associated with treatment gains, and that this association would be equal to or stronger than the association between the working alliance and treatment gains.

Hypothesis 3. Thirdly, it was hypothesized that the association between the alliance and treatment success would *not* be simply due to youths' readiness for change. In other words, it was hypothesized that alliance-related variables would significantly predict treatment success even after controlling for readiness for change.

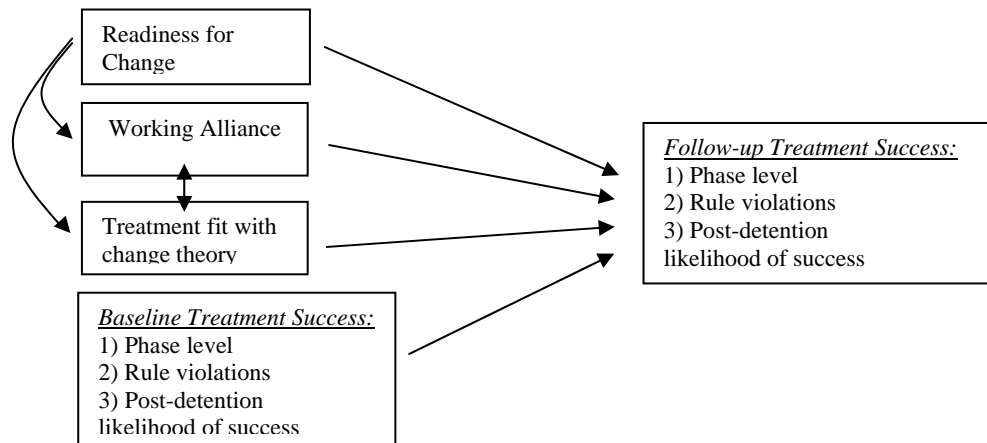


FIGURE 1. Hypothesized relationships among variables: readiness for change, working alliance, and treatment fit with change theory predict treatment success variables at follow-up, when controlling for baseline levels of treatment success.

Hypothesis 4. Fourthly, it was hypothesized that treatment fit with change theory would also predict later treatment *gains*, even while controlling for readiness for change (Figure 1).

Hypothesis 5. Lastly, it was hypothesized that the effect of readiness for change on treatment success and treatment gains would be moderated by treatment fit with change theory, such that youth who reported high readiness to change *and* high treatment fit with change theory would demonstrate more treatment success and treatment gains than youth who reported a high readiness for change but low treatment fit with their change theory (Figure 2).

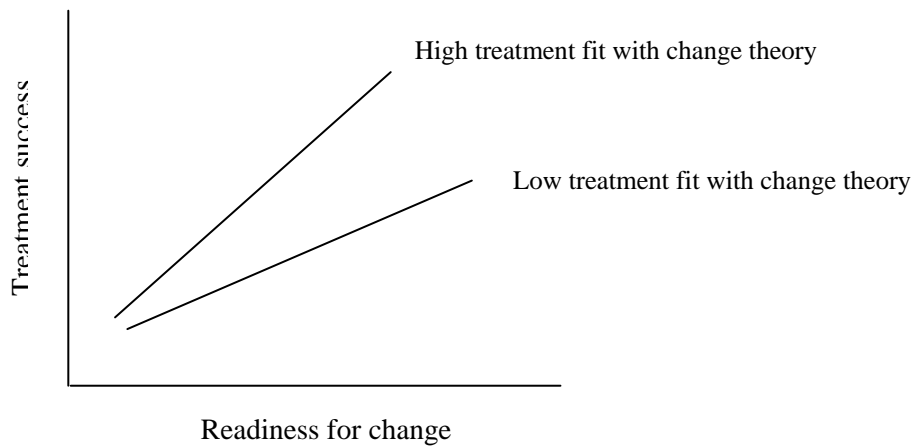


FIGURE 2. Treatment fit with change theory as a moderator of the relationship between readiness for change and treatment gains.

Significance of the Study

The current study makes several significant contributions in relation to other studies investigating the working alliance and treatment approaches with delinquent youth. First, the assertion that the working alliance is linked to treatment outcomes has, thus far, little empirical support in work with this population. Only one known study has

examined the relationship between working alliance and outcomes in treatment for juvenile delinquents, and its results were mixed (Florsheim, Shotorbani, Guest-Warnick, Barratt, & Hwang, 2000). If youth-reported working alliance is in fact associated with treatment success, this would suggest it is an important variable for research.

Beyond a simple test for a relationship between the alliance and outcomes, the current study aimed to test a specific hypothesis about the mechanism underlying this relationship: that early measure of the working alliance *precedes and predicts* therapeutic gains. If it could be shown that the working alliance has utility in predicting later therapeutic gains, over and above pre-treatment functioning, then clinicians would be on firm empirical ground in using measures of the working alliance to monitor treatment progress. Clinicians would then also know that direct work on strengthening the alliance could be a useful technique to improve the likelihood of therapeutic success.

By examining youths' theories of change, this study adds further insight into how to build working alliances with delinquent youth. If, as hypothesized, youth perception of treatment's "fit" with their change theory is correlated with the working alliance and predictive of progress in treatment, this too can be used as a clinical tool. In the process of the study the investigator created a survey which treatment staff can ask youth to complete. Youth's responses on this survey may help treatment staff to assess a youth's theory of change and whether or not that youth perceives treatment tasks to fit his or her theory. This instrument, then, may help staff obtain useful information on how to engage a particular youth in treatment.

This study also examined the role of readiness for change. Often, when youth are not progressing in treatment, the default explanation is “they did not want to change.” However, this explanation does not provide much help to the treatment professional in how best to work with these youth. The proposed study sought to distinguish between youth experiencing treatment failure related to lack of readiness for change, and those who are ready for change but have been unable to engage with treatment because they do not see it as helpful to them in achieving change. This study’s findings may allow staff to target interventions more efficiently to these two different types of youth.

The study also qualitatively examined youths’ theories of change. By describing the content and patterns of youths’ theories of change, we can gain understanding of how youth think about the movement towards a crime-free life. This qualitative examination adds to a new and growing body of research on the process of *desistance*: how, over the life course, individuals manage to reduce or quit their previous criminal activity and build new, crime-free lives. Maruna, Immarigeon, and LeBel (2004) point out that the field of criminology is following a movement in another field – addiction research – from an exclusive focus on “treatment” of substance use to a larger concern with “recovery.” This change is based on the understanding that treatment may play a relatively minor role in the larger process of recovery. It is suggested that criminology would also be more productive if treatment is viewed as just one potential part of the larger process of desistance from crime. Treatment may play a role in the “larger process” of desistance, but so may family support, social forces, environmental resources, and individuals’ own efforts at self-change. Acknowledging the limitations of treatment’s role may actually

help treatment work better. As Maruna et al. (2004) suggest, understanding and recognizing the “natural” process of reform from offenders’ own points of view can help clinicians to “design interventions that can enhance or complement these spontaneous efforts” (p. 16). The current study aimed to learn how desistance is seen from the perspective of delinquent youth themselves, thus adding to the body of knowledge that may make clinicians better able to design interventions that can support youth in building crime-free lives.

Chapter 2: Review of the Literature

Juvenile Justice in the United States of America

The Juvenile System

A separate court system to handle juveniles was created in this country in 1899, based on the belief that youth committing crimes need to be treated differently from adult offenders. Many differences exist between the adult and juvenile systems. For instance, the juvenile system focuses on the individual rather than the specific offense; while when adults are found guilty they are convicted of a specific offense, juveniles are simply “adjudicated delinquent.” Another divergence is in the two systems’ relative emphases on punishment vs. rehabilitation. While the juvenile system shares with its adult counterpart the goals of protecting public safety and imposing retribution for crimes, traditionally a larger emphasis has been placed on treatment. The relative focus on retribution vs. treatment shifts over time, however, with shifting societal attitudes. For instance, following a focus on “law-and-order” in politics and society in the 1990’s, all but three states passed more punitive laws dealing with juvenile crime (OJJDP, 1999).

The juvenile court system handled 1.6 million delinquency cases in the year 2000 (the last year for which these statistics are available). In 23% of these cases the most severe offense was against a person (primarily assault, but also including rape, homicide, robbery, etc), in 41% the offense was against property (primarily larceny-theft but also including vandalism, trespassing, etc), 12% represented drug law violations, and 23% involved public order offenses (obstruction of justice, weapons law violations, liquor law violations, disorderly conduct, etc). Demographically speaking, 68% cases involved

White youth, 26% represented Black youth, and youth of “other races” made up 5% of cases.¹ The percentage of Black youth among delinquency cases (26%) was disproportionately high compared to their proportion (15%) in the U.S. youth population. The number of delinquency cases processed by the juvenile court increased by 43% between 1985 and 2000, and rates increased among all ethnic groups and age groups. One quarter (25%) of all delinquency cases handled in 2000 involved a female youth. Female cases rose 83% between 1985 and 2000, compared to a 34% increase in case rates for males. Juveniles age 15 and younger represented 58% of delinquency cases (Puzzanchera, Stahl, Finnegan, Tierney & Snyder, 2004).

When youth are brought to juvenile court as result of an alleged crime, the juvenile system has a wide array of interventions with which to respond. Some youths are dealt with informally, agreeing voluntarily to abide by certain rules or undergo certain treatments in order to avoid formal prosecution. Formal handling of delinquency cases has increased, however; in 2000, 58% of delinquency cases were formally handled, compared to 50% in 1989. The rates of formal handling differ for youth in different demographic groups; cases involving males were more likely to be formally handled, and cases involving Black youth were more likely to be formally handled than cases involving White youth or youth of other races. If a youth does undergo formal prosecution and is adjudicated delinquent (which, in 2000, occurred in 66% of cases

¹ The Office of Juvenile Justice and Delinquency Prevention (OJJDP) reports the race of juveniles as one of three categories: “White,” “Black,” and “Other Races.” Information on youth ethnicity is not reported, and the authors of the OJJDP report note that “throughout this report, juveniles of Hispanic ethnicity can be of any race; however, most are included in the white racial category” (Puzzanchera et al., 2004, p. 18).

taken before the court), the court must then decide among many options for the disposition of his or her case. Probation is the most common disposition; in 2000, probation was the most severe disposition in 63% of cases in which the youth was adjudicated delinquent. Probation may be just a matter of monitoring, in which youth are required to report to a probation officer on a regular basis. However, either judges or probation officers may mandate other requirements as conditions of probation. Youth may be mandated to counseling, drug treatment, or any of a number of different interventions. In 2000, 24% of youth adjudicated delinquent were ordered to an out-of-home placement. “Out-of-home placement” may refer to a wide variety of facilities, public and private, which range from state training schools with lockdown, prison-like settings, to non-secure, community facilities (such as group homes) with more home-like environments (Puzzanchera et al., 2004).

An additional option is to refer a juvenile to the adult correctional system, which can happen in a number of ways. Some offenses may be considered so severe that youth committing them are automatically excluded from the juvenile system according to state law, and will be tried and sentenced within the adult system from the beginning. Prosecutors also may have discretion in whether to try a youth in the juvenile or the adult system. However, the most common mechanism of transfer to the adult system is judicial waiver; a juvenile court judge may waive jurisdiction over a particular case and transfer the youth to criminal court. Most state laws governing transfer of youths to the adult system limit this option to youths judged to be “no longer amenable to treatment” (OJJDP, 1999).

Correctional Treatment and the Serious, Violent Juvenile Offender

Decades of criminology research have highlighted a phenomenon known as the “age-crime curve.” Crime rates accelerate during the teenage years and peak in the late teens (Laub, Nagin, & Sampson, 1998), then tend to decelerate such that by the time they reach age 28 around 85% of people called “offenders” seem to stop offending (Blumstein & Cohen, 1987). Laub and Sampson (2001) have gone so far as to suggest that “because low-rate offending is normative, especially during adolescence, criminologists should not spend much time and energy theorizing why everyone seems to commit crimes during their teen years” (p. 10). The same has been argued for correctional treatment; low rate adolescent offenders are proposed to need low-level interventions, with “graduated sanctions” being used as offenses increase in rate or severity. Most offenders, it is argued, can best be served through less-restrictive interventions such as probation and non-residential community-based programs (OJJDP, 1995). The most severe and restrictive interventions (i.e., incarceration) should be reserved for youth termed serious and/or violent juvenile (SVJ) offenders (Krisberg & Howell, 1998). Research suggests that this group tends to be chronic offenders and is responsible for a disproportionate fraction of all juvenile crime (Loeber & Farrington, 1998). SVJ offenders, if they are not transferred to the adult justice system, are often incarcerated at secure public institutions. In 1999, public juvenile facilities held 79,158 juveniles in residential custody (Sickmund, 2004).

Nearly all such institutions offer some form of treatment. Youth up to a certain age are required to attend educational programs. Vocational training is also used as a

treatment technique. In terms of psychological/behavioral interventions, these institutions may offer individual counseling, group counseling, behavioral programs, interpersonal skills training, or a combination of all of these. Institutions may also offer specialized treatment programs developed for certain types of criminal behaviors, such as sex offenses and substance abuse (Siegel & Senna, 2000).

In an attempt to discern what treatments work and how well, Lipsey and Wilson (1998) conducted a meta-analysis of 200 experimental and quasi-experimental studies on interventions for serious adolescent offenders. To limit the analysis to studies of interventions with “serious” offenders, the authors selected only studies in which all or a great majority of study participants were adjudicated delinquents, most had a prior history of person or property crimes (rather than primarily less-serious substance abuse offenses, status offenses, or traffic violations), and the referral to the intervention program was made by someone in the juvenile justice system. Separate meta-analyses were then conducted for studies of interventions with non-institutionalized adolescents (117 studies) and studies with institutionalized youth (83 studies, of which 74 took place in juvenile justice institutions and 9 in residential facilities under private or mental health administration).

In the analysis of studies with institutionalized youth (the population of interest for the current study) Lipsey and Wilson (1998) found the largest and most consistent treatment effect sizes in studies of interpersonal skills training ($n= 3$, equated² effect

² The authors calculated an “equated effect size” to estimate the effect associated with each treatment type when differences in methods and procedures across studies, as well as differences in juvenile characteristics and amount of treatment, were held constant (Lipsey & Wilson, 1998).

size= 0.49) and teaching family homes (n=6, equated effect size= 0.40). A number of other treatment types (multiple services, community residential, “other,” and behavioral programs) also received empirical support, but some had significant heterogeneity among the individual studies’ effect sizes which were averaged into the mean for the treatment type. The authors found it difficult to draw firm conclusions about the relative effectiveness of different types of interventions, due to the small number of studies in each category. In addition, treatment type was only a moderate predictor of effect size. The variable *most* related to effect size was the treatment’s administration by mental health personnel rather than by juvenile justice personnel. The authors suggest that the role of juvenile justice personnel as authorities in the institutions interferes with their ability to provide effective treatment. Abrams, Kim, and Anderson-Nathe (2005) addressed this issue in a qualitative study of how one juvenile institution balanced the goals of a punitive correctional philosophy with the goals of psychotherapeutic treatment. Their research highlights a number of ways in which these goals may conflict and hamper the effectiveness of treatment within correctional institutions.

Particularly for serious juvenile offenders, treatment failure is common (Kazdin, 1990; Kazdin, Mazurick, & Siegel, 1994). Youth in treatment often fail to show clinically significant behavioral or psychological changes (Kazdin, 1993; Mulvey, Arthur, & Reppucci, 1993). Overall, Lipsey and Wilson (1998) found a statistically significant 0.12 standard deviation unit difference in recidivism between treated youth and control group youth, equivalent to the difference between a 44% recidivism rate for treated youth and a 50% rate for the untreated control group. As the authors describe, this effect “does not

seem trivial, but is not especially impressive either” (p.318). Clearly there is still much room for improvement.

Due to the difficulty of treating SVJ offenders, and the consequences of their offenses to themselves, victims, and society, a great deal of attention is now being paid to efforts at prevention (OJJDP, 1995). “It is never too early,” runs the argument, to intervene to prevent serious juvenile delinquency, and prevention efforts may be more cost-effective and beneficial than intervening after much damage has already been done. However, as argued by the OJJDP Study Group on Serious and Violent Juvenile Offenders, it is also “never too late” (Loeber & Farrington, 1998). Interventions and sanctions can work with SVJ offenders to reduce the risk of reoffending. Lipsey and Wilson (1998) point out that the average 12% reduction they calculate hides the variation that exists in interventions for SVJ offenders; the best programs produced reductions of up to 40% in recidivism. Though prevention efforts are crucial, it is also incumbent upon us to continue working to improve interventions for youth who have already committed serious or violent offenses. There is continued need to discover what works to help SVJ offenders develop a crime-free life.

Working Alliance

Working Alliance in the Treatment of Adolescents

Faced with the difficulty of determining “what works” in therapy, psychotherapy researchers have begun to look not at specific treatment approaches but rather at factors common to *all* successful therapy. From this research, the working alliance has emerged as a useful tool in understanding and increasing therapeutic effectiveness. Though the

working alliance has been studied most with adults, it may have particular developmental relevance for adolescents. DiGiuseppe and his colleagues suggest that adolescents may be even more concerned than adults about their therapist's agreement with them on the goals and tasks of therapy, "because of the importance of developmental issues such as dependence, independence, and self-determination for teenagers" (DiGiuseppe, Linscott & Jilton, 1996, p. 87). To engage with an adolescent, then, it is important that a therapist work with the youth to identify a goal that makes therapy acceptable, or even desirable, to the adolescent. Adolescents in general, and delinquent youth in particular, often come to treatment at the behest of others (parents, schools, law enforcement) and against their own will. The development of a positive working alliance will depend, then, on helping the teenager define a personally meaningful treatment agenda. Church (1994) found that adolescents talk more about therapy or the therapeutic relationship and more frequently ask the therapist for advice when therapists present themselves as partners, encourage adolescents to work out their own solutions, show a willingness to discuss adolescents' negative feelings about the therapy and the therapeutic relationship, take responsibility for confidentiality, and provide reasonable structure for the session. Adolescent clients who experience the enhancement of personal autonomy in therapy show the highest degree of satisfaction with treatment at termination (Taylor & Adelman, 1986). A number of studies have suggested that allowing adolescents to choose their therapist, giving them treatment options from which to choose, or offering them the choice of what to discuss in therapy may enhance the relevance of and motivation for psychotherapy for the adolescent client, leading to a higher level of engagement (Church, 1994; Hanna &

Hunt, 1999; Liddle, 1995; Loar, 2001; Rubenstein, 1996). In addition to enhancing motivation, this approach may enhance expectancy effects. When a treatment fits with a client's pre-existing beliefs about their problem and the change process, clients will have greater expectations for positive change, and positive expectancy about change is a predictor of outcomes (Frank & Frank, 1991; Lambert, 1992).

Despite the general agreement that developing a collaborative working alliance is a critical step in the treatment of adolescents (Digiuseppe et al., 1996; Shirk & Russell, 1996; Slomowitz, 1991), little research has directly studied the connection between the working alliance and outcomes for delinquent youth (Colson et al., 1991). In part, this may be due to the differences between treatment settings for delinquent youth and settings in which the working alliance has traditionally been studied: inpatient vs. outpatient, multiple treatment staff vs. a single therapist, frequent staff turnover vs. all treatment occurring with one, stable therapist, long-term vs. a discrete, short-term course of treatment. Recently, however, a few studies have begun to explore the working alliance in other clinical settings, such as psychiatric hospitals and residential treatment centers (Eltz et al., 1995, O'Malley, 1990).

In one study with delinquent boys, Florsheim et al. (2000) found that working alliance measured at 3 months into treatment was predictive of lower rates of recidivism 1 year post-treatment. However, some predictions from adult working alliance research did not hold up. For instance, based on the research findings with adults, Florsheim et al. (2000) predicted that early (3 weeks into treatment) youth ratings of a positive working alliance would predict positive outcomes. However, early positive ratings actually

predicted *poor* outcomes; the author speculated that this was due to youth “faking good” early in treatment in order to placate authorities. In other words, due to the differences between treatment of delinquent adolescents and traditional psychotherapy, measures and predictions taken from the one did not immediately apply to the other. Clearly, more research is needed to explore and test the functioning of the working alliance in correctional settings.

Predictive Utility of the Working Alliance

As proposed by Bordin (1979), the working alliance is what “makes it possible for the patient to accept and follow treatment faithfully” (p. 2). Rather being a byproduct of therapeutic success, in this formulation the working alliance is what makes therapeutic success *possible*. The working alliance as a foundation for and predictor of therapeutic gains, not just something that varies with them, has received mixed attention. At stake is whether or not the working alliance can be a useful tool to understand and monitor treatment progress. If the working alliance precedes and makes possible later therapeutic gains, then early measurement of the working alliance can be a useful way to monitor whether or not treatment is on the right track (Duncan & Miller, 2000). On the other hand, if the working alliance merely *co-varies* with successful therapy, but does not precede any other variables in time, then it may be useful in understanding how therapy works but cannot be used in early prediction and monitoring of change.

In two classic meta-analyses of the relationship between the working alliance and therapeutic outcomes, Martin, Garske, and Davis (2000) and Horvath and Symonds (1991) report that the relationship is small but consistent (average effect expressed as a

correlation = .22 in Martin et al., .26 in Horvath & Symonds). However, methods used to obtain these effect sizes vary widely among studies, and have important implications for how these findings are interpreted. As Martin et al. point out,

The direct association between the alliance and outcome identified in this empirical review is supportive of the hypothesis that the alliance may be therapeutic in and of itself...However, alternative explanations for the relation of the alliance and outcome (e.g., the alliance may have an indirect effect on outcome or the alliance may interact with other interventions) cannot yet be ruled out. What is evident from this review is that the strength of the alliance is predictive of outcome, whatever the mechanism underlying that relation. (p. 446)

Some studies included in Martin et al.'s analysis (e.g. Mohl et al., 1991; Piper et al., 1991; Priebe & Gruyters, 1993) report a simple correlation between working alliance and outcomes. By not controlling for pre-treatment functioning, these studies leave open the possibility that the alliance-outcome correlation is a spurious one, due only to the phenomenon by which better-functioning clients "look better" both in their working alliance and on post-treatment outcomes.

Many of the studies Martin et al. (2000) include avoid this confound by controlling for pre-treatment functioning, such that they are measuring the association between the alliance and treatment *gains*. Even among these studies, however, few address the issue of predictive utility. A number of studies find that measures of the working alliance at the end of treatment are associated with gains that have already been made (e.g. Castonguay et al., 1996; Hatcher & Barends, 1996), while others find that treatment gains are associated with an average of working alliance ratings over the course of treatment (e.g. Eaton, Abeles, & Gutfreund, 1988; Krupnick, et al., 1994). An association between late or averaged working alliance and outcomes may suggest that a strong working alliance plays a part in treatment gains, or that improvements in treatment

go hand in hand with improvements in the working alliance. These findings are inconclusive, however, on a key theoretical question: does the working alliance *precede and make possible* later therapeutic gains, or does it parallel therapeutic gains as they are occurring? In other words, can the working alliance be used as an early predictor of change?

Some evidence does in fact support the predictive utility of the working alliance. For example, if the working alliance co-varies with therapeutic progress, then working alliance reported in a session should be associated with improvement experienced in that session. In fact, some research has suggested that the relationship between working alliance and outcome measured at the same time is fairly weak. By contrast, working alliance does seem able to predict outcomes in *future* sessions (Horvath & Symonds, 1991; Horvath, Gaston, & Luborsky, 1993; Mallinckrodt, 1995).

Two recent studies with adolescents have addressed the issue of predictive utility, by measuring the relationship between early alliance and later treatment gains. As mentioned above, Florshiem et al. (2000) found that working alliance measured at 3 months into treatment was predictive of lower rates of recidivism 1 year post-treatment, even after controlling for pre-treatment psychological and behavioral functioning. Tetzlaff et al. (2005) examined the relationship between working alliance and outcomes among youth enrolled in treatment programs for cannabis use (while these youth were not incarcerated, the authors note that 62% of participants were “involved” with the criminal justice system). After statistical control of initial substance abuse and substance-related problems, they found that the working alliance was a “small but potentially useful”

predictor of drug use both immediately post-treatment and 3 months later (p. 204). However, they did not find evidence that the working alliance predicted long-term trajectories of use (up to 30 months post-intake) above and beyond the effect of initial substance use. As the authors note, “behavior change is a complex process precipitated by multiple factors...given the numerous pretreatment, treatment, and posttreatment variables that have relevance to an adolescent’s potential for relapse/abstinence” (p. 204). Among this constellation of factors, much research is still needed to determine what, if any, role the working alliance might play in treatment success – and prediction of treatment success – among delinquent youth.

Theories of Change

In part, the struggle to improve treatment for juvenile offenders is a search for the “right” theory of how desistance happens. Professional theories of change abound, as the explicit or implicit basis for each form of correctional treatment. For instance, vocational programs are founded on the assumption that youth will desist from criminal behavior once they obtain legitimate means of success, whereas cognitive treatment is founded on the assumption that desistance will follow changes in offenders’ thinking such as stopping rationalization and increasing empathy. Unfortunately, statistics on recidivism and treatment failure among delinquent youth suggest that our current theoretical and clinical understandings are limited.

What best explains why and how youth will desist from crime, and how can treatment best help them along that path? One source of information on this subject tends to be overlooked by professionals and researchers – delinquent youth themselves. As

Goldstein (1990) suggests, delinquent youth are “delinquency experts” in a way researchers can never hope to be. There are many reasons *not* to consult delinquent youth in their own treatment: it may be argued that youth are incarcerated to be punished, not to be allowed freedom of choice in their treatment; youth may deny need for treatment in the first place, and thus be unwilling to engage in a discussion of what treatment would work best; youth may be too wrapped up in the causes of their delinquency (gang loyalties, cultures of violence, low self-esteem) to be able to see these forces and hypothesize accurately about what would help them change. I suggest that all of these arguments, although they contain validity, must be trumped by our need for information. We can hardly afford to ignore *any* potentially helpful source of information, when our current knowledge is so limited and the stakes are so high. Therefore, I will suggest a number of ways in which knowing youths’ own theories of change could potentially assist us in the treatment of juvenile offenders.

