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Cognitive Behavioral Substance Treatment on Latino Engagement, Motivation, and Drug Use Thinking

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Walden University
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Abstract

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MS, Walden University, 2014

MPA, University of La Verne, 2008

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

The U.S. Latino population seeking substance abuse treatment has nearly doubled over the past 10 years, yet ethnic-based research and intervention strategies are lacking. The purpose of this quantitative study was to evaluate the efficacy of the Treatment Readiness Induction Program (TRIP) among the Latino adolescent population. Cognitive behavioral therapy and the integrated judgment and decision making model provided the theoretical framework. Secondary data from 137 Latino/Latina participants were collected on engagement, motivation, and drug use thinking scales and their respective subscales to evaluate differences by gender and by a group of clients who received standard operating practice treatment (SOP) and those who, in addition to SOP, received TRIP treatment (SOP+TRIP). An independent *t* test found no gender differences on any of the subscales. Contrary to expectations, an independent *t* test indicated the SOP group had statistically significantly higher scores on the motivation subscale of desire for help and on the engagement subscale of peer support. The longer time in treatment by the SOP+TRIP group may account for the unexpected findings, and a repeated-measures design is recommended in future research to map and better understand changes in engagement, motivation, and drug use thinking across time in treatment. Findings and recommendations inform positive social change intervention and assessment strategies that target Latino clients seeking support of drug abuse.

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Dedication

I would like to dedicate this dissertation to my family and friends who believed in me and supported me in completing my educational goals. The PhD has been a memorable journey, and the many good experiences and teaching moments will guide my professional career.

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I would like to acknowledge and thank my committee members, Dr. Diebold and Dr. Georita, at Walden University. Thank you for all your hours dedicated in aiding me through advising and empowering me to grow into a professional scholar. Finally, I would like to acknowledge Dr. Jennifer Beacon at Texas Christian University for her support and immeasurable hours of consultation and feedback on my dissertation topic.

Table of Contents

List of Tables

Chapter 1: Introduction to the Study

The Latino adolescent population is steadily growing in the United States (Rojas, Halford, Brand, & Tivis, 2012). The larger Latino population is the fastest growing population in the United States, which raises questions regarding how to best serve this group pertaining to mental health (Bernal, 2001). Evidence-based practices are being reviewed to evaluate their efficacy toward ethnic minorities (Bernal, 2012). In addition, evidence-based practices are being evaluated to compare their efficacy among ethnic minorities and subethnicities (Austin & Wagner, 2006).

Background

Understanding effective treatment methods for the adolescent population can become challenging as the dynamics among that population involve gender differences, socioeconomic status, family history, past trauma, and genetic predisposition (Kennedy, Burnett, & Edmonds, 2011). Moreover, looking at a specific ethnic group involves additional variables worth noting for ongoing research and treatment development. For example, among the Latino population, research has indicated substance abuse treatment outcome differences pertaining to subethnicities (Guerrero, Marsh, Khachikan, Amaro, & Vega, 2013). Among the Latino population, the adolescent group continues to be the largest growing group in the United States, yet ethnic-based research is lacking (Guerrero et al., 2013). The number of Latinos who have sought substance abuse treatment has nearly doubled over the past 10 years, yet limited treatment strategies exist (Guerrero et al., 2013; Kouyoumdjian, Guzmán, & Leon, 2015). This study addressed the need to

identify effective treatment strategies for this population and to provide additional insight into current practices for further research.

Problem Statement

This study included an enhanced cognitive behavioral therapy (CBT) intervention program to determine differences in during-treatment engagement, motivation, and drug use thinking between Latino participants who received the intervention and those who did not. The literature indicated that cultural and ethnic differences impact treatment outcomes (Schwartz et al., 2014), so it was important to examine the influence of a program for Latino adolescents. Although the data were archival, the findings were relevant because the Treatment Readiness Induction Program (TRIP) continues to be implemented in several states.