Increasing Active Participation

First, attending to a youth’s theory of change is proposed to increase active participation with treatment. Client participation in the therapeutic process has received a great deal of attention in recent years. Rather than “sick” people coming to expert therapists in need of “fixing,” strengths-based therapies conceptualize clients as “active participants hunting a more satisfying life” (Duncan & Miller, 2000, p. 66). This conceptualization grows out of decades of psychotherapy outcome research suggesting that rather than being a passive recipient of therapist skills and models, the client is the “engine” of change (Tallman & Bohart, 1999).

In a review of forty years of outcome data, Asay and Lambert (1999) conclude that clients and their strengths, resources, and relational supports account for 40 percent of therapeutic change. Prochaska, Norcross, and DiClemente (1994) argue that “all change is self-change, and therapy is simply professionally coached self-change” (p. 17). Similarly, researchers who study “natural” desistance from crime offer the rationale that we can learn from “desisters” what self-change had to occur, and use this to inform treatment. Just as therapy is only “professionally-coached self-change,” correctional treatment can be seen as an attempt to help offenders find their way sooner to change they might eventually make on their own. As Adams (1997) writes,

substantial and lasting changes in criminal behavior rarely come about only as a result of passive experience, and such changes are best conceptualized as the outcome of a process that involves significant participation by the offender, who, in many respects, acts as his or her own change agent. (p. 334-335)

If this is the case – if clients themselves are primarily responsible for change – then the most important work for a therapist is finding ways to engage the client in the process of change. Therapists do this by working to forge a positive working alliance. Duncan and Miller (2000) write:

The unequivocal link between the client’s rating of the alliance and successful outcome makes a strong case for a different emphasis in therapy – on tailoring therapy to the client’s perception of a positive alliance...Influencing the client’s perceptions of the alliance represents the most direct impact we can have on change. It houses the persuasion of the masters and gurus that we have all envied; it is the “super” technique that we dream of in our fantasy cases. (p. 75)

The authors term this approach “client-directed therapy.” They go on to suggest that the most effective way to influence a client’s perception that you are working collaboratively on agreed upon goals and tasks is to *attend to the client’s own theory on how change will occur*, and choose goals and tasks accordingly (Duncan & Miller, 2000). What is

suggested here is not necessarily that there is one “right” theory and that the client knows which it is, but that any number of theories may have some validity, just as any number of treatments may be helpful – so one might as well go with the one for which the client feels the most affinity. Client characteristics, therapist characteristics, and treatment approach can vary in any number of ways in successful therapy as long as clients are engaged, and feel they are collaboratively and effectively working towards their goals.

Can this approach be adapted to correctional treatment? Maruna (2001) reports an example of a program in which it already is. In the New York-based HIT program for offender rehabilitation, if an offender claims that he will desist from crime once he has a job, HIT provides skills training. If he claims he will desist once he gets over addiction, HIT provides drug treatment. As the program’s founder, Father Young, explains, his job is “taking away an offender’s excuses” (qtd. in Maruna, 2001, p. 143). In other words, Father Young’s approach is to take offenders’ claims of motivation to desist at face value, and work successively on each new obstacle to desistance that offenders perceive (or claim) to face. As long the program is working on tasks relevant to an offender’s own theory of change, it is harder for that offender to use what is missing as an “excuse” to disengage.

Advancing Prescriptive Treatment

For the purpose of increasing treatment participation, “attending to a youth’s theory of change” does not even necessarily mean adjusting the treatment program. Youth may already be assigned to a program and logistically this cannot be changed, or may have to be assigned to a “treatment” (for instance, incarceration) with which a youth

does not and will not agree. Some theorists who advocate that we attend to the client's theory of change make it clear that this is primarily for the purpose of engaging the client in treatment – *not* for the purpose of actually directing the course of treatment. Lazarus (1992) writes:

It would be naïve to assume that patients necessarily know what is best for them or that the therapist must comply with each of their expectations. Nevertheless, I have found that it is wise, initially, to follow the patient's script fairly closely so that adequate rapport is established. (p.243).

Though they advocate attending to the client's theory of change, Norcross and Beutler (1997) similarly assert that “it would be naïve to assume that patients always know what they want and what is best for them” (p.48). In this “rapport-driven” approach, attending to the client's theory of change is used to monitor how the client is accepting the treatment and learn better ways to “sell” the treatment. By knowing what a client's theory of change *is*, a therapist may be better able to present treatment as consistent with that theory.

Duncan and Miller (2000) argue that the above approach – attending to the client's theory of change only in order to build rapport, upon which you can get on with the “real business” of therapy – is misguided. They believe that “given time and space that privileges their ideas,” clients *do* in fact know what is best for them (p. 148). From this perspective, attending to delinquent youths' theories of change might further our ability to provide prescriptive treatment.

In the past, the search for the “right” theory has been conducted under the “one true light” assumption; that there is one, best treatment that will work for everyone all of the time (Goldstein, 1969). A more useful approach, it has been suggested, is to look to prescriptive treatment – there are probably any number of “right” theories and effective

treatments, and we need learn how to predict which youth will fit best with which treatment. The best-known research advancing prescriptive treatment is Project Match, a large study comparing three different treatments for substance-abusing adults which attempted to discover client characteristics which differentially predicted who would succeed within which treatment (Project MATCH Research Group, 1997). Project MATCH generated several clinically useful findings; for instance, clients experiencing a great deal of anger did better within a treatment (based on principles of Motivational Interviewing) that emphasized personal autonomy and non-confrontational methods (Project MATCH Research Group, 1998). However, many hypothesized client-treatment relationships failed to emerge, prompting some to speculate that prescriptive treatment makes little difference. An alternative explanation, however, is that we have not yet learned what factors by which to match clients effectively to treatment (Springer, McNeece, & Arnold, 2003). Duncan and Miller (2000) suggest that “matching” treatment approaches to the client’s theory of change can increase therapeutic effectiveness. It seems plausible that this could work in the treatment of juvenile delinquents as well. There are many programs and treatment approaches that have been developed for juvenile offenders; what if youth themselves could help us match them to the “right” one by indicating which best matched their theory of change?

There is some emerging evidence to support this approach. For example, Trice (1990) studied how internal/external locus of control related to how conduct-problem youth responded to two different in-school interventions. Though he did not study theory of change explicitly, locus of control is one dimension of a theory of change. A youth

with an internal locus of control will have a theory of change that reflects this, such that the theorized change agent will be a task that is within the youth's control. Trice (1990) found that youth with an internal locus of control fared better in the less structured, individual counseling treatment, whereas youth with external locus of control did better in the more structured, behavioral contracting intervention. In this case, matching youth on one theory-of-change dimension – sense of personal control – may have made clinicians better able to serve youth based on their individual differences. In another study, Hester, Miller, Delaney, and Meyers (1990) compared the effectiveness of two different alcohol treatments for clients with different theories about their alcoholism. Clients who believed their addiction was a disease were more successful in traditional, “disease-model” alcohol treatment, while clients who believed their alcoholism was a bad habit were more successful in the learning-based treatment. Crane, Griffin, and Hill (1986) found that the “fit” between a treatment and the client's view of the problem accounted for 35% of outcome variance.

Increasing Cultural Competence

Attending to youths' theories of change may also help to avoid situations in which professionals' theories lack cultural competence. It has been suggested that interventions for youth must become more culturally competent (Springer et al., 2003), in order to adapt to the specific needs and interests of offenders of different ethnic backgrounds. One way in which interventions can fall short of cultural competence is in imposing a theory of change developed by and for White individuals onto individuals of diverse cultural backgrounds, whose experience and worldview may not fit the theory. For

instance, it is often assumed by treatment providers that in order to change youth must “take responsibility for their actions” and accept personal control over their past as well as their future behavior (Abrams, Kim, & Anderson-Nathe, 2005; Fox, 1999). However, youth who assert that external factors led to their incarceration, and who feel that external factors control their ability to change, may have an excellent point. Members of historically disadvantaged ethnic groups may be more likely to have an external locus of control; in response to centuries of discrimination against their ethnic group, individuals may make a realistic assessment that their ability to change is limited by external forces (Sue & Sue, 2003). Like ethnic background, social class and gender may also affect a youth’s “fit” with particular theories. Youth raised in poverty are over-represented in the juvenile justice system. As Godwin (2002) describes, “problems made worse by poverty range from abuse and neglect to difficulties in school, lead poisoning, and developmental delays associated with pre- and post- natal nutrition. These risk factors may lead to learning disorders, low self-esteem, and long-term health and mental health problems as well as violent behavior” (p. 8). Correctional theory and treatment also must adapt to the growing number of female offenders. Some female juvenile offenders run away from home as a result of sexual and physical abuse and domestic violence, circumstances that can lead to shoplifting, prostitution, and drug-related activities (Weston & Manatu-Rupert, 2001). In such situations, counselors who argue with youth that they are personally in control of their past and future behaviors may not just be counter-therapeutic, they may be objectively wrong, due to lack of awareness of cultural forces to which they themselves are not subject. Regardless of the “truth” of anyone’s views on

the origins of criminal behavior, the problem remains: many youth may not agree with the justice system about the reasons they are incarcerated, nor with the goals and tasks they should pursue (Godwin, 2002). Learning and attending to an offender's theory of change may help treatment professionals become more aware of differences in experience, culture, and worldview that may have otherwise impeded a youth's engagement with treatment.

Readiness for Change

The Transtheoretical Model

Of course, a youth's engagement with treatment may also be impeded by their lack of motivation to change in the first place. An important way in which juvenile delinquents may differ from "traditional" clients is in their motivation. If youth do not view their delinquency as a problem and do not desire to change, then how is one to build an alliance to work on a goal with which they do not agree? Researchers and clinicians working with substance-addicted clients have long struggled with the same concerns; a treatment is provided to change a problem behavior, but many clients do not appear to want to make this change. Out of such work Prochaska and DiClemente (1982) developed the Transtheoretical Model, which incorporates motivation under the construct "readiness to change." In this model, individuals are proposed to go through a number of stages in the process of making any behavior change. In the first stage, *precontemplation*, individuals do not recognize the behavior as a problem and have no desire to change it. They may feel coerced into changing due to outside pressures from family, friends, community, or the legal system, but the behavior usually returns once the

external pressure subsides. In the *contemplation* stage, individuals have gained some awareness that a problem exists. They may be seriously considering changing the problem behavior, but have not yet committed to doing so. In the next stage, *preparation*, the individual is not merely thinking about change but intends to take action immediately. Individuals in this stage may make small changes or reductions in problem behavior. Following this, individuals actually take *action*, putting time, energy, and commitment into changing their behavior. Once successful change is made, individuals enter the *maintenance* stage in which they work to stabilize the positive change and prevent falling back into previous behavior.

Researchers have used two general models to understand how readiness for change operates in treatment. The first model suggests that readiness to change moderates the effect of treatment on outcomes. Under this model, baseline readiness for change is viewed as a necessary precursor for behavioral change. By contrast, a second model suggests that readiness to change mediates treatment effectiveness, as a *mechanism* of change. Under this model, treatment initiates readiness (i.e. turns precontemplators into contemplators), which leads to positive change. Williamson, Day, Howells, Bubner, and Jauncey, (2003) tested these two models with a population of incarcerated adults in an anger management program. They found support for the moderation model, in which initial high stage of change predicts positive change in treatment. The mediational model – in which treatment is seen as bringing about increases in readiness to change, which in turn produce positive effects – was not

supported. This research supports the use of readiness for change as a predictor (rather than an outcome) variable.

If baseline readiness for change is understood as moderating treatment outcomes, studying readiness for change will prove clinically relevant if it can help clinicians better target interventions. Prochaska and Norcross (2001) assert that many treatment programs assume that participants are in the “action” stage – ready to change, and thus able to learn and use new strategies to change their behavior. The stages of change model suggests that such treatments will be less effective with participants in the lower stages of change. Those in the precontemplation stage, for instance, would be better served with intervention approaches matched to their stage of change. Miller and Rollnick (1991) designed Motivational Interviewing (MI) as a therapeutic approach relevant to clients in lower stages of change. MI therapists assess a client’s stage of change and, in non-confrontational ways, work to help clients move into the next stage. If a youth is in the precontemplation stage of desistance, the therapist’s work is to help the youth develop a sense of ambivalence about the delinquent behavior that was previously seen in a purely positive light, and move eventually into the contemplation stage, in which the youth is actually thinking about changing and how that might occur.

If clinicians could reliably discriminate between those who were genuinely ready to change and those who were not, they could target interventions effectively based on this variable. However, here we run into a problem. While the standard general-use measure of stages of change, the University of Rhode Island Change Assessment (URICA; McConaughy, Prochaska, & Velicer, 1983) has been extensively researched,

results are decidedly mixed (Sutton, 2001). In the one known study examining the URICA's psychometric properties with a juvenile justice population, predictive validity was not examined, thus yielding no support for a link between readiness for change and outcomes. In addition, reliability for the most relevant subscale for this population (Precontemplation) was poor for this sample (Cohen, Glaser, Calhoun, Bradshaw & Petrocelli, 2005). Thirdly, Cohen and colleagues examined the URICA's use in classifying youth into discrete stages of change, the use for which the measure was initially designed. Based on a number of empirical problems, however, this approach has been critiqued as lacking in both clinical utility and empirical support. For instance, patterns of correlations among the URICA subscales show that they are not measuring discrete stages, and various cluster analyses have yielded different numbers of clusters which do not map onto to the original stages (Sutton, 2001). As the attempt to isolate discrete stages has proved elusive, it has been suggested that a better use of the URICA is in calculating a composite, continuous measure of readiness to change (Carey, Purnine & Maisto, 1999; Sutton, 2001). Unfortunately, this use of the URICA has not been validated with a juvenile justice population. Our ability to measure readiness to change, then, does not currently support the variable's use to predict outcomes or to match delinquent youth to treatments.

Readiness to Change Among Criminal Offenders

The lack of reliable measures is not the only problem, however, with using readiness for change to predict outcomes or target interventions. A number of studies demonstrate that while readiness for change may be important, it falls far short in

explaining the variance in treatment outcomes with “unmotivated” populations. In part, this is due to the high level of readiness for change expressed even by groups who would be expected to be highly *unmotivated*. In a study of incarcerated participants in an anger management program, Williamson et al. (2003) found that a large majority of participants reported being in the higher stages of change. Hemphill and Howell (2000) found that reported levels of readiness for change among their sample of adolescent offenders were similar to clinical norms. In another study, Burnett (1992) asked a sample of prison inmates whether they wanted to desist from crime upon their release; 80% said they did. However, twenty months after release, 60% of this same group reported re-offending. Such research suggests that we must look beyond reported motivation to discover other explanations for why some youth successfully desist from crime and some do not.

Of course, the question of motivation gets very sticky; were these offenders lying to others or deluding themselves about their motivation? This is certainly possible. However, as one cannot reliably discriminate the “really motivated” from those who are “faking it,” questioning claims of motivation does not help clinicians to target interventions. An alternative approach would be to take claims of motivation at face value. Maruna (2001) suggests that rather than attempting to enhance motivation, interventions may be more productive in focusing on how to support people who claim they already *want* to stop offending to succeed at doing so. This approach operates under the assumption that desistance may have less to do with the genuineness of the motivation than with the obstacles to success. Maruna (2001) bases this assertion on his

extensive qualitative study with long-term, persistent adult offenders. In interviews, these offenders reported they were

sick of offending, sick of prison, and sick of their position in life. Several talked at length about wanting to go legit...yet, they said that they feel powerless to change their behavior because of drug dependency, poverty, a lack of education or skills, or societal prejudice. (p. 74)

In other words, these offenders claim that they are *already in the contemplation stage of change*, and thus are not in need of intervention to enhance their motivation. Rather than lacking the desire to change, these offenders claim that they lack the *capability*.

Another extensive qualitative study of offenders on probation suggests a complex interaction between motivation to desist and perceived capability to do so (Farrall, 2002). In this study, the researcher examined the effects of both offenders' motivation to desist and the *obstacles* they perceived to be in the way of successful desistance. Among offenders who expressed confidence that they wanted to and were able to desist, most did in fact desist regardless of whether or not they resolved the obstacles they faced. It seems that these offenders just didn't have that many strikes against them – they had shorter offense histories and more resources – such that they were able to desist despite some unresolved obstacles in their way. For those who said they didn't want to or were unable to desist, however, overcoming perceived obstacles was strongly related to desistance. Among these “pessimistic” offenders (those who expressed that they didn't want to or couldn't stop offending, or both), 64% of those who said they faced an obstacle and resolved it desisted, while only 31% of those who faced an obstacle and did *not* resolve it desisted. When lack of motivation and/or self-efficacy was combined with lack of resolution of obstacles, offenders were highly likely to return to crime. This suggests that

in helping offenders to desist from crime, treatment providers have to pay attention to not just whether an offender wants to change, or whether he or she can, but both.

As far as the impact of correctional intervention, Farrall (2002) found that when probation officers had given an offender “some” or “a lot” of help in tackling obstacles related to employment or family, the obstacles were more frequently resolved. Unfortunately, this was a relatively rare phenomenon. The study found that offenders and probation officers most often did not agree on what obstacles offenders faced to their desistence, which certainly would seem to preclude them working together to resolve them. Perhaps related, probation officers’ efforts at helping offenders overcome obstacles were reported by both offenders and officers to have little effect.

These findings are suggestive of the importance of the working alliance. Offenders are most successful when they receive help in overcoming the obstacles they perceive to be in their way, and ineffective help is associated with lack of agreement about what help is needed. These results underscore the need for offenders and correctional workers to collaboratively agree upon the goals and tasks they will work on together. And in order to achieve this agreement, perhaps correctional workers can be more effective by considering offenders’ own ideas about what obstacles they face and how those might be overcome.

Farrall’s (2002) research confirms that baseline factors (length of criminal history, personal and social resources) and motivation for change do have an impact on treatment outcomes. After considering these factors, however, a good deal of unaccounted-for variance remains. The current study proposed that additional variance can be explained

by the working alliance, and by the success of treatment staff at facilitating a factor highly important to the working alliance – a youth’s perception that treatment has something to offer him, by helping him overcome the obstacles he perceives to successfully desisting from crime. In other words, correctional treatment can be most effective when working within a youth’s own theory of change.

Chapter 3: Method

Design

The current study was naturalistic rather than experimental in nature, examining treatment processes in a pre-existing, real-world treatment setting. In traditional psychotherapy studies, the working alliance is measured early in treatment and used to predict outcomes at the end of treatment. However, “early in treatment” is more difficult to define in a juvenile justice setting, where youth may move in and out of various treatment programs during the months or years of their incarceration. Following Florsheim et al.’s (2000) findings, working alliance measured soon after a youth’s arrival to the facility may have little relationship to eventual outcomes. However, this does not necessarily mean that the working alliance has no validity in this setting. Rather than trying to link initial working alliance to long-term outcomes, the current study proposes a more micro-level connection between working alliance measured at one time point and treatment progress in the following time period. Therefore, the current study sampled youth regardless of their time served or time remaining in treatment, and examined the relationship between their ratings of the working alliance and their gains in treatment 2- and 4- months later.

Participants

The study recruited a convenience sample of youth incarcerated at a secure institution run by the Texas Youth Commission (TYC), the state juvenile correctional agency for Texas. Youth are committed to TYC for mostly felony-level offenses, when they are at least age 10 and less than age 17. TYC can maintain jurisdiction over these

youth until their 21st birthdays (TYC, 2005a). One hundred and fourteen youth were recruited for the study. The sample consisted of 84.2% males and 15.8% females. In terms of broad racial/panethnic categorizations, 30.7% youth were Black, 35.1% were Latino, 28.9% were White, 3.5% identified two racial categories, and 0.9% was Native American (only one youth did not report a racial category). Youth who reported their race as Black or African-American generally did not report an additional, ethnic label. Among White youth, 58.8% reported an ethnic label, and these labels indicated some type of European-American descent. Among Latino youth, 92.5% reported an ethnic label, of which all but one reflected Mexican or Mexican-American heritage.

The vast majority (87.7%) of youth in the sample were 18 years of age or older ($M = 18.4$ years, $SD = 1.22$). The median educational level completed by participants was 10th grade, and the median educational level they reported for both their mothers and fathers was high school. Of youth who reported such data, 25.5% of mothers and 17.6% of fathers had completed some college, and 13.6% of mothers and 12.9% of fathers had completed a degree or certification after high school (technical/vocational school, college, or post-graduate degree).

The mean age at which participants reported first getting “into trouble” was 10.6 years, and the mean age they reported first being arrested was 13.0 years. Youth on average had been at the correctional facility for 31.6 months ($Max = 74$, $Min = 2$). The TYC institution which was used as the study site for this research is home to the state’s only specialized treatment program for violent and capital offenders; as a result, this facility tends to house the most severe offenders among the TYC population (A. Kelley,

personal communication, May 17, 2005). In terms of the criminal offense for which participants had been incarcerated, the most common reported category was sexual offenses (including violent sexual offenses), followed by violent, non-sexual crimes (Table 1).

TABLE 1 Crimes resulting in current incarceration, by participant self-report

<i>Offense Type</i>	<i>Freq.^a</i>	<i>Specific Offense</i>	<i>Freq.^a</i>
Sexual (including violent) crimes	40	Indecency with a child	3
		Sexual assault	8
		Aggravated sexual assault	28
		Unspecified sexual offense	1
Violent, non-sexual crimes	33	Assault	6
		Assault with bodily injury	3
		Aggravated assault	4
		Aggravated assault w/ deadly weapon	6
		Manslaughter	1
		Attempted murder	2
		Murder	11
Robbery	25	Robbery	13
		Aggravated Robbery	12
Property crimes	8	Burglary of a habitation	2
		Burglary of a building	3
		Auto theft	2
		Arson	1
Drug crimes	4	Public intoxication	1
		Possession of a controlled substance	2
		Possession with intent to sell	1
Other	14	Evading arrest	1
		Violation of probation	4
		Unlawful possession of a fire arm	3
		Family violence	1
		Injury to a child	2
		Engaging in organized criminal activity	2
		Did not report	1

Note. ^a Some participants reported more than one criminal offense.

All youth at the facility take part in the mandatory “Resocialization Program.” This program includes academic and vocational training, discipline, and correctional therapy. The standard correctional therapy program includes a number of phases. Youth are taught to recognize and confront “thinking errors” that may have been involved in criminal behavior and avoiding the consequences of that behavior. In the “life story” component, youth are asked to tell the story of their lives leading up to their offense and identify what “unmet needs” emerged from their early lives, which may have influenced their criminal paths. In the next phase, youth are encouraged to understand their own personal “offense cycle,” which is described as the process by which their “unmet needs” are triggered by a “critical situation,” which brings about an “internal reaction,” that then leads to “preparation to offend” and on to the youth’s offense itself. Youth then work to develop a “success plan” to set goals for success in the areas of education, work, family, social, and personal life. Youth work on these phases of the correctional therapy program in individualized assignments, one-on-one counseling with their caseworkers, and in daily group therapy. In addition to the standard program, certain youth may be offered specialized treatment over the course of their stay. The facility offers specialized treatment programs for youth who have committed sexual offenses, youth who have committed violent or capital offenses, and youth who are addicted to substances. Caseworkers also may refer a youth to the facility’s psychology department if they believe youth are in need of more individualized treatment for mental health concerns; youth may then undertake a course of individual psychotherapy with a staff psychologist.

Ninety-four participants (82.5%) reported some exposure to specialized treatment programs at the facility: 38 had been involved in chemical dependency treatment, 35 in sex offender treatment, and 35 in violent offender treatment (14 participants reported involvement in more than one of these programs). Of the youth reporting exposure to specialized treatment, 34 reported being currently involved in the treatment, 35 reported failing out of a treatment program, and 35 reported that they had previously, successfully completed a treatment program. Only seven participants reported currently seeing a psychologist for psychotherapy.

Characteristics of study participants were compared to available data for youth incarcerated in the facility as a whole, to ascertain whether the recruited sample was representative of the population. Participants in the sample appeared representative in terms of gender, race, and age of first arrest. The average age of study participants ($M = 18.4$ years) was higher than that of youth in the facility as a whole ($M = 17.2$ years) due to the study's oversampling of youth above the age of consent. Youth in the sample reported being at the institution for longer on average ($M = 31.6$ months) than the population of the facility as a whole ($M = 17.5$ months); this appeared to be primarily due to the overrepresentation of older youth, as the sample youth had only a slightly longer average length of stay than the general group of 18-20 year olds at the facility ($M = 28.2$ months). Similarly, youth in the sample had on average fewer rule violations and higher phase levels than the population as a whole, but did not differ from the population of 18-20 year olds on these variables. A smaller percentage of youth in the sample (31.5%) reported current enrollment in specialized treatment, as compared to the 40.4% of youth

reported by the facility to be enrolled in such treatment (37.7% of the group of 18-20 year olds).

Five youth were lost from the sample at 2-month follow-up due to their departure from the institution soon after baseline data collection: 2 youth were transferred to the adult correctional system, 2 youth were released into the community, and 1 youth was transferred to a different facility within the juvenile system. Fifteen more youth were lost from the sample at 4-month follow-up; 1 was transferred to the adult correctional system, 11 were released to their communities or to a halfway house, and 3 youth were transferred to a different juvenile facility. At 2-month follow-up, seven youth were added to the sample due to newly-available parental consents or expressed interest of the youth, but as no data was available for these youth at baseline, their data was not used in the main analyses.

Procedures

Prior to the main study, a small sample of 5 youth at the institution was recruited to pilot test the survey instruments. These youth were asked to complete all study materials, then were individually interviewed on their understanding and reactions to the instruments. Several wording changes were made to the instruments based on feedback from pilot testing (see Appendices for revised measures).

The investigator visited youth in their dorms and informed them about the study. Those who agreed to participate were asked to give written informed consent (youth aged 18-20, see Appendix A) or assent (youth under age 18, see Appendix A) for their own participation in the study as well as the researcher's check of their official records. Minor

youth who wished to participate submitted names and addresses of parents/guardians, who were mailed parental consent forms (see Appendix A). Information about the study was also presented to parents and youth during weekend visitation times, and parents were able to give written consent at that time.

Youth were then given a packet of surveys including a demographic questionnaire (Appendix B), a modified version of the Adolescent Working Alliance Inventory (AWAI; Appendix C), the Theory of Change Survey (TOCS; Appendix D) a version of the Contemplation Ladder (CL; Appendix F), and the Post-Detention Likelihood of Success Scale (PDLSS; Appendix G). Survey order was counterbalanced to minimize carry-over effects. Each consent form and associated packet was coded with an identification number, such that only the consent forms contained any identifying information. Readability of all materials was assessed with the Flesch-Kincaid Readability Index, which rated their readability at the following grade levels: youth consent form = grade 7.2; parent consent form = grade 10.2; demographic questionnaire = grade 2.1; AWAI = grade 4.2; RfC = grade 3.2; TOCS = grade 3.0 (expanded TOCS = grade 5.0); and PDLSS = grade 5.1. An investigator was present for group administrations of the questionnaire packets in order to answer any questions and clarify instructions.

Instrumentation

Demographic Information

Youth were asked to indicate their gender, racial/ethnic identification, age, age of first criminal offense, committing offense, duration of stay in the facility, length of

sentence, and participation in/completion of specialized treatment while incarcerated (Appendix B).

Working Alliance

Of the existing measures of therapeutic alliance, the Working Alliance Inventory (WAI; Horvath & Greenberg, 1986) has received the most empirical attention (Martin, Garske, & Davis, 2000), having been explored in well over 100 published studies and several meta-analytic reviews (Horvath, 1994; Horvath & Symonds, 1991; Martin, Garske, & Davis, 2000). The Working Alliance Inventory was designed to assess Bordin's (1979) theoretical conceptualization of the working alliance. Convergent and discriminant validity have been shown through the WAI's strong correlations with related measures of the therapeutic alliance, and lower correlations with measures assessing less-related aspects of the client-therapist relationship (Horvath, 1994). Reliability estimates (alphas) from past samples using the whole instrument range from .93 to .84 (Horvath, 1994). Based on factor analytic work by Tracey and Kokotovic (1989), the original 36-items measure was abbreviated into a 12-item version (WAI-S). Busseri and Tyler (2003) found that the WAI-S had equivalent psychometric properties to the full measure, lending support to the interchangeability of the long and short forms. Given these results, the current study used the short form to maximize time-savings and convenience for the participants.

Item stems on the WAI and WAI-S contain wording that may be inappropriate for an adolescent population (i.e. "We are working towards mutually agreed upon goals"), particularly for delinquent youth who may have a lower reading level than the average

adolescent. An adolescent version of the WAI has been developed (AWAI; Linscott, DiGiuseppe, & Jilton, 1993), in which item stems were re-written to be more age-appropriate (i.e. “We are working on goals that we both agree on”). As proposed by the authors, however, the AWAI asks respondents to answer either “yes” or “no” to each item, providing little variability in responses. Therefore, the current study will use AWAI item-wording to better accommodate participants’ developmental and educational levels, but retain the standard 7-point response scale to achieve variability. Two items which appear at least somewhat distinct on the WAI-S (“I believe my therapist likes me” and “I feel that my therapist appreciates me”) were re-written for the AWAI such that they appear to be redundant (“I think my therapist likes me” and “I feel that my therapist likes me”). For the present study, the “adult” wording of these two items will be retained, as the wording appears to be age-appropriate, and the adolescent alternative is repetitive and may jeopardize the measure’s face validity.

The WAI has been modified by many researchers to fit particular populations and treatment contexts (Horvath, 1994). Relevant to the present study, Florsheim et al. (2000) modified the WAI for a study with delinquent boys in a residential treatment program. First, the authors asked each youth to indicate the program staff most involved in his treatment and to then respond to the WAI based on his relationship with that staff person. This method took into account the particularities of a residential treatment setting, in which, unlike in traditional individual psychotherapy, it is not immediately clear with whom youth will form alliances and which of those alliances will be most important to treatment progress. Florshiem et al. (2000) explained that asking each youth

to self-select a primary staff person was intended to assess the highest level of staff support available to each youth. In light of this adjustment, WAI item stems were changed to replace the word “therapy” with “program” and “therapist” with “program staff person.” Alpha coefficients for samples using this modified WAI ranged from .81 to .89 (Florsheim et al., 2000). The current study adopted similar modifications to the WAI in order to better fit the treatment setting of the present sample (Appendix C). Reliability coefficients (Chronbach’s alphas) for this modified AWAI for the current sample were high (.93 at baseline administration, .91 at 2 months, and .93 at 4 months).

Treatment Fit with Change Theory

Treatment fit with change theory is a construct related to the Working Alliance Inventory’s “agreement on the tasks of therapy,” but the current study proposes that this variable be assessed separately and directly in a way that has not been done in prior research. Therefore, no existing measure can adequately assess this construct. For the purposes of the current study, a short survey named the Theory of Change Survey (TOCS; Appendix D) was developed to assess youth’s theories of change and their perception that their treatment program includes tasks that fit their theories. The survey consisted of two fill-in-the blank spaces: in the Theory of Change-General portion, youth were asked to complete the sentence “I would stop doing crimes/ keep out of trouble if...” while in the Theory of Change-Personal Control portion, they were asked to answer the question “What could you do at TYC that would help you stop getting into trouble when you get out?” This method was intended to gather qualitative data on youths’ theories of what behaviors, events, or circumstances would allow for desistance

from crime. While the theory of change-general portion of the TOCS was left open to elicit any range of responses, the theory of change-personal control portion was designed to elicit responses that might be more specific to their time in treatment and within youth's own control. For each of the filled-in "change theories," youth were asked to answer 2 questions on a 5-point Likert scale assessing their perception of the relevance of treatment to this theory ("How much does your staff work with you to make this happen?" and "How much will the work you do in treatment help to make this happen?"). These two items in each of the General and Personal Control sections were meant to tap the same construct, i.e. how much youth perceived that the help offered to them in correctional treatment "fit" within their theory of change.

Results from administration of the TOCS at baseline, however, suggested this measure was functioning differently than expected. The measure as a whole showed somewhat low reliability ($\alpha = .79$). Item analysis suggested that the four items were indeed measuring two different constructs, but rather than the general/personal control division that was expected, a staff/treatment division was strongly supported by the data. For analysis, the TOCS was separated into two subscales, treatment and staff ($\alpha = .82$ for the treatment subscale, $.76$ for the staff subscale).

To explore the "fit of concrete treatment tasks" vs. "fit of help from staff" constructs further, the TOCS was revised and expanded for use at the 2-month and 4-month data collection times. So as not to increase administration time, the expanded TOCS (Appendix E) retained only the theory of change-general question. The rating scale part of the survey, however, was expanded to 13 items arranged into 2 subscales; 6

items inquiring about the “fit” of help provided by specific types of staff, and 7 items relating to the “fit” of specific aspects of treatment. Reliability coefficients (Chronbach’s alpha) for the expanded TOCS were .87 (.81 for each of the treatment and staff subscales) at 2-month data collection, and .91 (.83 for the treatment, and .84 for the staff subscale) at 4-month data collection.

Readiness for Change

Readiness for change was measured with the Contemplation Ladder, adapted from Biener and Abrams (1991). This one-item self-report measure was designed as a continuous measure of readiness to quit smoking, and asks participants to rate themselves on an 11-point Likert Scale anchored at 5 points with verbal labels (“Taking action to quit,” “Starting to think about how to change my smoking patterns,” “Think I should quit, but not quite ready,” “Think I need to consider quitting some day,” and “No thought of quitting”). Just as its theoretical underpinning, the transtheoretical model, has spread from its roots in the substance abuse field, the contemplation ladder has been adapted from smoking cessation for use with a wide range of risky behaviors. Versions of the ladder have been developed for studies of drinking (Carey, Carey, Maisto & Purnine, 2002), drug abuse (Baker, Boggs & Lewin, 2001), needle-exchange (Blumenthal, Gogineni, Longshore & Stein, 2001), gambling (Petry, 2005), and condom use (LaBrie, 2005).

Two recent studies have examined the possibility of using the contemplation ladder as a practical alternative to the URICA (whose limitations are described in detail in Chapter 2) in clinical or research situations where an overall readiness to change

measure is needed rather than a discrete stage classification. Amodai and Lamb (2004) found evidence that the contemplation ladder performed as well or better than the URICA in assessing readiness to quit smoking. LaBrie (2005) examined contemplation ladders as measures of motivation to change drinking and condom use; for both behaviors the ladders correlated highly with longer readiness-to-change questionnaires and showed greater concurrent validity than their longer counterparts. Concurrent validity was also suggested in a study using the contemplation ladder with adolescents given a ticket for smoking; responses on the ladder were correlated with other readiness to change measures, as well as with self-efficacy and interest in a treatment program (Stephens, 2004).

Contemplation ladder anchors were revised for the current study to fit the variable of interest, readiness to change criminal activity (Appendix F).

Phase Level

Treatment success is operationalized by the institution through the phase system. Each month, youth are assessed in the three “ABC” areas: academics, behavior, and correctional therapy. School personnel, correctional staff, and clinical staff evaluate each youth’s progress on goals set at the beginning of the evaluation period. At each monthly assessment period, youth may be advanced a level, retained at the same level, or dropped a level in each of the three assessment areas. In each area, youth may be assessed as a phase level 0, 1, 2, 3, or 4. For the purposes of the study, the number corresponding to the phase level in each of a youth’s three assessment areas were summed, such that the overall phase level variable ranged from 0 to 12. Although this measure of treatment

success is somewhat general, it has the advantage of being indicative of actual behavior within the correctional setting.

Rule Violations

Though phase level in part reflects a youth's level of disruptive behavior, this study also measured disruptive behavior directly as a second treatment success criterion variable. As rule-breaking and violent behavior is a serious safety consideration, it may be the most "face valid" measure within the institution of the potential for criminal behavior on the outside. In addition, measuring the actual number of rule violations was believed to be a more sensitive measure of behavior change than changes in phase level. A reduction in violations from 30 per month to 20 per month would be registered as improvement by this measure, whereas both of these high levels of offending would classify a youth at behavior level 0 in the phase system. In TYC, rule violations are separated by severity into Category I violations (e.g. assault, attempted escape, stealing \$50 or more) and Category II violations (e.g. breaching group confidentiality, presenting a danger to others, missing an activity or curfew). Each youth's rule violations score was obtained by summing all of their reported rule violations for the prior two months, after doubly weighting their more severe category I violations.

Post-Detention Likelihood of Success

Treatment success was also operationalized with one self-report measure: the Post-Detention Likelihood to Succeed Scale (PDLSS; Evans, Brown, & Killian, 2002: Appendix G). While other criterion variables in the current study measured concrete behavior change assessed by staff, the PDLSS was included as a more sensitive measure

of subtle, psychological shifts in a youth's motivation and perceived ability to achieve desistance. This measure was developed to assess incarcerated youths' intentions to engage in risky behaviors as well as their beliefs about their ability to be successful. The "post-detention likelihood to succeed" construct is based on four suppositions well-established in the literature: using substances and re-entering antisocial social networks is associated with continued delinquency, while reducing conflict with others and increasing involvement in prosocial activities is associated with desistance. In accordance with these suppositions, Evans et al. (2002) designed 15 self-report items to assess a youth's perception of what will happen upon his or her release. Sample prompts include "After leaving here, how likely do you think you will... hang out with your old friends?," rated on a 4-point Likert scale. The scale was validated on a racially diverse sample of 197 male and female youth detained in facilities in both an urban and a rural area in Nevada. The Cronbach's alpha for the original sample was found to be .87. For the current study, answer choices for the item stem "...complete high school" were modified to add an additional answer choice (5 = "I have already completed high school") reflecting that many youth at this facility complete their high school diplomas over the course of their incarceration. Reliability coefficients (Chronbach's alphas) for this measure with the present sample were adequate (.80 at baseline, .82 at 2-months, and .90 at 4-months).

Analysis

Quantitative Analysis

Hypothesis 1. It was first hypothesized that treatment fit with change theory (TFCT) would be correlated with the working alliance (WA), as these constructs should be highly related. Bivariate correlations were analyzed to determine the relationship between the working alliance and treatment fit with change theory.

Hypothesis 2. Secondly, it was hypothesized that treatment fit with change theory (TFCT) would be correlated with later treatment gains, and this correlation would match or exceed the relationship between the working alliance (WA) and later treatment gains. Again, bivariate correlations were used to analyze the relationship between alliance-related variables and percent change in each of the outcome variables between baseline and 4-month follow-up. For the sake of simplicity, only treatment gains at 4-months (rather than 2 months) were presented, due to greater interest in treatment gains sustained for longer periods of time.

Hypotheses 3. It was hypothesized that treatment fit with change theory (TFCT) would predict treatment success variables measured concurrently, even while controlling for readiness for change (RfC). Each of the three criterion variables measured at baseline were regressed on treatment fit with change theory, while also entering readiness for change as a control:

Baseline Criterion (PL, RV, or PDLSS) =

$$b_0 + b_1 (\text{Baseline RfC}) + b_2 (\text{Baseline TFCT}) + b_3 (\text{Baseline RfC} * \text{Baseline TFCT})$$

Predictor and criterion variables:

Predictor variables: RfC= Readiness for change
TFCT= Treatment fit with change theory

Criterion variables: PL = Phase level
RV= Rule violations
PDLSS= Post-detention likelihood of success

Hypothesis 4. Treatment fit with change theory (TFCT) was hypothesized to predict treatment *gains* at 2-month and 4-month follow-up, even while controlling for readiness for change (RfC). Treatment “gains” were assessed by entering baseline treatment success as a predictor, and testing whether TFCT still emerged as a unique predictor of later treatment success. Each of the three criterion variables measured at 2-month and 4-month follow up were regressed on treatment fit with change theory, while adding baseline criterion variables as a control. Again, readiness for change was controlled:

2-month or 4-month Criterion (PL, RV, or PDLSS) =

$$b_0 + b_1 (\text{Baseline Criterion}) + b_2 (\text{Baseline RfC}) + b_3 (\text{Baseline TFCT}) + b_4 (\text{Baseline RfC} * \text{Baseline TFCT})$$

Hypothesis 5. The interaction between readiness for change (RfC) and treatment fit with change theory (TFCT) was hypothesized to be a significant predictor of concurrent treatment success and later treatment gains. The hypothesized interaction effect was examined by entering an interaction term into each of the above regression equations.

First, a test of the full model was examined. Next, t-tests were performed to determine the significance of each regression coefficient within the model. Semi-partial correlation coefficients were calculated to measure the strength of the association between each predictor and each criterion variable. All tests were conducted at the $\alpha = .05$ level.³ Secondary analyses were conducted to explore other relationships in the data.

Qualitative Analysis

Qualitative responses on the Theory of Change Survey underwent content analysis and were coded for themes. The unit of analysis was each individual response to prompts on the Theory of Change Survey; youth were asked to respond to the prompt, “I would stop doing crimes/keep out of trouble if...” at each of the three times of data collection, and at the first time of data collection they additionally responded to the question, “What could you do at TYC that would help you stop getting into trouble when you get out?” Five individuals were involved in the coding process: 3 doctoral students of counseling psychology (including the primary investigator), 1 masters student in counseling, and 1 masters level professional in the field of social work/addictions research. Rather than approach the data with preconceived frameworks, coders were instructed to conduct a more inductive analysis by allowing themes to emerge from the data (Patton, 2001). Coders identified and documented themes individually, then

³ Strict statistical theory would require that the researcher adjust the error rate for each statistical test in order to comply with an experiment-wise error rate of .05. The current study did not use this method, however, as it brings too high a risk of type 2 error, which is of great concern in an exploratory study. The current study can be less concerned with the risk of an inflated type 1 error rate because, as an exploratory study, its findings will need to be replicated.

convened to review categories and agree on a coding scheme. Following this step, coders individually coded each response for major categories and sub-categories. As many of the qualitative responses contained multiple parts, coders were allowed to give each response more than one code to reflect different units of content. Lastly, coders reconvened to compare coding and address discrepancies. In a few cases, sub-categories were collapsed due to excessive overlap. Further discrepancies were resolved through consensus. A total of 8 meaningful major categories were identified: “Self Change,” “Constructive Outlet,” “Environment Change,” “Relationships,” “Get Help,” “Fresh Start,” “Get Out,” and “Change the Past.” Major categories containing distinct sub-groups of content were further divided, and a total of 17 meaningful sub-categories were identified.

In addition, one deductive, theory-driven dimension was used in qualitative analysis: “source of action” (see qualitative results section for further details). Each response was given an additional “source of action” code. The responses could be coded as calling for action by the “self only,” calling for action from “both self and others,” calling for action from “others only,” or as “indeterminate” as to whose action was needed.

Inter-rater agreement was determined by the percent of responses for which there was agreement among all coders (4 coders were involved in the final step of coding). Of a total of 384 responses, there was initial agreement among all coders on a major code for 327 responses (85%), while there was no initial agreement on 54 responses and 3

responses were determined to be uncodable due to illegibility or insufficient content.

After reconvening, coders came to agreement by consensus in all but 1% of cases.

The resulting data was then summarized with relative frequencies. Further, this data was examined for relationships between variables, following methods described by Krippendorff (1980). Data was separated by various demographic variables (racial/panethnic group, sex, type of criminal offense) and visually inspected for potential differences between groups in the frequencies with which they reported each major content category. When there appeared to be a meaningful association, a χ^2 test was conducted to determine the significance of association between membership in a particular group and the presence/absence of a particular thematic category.

Additionally, exploratory analyses were undertaken to determine if the presence/absence of a particular theme was associated with higher levels of any of the predictor or criterion variables. When differences were suggested, independent t-tests were run comparing mean levels of these variables for youth who did/did not indicate a particular theme in their response. The “source of action” coding contained four different groups (rather than the two “presence/absence” groups for each of the theme categories). For this reason, one-way ANOVAs were used to determine how much of the variance in study variables could be explained by a youth’s “source of action” code (Weber, 1990).

As qualitative data analysis was highly data-driven rather than being a test of pre-formed hypotheses, multiple exploratory analyses were conducted and type I error can be expected to be quite high. Therefore, all results must be taken with great caution and are merely suggestive of possible areas for future research.

Chapter 4: Quantitative Results

Descriptive Statistics

Table 2 below presents descriptive statistics for each of the predictor and criterion variables at each of the three time points. In a few cases, missing data resulted from youth skipping over survey items. As this missing data represented a very small percentage of total responses (<1.5% of items per survey), item means were substituted for missing data to preserve adequate sample size (Downey & King, 1995). In a few cases an entire survey was unusable (i.e. a youth completed the AWAI based on his relationship with a family member rather than with treatment staff, or circled multiple, non-adjacent responses on the contemplation ladder). In these cases, the unusable survey was deleted pairwise from correlational analyses but listwise from regression analyses. Sample sizes for regressions of behavioral outcome variables were higher than for regressions of post-detention likelihood of success (PDLSS), because although some youth were not available to complete self-report outcome measures during data collection times, data on their rule violations and phase levels could be accessed later from official records. After the first wave of data collection, an unexpected finding was noted on the theory of change survey. On the original version of this survey administered at baseline, youth consistently rated *treatment* as more relevant to their theories of change than help from the *staff* who facilitate that treatment. In addition, while the treatment fit with change theory - treatment subscale (TFCT-Tx) showed significant associations with treatment success, the staff subscale (TFCT-Sf) showed a smaller correlation with the PDLSS, and only trivial correlations with the behavioral outcome variables (Table 3).

TABLE 2 Descriptive Statistics for Predictor and Criterion Variables

<i>Variable</i>	<i>Time</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Readiness for Change (RfC) ^a	Baseline	104	8.64	1.85	0.00	10.00
	2-month	97	8.35	2.37	0.00	10.00
	4-month	69	8.28	2.67	0.00	10.00
Working Alliance (WA) ^b	Baseline	108	57.83	17.18	15.00	84.00
	2-month	97	59.78	15.48	12.00	83.00
	4-month	71	60.35	15.87	16.00	83.00
Treatment fit with Change Theory, Treatment Subscale (TFCT-Tx)	Baseline ^c	109	7.28	2.25	2.00	10.00
	2-month ^d	96	19.64	5.80	6.00	30.00
	4-month ^d	74	19.63	6.05	6.00	30.00
Phase Level	Baseline	107	8.42	2.54	0.00	12.00
	2-month	104	8.51	2.63	1.00	12.00
	4-month	87	9.05	2.26	2.00	12.00
Rule Violations ^e	Baseline	109	6.59	8.78	0.00	63.00
	2-month	108	6.36	8.92	0.00	44.00
	4-month	89	6.06	7.08	0.00	31.00
Post-Detention Likelihood to Succeed (PDLSS)	Baseline	109	42.29	6.24	24.00	53.00
	2-month	97	40.88	6.77	20.00	52.00
	4-month	75	40.16	8.61	13.00	52.00

Note. ^aAs measured on the Contemplation Ladder. ^bAs measured on the Adolescent Working Alliance Inventory. ^cAs measured on the Original Theory of Change Survey. ^dAs measured on the Expanded Theory of Change Survey. ^eRule Violations variable calculated by summing all official referrals a youth received in the previous 2 months, after doubly weighting more serious “Category I” violations.

(For further description of this finding, as well as results from the use of an expanded version of the theory of change survey, see “Other Findings,” below). Given suspected interpretation problems with the TFCT-Sf items, the TFCT-Tx subscale was used instead of the full set of items in all of the regression analyses to follow.

Analyses

Hypothesis 1

The first hypothesis predicted that the new variable developed for this study, treatment fit with change theory (TFCT), would be correlated with the working alliance

(WA). As predicted, TFCT-Tx showed moderate-to-large correlations with WA (Tables 3-5) at all administrations. This supports the hypothesis that the construct “treatment fit with change theory” is indeed related to the working alliance in this sample of incarcerated youth.

TABLE 3 Intercorrelations Among Variables, Baseline⁴

Variable	WA	TFCT-Tx	TFCT-Sf	RfC ^e
Phase Level	.17	.39**	.10	.33**
Rule Violations	-.12	-.24*	-.02	-.24*
PDLSS ^a	.19	.40**	.34**	.57**
WA ^b		.55**	.34**	.28**
TFCT-Tx ^c			.49**	.31*
TFCT-Sf ^d				.23*

Note. ^a Post-Detention Likelihood to Succeed Scale. ^b Working Alliance, from the Adolescent Working Alliance Inventory. ^c Treatment fit with Change Theory (from original Theory of Change Survey), Treatment Subscale. ^d Treatment fit with Change Theory (from original Theory of Change Survey), Staff Subscale. ^e Readiness for Change, as measured on the Contemplation Ladder. * $p < .05$ ** $p < .01$

TABLE 4 Intercorrelations Among Variables, 2-month follow up

Variable	WA	TFCT-Tx	TFCT-Sf	RfC ^e
Phase Level	.28**	.23*	.21*	.27**
Rule Violations	-.34**	-.25*	-.10	-.35**
PDLSS ^a	.54**	.45**	.25*	.70**
WA ^b		.51**	.42**	.43**
TFCT-Tx ^c			.66**	.33**
TFCT-Sf ^d				.22*

TABLE 5 Intercorrelations Among Variables, 4-month follow up

Variable	WA	TFCT-Tx	TFCT-Sf	RfC ^e
Phase Level	.29*	.29*	.24*	.35**
Rule Violations	-.25*	-.25*	-.17	-.35**
PDLSS ^a	.37**	.55**	.47**	.70**
WA ^b		.34**	.37**	.42**
TFCT-Tx ^c			.74**	.56**
TFCT-Sf ^d				.48**

Note. ^a Post-Detention Likelihood to Succeed Scale. ^b Working Alliance, from the Adolescent Working Alliance Inventory. ^c Treatment fit with Change Theory (from expanded Theory of Change Survey), Treatment Subscale. ^d Treatment fit with Change Theory (from expanded Theory of Change Survey), Staff Subscale. ^e Readiness for Change, as measured on the Contemplation Ladder. * $p < .05$ ** $p < .01$

⁴ Asterisks to denote statistical significance are included in the following tables as a convention only. They do not reflect actual probability of type 1 error, which has been inflated by the number of experiment-wise statistical tests performed. As stated earlier, the current study has chosen to accept a high potential level of type 1 error due to its exploratory nature.

Hypothesis 2

The second hypothesis predicted that TFCT would be correlated with treatment gains at 4-month follow-up, and that this correlation would be as strong or stronger than the relationship between the WA and treatment gains. Baseline ratings of TFCT-Tx showed a significant, moderate correlation with 4-month gain in predicted post-detention success (PDLSS) (Table 6). The working alliance (WA) did not show a significant association with gains on the PDLSS. Neither TFCT-Tx or the WA were associated with gains in phase level or rule violations.

TABLE 6 Correlations between predictor variables (measured at baseline) and treatment gains^a at 4-month follow up.

<i>Predictor</i>	<i>Phase Level</i>	<i>Rule Violations</i>	<i>PDLSS</i> ^f
<i>WA</i> ^b	-.07	-.03	.07
<i>TFCT-Tx</i> ^c	-.10	-.16	.34**
<i>TFCT-Sf</i> ^d	.07	-.16	-.02
<i>RfC</i> ^e	.04	-.33**	.06

Note. ^a Treatment gains assessed by calculating the percentage change in each baseline measure at 4-month follow up.