Purpose of Study

The purpose of the study was to evaluate the efficacy of the TRIP intervention among the Latino adolescent population. The study was quantitative, including secondary data from Texas Christian University (TCU). Following TCU's pilot program study, I performed secondary data analysis to measure the during-treatment efficacy (i.e., engagement, motivation, and drug use thinking) and applicability of the TRIP intervention. I conducted independent *t* tests comparing Latinos and Latinas who participated in the treatment condition and those who only received standard treatment. The original study included the Adolescent Screening and Assessment Package, which consists of 11 composite modules (Knight, Becan, Landrum, Joe, & Flynn, 2014), but only three were used for the current study. Motivation was measured using three

subscales: problem recognition, desire to receive help, and treatment readiness. Engagement was measured using four subscales: treatment participation, treatment satisfaction, counselor rapport, and peer support. Drug use thinking was measured using three subscales: control over personal drug use, drug culture, and drug resistance efficacy.

Research Questions and Hypotheses

There were two independent variables in the study: (a) sex (Latino versus Latina) and (b) intervention (standard practice versus TRIP). There were three primary dependent composite variables: (a) engagement, (b) motivation, and (c) drug use thinking. In addition to the overall composite score, each of these had subscale scores (delineated below) that were analyzed separately.

RQ1- Quantitative: What differences in engagement (specifically in treatment participation, treatment satisfaction, counseling rapport, and peer support) exist between Latinos and Latinas who participated in TRIP versus those who only received standard operating practices?

Null 1: There are no differences in engagement by intervention.

Alternative 1: There are engagement differences between groups who participated in the intervention and those who only received the standard operating practices.

Null 2: There are no differences in engagement between sex (i.e., Latinos and Latinas).

Alternative 2: There is a difference in engagement between sex (i.e., Latinos and Latinas).

Null 3: There is no interaction effect of intervention by sex on engagement.

Alternative 3: There is an interaction effect of intervention by sex.

RQ2- Quantitative: What differences in motivation (i.e., treatment readiness, desire for help, and problem recognition) exist between Latinos and Latinas participating in TRIP versus those who did not receive treatment intervention?

Null 4: There are no differences in motivation by intervention.

Alternative 4: There are differences in motivation between groups who participated in the intervention and those who only received the standard operating practices.

Null 5: There are no differences in motivation by sex (i.e., Latinos and Latinas).

Alternative 5: There is a difference in motivation by sex (i.e., Latinos and Latinas).

Null 6: There is no interaction effect of intervention by sex on motivation.

Alternative 6: There is an interaction effect of intervention by sex on motivation.

RQ3-Quantitative: What differences in drug use thinking (i.e., control over personal drug use, drug culture, and drug resistance) exist between Latinos and Latinas participating in TRIP intervention versus those who only received standard operating practices?

Null 7: There are no differences in drug use thinking by intervention.

Alternative 7: There is a difference in drug use thinking by intervention.

Null 8: There are no differences in drug use thinking by sex (i.e., Latinos and Latinas).

Alternative 8: There is a difference in drug use thinking by sex (i.e., Latinos and Latinas).

Null 9: There is no interaction effect of intervention by sex on drug use thinking.

Alternative 9: There is an interaction effect of intervention by sex on drug use thinking.

Theoretical Framework

I chose to use CBT and the integrated judgment and decision making (IJDM) model as my theoretical framework because both were used in the initial TRIP study (Dansereau, Knight, & Flynn, 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016). The TRIP model focused on how an adolescent improved in targeted areas (Knight et al., 2016). In the initial study of adolescents in five residential substance abuse treatment settings, cognitive measures were used to monitor a youth's efforts at improving problem recognition and decision-making (Knight et al., 2016).

CBT has a received much attention in various studies on mood disorders and substance abuse disorders among the adolescent population (Gearing, Schwalbe, Lee, & Hoagwood, 2013). In the TRIP study on adolescents in residential treatment centers, clients were encouraged to evaluate their decisions and approach scenarios with alternative actions (Knight et al., 2016). Such interactions encouraged youth to improve their cognitive abilities pertaining to better day-to-day choices (Beck & Beck, 1995).

The second theoretical model, IJDM, is used to target cognitive functioning, including decision-making, to reduce risky behavior among youths (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016). The incorporation of the IJDM

involved adolescents receiving scenarios in which experiential-based thinking was promoted (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016).

Nature of Study

Secondary analysis was used for my study. Archival data were used to compare Latino adolescents who had participated in one of five residential treatment centers in the United States. Data for my study were obtained from TCU.

Five residential treatment programs participated in the TCU study (Knight et al., 2016). Every client received treatment; however, the sample was separated into two groups. One group received standard operating practices (i.e., standard treatment program) and the second group was enrolled in the TRIP program (i.e., standard treatment and TRIP intervention). The initial phase provided assessments for data comparison. Phase I of the study consisted of 6 months of assessment and data collection (Knight et al., 2016). Adolescents designated to Phase I only received assessment and were not included in the TRIP intervention component, receiving only each residential program's standard operation practices (Knight et al., 2016). Subsequently, Phase II consisted of TRIP treatment intervention (Knight et al., 2016). Adolescents designated to Phase II received both assessment and treatment intervention. Posttests consisted of measuring participants' drug use thinking (e.g., drug culture, drug resistance efficacy), motivation (e.g., treatment readiness, problem recognition), and engagement (e.g., treatment participation, treatment satisfaction) (Knight et al., 2016).

Definitions

Terms used in this study were defined according to literature specific to the TRIP intervention (Knight, Becan, et al., 2014; Knight, Dansereau, Becan, Rowan, & Flynn, 2014; Knight et al., 2016). These terms include the following:

Drug use thinking: Control over personal drug use, drug culture, and drug resistance efficacy (Knight, Becan, et al., 2014).

Engagement: Treatment participation, treatment satisfaction, counselor rapport, and peer support (Knight, Becan, et al., 2014).

Motivation: Problem recognition, desire to receive help, and treatment readiness (Knight, Becan, et al., 2014).

Assumptions

Because my study was quantitative and included secondary data, I assumed that the original data were accurately transcribed and represented an accurate description of client experiences.

Scope and Delimitations

Data were specific to residential treatment facilities. Secondary analysis was the choice of methodology because the adolescent population is a protected population. More research was needed to identify best treatment practices for the Latino population. Additionally, ethnic-specific studies would improve understanding of how TCU-TRIP measures influenced outcomes for Latino adolescents. Because there were limited studies targeting Latino adolescents in substance abuse treatment, it was unclear how this study

would support ongoing research development. However, findings may provide insight into how Latino adolescents respond to the TCU-TRIP intervention.

Limitations

Secondary analysis was the methodology for this study, and it was unclear how accurately clients reported their experience. Additionally, staff perception of the treatment experience may vary from site to site, possibly influencing documentation pertaining to treatment outcomes. Lastly, it was unclear how staff turnover and client unplanned terminations may have impacted the initial study.

Significance

There was a need to identify effective substance abuse interventions for Latino adolescents. Examining outcome measures may provide more understanding of what works and for whom. The TCU-TRIP includes specific instruments that focus on factors such as motivation, engagement, and drug use thinking. Evaluating the impact of this intervention on this population may provide greater understanding of the types of interventions that are effective with Latino adolescents.

Summary

The Latino population is steadily growing, and there was a need to evaluate current treatment models to better serve this population. Examining the impact of treatment interventions on the Latino adolescent population may help increase treatment outcomes and reduce lifelong health disparities for this group. In the Chapter 2, I review literature specific to Latino adolescents who participated in the initial TCU-TRIP study. I focus on three specific areas: (a) motivation, (b) drug use thinking, and (c) engagement.

In Chapter 3, I describe the research design and methodology. Chapter 4 includes an analysis of the data. Chapter 5 contains a summary of the findings and recommendations for future study.