^b Working Alliance, from the Adolescent Working Alliance Inventory. ^c Treatment Fit with Change Theory (from original Theory of Change Survey), Treatment Subscale. ^d Treatment Fit with Change Theory (from original Theory of Change Survey), Staff Subscale. ^e Readiness for Change, as measured on the Contemplation Ladder. ^f Post-Detention Likelihood to Succeed Scale.

* $p < .05$ ** $p < .01$

The hypothesis was partially supported, as TFCT was associated with treatment gains by self-report 4 months in the future, while the WA was not associated with these self-reported treatment gains. However, neither TFCT nor the WA were associated with improvements on behavioral outcome measures.

Hypotheses 3

The third hypothesis predicted that treatment fit with change theory (TFCT-Tx) would predict concurrent treatment success even while controlling for readiness for change (RfC). This was tested through a series of multiple regression analyses. While it was originally proposed to enter both WA and TFCT into each regression equation, a decision was made to include only TFCT in each equation. This decision was based on results from analysis of hypothesis 1 (which suggested high levels of multicollinearity between the WA and TFCT) and results of the analysis of hypothesis 2 (which suggested that the WA was a much weaker predictor of treatment gains than was TFCT).

TABLE 7 Results of the Simultaneous Regression Analyses: Prediction of concurrent treatment success

<i>Criterion/Predictor</i>	<i>B</i>	<i>SE B</i>	β	ΔR^2	ΔF	<i>Semi-partial r</i>
Phase Level ^a				.24	10.55***	
Readiness for change (RfC)	0.81	0.23	.37**			.31
Treatment fit with Change Theory, Treatment Subscale (TFCT-Tx)	0.74	0.21	.33**			.31
RfC*TFCT-Tx	0.46	0.17	.28**			.24
Rule Violations ^b				.19	7.69***	
Readiness for change (RfC)	-1.94	0.69	-.30**			-.25
Treatment fit with Change Theory, Treatment Subscale (TFCT-Tx)	-1.97	0.63	-.30**			-.28
RfC*TFCT-Tx	-1.45	0.50	-.31**			-.26
Post-Detention Likelihood to Succeed (PDLSS) ^b				.36	18.45***	
Readiness for change (RfC)	3.13	0.58	.51***			.43
Treatment fit with Change Theory, Treatment Subscale (TFCT-Tx)	1.28	0.54	.20*			.19
RfC*TFCT-Tx	0.07	0.42	.02			.01

Note. All predictor variables standardized.

^a *N* = 102. ^b *N* = 104.

p* < .05 *p* < .01 ****p* < .001

The hypothesis was supported. As can be seen in the results presented in Table 7, TFCT-Tx was significantly related to all concurrent treatment success variables, even while controlling for readiness for change (RfC). Semi-partial correlations suggest small to moderate effect sizes. These results suggest a relationship between youth ratings of TFCT and their current level of treatment success. The separate question of whether TFCT predicts future *gains* in treatment success is analyzed below.

Hypotheses 4

Fourth, it was hypothesized that TFCT would uniquely predict *gain* in treatment success at 2- and 4-month follow-up, over and above the effects of readiness for change. In other words, it was hypothesized that TFCT would emerge as a unique predictor of later treatment success (while controlling for baseline levels of treatment success), even with RfC in the equation.

This hypothesis was partially supported. TFCT-Tx did emerge as a significant predictor of gain in post-detention likelihood to succeed (PDLSS) at both 2- and 4-month follow-up (Tables 8 and 9). Though small, the strength of this effect increased with a greater amount of time. While the TFCT-Tx showed a unique (semi-partial) correlation of .15 with gain on the PDLSS 2 months later, it had a unique semi-partial correlation of .27 with gain on the PDLSS 4 months later.

TABLE 8 Results of the Simultaneous Regression Analyses: Prediction of treatment gains at 2-month follow-up

<i>Criterion/Predictor</i>	<i>B</i>	<i>SE B</i>	β	ΔR^2	ΔF	<i>Semi-partial r</i>
Phase Level ^a				.68	47.45***	
Baseline Phase Level	2.08	0.19	.77***			.67
Readiness for change (RfC)	-0.01	0.18	-.01			-.01
Treatment fit with Change Theory, Treatment Subscale (TFCT-Tx)	0.29	0.16	.12			.11
RfC*TFCT-Tx	0.17	0.12	.10			.08
Rule Violations ^b				.43	17.18***	
Baseline Rule Violations	5.66	0.85	.60***			.52
Readiness for change (RfC)	0.22	0.72	.03			.02
Treatment fit with Change Theory, Treatment Subscale (TFCT-Tx)	-1.01	0.63	-.14			-.13
RfC*TFCT-Tx	-0.18	0.49	-.04			-.03
Post-Detention Likelihood to Succeed (PDLSS) ^c				.56	26.74***	
Baseline PDLSS	4.40	0.61	.66***			.53
Readiness for change (RfC)	0.17	0.63	.03			.02
Treatment fit with Change Theory, Treatment Subscale (TFCT-Tx)	1.09	0.52	.16*			.15
RfC*TFCT-Tx	0.02	0.39	.01			.00

Note. All predictor variables standardized.

^a *N* = 94. ^b *N* = 98. ^c *N* = 87.

p* < .05 *p* < .01 ****p* < .001

This effect was not found for the staff-rated, behavioral measures. TFCT-Tx did not significantly predict gain in phase level or rule violations at either 2 or 4 month follow-up. In summary, the hypothesis that TFCT would predict later treatment gains while controlling for readiness for change was supported for the self-report outcome measure (PDLSS), but not for the staff-rated behavioral measure (phase level) or for actual change in number of rule violations.

TABLE 9 Results of the Simultaneous Regression Analyses: Prediction of treatment gains at 4-month follow-up

<i>Criterion/Predictor</i>	<i>B</i>	<i>SE B</i>	β	ΔR^2	ΔF	<i>Semi-partial r</i>
Phase Level ^a				.61	29.88***	
Baseline Phase Level	1.67	0.20	.68***			.60
Readiness for change (RfC)	0.38	0.19	.18*			.14
Treatment fit with Change Theory, Treatment Subscale (TFCT-Tx)	0.19	0.19	.08			.07
RfC*TFCT-Tx	0.19	0.13	.12			.10
Rule Violations ^b				.40	12.90***	
Baseline Rule Violations	4.33	0.83	.52***			.46
Readiness for change (RfC)	-1.19	0.66	-.20			-.16
Treatment fit with Change Theory, Treatment Subscale (TFCT-Tx)	-0.27	0.70	-.04			-.03
RfC*TFCT-Tx			.11			.09
Post-Detention Likelihood to Succeed (PDLSS) ^c				.69	37.93***	
Baseline PDLSS	5.54	0.69	.68***			.55
Readiness for change (RfC)	-0.93	0.72	-.12			-.09
Treatment fit with Change Theory, Treatment Subscale (TFCT-Tx)	2.96	0.73	.31***			.27
RfC*TFCT-Tx	-0.59	0.47	-.10			-.09

Note. All predictor variables standardized.

^a *N* = 81. ^b *N* = 83 ^c *N* = 72.

p* < .05 *p* < .01 ****p* < .001

Hypothesis 5

The above regression analyses also served to analyze the fifth hypothesis, that readiness to change (RfC) and treatment fit with change theory (TFCT-Tx) would interact, such that youth who were ready to change *and* viewed treatment as “fitting” their theory of change would show more success in treatment than those who were ready to change but did *not* perceive that treatment fit their needs. Simultaneously with main effect predictors, an interaction term was entered into all of the above regression equations. The hypothesis was partially supported within baseline data, in which the TFCT-Tx* RfC interaction showed significant, small effects on concurrent behavioral outcome measures, but not on the self-report measure (PDLSS). In the analyses

predicting treatment gains at 2- and 4-month follow-up, however, the interaction effect failed to emerge as a significant predictor in any analysis.

Other Findings

TFCT Treatment vs. Staff subscales

As mentioned above, youth on average responded to TFCT-Staff items (“How much does your staff work with you to make this happen?”) with much lower ratings than to TFCT-Treatment items (“How likely is it that treatment will help make this happen?”). This was unexpected, as the “staff” and “treatment” items were intended to tap into a general treatment factor. A possible explanation for this finding was imprecise item wording. While the word “staff” was intended to evoke for youth all types of treatment staff – caseworkers, psychologists, correctional officers, teachers – in the jargon of this particular institution the word “staff” is often used to refer specifically to correctional officers. It was unclear, then, whether the low ratings of staff’s help reflected feelings about treatment staff as a whole, or only one specific class of treatment staff. The expanded version of the Theory of Change Survey (Appendix E, and see Procedures, above) was designed to examine this effect. With all types of treatment and categories of staff rated separately, the effect remained – treatment items on average received higher ratings than staff items (Tables 10 and 11).

TABLE 10 Youth Ratings of “Fit” Between Their Change Theories and Help Provided by Specific Types of Treatment and Staff –2-month follow up

<i>Treatment Type</i>	<i>M^a</i>	<i>SD</i>	<i>Staff Type</i>	<i>M^a</i>	<i>SD</i>
School and/or job training (1) ^b	3.75	1.17	Caseworker (3)	3.40	1.32
Correctional therapy (2)	3.47	1.29	Teachers (6)	3.14	1.21
Specialized treatment (4)	3.34	1.47	Psychologist (8)	2.88	1.37
One-on-one counseling (5)	3.31	1.23	Correctional Staff (9)	2.76	1.30
TYC structure and rules (7)	2.94	1.32			

Note. ^a Mean response on 5-point Likert scale, 1 = strongly disagree, 5 = strongly agree.

^b Rank order of each treatment/staff type in overall ratings

TABLE 11 Youth Ratings of “Fit” Between Their Change Theories and Help Provided by Specific Types of Treatment and Staff –4 month follow up

<i>Treatment Type</i>	<i>M^a</i>	<i>SD</i>	<i>Staff Type</i>	<i>M^a</i>	<i>SD</i>
School and/or job training (1) ^b	3.66	1.20	Caseworker (4)	3.30	1.48
Specialized treatment (2)	3.52	1.37	Teachers (5)	3.24	1.40
Correctional therapy (3)	3.49	1.35	Correctional Staff (7)	2.96	1.43
One-on-one counseling (6)	3.13	1.50	Psychologist (9)	2.94	1.62
TYC structure and rules (7)	2.96	1.32			

Note. ^a Mean response on 5-point Likert scale, 1 = strongly disagree, 5 = strongly agree.

^b Rank order of each treatment/staff type in overall ratings

Of interest was not just the average level of ratings of treatment vs. staff, but which ratings were more related to treatment success. On the original Theory of Change Survey, TFCT-Tx items showed significant correlations with concurrent treatment success, while the TFCT-Sf items showed only non-significant, trivial correlations (Table 3). The expanded Theory of Change Survey was used to determine whether ratings of staff usefulness *overall* were unrelated to treatment success, or if it was just that ratings of *correctional staff* (whom youth might have been thinking of when responding to the original TFCT-Staff items) that were unrelated to treatment success. The latter hypothesis is partially supported by results from the expanded Theory of Change Survey.

When all staff types were explicitly named and rated separately, the new TFCT-Sf items showed correlations to treatment success that, while still weaker, were much more in line with the correlations found between treatment success and TFCT-Tx items (Tables 4 and 5). Lastly, individual items from the expanded survey were analyzed for their correlations with treatment success variables. As predicted, youth responses to the item regarding correctional staff were only trivially related to objective treatment success variables, whereas other items did show significant correlations with objective treatment success variables (particularly “My caseworker will help me make this happen so I can stop doing crimes,” “Correctional therapy will help me make this happen so I can stop doing crimes,” and “School and/or job training will help me make this happen so I can stop doing crimes”).

Youth in Specialized Treatment

Data were also analyzed separately for the subset of youth who reported at baseline that they were currently involved in specialized treatment, as being involved in a specialized treatment program is the correctional treatment context most analogous to the traditional psychotherapeutic treatments in which the working alliance has been studied. Exploratory analyses were conducted to ascertain any differences in the functioning of TFCT-Tx within this subgroup of youth. It was hypothesized that if any youth would show a relationship between TFCT-Tx and treatment outcomes, it would be this subset of youth enrolled in specific treatment. However, a small effect in the *opposite* direction was observed. Youth enrolled in specialized treatment at baseline gave higher average ratings of working alliance and treatment fit, but those ratings were *less* predictive of

outcomes for these youth than for the youth who did not report current enrollment in specialized treatment. For non-treatment-enrolled youth, baseline ratings of treatment fit did emerge as a significant predictor of both phase level (explaining 2% of unique variance) and post-detention likelihood of success (explaining 4% of unique variance) at 2-month follow-up, even while controlling for baseline. No trend in this direction was observed among youth enrolled in specialized treatment.

Summary

In sum, results from the present analyses suggest that within a sample of incarcerated youth, the construct of treatment fit with change theory is in fact related to the more-established construct of the working alliance. Also, treatment fit with change theory was significantly associated with later treatment gains on a self-report outcome measure, while the working alliance was not associated with those gains.

Treatment fit with change theory was associated with increases, both 2 months and 4 months later, in youths' positive predictions about post-detention success. These effects were small, but did seem to increase with time, such that youth's ratings of treatment fit were a stronger predictor of gain at the 4-month follow-up than they had been at the 2-month follow-up. All of these results were obtained while controlling for youth's readiness for change. Thus, they suggest that the influence of treatment fit with theory of change is unique, and cannot be accounted for merely by youths' readiness for change.

In addition, treatment fit with change theory was predictive of being, concurrently, at a higher staff-rated phase of treatment and committing fewer staff-logged

rule violations. Again, these results were obtained while controlling for youths' readiness for change. However, neither treatment fit with change theory nor the working alliance were associated with later *improvements* in staff-rated treatment phase or number of rule violations. While alliance-related variables did not predict gains in behavioral outcomes, neither did readiness for change in most cases. Instead, a great proportion of the variance in later behavioral outcomes was explained by baseline levels of those variables.

Lastly, youth who expressed readiness to change *and* rated highly treatment's fit with their change theory were at higher staff-rated phases of treatment and committed fewer staff-logged rule violations. However, like the main effects, this interaction effect did not predict later improvements in staff-rated treatment phase or number of rule violations.

Chapter 5: Discussion of Quantitative Findings

The goal of the present investigation was to examine several hypotheses about “what works” in treatment with incarcerated youth. The study examined relationships between the working alliance, treatment fit with change theory, readiness for change, and treatment success. The proposed model (see Figures 1 and 2, pp. 9-10) was partially supported by the current study. The new construct developed in this study, treatment fit with change theory, was related to the working alliance among these youth. Further, the strength of the relationship between treatment fit with change theory and self-report treatment gains in this, incarcerated population ($r = .34$) matched the average strength of the alliance-outcome association ($r = .31$) found in the general psychotherapy literature between client-rated alliance and client-rated outcome measures (Horvath & Symonds, 1991). This effect remained even when readiness for change was controlled.

These relationships did not carry over into prediction of gains in staff-rated treatment success or rule violations. Treatment fit with change theory was associated with *concurrent* levels of the behavioral variables, even while controlling for readiness for change. However, once prior functioning was controlled for, treatment fit with change theory was not predictive of future *gains* in behavioral variables. Similarly, the proposed interaction effect (between treatment fit with change theory and readiness for change) was associated with concurrent treatment success, but did not predict improvement in future outcomes. This chapter provides a discussion of the results and limitations of the study, as well as implications for future research and practice.

Relationship Between the Working Alliance and Treatment Fit with Change Theory

The client's perception of the working alliance – composed of the client's sense of a bond with the therapist, a collaborative identification of goals, and perception of productive work on tasks that will help reach those goals – has been shown in general research on psychotherapy to have a robust association with treatment success (Horvath & Luborsky, 1993). This study predicted that the working alliance would play an important role in treatment with incarcerated youth, but that modifications of the construct would make it more relevant to the particular population and setting. While the working alliance is generally understood as a relationship between two people, therapist and client, in a correctional setting it was proposed to be more useful to look at a youth's "alliance" with a number of different staff and treatment types active in this environment. In addition, it was suggested that to be more relevant to a correctional setting, a measure of the alliance would need to focus more on the concrete, task-centered aspects of the working alliance (does treatment make sense to me, and is it offering something I can use?) as opposed to the relational aspect (do I trust this particular therapist?). The Theory of Change Survey was created by the author with these modifications in mind.

As predicted, youths' ratings of treatment fit with their change theories was strongly related to their ratings of the working alliance, suggesting that the new "treatment fit with change theory" variable was successful in tapping an alliance-related construct. The more-established variable, the working alliance, showed no significant relationships with 4-month treatment gains on any measures. This might suggest that the working alliance is less related to outcomes among incarcerated youth than it has been

found to be with other populations or within other treatment settings. However, the new alliance-related construct proposed for this study, treatment fit with change theory, did show a moderate association with self-reported treatment gains 4 months later. The strength of this association ($r = .34$) matched the average estimate of the size the relationship between client-rated working alliance and client-reported outcomes ($r = .31$) found in a meta-analysis of this effect (Horvath & Symonds, 1991). This suggests that something akin to the working alliance – the “fit” of the goals and tasks of treatment with a youth’s theory of change – may be just as important in work with these youth as the working alliance has been found to be in other settings. This result also suggests that the working alliance-concept may need adjustments to apply to correctional settings, and that the current study’s proposal of “treatment fit with change theory” may be a productive way of conceptualizing and measuring an alliance-related construct among these youth.

Among all aspects of the correctional treatment program, youth rated school and job training as offering the most help within their change theories. Unsurprisingly, youth rated help from correctional staff – the personnel directly responsible for daily discipline – as offering the least help within their change theories. Interestingly, youth’s low ratings of the help offered by correctional staff were *not* related to success in treatment. This finding fits in with Lipsey and Wilson’s (1998) conclusion from their meta-analysis of “what works” in correctional treatment, that the role of juvenile justice personnel as authorities in the institutions interferes with their ability to provide effective treatment. The lack of any relationship between feelings about staff and behavioral outcomes is particularly interesting in the case of the rule violations outcome measure—it might be

supposed that youth who committed a high number of rule violations would rate particularly poorly the helpfulness of the correctional staff who are the primary agents of enforcing rules and recording those rule violations. Instead, ratings of correctional staff showed little relationship at all with rule violations. On the other hand, ratings of staff who are responsible for treatment – caseworkers – was one of the items that was most consistently related to treatment success. This pattern of correlations suggests that the process of controlling behavior and engaging in treatment is more associated with beliefs about treatment and treatment staff than it is with a more across-the-board opposition to rules and authorities in general.

Finally, this study demonstrated that the Theory of Change Survey was able to elicit more information than the Working Alliance Inventory in this sample, by allowing youth more flexibility in their responses. In one extreme example, a respondent filled out the AWAI based on his relationship with his caseworker, answering “always” to items such as “I believe this person can help me,” “This person and I are working on goals that we both agree on,” and “We both understand the kind of changes that would be good for me.” However, on the Theory of Change Survey he reported that he would stop doing crimes if “you pay me a gagillion dollars and give me a lifetime supply of heroin and crack.” This response could have been a genuine “theory of change,” or merely a sarcastic comment reflective of a general lack of interest in desistance and lack of buy-in to correctional treatment. In any case, this youth’s responses on the AWAI did not capture any of these negative feelings, while his responses on the TFCT items did – he rated “strongly disagree” to all items stating that staff members or treatment types would

“help me make this happen.” It may be that the standard format of the working alliance inventory is subject to positive response bias, particularly among incarcerated youth who may be motivated to “fake good” to those in authority over them. The same response bias may be less prevalent on the Theory of Change Survey, as youth are asked to actually stop and think about what their theory of change is and whether their treatment fits with it, rather than just provide an abstract “popularity rating” of their treatment staff.

Role of Readiness for Change

The current study did not make any explicit hypotheses about a main effect of readiness for change on treatment success, instead viewing it as an extraneous variable to control due to potential confounding of the variables of interest. It is interesting to note, however, that similar to other research with offenders (Burnett, 1992; Maruna, 2001), participants in this study reported very high levels of motivation to desist from crime. The modal response on the Contemplation Ladder at all three administrations was 10 (“Taking action to stop doing crimes”), the highest response choice available. Of course, the Contemplation Ladder was also the survey most subject to “faking good” in a coercive, correctional setting. The “right answer” was clear, and there could be consequences to youth’s length of incarceration to admitting to “No thought of stopping” criminal activity. Very few youth reported this. In any case, these results point to the difficulty of using motivation as a way to predict outcomes within coercive treatment settings. Either most offenders are motivated and thus help is needed with overcoming obstacles rather than enhancing motivation (Maruna’s (2001) theory), or offenders simply

will not reliably report their level of motivation. Either way, measuring motivation would not be particularly productive.

This study aimed to test whether any association between alliance-related variables and outcomes in this population were confounded by readiness to change. Does the positive effect of a working alliance merely suggest that incarcerated youth view treatment as useful when they are already prepared to change? The data supported presuppositions that readiness for change would play a role in treatment success, and that it would share variance with the working alliance and treatment fit with theory of change. However, controlling for readiness for change did not eliminate the effect of treatment fit with change theory on treatment success (as measured by self-report on the PDLSS). These results suggest that treatment fit with change theory does in fact have a unique relationship with treatment success, that cannot be fully accounted for by a youth's readiness to change.

Rather than a simple, direct effects model, results also suggest a more complex relationship between readiness for change and treatment success. Readiness for change did have a main effect on concurrent treatment success, suggesting that readiness for change in and of itself is associated with treatment success. However, the interaction between readiness for change and treatment fit with change theory was also significantly related to behavioral outcome variables (measured concurrently). This suggests that doing well in treatment is associated with youth being both ready to change *and* perceiving that treatment as offering them something that makes sense within their theories of change. This result supports Farrall's (2000) findings about the complex

interaction between motivation, intervention, and outcomes. He found that while motivation alone seemed to be “enough” to allow some ex-offenders to successfully desist from crime, other ex-offenders reported low motivation to desist and many obstacles in their way. For these “unmotivated” offenders, intervention made a difference: ex-offenders who reported getting help to overcome obstacles also experienced more later success. The current study supports the idea that delinquent youth’s own readiness for change is important, but also that interventions that make sense to these youth may be able to support their motivation and help it to translate into successful behavior change.

The significance of this interaction effect emerged only in the concurrent analysis, not in the analyses of later treatment *gains*. These non-significant results seem most parsimoniously understood as related to the non-significance of the main effects in these analyses, which is discussed below.

Treatment Fit with Change Theory as an Early Predictor of Treatment Gains

As noted by Martin et al. (2000), finding an association between the working alliance and outcomes suggests that there is a relationship between them, but does not indicate what mechanism underlies this relationship. It has been suggested (Bordin, 1980) that the alliance-outcome relation emerges because early working alliance makes possible later therapeutic gains. The current study proposed to test a related hypothesis by examining whether a youth’s perception of treatment’s “fit” with his or her change theory would be able to predict future treatment gains, over and above prior functioning. The current study provided partial support for this hypothesis by finding that early ratings

of treatment fit with change theory preceded and predicted gains in a self-report measure of treatment success. Treatment fit with change theory was more predictive of gains at 4-month follow-up than of gains at 2-month follow-up, suggesting that the effect may be slow-acting and gain strength over time. This study provides evidence that treatment fit with change theory may be an early predictor of therapeutic gains, at least as measured by youth self-report. This finding suggests the possibility that by working to select or explain treatment tasks in ways that “fit” a youth’s theory of change, clinicians may have a better chance of helping incarcerated youth make progress in treatment. “Progress” in this case was measured by increases in youths’ reported ability to envision a positive, crime-free future life.

As reported earlier, treatment fit with change theory was associated with concurrent levels of staff-rated treatment success even when controlling for readiness to change. However, this may be a spurious correlation, related to initial levels of functioning. Once initial levels of functioning were controlled, treatment fit with change theory did not predict *gains* in staff-rated treatment progress or *decreases* in rule violations.

One explanation for the lack of significant findings on the behavioral measures may be the difference between effecting a change in attitudes versus effecting a change in actual behaviors. This study’s self-report measure of treatment success asked youth to predict how likely they were to engage in various behaviors upon their release, either behaviors that are supportive of a crime-free life or behaviors that are supportive of continued criminal activity. This could be considered a measure of attitudes towards

behavior change. Finding that treatment fit with change theory predicted positive changes in attitudes but not in actual behavior may merely suggest that the study followed youth long enough to observe attitude change, but not long enough for these changes in attitudes to translate in actual, concrete behavior. Even if behavior change did take place, the particular behavioral measures selected for this study may themselves be relatively insensitive to registering that change after a short period of time. Phase level is a “socially valid” measure within the correctional institution, as different phase levels reflect real, significant changes in behavior and are linked to meaningful outcomes such as release from incarceration. However, it takes time for correctional staff to notice behavior change such that they advance youth to the next phase level, and staff re-assess youth phase levels only once per month (strikingly, 28% of participants who completed the study experienced no change at all on the phase level variable between the baseline measurement and 4-month follow-up). The number of rule violations a youth commits should be a more time-sensitive measure of behavioral change, with less of a time lag in registering behavior change. However, this only measures disruptive and violent behavior, and is unable to assess more subtle behavior changes or increases in *positive* behavior.

Though inconclusive, it is interesting to note that treatment fit with change theory had a stronger effect on gains self-reported progress at 4-month follow-up than it had after only two months. An incubation period may be necessary for this effect to gain strength, to facilitate the transition from attitudes to actual behavior change, and for behavior change to register on staff-rated measures. Future research could examine this

possibility with a longitudinal study, and by using trained observers to rate multiple types and increments of behavior change.