Chapter 2: Literature Review

The Latino population is the largest growing demographic group in the United States (Rojas et al., 2012). In 2015, the Latino population accounted for approximately 17% of the U.S. population, which is more than 55 million people (Ruiz, Campos, & Garcia, 2016). It is estimated that by the 2050, 50% of the U.S. population will consist of ethnic minorities (Bernal, 2001), 25% of those being Hispanics (Bernal, 2001; Wagner et al., 2006). In other words, approximately 133 million Latinos will be living in the United States (Quezada, et al., 2012).

Because the U.S. population is projected to change in the next three decades, mental health professionals and service providers are recognizing the need to evaluate clinical practices and identify effective treatment models for the growing Latino population (Bernal, 2001; Holden et al., 2014). Researchers have recommended further studies and development of evidence-based practices, including a representative sample of ethnic minorities (Bernal, 2001). Integrated health care models are being developed to address the need for culturally centered interventions providing adequate care and decreasing disparities among ethnic groups (Holden et al., 2014).

In the case of the Hispanic population, approximately 40% are under the age of 21 (Wagner et al., 2006). Despite the size of this group, they are underrepresented in substance abuse literature (Rojas et al., 2012). Studies also indicated that Hispanics are more adversely impacted by substance abuse in comparison to other groups (Rojas et al., 2012). Despite these findings, there is little documented research on mental health and substance abuse treatment for Hispanics (Rojas et al., 2012).

There is growing concern and emphasis being given to services and supports, specifically on current and future mental health and substance abuse treatment services (Bernal, 2001; Bravo, Amana-Taylor, Guimond, Updegraff, & Jahromi, 2014; Quezada, Shaw, & Zárate, 2012). There is a need to identify effective treatment models for Latinos/Latinas (Bernal, 2001; Bravo et al., 2014; Quezada et al., 2012). Examining current practices and exploring the impact on mental health services for Hispanics would contribute to the pool of knowledge that exists for this population (Bernal, 2001). An ongoing problem is in the generalization of evidence-based practices and external validity (Bernal, 2001). Previous intervention research generally focused on specific disorders and predominantly Caucasian, middle-class individuals (Bernal, 2001). Ethnic-specific studies would support specific interventions for ethnic minorities (Bernal, 2001; Holden et al., 2014). Looking at a specific group and identifying factors that contribute to favorable outcomes would best serve ethnic groups. For example, Bernal (2001) mentioned that often the focus of ethnic minority studies has been on comparing two different groups to measure the differences between them. Looking at the Hispanic population separate from other ethnicities would support research in identifying best practices for Latinos. Bernal suggested that a focused effort at evaluating Hispanic mental health treatment would provide further understanding as to which treatment works, why it is impactful, and what aspects of the intervention make it effective.

Literature Search Strategy

To complete the literature review, I contacted TCU's Institute of Behavioral Research to obtain articles written about the TRIP pilot study. I also obtained general

literature on evidenced-based practices, efficacy of evidence-based practices among Latinos/Latinas, and adolescent treatment efficacy.

Cultural Considerations

There is a growing interest in identifying effective substance abuse treatment for the Hispanic population (Guerrero et al., 2013). One reason for the interest is Hispanics are less likely to complete treatment (Guerrero et al., 2013). Additionally, Hispanics are less likely to receive appropriate services and are less satisfied with services offered (Guerrero et al., 2013). These are some reasons for the growing need to identify effective substance abuse treatments for this population (Guerrero et al., 2013). One challenge for researchers pertains to data sets with inadequate sample sizes that are representative of Hispanics (Guerrero et al., 2013). This challenge is especially problematic when looking at differences among subethnicities within the Hispanic population (Guerrero et al., 2013). Inadequate sample sizes specific to this population continue to hinder identification of effective substance abuse treatment practices for Hispanics (Guerrero et al., 2013). Generating research relevant to Hispanics' care needs would improve outcome measures (Guerrero et al., 2013). In 2012, the percentage of Latinos in substance abuse treatment was approximately 12% (Guerrero et al., 2013). The percentage of Hispanics in treatment has doubled in the past 10 years, making them the fastest growing group entering substance abuse treatment (Guerrero et al., 2013). Despite this increase, there has been inadequate research and limited identification of effective strategies to address the problem (Guerrero et al., 2013; Kouyoumdjian et al., 2015).