The current study used behavior within the institution as a convenient proxy for the outcome that is ultimately of interest – behavior within the community – which is far more difficult and time-consuming to monitor. It is unclear how much institutional behavior is predictive of community behavior. (This distinction is even noted in the DSM-IV, which differentiates in substance abuse disorders between unarguable remission and “remission within a controlled environment” for those who have only, thus far, demonstrated change their substance use while in an inpatient treatment program or behind bars.) It is interesting to note that in the one previous study of the working alliance with incarcerated youth, the effects of the working alliance were most strongly seen on post-incarceration behavior rather than on behavior within the institution (Florsheim, 2000).

Behavior change within a correctional institution does not necessarily require any intrinsic motivation or “buy-in,” as the possibility of gaining privileges and eventual release are extremely potent extrinsic motivators to “play along.” Mullins, Suarez, Ondersma, and Page (2004) noted this effect in a study that used motivational interviewing (MI) to try to increase engagement and retention in a substance abuse treatment program. Participants in the study were women who had been mandated to attend the treatment program by their child welfare program caseworkers, so issues of custody and/or visitation of their children were at stake in their attendance. Though in many other settings MI has been shown to increase treatment engagement by increasing

participants' intrinsic motivation, MI failed to show any significant effects among these women. The authors speculated that when extrinsic motivators are so strong, differences in intrinsic motivation play a smaller role, because “coercion in and of itself may be the necessary component in treatment engagement and retention” (p. 57).

There is a possibility that treatment fit with change theory does not predict how youth behave in a coercive setting where the effects of motivation and alliance are distorted. Instead, treatment fit with change theory/working alliance may be associated with how much youth *internalize* from that treatment, in ways that will affect their behavior once they are free. Based on the argument that internalization of treatment benefits is the key to behavior change within the community, it could even be argued that youths' self-reported changes in attitudes – such as those assessed on the PDLSS in the current study – may be a better predictor of real-world behavior than is their institutional behavior. On the other hand, youth's predictions of how they will behave when they are released may be completely unreliable, based not on genuine insight into their motivations and abilities but on unrealistic optimism or denial of the extent of the problem. Future research is needed to determine what, if any, link exists between youth's own predictions of their post-incarceration behavior and that behavior itself.

Ultimately, the hypothesis that treatment fit with change theory would predict how youth behave while incarcerated presupposes that treatment itself plays a sizeable role in youth's lives, choices, and behaviors. This is a necessary assumption if we are to hypothesize that belief in and engagement with treatment will affect youth's behavior. As noted by Tetzlaff (2005), however, many other aspects of life may loom much larger

and play greater roles in youth's motivation, hope, and ability to control behavior. Past history, beliefs about the world and its possibilities, support of family, psychological distress and disorders, and numerous other factors may far outweigh the effects of treatment and what it provides. Qualitative results, to be discussed in the next chapter, do in fact suggest that when youth think about what will effect change in their lives and behavior, treatment is not at the forefront of many of their minds.

Strengths and Limitations

Strengths of the current study include the external validity inherent in studying treatment processes in a real-world treatment setting with delinquent youth. In addition, this study did not limit its outcome measures to self-report, "arbitrary metrics" of which there has been much recent critique (Blanton & Jaccard, 2006). Instead, this study included two measures – phase level and rule violations – that could be described as "socially valid...[measures on which improvement would signify that] changes or differences at the end of treatment actually made a difference to people themselves or those with whom they were in contact" (Kazdin, 2006). Lastly, the current study employed a rigorous method of determining the unique predictive value of the variables of interest, by controlling for a potential confound (readiness to change) and for baseline levels of functioning.

The generalizability of the current study is limited to youth from the ages of 18 to 20, males (due to the very small sample of female offenders), and to serious, violent juvenile offenders rather than the larger, more heterogenous population of adolescent offenders. Although the population to whom the results can be generalized is small, this

group has both been seen as particularly intransigent to change, and has also been vastly underrepresented in the research literature. Positive change in this population would have enormous societal implications in terms of the safety of our communities and the cost of keeping adolescents (and the adults they become) in the tax-supported correctional system.

A number of methodological limitations may have affected the study's power to observe the effects of interest. Measurement error may have been high, due to the use of surveys in an early stage of development (i.e. TFCT-Tx at baseline was a two-item measure) or youth unwillingness to complete surveys honestly due to fear of repercussions. The researcher repeatedly assured participants that she was not associated with the correctional institution and that their honest answers would be confidential, but it is impossible to know how forthright or guarded the participants were. (It is interesting to note that correlations between the WA and concurrent treatment success at 2- and 4-month follow-up were nearly double those observed at baseline – one possible explanation is youth suspicion of the researcher at baseline giving way to more faith that confidentiality would be protected when no adverse consequences were observed.) Several statistical problems could have also contributed to lack of significance, such as small sample size and normality problems with both of the behavioral outcome measures.

The current study shares similarities with cross-sectional designs, in that participant youth were not a cohort who had entered treatment at the same time, but instead had spent different amounts of time incarcerated and in treatment (ranging from 2 to 74 months). One problem with this design relates to the functioning of the working

alliance. Many of these youth could be considered to be in the middle phase of treatment. Research suggests that the working alliance is labile during the mid-phase of therapy, such that measurements taken during the fluctuations of the alliance in this phase are likely to have weaker relationships with outcomes (Horvath, 1994). Due to this natural process, then, low mid-treatment ratings of the alliance are not necessarily related to later outcomes. As previously noted, it is difficult to define when to measure “early-treatment” working alliance in a correctional treatment setting, and Florshiem et al.’s (2000) results demonstrated that a more classic approach that measured the working alliance very early in treatment with delinquent boys was not effective, either. Further theory and research will be needed to address this problem.

The cross-sectional design also produced another problem, in that participant youth were probably at very different stages in the developmental process of desistance from crime. Some youth, for instance, may have already completed the process of behavior change. Qualitatively, one youth reported “I’ve already learned how to break my patterns of offending and I know how to stop victimizing.” The language this youth uses echoes that of the correctional treatment program, suggesting that this youth feels that treatment offered help towards his process of desistance. However, this youth went on to write that at this point, continued incarceration, “only helps you become a better criminal.” This youth’s feelings about the “fit” of treatment with his own desistance process, then, will not necessarily be predictive of any change in his behavior. Again, future research that longitudinally tracked youth as they entered the juvenile justice

system and proceeded through treatment and release would allow us to observe the effects of treatment fit as they occur.

Chapter 6: Qualitative Findings

The following chapter reports and discusses results from the qualitative portion of the study. First, thematic categories which emerged from content analysis are described. Next, the relative frequencies of these content categories were analyzed to explore possible differences between subsets of youth (based on gender, race/ethnicity, and type of criminal offense), as well as to determine any relationships between content categories and study variables. Results of these quantitative analyses are presented. Lastly, these results are discussed in terms of their implications for theory and research on desistance, as well for clinical practice with delinquent youth.

Descriptive Findings

Theories of Change

At all three points of data collection, participant youth completed the Theory of Change Survey by writing a response to the prompt, “I would stop doing crimes/keep out of trouble if...” All qualitative responses were compiled and underwent coding for themes (see “Procedures,” above). Descriptive statistics about the themes that emerged from this qualitative analysis are presented in Table 11, below.

The major category of change theory most frequently observed was “Self Change” (36% of responses). In this category of responses, participants reported that what needed to happen in order for them to desist from criminal activity had something to do with control over, or change within, the self. In the coding process, “Self Change” responses were further broken down into smaller sub-categories. The most common of these was the “self-discipline” sub-category (19%). Responses in this category reflected

a need to simply *control* one's own thoughts or behavior. This included references to staying focused, setting goals, controlling impulses, or using decision-making strategies. A second "Self Change" sub-category was "deeper change in thoughts or values" (11%). Rather than needing to just *control* behavior, responses in this category related to the need for a deeper cognitive or moral *change*. These responses included references to changing values, having empathy, learning how to handle problems, changing thought patterns, taking responsibility for actions, maturing, or gaining self-knowledge or insight into one's past actions. Responses were coded with the sub-category "emotions" (4%) if they mentioned the need to control or manage emotions, or meet emotional needs such as the need to express oneself or have greater self-esteem. Lastly, responses were given the sub-category code for "choice" (6%) if the participant stated that stopping criminal behavior was a straightforward matter of personal choice, desire, or motivation. Responses in this category ranged from those that implied personal control over a positive choice to desist from crime ("If nothing, I already want and am going to stop doing crimes") to those that implied that the choice had not yet been made ("If I ever felt like it."). The next major category frequently observed (tied with the "Environment Change" category, discussed below) was "Constructive Outlet" (29%) Responses in this category made explicit reference to needing something constructive to do with oneself in order to successfully desist from crime. In the sub-category "work or school" (12%), responses related to getting a job or going to school, often to receive training for a particular career (barber, carpenter, architect, welding, business management). In the "general" sub-category (16%), some responses related to the need to engage in particular

TABLE 12 (Page 1) Theories of Change Among Incarcerated Youth:
Qualitative Responses to Prompt, “I would stop doing crimes/keep out of trouble if...”

<i>Major Category</i>	<i>%^a</i>	<i>Sub Category</i>	<i>%^a</i>	<i>Examples</i>
Self Change	36%	Control of thoughts or behavior	19%	“I stay focused” “I get strong goals for myself and follow my steps” “I stop to think about my costs and benefits.” “I put my mind to doing right.”
		Deeper change in thoughts or values	11%	“I can be responsible for my own actions and be a better person.” “By doing a life story to see how I cause myself to commit a crime.” “Learn to internalize and demonstrate empathy.” “I could break my habit of falling into negativity.”
		Handling emotions and emotional needs	4%	“I learned how to cope and deal with anger.” “Stop looking for acceptance in the wrong place.” “I could express myself.”
		Simple choice	6%	“I made the choice to because it doesn’t matter what others do.” “I ever felt like it.”
Constructive Outlet	29%	General	16%	“I had a lot of structure and fun activities to participate in.” “Keep myself busy with activities I enjoy.” “I find something constructive to do with my life.” “If I had something to look forward to doing.”
		Work or school	12%	“I was to get a job that would keep me busy.” “I go to college.”
		New role	3%	“Be a mentor and teach people who want to learn.” “I can be back with my little girl as a good father figure.”

Note. ^a Many participants gave responses containing multiple parts. Therefore, percentages reflect the percent of responses for which any part of the response fit this category.

TABLE 12 (Page 2) Theories of Change Among Incarcerated Youth:
Qualitative Responses to Prompt, “I would stop doing crimes/keep out of trouble if...”

<i>Major Category</i>	<i>%</i>	<i>Sub Category</i>	<i>%</i>	<i>Examples</i>
Change in environment	29%	Change peer group	10%	“I am not surrounded by negatively influenced people.” “I could hang out with positive friends.”
		Access to material goods	5%	“I had everything I wanted and needed to survive.” “I had other options than stealing or selling drugs.” “Someone gave me all the money that I want.”
		Access to external motivators	4%	“Having things to look forward to, incentives.” “I had something to motivate me to do good.” “They would pay me not to.”
		General change of environment	4%	“I move away from my old environment.” “I find a positive environment to live in.”
		End unfair treatment	4%	“Staff would quit yelling at us.” “People here need to cut youth more slack.”
		System change	3%	“The courts give us a chance to self-correct and learn from our mistakes, and not be so quick to put us behind bars for a crime we commit as youngsters.”
Relationships	20%	More focus on existing relationships	8%	“Spending more time with my family.” “Stop and think of my familia.” “Look at my son’s picture and do what I have to do to get out of here.”
		Meeting relational needs	13%	“Basically I just need someone to show me that they care.” “I need someone to talk to and get my feelings out.” “People would support when I fall and are there to help me.”

TABLE 12 (Page 3) Theories of Change Among Incarcerated Youth:
Qualitative Responses to Prompt, “I would stop doing crimes/keep out of trouble if...”

<i>Major Category</i>	<i>%</i>	<i>Sub Category</i>	<i>%</i>	<i>Examples</i>
Get help	11%	General help	1%	“I had the proper guidance.” “I got the help I need.”
		Get or apply treatment	10%	“If we had more one-on-one counseling.” “I continue to use my recovery program.” “I use the things that they teach me here.” “I finish treatment.”
Fresh start	6%			“I got a chance to prove that I no longer want to hurt others.” “If I was given a chance to live a prosocial life.” “I could get my record sealed.”
Gain release	6%			“This place is making me worse.” “I get out.”
Change the past	3%			“There were more opportunities for me as a child.” “My dad was alive.” “I grew up in a different family.”

activities (sports, volunteering, art). A good deal of these “general” responses, however, referred not to specific activities but to the simple need to “keep busy” (i.e. “If I have no free time on my hands and stay occupied”). Even when the youth identified wanting to engage in a specific activity, often the response did not indicate any inherent desire for that activity itself but rather to its value in keeping the youth occupied (“I could find a good job that would keep me busy at all times”). Lastly, in responses labeled “new role” (3%), the constructive outlet needed was to move into a new role acting as a parent, leader, or mentor.

In the major category “Environment Change” (29%), participant responses indicated that what was needed for desistance from crime was a change in the environment around them. The largest sub-category of these responses related to a change in “peer group” (10%). These responses did not refer to specific relationships or relational needs (such as the need for confidants, caring relationships with friends, etc) but instead to a generalized need for an “environment” with less negative peer influence (“I don’t go back to the same friends I got in trouble with”) or more positive peer influence (“I hung out with more prosocial friends”). Though the change needed was located in the environment external to the youth, it should be noted that in many cases the youth implied that they themselves had the internal control/ personal responsibility to effect this change (i.e. “I go out and find more positive peers,” or “I stop messing around with negative people”). The remaining sub-categories under “Environment” were all relatively low in frequency. In the “general” sub-category (4%), youth reported an unspecified need for a more positive environment or simply a change in location. Other

sub-categories reflected a need for environmental change that was less under personal control and/or less a matter of personal responsibility. In the “end unfair treatment” sub-category (4%), youth made explicit mention of wanting correctional staff to change their practices (“staff needs to quit yelling at us and just talk”). In the “system change” sub-category (3%), participants took a larger view and critiqued the correctional system or the society at large. Lastly, two sub-categories referred to the need for external motivators or access to material goods. In the “access to material goods” sub-category (5%), participants reported that access to specific material goods would prevent them from returning to crimes. Some responses spoke of just needing enough to “get by” (i.e. “If I had enough money to get all the things I want and need to survive in this crazy and corrupt world. I just want to live a decent life”), while a few others spoke of the desire for luxuries or illegal goods (“If I had enough money to live lavishly with”). In the “access to external motivators” sub-category (4%), youth reported needing something external to motivate them to desist from crime, such as positive reinforcements, incentives, or simply “something to look forward to.”

Another common major category of youth response was “Relationships” (20%). In one sub-category of these responses, youth spoke of needing to meet “relational needs” (13%) such as the need to be cared about, to be supported, or to trust and express themselves to another person. In the other sub-category, youth spoke of the need for “more focus on existing relationships” (8%). Some of these responses spoke of needing more time in contact with families and loved ones, or the need to improve these relationships. Others spoke of a more cognitive process of focusing on or prioritizing

important relationships (“I stop thinking only of myself and start focusing on my family and my baby”).

“Get Help” (11%) was the last major category that was mentioned in at least 10% of the responses. A few of these responses (1%) referred to the need for help or guidance from an unspecified source. The largest sub-category, however, specifically referred “getting or applying” some form of treatment or counseling program (10%). Some of these responses referred to the need for more or different forms of treatment (“we have a class were they talk about crimes,” “more one-on-one counseling”). A few specifically mentioned the treatment they were currently receiving as helpful to them (“I was to continue with the new skills I’m getting and apply it to my everyday life”). Some of these responses, however, were very general self-admonitions to “do treatment” (i.e. “Go to treatment and anger management classes,” “I finish treatment”) with little indication of if or how the youth felt he or she was benefiting from that treatment.

Lastly, three themes emerged from the data that were less frequent, but distinct enough to merit separate major categories. In the “Fresh Start” category (6%), responses related to the need for a second chance, to escape the baggage of a criminal life and have a chance to build a new one. Some of these responses implied a concern about identity. Responses spoke of the desire for others to stop viewing them as criminals (“When I am doing good and when I am actually trying and doing all I can to be good and I get acknowledged for it instead of always being assumed on and treated like I’m so bad and that I’ll never change”) or the desire to prove a new non-criminal identity to others (“I were released and prove myself, that I’ve redeemed myself, I’ve matured and I’m no

longer the same person”). In another small-frequency major category (“Gain Release,” 6%), participant responses implied that all they needed was release from incarceration. Some of these responses were general (“I get out”) while others made a specific case about incarceration’s potential to actually increase criminal offending (“I could only spend a little amount of time in here. The reason I say this is because being away from our family hurts us emotionally and psychologically”). Lastly, a few respondents did not give a theory of change reflecting something that could happen now or in the future, but instead reported that for them to stop committing crimes something in the *past* would have had to have been different (“Change the Past,” 3%).

Source of Action

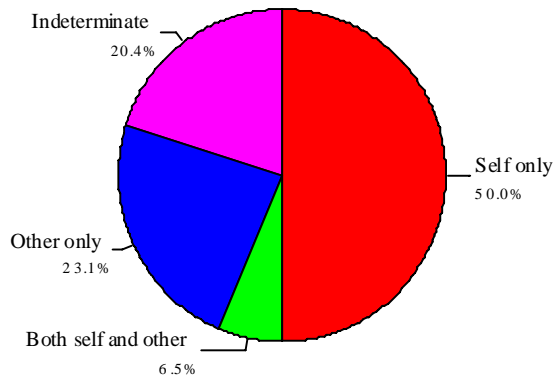
One additional coding scheme was used on the data, using a different approach to categorization. The categorization of themes (as described above) was conducted inductively, with themes allowed to emerge from the data. A second coding scheme, however, used a more deductive, theory-driven approach, by linking the current study’s data to a pre-existing theoretical construct in the literature.

The content analysis described above indicated *what* participants believed would need to happen for them to desist from crime. It did not, however, illuminate *who* they believed would need to take action to effect the necessary change. It was noted that even within categories, responses differed in terms of who reportedly needed to take action to make the change happen. For instance, while all theories within the “Environment Change” category stated that a change was needed in the external environment, some responses indicated that the participant themselves would make the change (i.e. by acting

to associate a more positive peer group). On the other hand, other responses indicated that another person needed to act to make the change (i.e. staff needed to end unfair treatment). In some responses it was difficult to tell who needed to take action to make the needed change. For instance, in the response “[I would stop doing crimes if...] I had positive people in my life,” it is unclear whether the youth believes he or she can take action to find and associate with positive people, or that others need to facilitate this change. These differences appear related to what Brickman et al. (1982) refer to as “attribution of responsibility for the solution to a problem.” As Brickman et al. make clear, this construct must be distinguished from “attribution of responsibility for the origin of the problem.” Individuals may believe that others caused a problem, but that they themselves have responsibility to fix it, or vice versa. The current study asked youth for their attributions about solutions to their criminal behavior, so this construct alone is examined here.

Theory of change responses were coded for whether they indicated that action needed to be taken by the self, by others, if action was needed from both sources, or if the source of needed action could not be determined. Responses that *only* referred to the self as the source of needed action were twice as frequent as responses that *only* referred to others as the source of needed action (Figure 3).

FIGURE 3. Sources of action indicated in participants' theories of change.



Note. Percentages refer to percent of participants indicating the specified source of action in their qualitative response at baseline. “Indeterminate” refers to responses which did not clearly indicate who (the participant themselves, another person, or both) needed to act to effect change.

Personally Controllable, In-Treatment Tasks Related to Change

On the Theory of Change Survey (original version), youth were asked a follow-up question: “What could you do at TYC that would help you stop getting into trouble when you get out?” While the first, general theory of change question was intended to throw a wide net to capture any and all theories a youth might hold about changing criminal behavior, this second question was meant to elicit a more specific answer: are there specific treatment tasks, during incarceration, that youth feel will help them desist from crime? This question was also specifically intended to elicit tasks youths perceived to be under their own personal control. Qualitative responses to this questions were compiled and coded as described above. The same thematic categories were used, with a few exceptions. Some of the smaller categories and subcategories in the previous analysis did not appear here, and so were eliminated from analysis. Two sub-categories were added

to this analysis, to account for finer distinctions found in this set of responses. Detailed descriptive information is presented in Table 13 below.

Unsurprisingly, when asked specifically about a task under their own personal control, a larger percentage of youth (51% as compared to 36% of the general theory of change responses) reported a task that fell into the “Self Change” category. As compared to the general theory of change responses, a larger proportion of these “Self Change” responses referred to “deeper change in thoughts and values.” One in four respondents mentioned this kind of change as something they could do in treatment to help them stop criminal behavior on the outside. Many of these responses included references to developing empathy for others.

Questioning youth about in-treatment tasks also elicited many more references to “Getting Help” (26% as compared to 11% of the general responses). As in the general theory of change responses, many of these responses (11%) spoke of “getting or applying help.” Some spoke generally about getting treatment, while others made specific note of what type of treatment they needed and how it would assist them (i.e. “The treatment helps me weigh out costs and benefits before I act.”). The increased number of responses in the “Get Help” category in this set of data made it possible to make finer distinctions among these responses, and two new sub categories were added to better capture existing themes. Many youth referred not to the specific effects of particular treatment, but to the need for a change in their own attitudes about treatment. Responses in the “be open to help” (11%) category spoke of needing to accept help, to listen to others’ advice, or to internalize skills and values being presented in treatment. Finally, a few references to

TABLE 13 (Page 1) Personally Controllable, In-Treatment Tasks Related to Change: Qualitative Responses to Prompt, “What could you do at TYC that would help you stop getting into trouble when you get out?”

<i>Major Category</i>	<i>%^a</i>	<i>Sub Category</i>	<i>%^a</i>	<i>Examples</i>
Self Change	51%	Deeper change in thoughts or values	27%	“Admit to my wrongs now.” “Change my negative values.” “Look at my past and look at the people I hurt.” “Learn positive ways to deal with situations I constantly find myself getting into.”
		Control of thoughts or behavior	23%	“Keep thinking positive like I am now.” “Think before I act.” “Get all my plans together now.”
		Handling emotions	6%	“Learn how to control my emotions.” “Learn some more coping skills.”
		Simple choice	1%	“Everything is a choice. You gotta make your own.”
Get help	26%	Get or apply treatment	11%	“The treatment helps me weigh out costs and benefits before I act.” “Pass the treatment I need.” “By having places to go such as groups to express myself.”
		Be open to help	11%	“Accept the help that is being offered to me and listen to my peers and my case worker.” “Listen to others positive advice.” “Internalize everything they have taught me.”
		Fulfill requirements	6%	“Nothing here, just work the program and get out quickly.”

Note. ^a Many participants gave responses containing multiple parts. Therefore, percentages reflect the percent of responses for which any part of the response fit this category.

TABLE 13 (Page 2) Personally Controllable, In-Treatment Tasks Related to Change: Qualitative Responses to Prompt, “What could you do at TYC that would help you stop getting into trouble when you get out?”

<i>Major Category</i>	<i>%</i>	<i>Sub Category</i>	<i>%</i>	<i>Examples</i>
Constructive Outlet	23%	Work or school	17%	“Get my high school diploma.” “Get my certifications so I can get a well paying job.”
		General	5%	“Learn to occupy my time.” “Play sports.”
Change in environment	9%	Change peer group	6%	“Hang with prosocial friends.” “Stop hanging around the wrong people.”
		General change of environment	3%	“Keep myself out of places where it might be possible that I could get into trouble.”
Relationships	9%	More focus on existing relationships	6%	“Build a better relationship with my family.” “Think about my 3 yr old daughter and family.”
		Meeting relational needs	4%	“Being heard when I need to express myself.”
Fresh start	2%			“Giving me another chance to be out and show that I can do it.”
Gain release	4%			“Nothing, this place don't help a person change.”

treatment suggested not that treatment would facilitate change, but merely that treatment was a required step for release from the institution. Responses in the “fulfill requirements” (6%) category spoke of treatment more as an obstacle than a tool (i.e., “do what I have to do to get out of here”).

Responses in the “Constructive Outlet” (23%) category were frequent, primarily due to many references to “work or school” (17%). When asked about helpful tasks they could accomplish while incarcerated, many youth seemed to agree with the participant who wrote that he could “continue to get this free education.” Many of the general theory of change responses had referred for the need for activities or merely *anything* constructive to keep the youth occupied and out of trouble. However, participants were much less likely (5% as compared to 16%) to mention this theme when asked what they could do *in* treatment that would help them.

The remaining categories of response were relatively small, each reported by fewer than 10% of respondents. Some respondents spoke of needing to make personally-controllable “Environment Change” (9%), primarily by associating with a positive peer group (6%). Other respondents stated the need to meet relational needs (4%), or to focus on their existing relationships (6%).

Analysis of Qualitative Findings

Following the thematic categorization described above, variables that emerged from qualitative analysis were analyzed quantitatively. Three areas of qualitative findings were analyzed: theory of change theme category, theory of change source of action, and theme category for personally controllable, in-treatment tasks. Analyses

tested for any differences in these areas among particular subsets of youth. Analyses also examined whether qualitative differences in youth's change theories were associated with different levels of predictor or criterion variables of interest to the current study. As noted previously, conducting multiple exploratory analyses runs the risk of highly inflated type I error rates. However, as this is a very new area of research, it was judged important to explore the data fully for any effects that might be present. All results must be taken with great caution and are merely suggestive of possible areas for future research.

Demographic Differences in Youths' Theories of Change

A question of interest to the study was whether particular groups of youth would differ in the content of their theories of change. To answer this question, baseline qualitative responses were separated by demographic variables, to look for possible group differences in youths' theories of change. The three major categories with the fewest responses (Fresh Start, Get Out, Past) were eliminated from the following analyses due to the small frequency counts in each category.

As seen in Figure 4 below, youth of different racial/panethnic groups showed similar patterns in the theories of change coded from their qualitative responses. While a few differences are suggested, χ^2 analyses indicated that none of these group differences were greater than expected by chance.

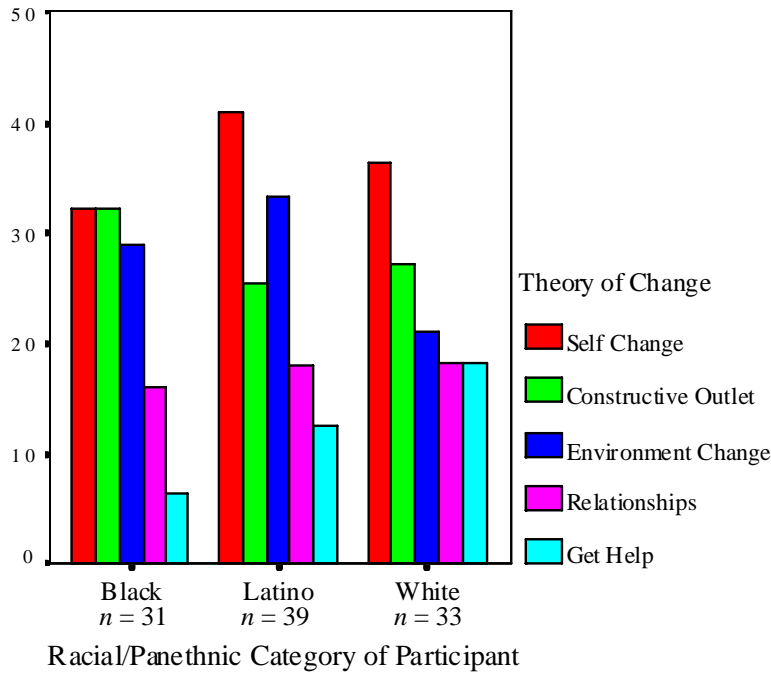


FIGURE 4. Major categories of change theory coded from participants' qualitative responses, separated by racial/panethnic category.

When responses were analyzed separately by the sex of the participant, however, two significant associations were observed (Figure 5). There was a moderate⁵ association between being male and reporting a theory of change related to needing a “constructive outlet,” $\chi^2(1, N = 108) = 5.14, p = .02$, Cramer's $V = .22$. In addition, being female was moderately associated with giving a response related to “relationships,” $\chi^2(1, N = 108) = 10.89, p = .001$ ⁶, Cramer's $V = .32$.

Responses in the “Constructive Outlet” and “Relationships” categories were examined further to more specifically locate the source of these gender differences.

⁵ Conventions for describing the magnitude of Cramer's V are taken from Rea and Parker, 1992.

⁶ Each of these χ^2 analyses violated an assumption, namely, one cell in each analyses had an expected count of less than five. These results should be taken with caution.

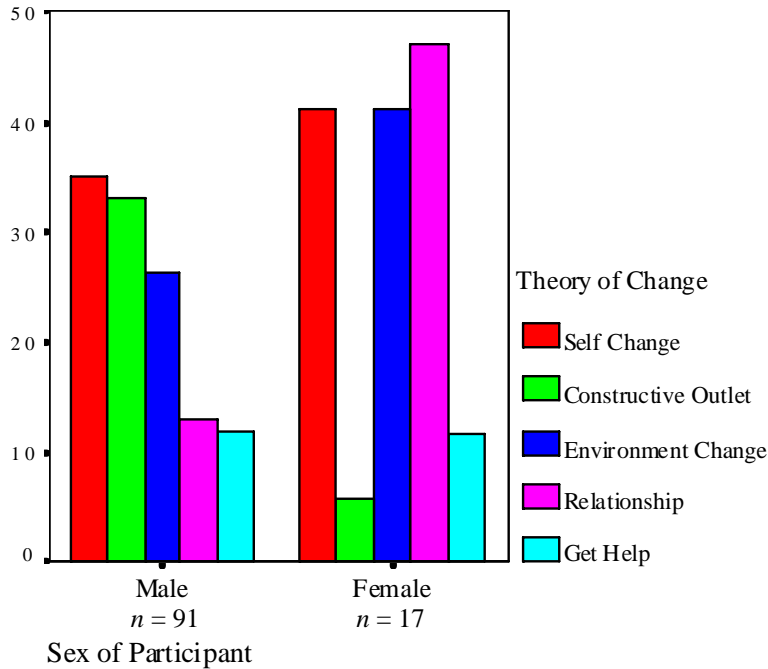


FIGURE 5. Major categories of change theory coded from participants' qualitative responses, separated by sex of participant.

Within "Constructive Outlet" responses, "general activity" and "work or school" responses were similarly rare among female respondents (only 1 female participant reported the need for "general activity," and no female participants cited "work or school" in their change theory). Within the "Relationships" category, female participants were proportionately twice as likely as male participants to report a change theory related to "more focus on existing relationships. The largest source of sex difference, however, was found in the differential reporting of "relationship needs." Only 9% of male participants cited relationship needs in their change theories, while a full 34% of female respondents did.

Qualitative responses were also separated by the over-arching type of offense – sexual or violent, non-sexual – that the participant reported had led to their current incarceration (Figure 6). (Only the “violent, non-sexual offense” and “sexual offense” categories were compared, as other offense categories contained too few participants for analysis.) One significant association was found. There was a moderate association between committing a violent, non-sexual offense and reporting a theory of change that involved having a “constructive outlet,” $\chi^2 (1, N = 108) = 4.02, p = .045, \text{Cramer's } V = .22$.

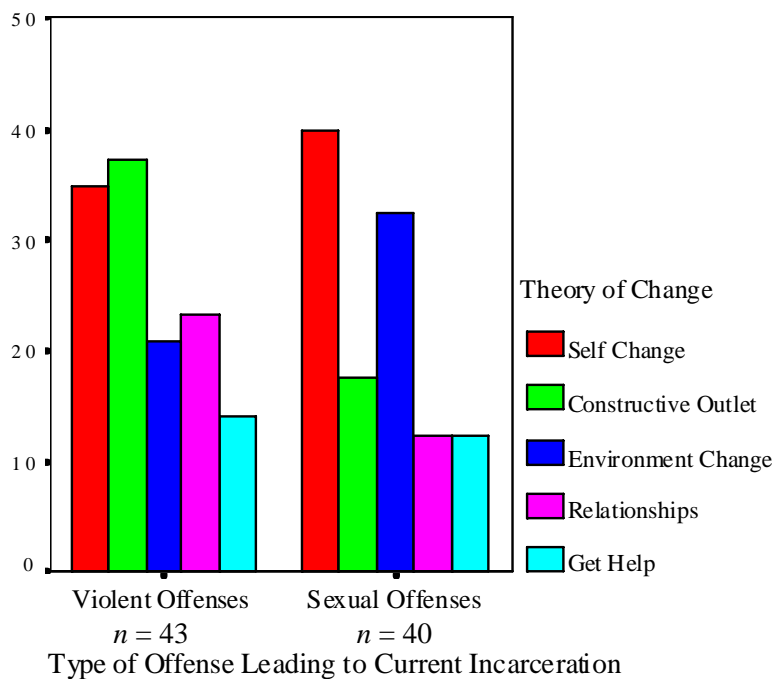


FIGURE 6. Major categories of change theory coded from participants' qualitative responses, separated by the type of offense that led to the participant's current incarceration (by self-report).

To better understand this finding, different types of “Constructive Outlet” responses were compared between sexual offenders and violent, non-sexual offenders. It was noted that

the need for “general activity” was similarly frequent among both types of offenders. Violent, non-sexual offenders, however, gave more responses indicating the need for a constructive outlet related to work or school.

Demographic Differences in Personally-Controllable, In-Treatment Tasks

Youth responses about what personally-controllable, in-treatment tasks would help them stop committing crimes were also examined, to explore whether they differed among subsets of youth. Only one meaningful difference was noted. All of the “Constructive Outlet” responses came from male participants. No females in the study reported this theme when asked what tasks they could accomplish in treatment that would be supportive of change. The association between being male and reporting that one could work on tasks related to having a “constructive outlet” was significant ($\chi^2(1, N = 109) = 6.42, p = .01, \text{Cramer's } V = .24$). No other meaningful differences were found between male and female participants. No associations at all were found between racial/panethnic category or offense type and thematic category among these responses. With the exception of the male-female difference in “constructive outlet” responses, youth in different groups did not show differences in what types of tasks they reported they could complete in treatment that would support a later crime-free life.

Demographic Differences in Source of Action

Data was similarly analyzed to explore whether particular subsets of youth made different attributions about *who* needed to act to effect the change they reported would be necessary for them to desist from crime. Participant data was again separated by racial/panethnic group, sex, and type of criminal offense. No meaningful differences

were found between groups. In other words, youth of different racial/panethnic groups, genders, or offense-types did not appear to differ on whom they placed the responsibility for making changes necessary to reducing their criminal behavior.

Change Theories and Study Variables

A further question of interest was whether particular change theories had any direct relationship with alliance related variables, or with treatment success itself. Exploratory analyses were conducted to examine whether particular change theories were associated with higher reported working alliance, treatment fit with change theory, or readiness for change. Independent t-tests were run to compare youth who did/did not report each change theory on their mean WA, TFCT-Tx, and RfC. No significant differences were found. Further, it was speculated that particular change theories might be associated with greater improvements in treatment. Again, independent t-tests were run to compare youth who did/did not report each change theory on the mean percentage change in their phase level, rule violations, and PDLSS. No significant differences were found. These explorations provided no evidence to suggest that any particular change theory was associated with a stronger working alliance or treatment fit with change theory, or with greater readiness for change. Neither was any evidence found to suggest that particular change theories were associated, in and of themselves, with greater gains in treatment.

Personally-Controllable, In-Treatment Tasks and Study Variables

Youths' reports of what change-supportive tasks they could accomplish in treatment were also examined, to find if particular themes were associated with study variables. No differences were found.

Source of Action and Study Variables

Similarly, the sources of action in youth's change theories (self only, self and other, other only, or indeterminate) were compared to explore whether youth reporting different sources of action differed in terms of the study's predictor or criterion variables. One-way ANOVAs were conducted comparing participants with different sources of action on their mean WA, TFCT, RfC, as well as the mean percentage change in their phase levels, rule violations, and PDLSS. Again, no significant effects were found. The source of action indicated in a participant's theory of change did not appear to be associated with different levels of alliance, treatment fit with change theory, or readiness for change. Different sources of action also were not associated with varying levels of gain in treatment (based on any of the three outcome measures: phase level, rule violations, or PDLSS).

Summary of Findings

Thematic analysis indicated that the most common major categories found in participants' theories of change were (in order of frequency) self-change, having a constructive outlet, environment change, relationships, and getting help. Meaningful distinctions were found within these categories, as well. For instance, Self Change theories included a "self-discipline" sub-category referring to relatively straightforward

control of one's thoughts and behaviors, but also a sub-category referring to "deeper change in thoughts or values." Theories of change involving having a "Constructive Outlet" were very common, and a surprising number of these theories referred to the need to "keep busy" in one way or another. Within the "Environment Change" category, the need for a change in "peer group" was the most commonly reported theory. The "Get Help" category, in which youth referred explicitly to the need for treatment or guidance, was less common, emerging in only 11% of responses. Participants' change theories were also analyzed to identify *who* was reportedly responsible for taking action. A full 50% of youth's change theories referred only to actions that they were personally responsible for taking. Only half as many youth (23%) reported that others were solely responsible for taking the action necessary for them to stop committing crimes.

Youth were also asked what type of personally-controllable tasks they could undertake while in treatment that would later help them to live a crime-free life. Half of all respondents indicated that they could make some form of "Self Change." These responses were roughly split between those indicating they need to make a "deeper change in thoughts or values," and those whose reported tasks fell under the "self-discipline" category. One in four responses referred to treatment in some way. These responses were divided between youth reporting treatment as an agent of therapeutic change, those reporting they needed to change their attitudes to be more open to treatment, and a few youth who reported just needing to complete treatment requirements so they could be released. Regarding the "Constructive Outlet" category, 17% of youth reported work or school as a useful in-treatment task. While the need to engage in

activities and keep busy was frequently reported in the general theories of change, this was much less common in youths' reports of useful tasks they could undertake in treatment.

No differences were found between racial/panethnic groups on the themes found in their theories of change, nor on who their theories of change implicated as the source of needed action. Male participants, however, were more likely to identify a “constructive outlet” in their theories of change, while female participants were more likely to identify “relationships.” In addition, participants who had committed violent, non-sexual crimes were more likely to mention needing a “constructive outlet” than were participants who had committed sexual crimes. No differences were found between gender or offense-type groups on whose action was called for in their change theories.

Lastly, no particular change theory was associated with higher ratings of the working alliance, treatment fit with change theory, or readiness to change. Neither was any particular change theory associated with greater treatment success (on any of the three outcome measures) at baseline or 4 month follow-up, nor were they associated with treatment gains over the 4-month period.

Discussion of Findings

The qualitative portion of the current study sought to learn what incarcerated youth themselves theorize will help them to successfully desist from crime. This exploration adds to a relatively new area of research, the study of desistance. While there is a great deal of literature detailing the origins of delinquency, and documenting various efforts to treat delinquent youth, only recently have researchers begun to study how the

larger process of desistance actually happens. This movement is based on the understanding that treatment may play a relatively minor role in the larger process of “reform” among delinquent adolescents. Looking beyond a narrow examination of treatment programs is crucial, Maruna, Immarigeon, and LeBel (2004) write, because “understanding how the larger voyage works may be the best strategy for understanding how and when to intervene” (p. 10). Efforts to “understand the voyage” have primarily involved looking back at past trajectories, either quantitatively through longitudinal data or qualitatively through the retrospective accounts of ex-offenders. The current study adds a new perspective, by sampling youths’ prospective theories about what will make desistance happen. These theories add information about what desistance “looks like” from the ground-level, to youth who are still incarcerated and whose trajectories towards desistance or continued crime are yet to be determined. Implications of these findings for desistance theory and for clinical practice with delinquent youth will be discussed below.

Implications for Desistance Theory

First, results from the qualitative portion of the study provide initial evidence of divergent validity for the “treatment fit with change theory” construct. It was hypothesized that youth would do better in treatment if they perceived treatment to “fit” with their theory of change, whatever that might be. It could be argued, however, that rather than benefiting from treatment that “fits” their pre-existing theory, in reality youth do better when they fit *themselves* to a particular theory of change – for instance, by adopting a theory that reflects an internal locus of control, or matches the ideology of their treatment program. If this alternative hypothesis were true, then treatment success

should have been directly related to particular theories of change or to an attribution of personal responsibility for change. No such relationships were found. This supports the hypothesis that there is no “right” or “wrong” theory for a youth to hold, and that youth do indeed benefit from treatment “fit” with their *own* change theories. The remainder of this section will discuss findings about what those theories were found to be.

Personal control. An intriguing finding of qualitative analysis was the large proportion of youth who identified some form of self change as the mechanism that would lead to their desistance from crime. Moreover, even youth who identified external changes as necessary for their desistance primarily identified themselves as the active agent in making those changes. This dimension seems related to what Brickman et al. (1982) refer to as “attribution of responsibility for the solution to a problem.” A large proportion of youth attributed this responsibility to themselves.

This finding seems surprising in light of common theories of delinquency, which cite myriad external, socio-ecological influences as sources of delinquent behavior. However, it should be noted that these theories tend to focus on the *origins* of delinquent behavior, while the current study examined theories about *reductions* in criminal behavior among youth who had already committed serious crimes. In a major longitudinal study of desistance, Laub, Nagin, and Sampson (1998) note that many of the “classic” factors that predict delinquency – low IQ, poor parental supervision, being a difficult child, living in poverty – did not differentiate between once-delinquent adolescents who desisted from crime versus those who persisted with criminal behavior. These factors may explain delinquency, but they cannot explain desistance. The

prevalence of “self change” theories among this study’s participants does not imply that these youth do not identify familial or environmental factors as contributing to their entry into delinquent behavior. It merely implies that youth tend to see personal, dynamic factors as key to their way *out*.

As described above, no differences were noted in youths’ reports of the locus of responsibility for change based on the participant’s racial/panethnic group. This is interesting to note in light of “conventional wisdom” that individuals belonging to historically disadvantaged racial/ethnic groups are more likely to have an external locus of control (Sue & Sue, 2003). No evidence for such an effect was found in the current data.

It is impossible to untangle, of course, the effects of treatment from what might have been youths’ own “organic” theories of change. Many of the participants had been exposed for years to the ideology of treatment at the correctional institution, which emphasizes personal responsibility and control over change. The age of the current participants may also play a role. While research has suggested that an external locus of control as well as avoidance of responsibility are common among delinquent youth (Powell & Rosén, 1999), it has also been noted that external orientations decrease among adolescents as they approach the end of their high school years (Chubb, Fertman, & Ross, 1997). The large majority of participants in the current study were aged 18 and older, and it is possible that this group has generally “aged out” of an external locus of control orientation and now feel more control over and responsibility for their futures. This interpretation would still be somewhat surprising, however, as the increase in internal

locus of control as youth age has been linked to the real increases in autonomy that free youth gain with age, increases which are not experienced by youth who are incarcerated.

Nevertheless, a high level of personal responsibility attributions would fit with theory proposed by Giordano, Cernkovich, and Rudolph (2002) based on a qualitative study of longitudinal outcomes among a contemporary sample of delinquent youth. Giordano et al. contrast their findings with those of Laub, Nagin, and Sampson (1998) who, based on a sample of White male offenders who came of age in the 1950's, developed a theory of desistance that emphasized social control. Giordano et al.'s findings, on the other hand, suggested that offenders' own personal efforts and "agentic moves" played a much greater role in successful desistance. Giordano et al. linked this greater emphasis on personal agency, paradoxically, to the environmental effects of social disadvantage. They suggest that "among highly advantaged men, a show of agency is not all that necessary" (p. 1054) for successful desistance from crime. Environmental resources and social controls are sufficient. However, they note that for those whose social world is limited by disadvantage or by enmeshment in criminal or drug cultures, social and environmental resources supportive of desistance are not highly available. In this absence, a high level of individual motivation and action may be required for change. Though the current study did not directly assess social disadvantage, low levels of parental education reported by participants suggests backgrounds of lower socioeconomic status, and the current sample (like incarcerated populations nationwide) contained a disproportionate number of youth from historically disadvantaged racial/ethnic groups. Social disadvantage is often thought to be associated

with fatalism and an external locus of control, based on individuals' realistic assessment that their own personal efforts are insufficient to produce desired outcomes (Sue & Sue, 2003). Findings of the current study and those of Giordano et al. appear to suggest that the flip side of this phenomenon may also be true: at a high level of disadvantage, individuals may make the realistic assessment that their own personal efforts are the only factors that can be changed.

Constructive outlet. Another striking qualitative finding was the prevalence of change theories that referred to the need for a “constructive outlet.” Many of these responses identified education and employment as key to their desistance from crime. The association between employment and desistance has long been noted. Laub, Nagin, and Sampson (1998) explain this association as an “investment process,” in which employment provides opportunities for ex-offenders to invest in conventional roles and social bonds that then provide incentives to refrain from criminal behavior. Farrall (2005), on the other hand, highlights the importance of employment to building a non-criminal identity. He theorizes that the appeal of employment to offenders is not the job, but the possibility of a new role and a future self.

While the need for constructive employment is well-established in the literature, one finding of the current study has less precedent. Among the participants seeking a “constructive outlet,” there was also a substantial proportion who cited a more general need for activities to keep themselves occupied. It was initially speculated that the focus on “keeping busy” might be related to the correctional environment itself, in which youth may experience boredom due to their lack of freedom or access to enjoyable activities.

However, while “keeping busy” was a frequent theme in youths’ theories of change, it was relatively rare among reports of what tasks were important to undertake during the period of incarceration. This suggests that youths’ references to “keeping busy” reflected their real theories of what they would need not during incarceration, but upon release into the free world.

One youth justified his “keeping busy” theory with the explanation, “because when your time is in doing something good you have no time to do wrong.” This statement could be a direct paraphrase of the “involvement” component of the social control theory of delinquency, in which Hirschi (1969) explains, “a person may be simply too busy doing conventional things to find time to engage in deviant behavior” (p. 22). Though social control theory as a whole has been widely researched, the specific assertion that mere involvement in conventional activities has a direct effect in reducing delinquent behavior has received weak empirical support (Wong, 2005). We might therefore conclude that youth are idealistic to assert that merely “keeping busy” will keep them out of trouble. However, the current study samples a particular subset of delinquent youth – serious, violent offenders – who may not have been thoroughly sampled in more general studies of adolescent delinquency. It is possible that the need for activities to stay occupied plays a stronger role in this group. It could be hypothesized that these youth have experienced less social control than adolescent offenders in general, or that lack of social control more adversely affects these youth. Research is needed to explore these possibilities.

Exploratory analysis of qualitative data produced a highly preliminary, but nonetheless intriguing difference between sexual and violent, non-sexual offenders in the frequency with which they reported a constructive outlet as important to their desistance. While the reported need to “keep busy” was similar between groups, violent, non-sexual offenders more often reported work or school as important to their desistance. This difference is interesting in light of the general finding in the research literature that youth who commit sexual offenses share more similarities than differences with their peers who commit violent, non-sexual offenses (Hanson & Morton-Bourgon, 2005). Guay, Ouimet, and Proulx (2005) suggest that among certain subtypes of sexual offenders, sexual crimes may be seen as variations on non-sexual violent crimes, such that sexual offending is yet another manifestation of low impulse control. In a recent meta-analysis of factors leading to recidivism among sexual offenders, Hanson and Morton-Bourgon (2005) report that an “unstable, antisocial lifestyle,” which includes lack of or unstable employment, is as strongly associated with repeat sexual offending as it is with repeat non-sexual offending. However, repeat sexual offenders tend to “ruminate on sexually deviant themes,” and are more likely than other groups to “respond to stress through sexual acts and fantasies” (p. 1158). This raises the possibility that while stable employment is similarly important in preventing recidivism among all types of criminal offenders, individuals with a different criminal history may make different attributions about how recidivism might occur. Youth who have committed sexual crimes may be aware of more internal, cognitive precursors to their crimes (i.e. “rumination on sexually deviant themes”), and thus see less salience in external precursors such as stress and instability in their environments.

Violent, non-sexual offenders may make a more direct linkage between lack of a constructive outlet and potential for continued criminal behavior.

Relationships. Relationships emerged as another common theme in youths' change theories. Youth cited the need to focus on one's existing family relationships as a way to motivate and focus oneself towards change. Youth also cited unfulfilled relational needs as key to making desistance possible; responses mentioned needing relationships with others who would support them, believe in them, care about them, and allow them to talk out their feelings. This type of response was significantly more common among female participants, a full third of whom made mention of this theme. There has been considerable attention in the past decade to potential differences between male and female delinquent youth in their characteristics, paths to criminal behavior, and treatment needs. One focus of attention has been the suggestion that female development may emphasize relationships and connections more than male development (Jordan, 1995). It has been suggested that standard correctional treatment primarily focuses on a male model of delinquency, and to be effective for girls treatment must attend to female developmental processes (Hartwig & Meyers, 2003).

It is interesting that so few of the male participants (9%) mentioned relational needs in their responses. In a qualitative study of young men who had successfully made the transition from adolescent delinquency to productive adulthood, Hughes (1998) found that every one of her participants cited the influence of having at least one person whose support for them was consistent and unconditional. It seems possible that meeting relational needs is important for the desistance process in male adolescents as well, but

that their attributions about these needs change over time. Youth who are still incarcerated, and far from their loved ones, may make attributions based on more concrete life changes (impulse control, a good job). As young men looking back on the process of desistance, however, they may identify another person's care and support as key to holding all of the more concrete elements together. Alternately, the recognition of relational needs could come first, prior to and facilitative of successful desistance.

Treatment. A relatively small proportion of participants specifically mentioned seeking help or treatment as important to their desistance. This does not necessarily mean they believed treatment to be unhelpful. For instance, many youth who cited self-change theories used language (i.e. "weigh my costs and benefits," "stop victimizing") directly taken from the language used in their correctional therapy program. These youth stated that they need to change themselves, but the changes they cite are those that have been suggested by their treatment providers. If these youth are genuine (rather than simply "parroting" language that surrounds them) this would imply that these youth have taken the suggested goals of treatment as their own. Internalization and ownership of these goals would seem very positive, and a sign that youth are working towards their own desired change with the collaboration of treatment that makes sense to them. In other words, youth do not need to specifically mention treatment in their change theories for treatment to be of use to them. They merely need to see treatment as a useful collaborator in effecting the desired change.

However, it is still unavoidable to notice that many youths' theories did not contain a direct link between what they need and what correctional treatment has to offer.

Correctional treatment cannot produce a person who will, throughout a youth's life, provide unconditional care and support. Youth may obtain diplomas and vocational training while incarcerated, but correctional treatment does not assure them a good job upon release. Correctional treatment also cannot make self-discipline happen: as one youth wrote, "I can go to a treatment program but all they can do is tell me how to stop my thought process." The same youth wrote, "When I get out it really will have to depend on me." What these mean for actual practice with these youth will be discussed below.