Treating the Latino population as a homogenous group may overlook potential differences among subethnicities (Castro et al., 2006; Miller, 2011; Ruiz et al., 2016). The Latino population has been described as consisting of various subethnicities that reflect a cluster of related subgroups (Castro et al., 2006). The diversity among the main group is evidenced by country of origin (Mexico, Cuba, Puerto Rico, etc.), urban versus rural, migration cohort, and community history (Castro et al., 2006). Substance abuse for Hispanic individuals varies among subethnicities (Guerrero et al., 2013). Geography also plays a role into the type of substances Hispanics use and abuse (Guerrero et al., 2013). For example, in Los Angeles, California, Hispanics are more likely to use heroin than any other non-Hispanic group (Guerrero et al., 2013). When compared to other non-Hispanic groups in Los Angeles, African Americans are more likely to use crack/cocaine and Caucasians are more likely to use amphetamines (Guerrero et al., 2013). In Texas, Hispanics are also likely to use heroin but in the East Coast states, cocaine use is more prominent (Guerrero et al., 2013). Central Americans and Caribbeans showed lower use of illicit drugs compared to Caucasians (Guerrero et al., 2013). Mexicans and Cubans have been reported to have higher alcohol consumption in comparison to Central Americans and South Americans (Guerrero et al., 2013). Looking at Southwest states, Mexicans reported higher amphetamine use. In general, younger Hispanic groups have higher rates of substance abuse compared to other non-Hispanic groups (Guerrero et al., 2013).

Readiness to participate in treatment is influenced by factors that may be associated with how a group adapts and adjusts to U.S. customs (Castro et al., 2006).

Adolescents' acculturative stress and differences in acculturation between adolescents and parents are additional factors worth considering for substance abuse research and treatment among the Latino population (Castro et al., 2006). Acculturation has been seen as an influential factor regarding Hispanic substance use (Miller, 2011). Acculturation has been broadly defined by place of birth and language spoken in the home (Guerrero et al., 2013; Sparks, Tisch, & Gardner, 2013). Changes in cultural norms, ideals, beliefs, and behaviors result from moving into a new cultural environment (Szapocznik, Lopez, Prado, Schwartz, & Pantin, 2006).

Research indicated that acculturation plays a significant factor in substance and alcohol abuse (Guerrero et al., 2013; Sparks et al., 2013). This is particularly the case with foreign born Hispanic women (Guerrero et al., 2013). U.S. born Hispanic women or women who immigrated at a young age have higher levels of alcohol and substance abuse (Guerrero et al., 2013). Hispanic women who immigrate to the United States at age 16 years or younger are more likely to be diagnosed with a substance abuse disorder (Guerrero et al., 2013). Research has suggested that acculturation and social roles are attributed to the differences in behaviors between U.S. and non-U.S. born Hispanic women (Guerrero et al., 2013). Although limited data exist to support this claim, there is a need to develop gender-specific treatment for substance abuse among Hispanic women (Guerrero et al., 2013). Acculturation is the process in which two cultures come into contact, influencing one or both (Miller, 2011). Acculturation becomes evident when a person begins to adopt majority group values and behaviors (Miller, 2011). Acculturation has been referenced as an influential factor among the Hispanic population regarding

substance abuse (Miller, 2011). Although mixed results have been found in such studies, it is worth noting the cultural differences among this diverse group (Miller, 2011).

Research indicated that adapting treatment interventions that are culturally sensitive to the Hispanic population's ethnic differences may increase outcomes measures. Regarding substance abuse treatment for Latino adolescents, engagement and retention strategies have received much attention (Bernal, 2001; Burrow-Sanchez & Wrona, 2012; Cervantes, Fisher, Cordova, & Napper, 2012; Marsh et al., 2012; Ramos & Alegria, 2014; Sanisteban, Mena, & Abalo, 2013; Sanisteban, Mena, & McCabe, 2011). The literature suggested that cultural and ethnic differences such as immigration status and language impact treatment outcomes (Schwartz et al., 2014). There also seem to be differences between U.S. born Latino adolescents and non-U.S. born Latino adolescents (Austin & Wagner, 2006; Castro et al., 2006). Researchers have brought attention to the Latino adolescent population as a heterogeneous group consisting of subethnicities that may be influenced by different factors (Austin & Wagner, 2006).