Implications for Clinical Practice

At one level, the current study may have implications for what types of interventions should be designed and implemented for delinquent youth. For example, a substantial proportion of participants, particularly male youth, reported needing a "constructive outlet" in the form of a good job or an education. This suggests the need not only for education and vocational training within correctional institutions, but also aftercare and community programs that help youth actually find and keep jobs where it counts: on the outside. In a study of outcomes among ex-offenders, Farrall (2005) consistently found that job training was not enough. All the training in the world, he points out, will not help ex-offenders find jobs where none exist, or where none are available based on ex-offenders' criminal records and lack of employment history. He suggests that aftercare/probation intervention could instead be expanded to include jobs programs where ex-offenders can actually 1) be employed, and 2) build up a record of employment such that they can actually gain paid work independently. A widely

acclaimed program in East L.A., Homeboy Industries, has stepped into this gap in its community by providing on-the-job training and employment for ex-gang-involved and at-risk youth, operating under the change theory “Nothing stops a bullet like a job” (Homeboy Industries, 2005). While Homeboy Industries has received governmental attention from no less than first lady Laura Bush (Iwata, 2005), this program was imagined, created, administered, and is largely funded in the private sector. Tax-supported public funds spent on delinquent youth, on the other hand, are generally concentrated in the types of correctional intervention (counseling and cognitive-behavioral treatment programs administered in secure residential facilities) that youth in the present study rarely cited as useful to them in desisting from crime.

The frequency with which female participants reported meeting relational needs as important to their ability to desist from crime also may have implications for specific interventions. While correctional treatment staff may be supportive and caring, the punitive nature of correctional settings and high youth-to-staff ratios do not easily lend themselves to fulfilling youths’ relational needs. Also, as a short-term intervention far from a youth’s own community, correctional treatment is simply not designed to provide long-term, consistent support. Interventions such as therapeutic foster care (Hahn et al., 2005), on the other hand, are more capable of providing one-on-one, consistent contact that youth will feel as caring and supportive. Therapeutic foster care is already used among the constellation of interventions available for delinquent youth (Chamberlain, 1998), and perhaps needs further attention.

Besides implications at the level of systems and programs, the current study's findings may suggest ways for individual clinicians to work with delinquent youth within any treatment setting. Maruna, Immarigeon, and LeBel (2004) point out that the finding that "nothing works" in correctional treatment has often been misinterpreted to mean that hardened offenders cannot change. In fact it indicated no such thing. The findings merely indicated that correctional treatment did not seem to make a difference in whether or not offenders reformed; control group participants tended to reform at the same rate as members of treatment groups. As Toch (2002) writes, the problem never was that "nothing works," but that almost everything works equally well – including offenders' own efforts. The high levels of self-change theories and attributions of personal responsibility for change among study participants support a conception of delinquent youth as "active participants hunting a more satisfying life" (Duncan & Miller, 2000, p. 66). The task of correctional treatment becomes, then, to figure out how best to support offenders in their own desistance process. For youth who believe that desistance will come about through their own efforts, correctional staff could work with this perception by presenting themselves more as "coaches for self-change" than "fixers" of damaged youth. Youth might be more likely to accept help if offered in a way that fits their theory of change. Youth also may have useful suggestions about how, from their perspective, treatment *could* play a more effective part in their desistance. The focus of treatment could then be molded accordingly; youth and staff could work collaboratively on impulse control, making goals and plans, finding constructive outlets, or setting youth up to build supportive relationships. If counselors *can* fulfill these requests, it may be more likely

that their efforts will be effective, because 1) youth may know what they need, and 2) youth may accept the help, because they are being given autonomy in the process.

Strengths and Limitations

A strength of the qualitative portion of the current study is that it asked incarcerated youth themselves about their own theories of how change will happen. This is a perspective often missing in debates about the fates of these youth, and can inform clinicians and policy makers in how to design the best programs to help these youth. While there are many advantages to learning how youth at the “ground level” see their world and their futures, from that embedded position youth may not be able to see clearly the forces that shaped the ground on which they stand. A youth espousing a philosophy that “you just have to choose” a crime-free life, for instance, may not see the forces (family dysfunction, poverty, oppression) that have restricted the range of “choices” laid out in front of him.

Qualitative responses were elicited from youth during their stay at a correctional facility, which may have affected their ability and/or desire to answer forthrightly. For instance, some responses may have reflected socially desirable regurgitation of treatment jargon, rather than genuine belief in the treatment philosophy. Qualitative data consisted of short, sentence-long responses from youth about their change theories. These represent only a quick snapshot of the one or two most salient things that came to each youth’s mind. Only study designs including more lengthy interview data will be able to adequately represent any particular youth’s full, complex theory of all the intersecting factors that will help him desist from crime.

Lastly, as noted before, the value of qualitative results from the current study is chiefly descriptive. Though results of quantitative analysis on these findings have been reported and discussed, the exploratory nature of analysis and lack of pre-formed hypotheses make significant results unreliable. The high potential for type II error is also a concern, as the study's small sample size resulted in a lack of sufficient power to detect small, but important effects that may have been present in the data. These results are intended as initial description of a fertile ground for future research, which will need to follow up with more specific questions and larger samples.

Final Thoughts

Exploratory analyses of qualitative data were unable to find any associations between particular types of change theories and treatment success, nor between particular change theories and stronger ratings of the working alliance and related variables. This suggests that there is not a particular "right" way for youth to think about changing their lives, that is in and of itself facilitative of treatment success or engagement with treatment. On the other hand, the current study did find that youth's ratings of how well treatment "fit" within their own theories of change *was* associated with later gains in their reported ability to imagine a crime-free life. Rather than imposing upon youth a particular treatment with its attendant ideology, it may be more productive to work with youth's own change theories. The usefulness of this approach may be merely opportunistic – we can more easily get youth's attention by taking them seriously. However, attending to youth's own change theories may also be productive for another reason – youth may be *right* about what they think will help them. Theories of change

did appear to differ among different subsets of youth, with the perceived need for a constructive outlet more important among male and violent offenders, and relationship needs perceived as more important among female offenders. These differences in youth's own perceptions match what we think we objectively know, looking from the outside, about these youth and what they need. This raises the prospect that youth, in their perceptions of what will help them change, may know themselves rather well, and may be able to tell us valuable information about what interventions will be useful. In the struggle to learn what we can do to help these youth, perhaps we should start listening.

Appendices

APROBADO POR EL IRB EL: 11/15/2005
mes/día/año

FECHA DE VENCIMIENTO: 12/23/2006
mes/día/año

**FORMULARIO DE CONSENTIMIENTO
ALIANZA DE TRABAJO, PREPARACIÓN PARA EL CAMBIO,
Y TEORÍA DEL CAMBIO**

Le pido que participe en un estudio de investigación. Favor de leer este papel y hacer preguntas acerca de cualquier cosa que no entienda antes de decidir si desea participar o no. No tiene que hacerlo si no quiere. Su decisión de participar o no, no tendrá ningún efecto en su tratamiento o la duración de su estancia en TYC. Además, si decide participar, puede parar en cualquier momento – sólo hay que decirme si ya no quiere seguir en el estudio.

La razón por qué hago este estudio es para aprender lo que la juventud encarcelada siente acerca de su tratamiento, y lo que cree les ayudaría cambiar y tener éxito cuándo salgan de TYC. Le estoy pidiendo a Ud. y a 100 otros jóvenes que me ayuden para aprender acerca de esto.

Si decide tomar parte en mi estudio, le pediré que:

- Responde a las preguntas [las encuestas] tres veces diferentes: ahora, en dos meses, y en 4 meses. No hay respuestas correctas ni equivocadas. Lo único que tiene que hacer es responder honestamente – me interesa saber cómo siente y piensa en realidad.
- Escriba su número de TYC para que yo pueda buscar los datos de cuántas recomendaciones recibe y en qué fase está.

Cada vez que responde a las preguntas [a las encuestas] tardará más o menos 30 minutos, y esto va a ocurrir tres veces. **Así es que se tardará un tiempo total de 90 minutos para participar en todo el estudio.**

Un riesgo en participar en este estudio es la pérdida de **confidencialidad** si alguien leyó lo que Ud. escribió. Yo le protegeré contra esto porque es importante para mí que las respuestas que Ud. escribe sean privadas.

- Sus encuestas [respuestas] estarán identificadas con un código, no con su nombre. Así es que nadie sabrá lo que respondió.
- Sus respuestas individuales no se compartirán con ninguno en TYC, o cualquier otra persona.
- Sus encuestas [respuestas] se mantendrán privadas y cerradas bajo llave en un archivo en la Universidad de Tejas en Austin.

Puede ser que responder a ciertas preguntas [de la encuesta] le hace sentir incómodo. Si esto ocurre, favor de venir a hablar conmigo, o pide hablar con su asistente social, o pide una autorecomendación para hablar con un psicólogo.

Si tiene cualquier pregunta acerca del estudio, favor de preguntar ahora. Si tiene preguntas después o quiere más información, favor de comunicarse conmigo.

Investigadora: Kristin Savicki
Universidad de Tejas en Austin
Departamento de psicología educacional

(512)471-0924
ksavicki@mail.utexas.edu

Si tiene preguntas acerca de sus derechos como participante de investigación, favor de comunicarse con Lisa Leiden, Ph.D, cátedra de la Junta directiva de inspección institucional de Austin para la protección de los participantes de investigaciones humanas de la Universidad de Texas en Austin.

Si está de acuerdo y puede participar en el estudio, favor de firmar abajo.

El estudio ha sido explicado a mí y mis preguntas han sido contestadas.Me gustaría tomar parte en este estudio.

Firma

Fecha

Número de TYC

Firma de investigadora

APPROVED BY IRB ON: 11/15/2005

EXPIRES ON: 10/23/2006

**PARENT CONSENT FORM
WORKING ALLIANCE, READINESS FOR CHANGE, AND THEORY OF CHANGE**

Your adolescent is invited to participate in a research study of how youth in TYC feel about their treatment, and what they think would help them to change and succeed once they are released.

My name is Kristin Savicki and I am a student at The University of Texas at Austin, Department of Educational Psychology. This study is a part of my doctoral program. I am asking for permission to include your adolescent in this study because I think we can help youth better if we know what **they** think – about how treatment works, and about what they think would help them succeed once they leave TYC. I expect to have 100 participants in the study.

It is up to you and your adolescent to decide to be in this study – it is voluntary. The decision to be in the study or not will have **no** effect on your adolescent's treatment or length of incarceration.

If you allow your adolescent to participate, I will ask him/her to:

- Fill out surveys at three different times: now, 2 months from now, and 4 months from now. On the surveys, there are no right or wrong answers. All your adolescent has to do is answer honestly – I am interested in how he/she really thinks and feels.
- Write down his/her TYC number so that I can look up records of how many referrals he/she gets and what phase level he/she earns.

Each time your adolescent fills out these surveys it will take about 30 minutes, and this will happen three times, so the **total time it will take to be in the study** is 90 minutes. Youth will fill out the surveys when they have free time; they will not miss any regular activities.

A risk to taking part in this study is loss of **confidentiality** if someone reads what your adolescent wrote. I will protect your adolescent against this, because it is important to me that the answers youth write on the surveys are confidential.

- Your adolescent's surveys will be marked with a code, not with their name, so no one will know what they answered.
- Your adolescent's individual answers will not be shared with anyone at TYC or with anyone else.
- Your adolescent's surveys will be kept confidential and locked in a file at the University of Texas at Austin.

There is always a chance that answering questions on the surveys could bring up unwanted feelings for your adolescent. If this happens, your adolescent will be encouraged to come talk to me, or ask to speak with his or her caseworker, or ask for a self-referral to speak with a psychologist.

If you have any questions about the study, please ask me. If you have any questions later, you can call me at (512) 471-0924. If you have any questions or concerns about your adolescent's participation in this study, you can call Lisa Leiden, PhD, Chair of the University of Texas at Austin Institutional Review Board for the Protection of Human Research Participants at (512) 471-8871.

You may keep the copy of this consent form.

APPROVED BY IRB ON: 11/15/2005

EXPIRES ON: 10/23/2006

You are making a decision about allowing your adolescent to participate in this study. Your signature below indicates that you have read the information above and have decided to allow him or her to participate in the study. If you later decide that you wish to withdraw your permission for your adolescent to participate in the study, simply tell me. He or she may stop participating at any time.

Printed name of adolescent

Signature of Parent(s) or Legal Guardian

Date

Signature of Investigator

Date

YOUTH ASSENT

I have read the description of the study titled "Working Alliance, Readiness for Change, and Theory of Change" that is printed above, and I understand what the procedures are and what will happen to me in the study. I have received permission from my parent or guardian to participate in the study, and I agree to participate in it. I know that I can quit the study at any time.

Signature of Youth

Date

TYC Number

APROBADO POR EL IRB EL: 11/15/2005
mes/día/año

FECHA DE VENCIMIENTO: 12/23/2006
mes/día/año

**FORMULARIO DE CONSENTIMIENTO DE LOS PADRES
ALIANZA DE TRABAJO, PREPARACIÓN PARA EL CAMBIO, Y TEORÍA DEL CAMBIO**

Su hijo(a) adolescente ha sido invitado(a) para participar en un estudio de investigaciones acerca de cómo la juventud en TYC se siente de su tratamiento. También se investigará acerca de lo que ellos piensan les ayudaría a cambiar y a tener éxito una vez que estén puestos en libertad.

Me llamo Kristin Savicki y soy una estudiante de estudios graduados en la Universidad de Tejas en Austin, del departamento de psicología educacional. Esta investigación forma parte de mi programa doctorado. Les estoy pidiendo permiso para incluir a su hijo(a) adolescente en este estudio porque creo que podemos servir mejor a la juventud si sabemos sus opiniones –acerca de cómo funciona el tratamiento y acerca de lo que les ayudaría a tener éxito una vez que salgan de TYC. Espero obtener la participación de 100 personas en este estudio.

Ud. y su hijo(a) deciden si quiere participar en este estudio. Es completamente voluntario. La decisión de participar o no participar en el estudio no tendrá ningún efecto en el tratamiento de su adolescente o duración de su encarcelamiento.

Si Ud. permite que su hijo(a) adolescente participe, le pediré a él o a ella que:

- Complete las encuestas (o sea, los cuestionarios) en tres ocasiones distintas; ahora, dentro de 2 meses, y dentro de 4 meses. En las encuestas, no habrán respuestas correctas ni erróneas. Lo único que deben de hacer sus hijos es responder de una manera honesta. Me interesa saber qué es lo que realmente piensan y sienten.
- Escriba su número de TYC para que yo pueda hallar los datos que indican cuántas recomendaciones ha recibido su hijo(a) y qué nivel de fase se ha ganado.

Cada vez que su adolescente llene estas encuestas tardará aproximadamente 30 minutos, y esto ocurrirá 3 veces. Así es que **el tiempo total para participar en el estudio** será de 90 minutos . Su hijo(a) completará las encuestas cuando tenga tiempo libre. No perderá ninguna actividad regular.

Un riesgo de formar parte de este estudio es la pérdida de **confidencialidad** si alguien lee lo que su adolescente escribió. Yo protegeré a su hijo(a) adolescente contra esto porque es importante para mí que las repuestas que los jóvenes escriban en las encuestas sean confidenciales.

- Las encuestas de su hijos estarán marcadas por un código, no con sus nombres, así que nadie sabrá lo que escribieron.
- Las respuestas individuales de sus hijos no serán compartidas con nadie de TYC ni con cualquier otra persona.
- Las encuestas de sus hijos se mantendrán confidenciales y cerradas bajo llave en los archivos de la Universidad de Tejas en Austin.

Es posible que respondiendo a preguntas del cuestionario pueda traerles sentimientos no deseados a sus hijos. Si esto ocurre se le animará a su hijo(a) que venga a hablar conmigo, o que pida hablar con su asistente social, o que pida una autorecomendación para hablar con un psicólogo.

Si Ud. tiene preguntas acerca de este estudio, favor de preguntarme. Si Uds. tienen preguntas después, pueden llamarme al (512)471-0924. Si tienen preguntas o inquietudes acerca de la participación de sus hijos adolescentes, también pueden llamarle al Lisa Leiden, PhD, cátedra de la Junta directiva de inspección institucional de Austin para la protección de los participantes de investigaciones humanas de la Universidad de Texas en Austin. Su teléfono es (512) 471-8871.

Puede quedarse con la copia de este formulario de consentimiento.

APROBADO POR EL IRB EL: 11/15/2005
mes/dia/ano

FECHA DE VENCIMIENTO: 12/23/2006
mes/dia/ano

Ud. decide si permite a su hijo(a) adolescente participar en este estudio. Su firma abajo indica que Ud. ha leído la información anterior y ha decidido permitir que su hijo(a) participe en el estudio. Si después Ud. decide que desea

cancelar su permiso de participación en el estudio, simplemente hable conmigo. Sus hijos pueden dejar de participar en cualquier momento.

Nombre (EN LETRA DE IMPRENTA) de su hijo(a)

Firma del padre/ los padres o tutor legal

Fecha

Firma de la investigadora

Fecha

ASENTIMIENTO DE JUVENTUD

He leído la descripción impresa arriba del estudio titulado "Alianza del trabajo, preparación para el cambio, y teoría del cambio" y comprendo los procedimientos y lo que me ocurrirá en el estudio. He recibido permiso de mis padres para participar en el estudio, y estoy de acuerdo participar en dicha investigación. Estoy consciente que puedo dejar el estudio en cualquier momento.

Firma del joven

Fecha

Número de TYC

Appendix B: Demographic Questionnaire

Youth Information

- 1) Please circle: Male Female
- 2) Race _____
- 3) Ethnicity (*like Mexican-American, Irish, Puerto Rican, etc*) _____
- 4) Age _____
- 5) What is the last grade in school that you completed? _____

6-7) How much school did your parents complete?

	Mother (or guardian)	Father (or guardian)
Elementary	1	1
Middle School	2	2
High School	3	3
Some College	4	4
Technical/Vocational School	5	5
4-year College	6	6
Post-Graduate Degree	7	7

- 8) How old were you when you first started getting in trouble? _____
- 9) How old were you when you first got arrested? _____
- 10) What was your committing offense? _____
- 11) How long have you been at Giddings? _____ years and _____ months
- 12) If you have a sentence, how long is it? _____
- 13) If you have a minimum length of stay, how long is it? _____
- 14) What treatment have you done at Giddings?

	Have you been in in this treatment?		Are you in it now?		Did you finish?	
	Yes	No	Yes	No	Yes	No
Chemical Dependency	Yes	No	Yes	No	Yes	No
Sex Offender	Yes	No	Yes	No	Yes	No
COG	Yes	No	Yes	No	Yes	No
Other:	Yes	No	Yes	No	Yes	No

- 15) Have you ever gone to counseling with a Psychologist here? Yes No
 If so, how many times did you meet? _____ Do you go to counseling now? Yes No

Appendix C: Adolescent Working Alliance Inventory

AWAI

Below are sentences that describe some of the different ways a person might think or feel about a treatment staff person (like a caseworker, psychologist, teacher, or JCO).

As you read the sentences, think of the **ONE** treatment staff person who is **MOST INVOLVED** in your treatment.

What type of staff is the person you are thinking of? (Please circle)

Caseworker Psychologist JCO Teacher Other _____

Next to each sentence is a scale. Please circle the number below the word that best describes how you feel. For example, if the sentence describes the way you always feel, circle number 7. If it never applies to you circle the number 1.

	Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always
1) This person and I agree about the things I will need to do in treatment to help improve my life.	1	2	3	4	5	6	7
2) The things I am doing in treatment give me new ways of looking at my problem.	1	2	3	4	5	6	7
3) I believe this person likes me.	1	2	3	4	5	6	7
4) This person does <u>not</u> understand what I am trying to get out of treatment.	1	2	3	4	5	6	7
5) I believe that this person can help me.	1	2	3	4	5	6	7
6) This person and I are working on goals that we both agree on.	1	2	3	4	5	6	7
7) I feel that this person appreciates me.	1	2	3	4	5	6	7
8) We agree on what is important for me to work on.	1	2	3	4	5	6	7
9) This person and I trust each other.	1	2	3	4	5	6	7
10) This person and I have different ideas about what my problems are.	1	2	3	4	5	6	7
11) We both understand the kind of changes that would be good for me.	1	2	3	4	5	6	7
12) I believe the way we are working with my problem is the right way.	1	2	3	4	5	6	7

Appendix D: Theory of Change Survey, Original Version

TOCS

People have a lot of ideas about what would help youth who are locked up to stop doing crimes and keep out of trouble once they get out of TYC. **I want to know what *you* think.**

On this survey, there are two blank spaces for you to write what you think would help *you*.

Below each blank space are 2 questions. For each question, please circle the answer you agree with the most.

I would stop doing crimes/ keep out of trouble if... _____

How much does your staff work with you to make this happen?

Not at all	Not very much	Not sure	Some	A lot
1	2	3	4	5

How likely is it that treatment will help make this happen?

Not likely at all	Not very likely	Not sure	Somewhat likely	Very likely
1	2	3	4	5

What could you do at TYC that would help you stop getting into trouble when you get out?

How much does your staff help you to do this?

Not at all	Not very much	Not sure	Some	A lot
1	2	3	4	5

How likely is it that treatment will help you with this?

Not likely at all	Not very likely	Not sure	Somewhat likely	Very likely
1	2	3	4	5

Appendix E: Theory of Change Survey, Expanded Version

TOCS

People have a lot of ideas about what would help youth who are locked up to stop doing crimes and keep out of trouble once they get out of TYC. **I want to know what *you* think.** In the blank space below, please write what you think would help *you*.

I would stop doing crimes/ keep out of trouble if... _____

Thinking about what you just wrote, please read the following statements about what might help you make this happen. (In the statement “Make *this* happen,” “*this*” refers to what you wrote about above.)

Please rate how much you agree or disagree with each statement by circling the number under the answer that best describes how you feel.

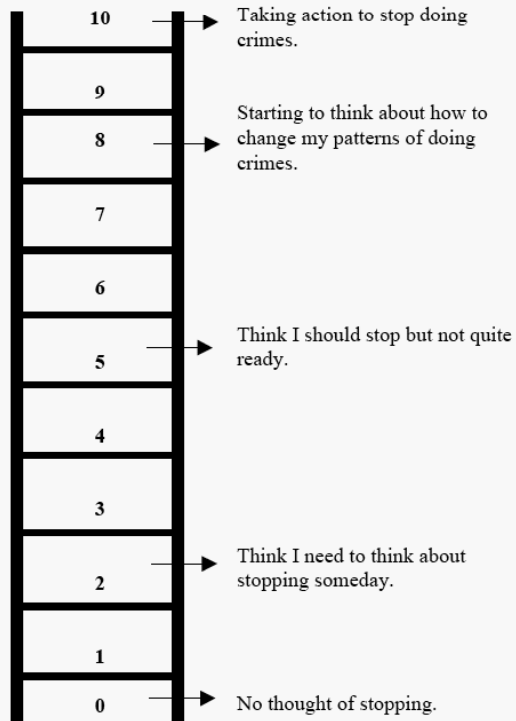
		Strongly disagree	Disagree	Not sure	Agree	Strongly agree
1) My <i>caseworker</i> will help me make this happen so I can stop doing crimes.	1	2	3	4	5	
2) My <i>JCO staff</i> will help me make this happen so I can stop doing crimes.....	1	2	3	4	5	
3) My <i>psychologist</i> will help me make this happen so I can stop doing crimes.....	1	2	3	4	5	Does not apply to me
4) My <i>teachers</i> will help me make this happen so I can stop doing crimes.....	1	2	3	4	5	
5) <i>No person</i> can help me make this happen – it is all up to me.	1	2	3	4	5	
6) <i>Correctional therapy</i> will help me make this happen so I can stop doing crimes.	1	2	3	4	5	
7) <i>Specialized treatment</i> (CD, SOTP, or COG/CSVOTP) will help me make this happen so I can stop doing crimes.....	1	2	3	4	5	Does not apply to me
8) <i>One-on-one counseling</i> will help me make this happen so I can stop doing crimes.	1	2	3	4	5	Does not apply to me
9) <i>School and/or job training</i> in TYC will help me make this happen so I can stop doing crimes.	1	2	3	4	5	
10) <i>TYC structure and rules</i> will help me make this happen so I can stop doing crimes.	1	2	3	4	5	
11) <i>No program or treatment</i> can help me make this happen – it is all up to me.	1	2	3	4	5	

Appendix F: Contemplation Ladder

CL

Each step on this ladder shows where different people are in their thinking about doing crimes.

Circle the number that shows where you are now.



Appendix G: Post-Detention Likelihood to Succeed Scale

PDLSS

Below are questions asking you to predict things that might happen after you leave TYC. Please circle the number under the answer that best describes how you feel *right now*.

After leaving here, how likely do you think you will...	Very Unlikely	Unlikely	Likely	Very Likely	
Complete high school	1	2	3	4	5 I have already completed high school.
Hang out with your old friends	1	2	3	4	
Hang out with friends that you have met in TYC	1	2	3	4	
Hang out with different friends who never get in trouble	1	2	3	4	
Use drugs and alcohol	1	2	3	4	
Avoid problems that might lead to doing a crime	1	2	3	4	
Work harder to get along with other adults	1	2	3	4	
Work harder at not getting into fights with other youths	1	2	3	4	
Spend more time with positive family members and adult people who will help you avoid trouble	1	2	3	4	

How much do you agree with these statements about yourself?	Strongly disagree	Disagree	Agree	Strongly Agree
After I leave here, I won't be doing any crimes.	1	2	3	4
After I leave here, I will be getting involved in more positive activities.	1	2	3	4
After I leave here, I think I will return here.	1	2	3	4
After I leave here, school can help me reach my goals	1	2	3	4

References

- Abrams, L. S., Kim, K., & Anderson-Nathe, B. (2005). Paradoxes of treatment in juvenile corrections. *Child & Youth Care Forum, 34*(1), 7-25.
- Adams, K. (1997). Developmental aspects of adult crime. In T. P. Thornberry (Ed.), *Developmental theories of crime and delinquency* (pp. 309-342). New Brunswick, NJ: Transaction Publishers.
- Amodei, N., & Lamb, R. J. (2004). Convergent and concurrent validity of the Contemplation Ladder and URICA scales. *Drug & Alcohol Dependence, 73*(3), 301-306.
- Andrews, D. A., Bonta, J., & Hoge, R. D. (1990). Classification for effective rehabilitation: Rediscovering psychology. *Criminal Justice & Behavior, 17*(1), 19-52.
- Asay, T. P., & Lambert, M. J. (1999). The empirical case for the common factors in therapy: Quantitative findings. In M. A. Hubble & B. L. Duncan & et al. (Eds.), *Heart and soul of change: What works in therapy* (pp. 23-55). Washington, DC: American Psychological Association.
- Bachelor, A., & Horvath, A. (1999). The therapeutic relationship. In M. A. Hubble & B. L. Duncan & et al. (Eds.), *Heart and soul of change: What works in therapy* (pp. 133-178). Washington, DC: American Psychological Association.
- Baker, A., Boggs, T. G., & Lewin, T. J. (2001). Randomized controlled trial of brief cognitive-behavioural interventions among regular users of amphetamine.

- Addiction*, 96(9), 1279-1287.
- Biener, L., & Abrams, D. B. (1991). The Contemplation Ladder: Validation of a measure of readiness to consider smoking cessation. *Health Psychology*, 10(5), 360-365.
- Blanton, H. and Jaccard, J. (2006). Arbitrary metrics in psychology. *American Psychologist*, 61(1), 27-41.
- Blumenthal, R. N., Gogineni, A., Longshore, D., & Stein, M. (2001). Factors associated with readiness to change drug use among needle-exchange users. *Drug and Alcohol Dependence*, 62.
- Blumstein, A., & Cohen, J. (1987). Characterizing criminal careers. *Science*, 237(4818), 985-991.
- Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research & Practice*, 16(3), 252-260.
- Brickman, P., Rabinowitz, V.C., Karuza, J., Coates, D., Cohn, E., & Kidder, L. (1982). Models of helping and coping. *American Psychologist*, 37 (4), 368-384.
- Burnett, R. (1992). *The dynamics of recidivism*. Oxford: Centre for Criminological Research, University of Oxford.
- Busseri, M. A., & Tyler, J. D. (2003). Interchangeability of the Working Alliance Inventory and Working Alliance Inventory, Short Form. *Psychological Assessment*, 15(2), 193-197.
- Carey, K. B., Purnine, D. M., & Maisto, S. A. (1999). Assessing readiness for change substance abuse: A critical review of instruments. *Clinical Psychology: Science & Practice*, 6(3), 245-266.

- Carey, K. B., Carey, M. P., Maisto, S. A., & Purnine, D. M. (2002). The feasibility of enhancing psychiatric outpatients' readiness to change their substance use. *Psychiatric Services, 53*(5), 602-608.
- Castonguay, L.G., Goldfried, M.R., Wiser, S., Raue, P.J., & Hayes, A.M. (1996). Predicting the effect of cognitive therapy for depression: A study of unique and common factors. *Journal of Consulting and Clinical Psychology, 64*, 497-504.
- Chamberlain, P. (1998). Treatment Foster Care. *Office of Juvenile Justice and Delinquency Prevention*. Washington, D.C.
- Chubb, N.H., Fertman, C.I., and Ross, J.L. (1997). Adolescent self-esteem and locus of control: A longitudinal study of gender and age differences. *Adolescence, 32*, 113-130.
- Church, E. (1994). The role of autonomy in adolescent psychotherapy. *Psychotherapy: Theory, Research, Practice, Training, 31*(1), 101-108.
- Cohen, J. (1988). *Statistical power analysis for the behavior sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Cohen, P. J., Glaser, B. A., Calhoun, G. B., Bradshaw, C. P., & Petrocelli, J. V. (2005). Examining readiness for change: A preliminary evaluation of the University of Rhode Island Change Assessment with incarcerated adolescents. *Measurement & Evaluation in Counseling & Development, 38*(1), 45-62.
- Colson, D. B., Cornsweet, C., Murphy, T., O'Malley, F., Hyland, P. S., McParland, M., & Coyne, L. (1991). Perceived treatment difficulty and therapeutic alliance on an adolescent psychiatric hospital unit. *American Journal of Orthopsychiatry, 61*(2),

221-229.

- Crane, D. R., Griffin, W., & Hill, R. D. (1986). Influence of therapist skills on client perceptions of marriage and family therapy outcome: Implications for supervision. *Journal of Marital & Family Therapy*, 12(1), 91-96.
- Davidson, W. S., II, Redner, R., Amdur, R. L., & Mitchell, C. M. (1990). *Alternative treatments for troubled youth: The case of diversion from the justice system*. New York, NY: Plenum Press.
- Derrickson, D. L. (2000). Working alliance and readiness to change in incarcerated sex offenders. *Dissertation Abstracts International: Section B: The Sciences & Engineering*, 60(8), 4215.
- Digiuseppe, R., Linscott, J., & Jilton, R. (1996). Developing the therapeutic alliance in child-adolescent psychotherapy. *Applied & Preventive Psychology*, 5(2), 85-100.
- Downey, R.G., & King, C.V. (April, 1995). Missing data in Likert ratings: A comparison of substitution techniques. Paper presented at the 11th Annual Conference of the Society for Industrial and Organizational Psychology, San Diego, CA.
- Duncan, B. L., & Miller, S. D. (2000). The client's theory of change: Consulting the client in the integrative process. *Journal of Psychotherapy Integration*, 10(2), 169-187.
- Duncan, B. L., & Miller, S. D. (2000). *The heroic client: Doing client-directed, outcome-informed therapy*. San Francisco, CA: Jossey-Bass.
- Eltz, M. J., Shirk, S. R., & Sarlin, N. (1995). Alliance formation and treatment outcome among maltreated adolescents. *Child Abuse & Neglect*, 19(4), 419-431.

- Eaton, T.T., Abeles, N., & Gutfreund, M.J. (1988). Therapeutic alliance and outcome: Impact of treatment length and pretreatment symptomatology. *Psychotherapy*, 25, 536-542.
- Evans, W. P., Brown, R., & Killian, E. (2002). Decision making and perceived postdetention success among incarcerated youth. *Crime & Delinquency*, 48(4), 553-567.
- Farrall, S. (2002). *Rethinking what works with offenders: Probation, social context and desistance from crime*. Cullompton.: Willan.
- Farrall, S. (2005). On the existential aspects of desistance from crime. *Symbolic Interaction*, 28 (3), 367-386.
- Florsheim, P., Shotorbani, S., Guest-Warnick, G., Barratt, T., & Hwang, W.-C. (2000). Role of the working alliance in the treatment of delinquent boys in community-based programs. *Journal of Clinical Child Psychology*, 29(1), 94-107.
- Fox, K. J. (1999). Changing violent minds: Discursive correction and resistance in the cognitive treatment of violent offenders in prison. *Social Problems*, 46(1), 88-103.
- Frank, J. D., & Frank, J. B. (1991). *Persuasion and healing: A comparative study of psychotherapy (3rd ed)*. Baltimore, MD: Johns Hopkins University Press.
- Giordano, P.C., Cernkovich, S.A., & Rudolph, J.L. (2002) Gender, crime, and desistance: Toward a theory of cognitive transformation. *American Journal of Sociology*, 107 (4), 990-1064.
- Glueck, S., & Glueck, E. . (1950). *Unraveling Juvenile Delinquency*. Cambridge, Mass.: Harvard University Press.

- Godwin, C. D., & Helms, J. L. (2002). Statistics and trends in juvenile justice and forensic psychology. In N. G. Ribner (Ed.), *California School of Professional Psychology handbook of juvenile forensic psychology* (pp. 3-28). San Francisco, CA: Jossey-Bass.
- Goldstein, A. P. (1990). *Delinquents on delinquency*. Champaign, IL: Research Press.
- Greenwald, R. (Ed.). (2002). *Trauma and juvenile delinquency: Theory, research, and interventions*. Binghamton, NY: Haworth Maltreatment and Trauma Press/The Haworth Press, Inc.
- Guay, J.-P., Oimet, M., and Proulx, J. (2005). On intelligence and crime: A comparison of incarcerated sex offenders and serious non-sexual violent criminals. *International Journal of Law and Psychiatry*, 28(4), 405-417.
- Hahn, R.A., Bilukha, O., Lowy, J., Crosby, A., Fullilove, M., Liberman A., et al. (2005). The effectiveness of therapeutic foster care for the prevention of violence: A systematic review. *American Journal of Preventive Medicine*, 28(2) Supplement 1, 72-90.
- Hanna, F. J., & Hunt, W. P. (1999). Techniques for psychotherapy with defiant, aggressive adolescents. *Psychotherapy: Theory, Research, Practice, Training*, 36(1), 56-68.
- Hanson, R.K., and Morton-Bourgon, K.E. (2005). The characteristics of persistent sexual offenders: A meta-analysis of recidivism studies. *Journal of Consulting and Clinical Psychology*, 73(6), 1154-1163.
- Hartwig, H.J. and Myers, J.E. (2003). A different approach: Applying a wellness

- paradigm to adolescent female delinquents and offenders. *Journal of Mental Health Counseling*, 25 (1), 57-75.
- Hatcher, R.L., and Barends, A. (1996). Patient's views of the alliance in psychotherapy: Exploratory factor analysis of three alliance measures. *Journal of Consulting and Clinical Psychology*, 64, 1326-1336.
- Hemphill, J. F., & Howell, A. J. (2000). Adolescent offenders and stages of change. *Psychological Assessment*, 12(4), 371-381.
- Hester, R., Miller, W., Delaney, H., & Delaney, R. (1990). *Effectiveness of the community reinforcement approach*. Paper presented at the 24th annual meeting of the Association for the Advancement of Behavior Therapy, San Francisco, CA.
- Hirschi, T. (1969). *Causes of Delinquency*. University of California Press, Berkeley, CA.
- Homeboy Industries. (2005). About us. Retrieved June 9, 2006 from http://www.homeboy-industries.org/father_gregg.php
- Horvath, A. O., & Greenberg, L. S. (1986). The development of the Working Alliance Inventory. In L. S. Greenberg & W. M. Pinsof (Eds.), *Psychotherapeutic process: A research handbook* (pp. 529-556). New York, NY: Guilford Press.
- Horvath, A. O., & Greenberg, L. S. (1989). Development and validation of the Working Alliance Inventory. *Journal of Counseling Psychology*, 36(2), 223-233.
- Horvath, A. O., & Symonds, B. D. (1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counseling Psychology*, 38(2), 139-149.
- Horvath, A. O., & Luborsky, L. (1993). The role of the therapeutic alliance in

- psychotherapy. *Journal of Consulting & Clinical Psychology*, 61(4), 561-573.
- Horvath, A.O., Gaston, L., & Luborsky, L. (1993). The therapeutic alliance and its measures. In N. E. Miller & L. Luborsky & et al. (Eds.), *Psychodynamic treatment research: A handbook for clinical practice* (pp. 247-273). New York, NY: Basic Books, Inc.
- Horvath, A. O. (1994). Empirical validation of Bordin's pantheoretical model of the alliance: The Working Alliance Inventory perspective. In A. O. Horvath & L. S. Greenberg (Eds.), *Working alliance: Theory, research, and practice* (pp. 109-128). Oxford, England: John Wiley & Sons.
- Hughes, M. (1998). Turning points in the lives of young inner-city men forgoing destructive criminal behaviors: A qualitative study. *Social Work Research*, 22 (3), 1070-5309.
- Iwata, E. (2005, July 11). Homeboy industries goes gangbusters. *USA Today*. Retrieved June 9 , 2006 from http://www.usatoday.com/money/smallbusiness/2005-07-10-homeboy-usat_x.htm.
- Jordan, J.V. (1995). A relational approach to psychotherapy. *Women and Therapy*, 16 (4), 51-61.
- Kazdin, A. E. (1990). Premature termination from treatment among children referred for antisocial behavior. *Journal of Child Psychology & Psychiatry*, 31(3), 415-425.
- Kazdin, A. E. (1993). Treatment of conduct disorder: Progress and directions in psychotherapy research. *Development & Psychopathology*, 5(1), 277-310.
- Kazdin, A.E. (2006). Arbitrary metrics: Implications for identifying evidence-based

- treatments. *American Psychologist*, 61 (1), 42-49.
- Kazdin, A. E., Mazurick, J. L., & Siegel, T. C. (1994). Treatment outcome among children with externalizing disorder who terminate prematurely versus those who complete psychotherapy. *Journal of the American Academy of Child & Adolescent Psychiatry*, 33(4), 549-557.
- Kazdin, A. E. (1997). A model for developing effective treatments: Progression and interplay of theory, research, and practice. *Journal of Clinical Child Psychology*, 26(2), 114-129.
- Kazdin, A. E., & Wassell, G. (1999). Barriers to treatment participation and therapeutic change among children referred for conduct disorder. *Journal of Clinical Child Psychology*, 28(2), 160-172.
- Krippendorff, K. (1980). *Content Analysis: An Introduction to its Methodology*. Beverly Hills: Sage.
- Krisberg, B., & Howell, J. C. (1998). The impact of the juvenile justice system and prospects for graduated sanctions in a comprehensive strategy. In R. Loeber & D. P. Farrington (Eds.), *Serious & violent juvenile offenders: Risk factors and successful interventions* (pp. 346-366). Thousand Oaks, CA: Sage Publications, Inc.
- Krupnick, J.L., Elkin, I., Collins, J., Simmens, S., Sotsky, S.M., Pilkonis, P.A., & Watkins, J.T. (1994). Therapeutic alliance and clinical outcome in the NIMH Treatment of Depression Collaborative Research Program: Preliminary findings. *Psychotherapy*, 31, 28-35.

- LaBrie, J. W., Quinlan, T., Schiffman, J. E., & Earleywine, M. E. (2005). Performance of alcohol and safer sex change rulers compared with readiness to change questionnaires. *Psychology of Addictive Behaviors, 19*(1), 112-115.
- Lambert, M. J. (1992). Psychotherapy outcome research: Implications for integrative and eclectic therapists. In J. C. Norcross & M. R. Goldfried (Eds.), *Handbook of psychotherapy integration* (pp. 94-129). New York, NY: Basic Books, Inc.
- Laub, J. H., Nagin, D. S., & Sampson, R. J. (1998). Trajectories of change in criminal offending: Good marriages and the desistance process. *American Sociological Review, 63*(2), 225-238.
- Lazarus, A. A. (1992). Multimodal therapy: Technical eclecticism with minimal integration. In J. C. Norcross & M. R. Goldfried (Eds.), *Handbook of psychotherapy integration* (pp. 231-263). New York, NY: Basic Books, Inc.
- Liddle, H. A. (1995). Conceptual and clinical dimensions of multidimensional, multisystems engagement strategy in family-based adolescent treatment. *Psychotherapy: Theory, Research, Practice, Training, 32*(1), 39-58.
- Linscott, J., Diguseppe, R., & Jilton, R. (1993). *A measure of therapeutic alliance in adolescent psychotherapy*. Paper presented at the 101st Annual Convention of the American Psychological Association, Toronto, Canada.
- Lipsey, M. W., & Wilson, D. B. (1998). Effective intervention for serious juvenile offenders: A synthesis of research. In R. Loeber & D. P. Farrington (Eds.), *Serious & violent juvenile offenders: Risk factors and successful interventions* (pp. 313-345). Thousand Oaks, CA: Sage Publications, Inc.

- Loar, L. (2001). Eliciting cooperation from teenagers and their parents. *Journal of Systemic Therapies*, 20(1), 59-77.
- Loeber, R., & Farrington, D. P. (Eds.). (1998). *Serious & violent juvenile offenders: Risk factors and successful interventions*. Thousand Oaks, CA: Sage Publications, Inc.
- Luborsky, L., Singer, B., & Luborsky, L. (1975). Comparative studies of psychotherapies: Is it true that "everyone has won and all must have prizes"? *Archives of General Psychiatry*, 32(8), 995-1008.
- Mallinckrodt, B., Coble, H. M., & Gantt, D. L. (1995). Working alliance, attachment memories, and social competencies of women in brief therapy. *Journal of Counseling Psychology*, 42(1), 79-84.
- Martin, D. J., Garske, J. P., & Davis, M. K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting & Clinical Psychology*, 68(3), 438-450.
- Maruna, S. (2001). *Making good: How ex-convicts reform and rebuild their lives*. Washington, DC: American Psychological Association.
- Maruna, S., Immarigeon, R., & LeBel, T.P. (2004). Ex-offender reintegration: Theory and Practice. In S. Maruna & R. Immarigeon, (Eds.), *After Crime and Punishment: Pathways to Offender Reintegration* (pp. 3-26). Portland, OR: Willan.
- McConaughy, E. A., Prochaska, J. O., & Velicer, W. F. (1983). Stages of change in psychotherapy: Measurement and sample profiles. *Psychotherapy: Theory, Research & Practice*, 20(3), 368-375.

- Miller, W. R., & Rollnick, S. (1991). *Motivational interviewing: Preparing people to change addictive behavior*. New York, NY: Guilford Press.
- Mohl, P.C., Martinez, D., Ticknor, C., Huang, M., & Cordell, L. (1991). Early dropout from psychotherapy. *Journal of Nervous and Mental Disorders*, 179, 478-481.
- Moras, K., & Strupp, H. H. (1982). Pretherapy interpersonal relations, patients' alliance, and outcome in brief therapy. *Archives of General Psychiatry*, 39(4), 405-409.
- Mullins, S.M., Suarez, M., Ondersma, S.J., and Page, M.C. (2004) The impact of motivational interviewing on substance abuse retention: A randomized control trial of women involved with child welfare. *Journal of Substance Abuse Treatment*, 27, p. 51-58.
- Norcross, J. C., & Beutler, L. E. (1997). Determining the therapeutic relationship of choice in brief therapy. In J. N. Butcher (Ed.), *Personality assessment in managed health care: Using the MMPI-2 in treatment planning* (pp. 42-60): LondonOxford University Press.
- Office of Juvenile Justice and Delinquency Prevention. (1995). *Guide for implementing the comprehensive strategy for serious, violent, and chronic juvenile offenders (NCJ 153681)*. Retrieved August 25, 2005, from the World Wide Web:
<http://ojjdp.ncjrs.org/publications/index.html>
- Office of Juvenile Justice and Delinquency Prevention. (1999). *Juvenile justice: A century of change. Bulletin: 1999 National report series. (NCJ178995)*. Retrieved July 21, 2005, from the World Wide Web:
<http://ojjdp.ncjrs.org/publications/index.html>

- O'Malley, F. (1990). Developing a therapeutic alliance in the hospital treatment of disturbed adolescents. *Bulletin of the Menninger Clinic*, 54(1), 13-24.
- Pantalon, M. V., & Swanson, A. J. (2003). Use of the University of Rhode Island Change Assessment to measure motivational readiness to change in psychiatric and dually diagnosed individuals. *Psychology of Addictive Behaviors*, 17(2), 91-97.
- Patton, M.Q. (2002). *Qualitative Research and Evaluation Methods*. Thousand Oaks, CA: Sage.
- Petry, N. M., & T., F. C. (2005). Stages of change in treatment-seeking pathological gamblers. *Journal of Consulting and Clinical Psychology*, 73(2), 312-322.
- Piper, W.E., Azim, H.F.A., Joyce, A.S., McCallum, M., Nixon, G.W.H., & Segal, P.S. (1991). Quality of object relations versus interpersonal functioning as predictors of therapeutic alliance and psychotherapy outcome, *Journal of Nervous and Mental Disorders*, 179, 432-438.
- Powell, K.M., & Rosen, L.A. (1999). Avoidance of responsibility in conduct disordered adolescents. *Personality and Individual Differences*, 27(2), 327-340.
- Priebe, S., & Gruyters, T. (1993). The role of the helping alliance in psychiatric community care: A prospective study. *Journal of Nervous and Mental Disease*, 181, 552-557.
- Prochaska, J. O., & DiClemente, C. C. (1982). Transtheoretical therapy: Toward a more integrative model of change. *Psychotherapy: Theory, Research & Practice*, 19(3), 276-288.
- Prochaska, J. O., Norcross, J. C., & DiClemente, C. C. (1994). *Changing for good*. New

York: Morrow.

Prochaska, J. O., & Norcross, J. C. (2001). Stages of change. *Psychotherapy: Theory, Research, Practice, Training*, 38(4), 443-448.

Project MATCH Research Group. (1997). Matching alcoholism treatments to client heterogeneity: Project MATCH posttreatment drinking outcomes. *Journal of Studies on Alcohol*, 58(1), 7-29.

Puzzanchera, C., Stahl, A. L., Finnegan, T. A., Tierney, N., & Snyder, H. N. (2004). *Juvenile court statistics 2000 (NCJ 209736)*. Office of Juvenile Justice and Delinquency Prevention. Retrieved July 21, 2005, from the World Wide Web: <http://ojjdp.ncjrs.org/publications/index.html>

Rea, L.M., & Parker, R.A. (1992) *Designing and conducting survey research*. San Francisco: Jossey-Boss.

Rubenstein, A. (1996). Interventions for a scattered generation: Treating adolescents in the nineties. *Psychotherapy: Theory, Research, Practice, Training*, 33(3), 353-360.

Shirk, S. R., & Russell, R. L. (1996). *Change processes in child psychotherapy: Revitalizing treatment and research*. New York, NY: Guilford Press.

Sickmund, M. (2004). *Juveniles in corrections. Bulletin: OJJDP national report series. (NCJ 202885)*. Office of Juvenile Justice and Delinquency Prevention. Retrieved August 20, 2005, from the World Wide Web: <http://ojjdp.ncjrs.org/publications/index.html>

Siegel, L., & Senna, J. (2000). *Juvenile delinquency: Theory, practice, and law*. Belmont,

- CA: Wadsworth.
- Slomowitz, M. (Ed.). (1991). *Adolescent psychotherapy*. Washington, DC: American Psychiatric Association.
- Smith, M. L., & Glass, G. V. (1977). Meta-analysis of psychotherapy outcome studies. *American Psychologist*, 32(9), 752-760.
- Springer, D. W., McNeece, C. A., & Arnold, E. M. (2003). *Substance abuse treatment for criminal offenders: An evidence-based guide for practitioners*. Washington, DC: American Psychological Association.
- Stephens, S., Cellucci, T. C., & Gregory, J. (2004). Comparing stage of change measures in adolescent smokers. *Addictive Behaviors*, 29(4), 759-764.
- Stiles, W. B., Shapiro, D. A., & Elliott, R. (1986). "Are all psychotherapies equivalent?" *American Psychologist*, 41(2), 165-180.
- Sutton, S. (2001). Back to the drawing board? A review of applications of the transtheoretical model to substance use. *Addiction*, 96(1), 175-186.
- Tallman, K., & Bohart, A. C. (1999). The client as a common factor: Clients as self-healers. In M. A. Hubble & B. L. Duncan & et al. (Eds.), *Heart and soul of change: What works in therapy* (pp. 91-131). Washington, DC: American Psychological Association.
- Taylor, L., & Adelman, H. S. (1986). Facilitating children's participation in decisions that affect them: From concept to practice. *Journal of Clinical Child Psychology*, 15(4), 346-351.
- Tetzlaff, B.T., Kahn, J.H., Godley, S.H., Godley, M.D., Diamond, G.S., and Funk, R.R.

- (2005). Working alliance, treatment satisfaction, and patterns of posttreatment use among adolescent substance users. *Psychology of Addictive Behaviors, 19* (2), 199-207.
- Texas Youth Commission. (2005a). *Juvenile corrections system in Texas*. Retrieved August 25, 2005, from the World Wide Web:
<http://www.tyc.state.tx.us/about/overview.html>
- Texas Youth Commission. (2005b). *TYC population trends*. Retrieved August 25, 2005, from the World Wide Web:
http://www.tyc.state.tx.us/research/growth_charts.html
- Texas Youth Commission. (2005c). *Commitment profile for new commitments, fiscal years 2000-2004*. Retrieved August 25, 2005, from the World Wide Web:
<http://www.tyc.state.tx.us/research/profile.html>
- Toch, H. (2002). Everything works. *International Journal of Offender Therapy and Comparative Criminology, 46*(2), 199-122.
- Tracey, T. J., & Kokotovic, A. M. (1989). Factor structure of the Working Alliance Inventory. *Psychological Assessment, 1*(3), 207-210.
- Trice, A. D. (1990). Adolescents' locus of control and compliance with contingency contracting and counseling interventions. *Psychological Reports, 67*(1), 233-234.
- Walters, G. D. (2002). Lessons learned from project MATCH. *Addictive Disorders & Their Treatment, 1*(4), 135-139.
- Weber, R.P. (1990). *Basic Content Analysis*. Newbury Park: Sage.
- Weston Henriques, Z., & Manatu-Rupert, N. (2001). Living on the outside: African

- American women before, during, and after imprisonment. *Prison Journal*, 81(1), 6-19.
- Wile, D. B. (1977). Ideological conflicts between clients and psychotherapists. *American Journal of Psychotherapy*, 31(3), 437-449.
- Williamson, P., Day, A., Howells, K., Bubner, S., & Jauncey, S. (2003). Assessing offender readiness to change problems with anger. *Psychology, Crime & Law*, 9(4), 295-307.
- Wong, S.K. (2005). The effects of adolescent activities on delinquency: A differential involvement approach. *Journal of Youth and Adolescence*, 34 (4), 321-333.

Vita

Kristin Lindsay Savicki was born in Dallas, Oregon on July 29th, 1976, the daughter of Kathleen and Victor Savicki. After graduating from Central High School in Independence, OR in 1994, she entered Swarthmore College in Swarthmore, PA. She received the degree of Bachelor of Arts in June, 1998. During the following years she was employed as a case manager at Citizens Advice Bureau in the Bronx, NY, and later as a senior field instructor at Aspen Achievement Academy in Loa, Utah. In August of 2002 she entered the Graduate School at the University of Texas at Austin. She received the degree of Master of Arts in Program Evaluation in May, 2006.

Permanent address: 388 Maple Hill Dr.
Salem, OR 97304

This dissertation was typed by the author.