Cultural factors have been mentioned as important when looking at treatment retention among ethnic minorities (Austin & Wagner, 2006; Warner et al., 2006). Latino substance use has been reported as being higher among U.S.-born Latinos in comparison to non-U.S. born Latinos (Wagner et al., 2006). For example, Latinos experience greater prolonged periods of alcohol consumption. Researchers have pointed to some factors that may influence alcohol consumption. Acculturation may influence patterns of alcohol and substance abuse addiction (Rojas et al., 2012). In one study, birth place was determined to be a significant predictor of substance use (Rodriguez et al., 2007). For example,

Hispanic youths born outside of the United States reported higher levels of substance abuse (Rodriguez et al., 2007).

Although acculturation concerns have been raised in the literature, it is not clear why less acculturated adolescents experience greater substance abuse problems (Rodriguez et al., 2007). According to research, traumatic immigration experiences and poor access to integrative care to address mental health and substance abuse problems continue to be a concern for this population (Guerrero et al., 2012; Holden et al., 2014; Marsh et al., 2009; Rodriguez et al., 2007). Cultural factors have been identified as both protective and risk factors (Castro et al., 2006). For example, low acculturation has been viewed as a potential risk factor (Castro et al., 2006). Another culture-specific risk and protective factor among Latinos is familism (Castro et al., 2006). Castro et al. (2006) pointed out that the greater the familism, the less likely an adolescent will resort to deviant behavior.

Adolescent Substance Abuse Treatment Engagement and Retention

Adolescents who receive adolescent substance abuse treatment encounter an array of problems with alcohol and drugs, including associated issues that increase ongoing use and abuse, delinquency, and psychological problems (Brunell et al., 2013). In 2002, approximately 93.6% of 2.6 million adolescents who exhibited severe alcohol and drug problems did not receive treatment (Waldron, Kern-Jones, Turner, Peterson, & Ozechowski, 2007). There are needs specific to this population, which are important to recognize for treatment to be effective (Brunell et al., 2013). Some studies focused on the influences of psychological problems and delinquency on treatment while others

addressed the need to identify variables that are conducive to engagement and retention (Amodeo, Chassler, Oettinger, Labiosa, & Lundgren, 2008; Brunell et al., 2013; Burrow-Sánchez, Meyers, Corrales, & Ortiz-Jensen, 2015). Parental factors have also been studied to determine best ways to increase substance abuse treatment outcomes (Waldron et al., 2007; Wisdom, Cavaleri, Gogel, & Nacht, 2011). However, the adolescent stage is a period when independent decision-making is exerted, which brings into consideration those perceptions, attitudes, and beliefs of this population (Wisdom et al., 2011). Although external influences, such as parent involvement and the legal system, pressure adolescents into treatment, there is much interest in understanding the motivation or readiness to change when entering substance abuse treatment (Waldron et al., 2007; Wisdom et al., 2011). Readiness to change, motivation, and engagement in substance abuse treatment is a consistent and repeated interest in the literature (Clair et al., 2011; Waldron et al., 2007; Wisdom et al., 2011). Such constructs are important in adolescent substance abuse treatment because treatment implications may stem from having little to no willingness to change behaviors associated with alcohol or substance abuse (Clair et al., 2011).

In general, engagement and retention of adolescents in substance abuse treatment are ongoing challenges (Amodeo et al., 2008; Burrow-Sánchez et al., 2015). The literature indicated that if an adolescent remained in treatment for a minimum of 90 days, there was more potential for benefitting from treatment (Amodeo et al., 2008; Burrow-Sánchez et al., 2015). Adolescents receiving treatment longer than 3 months have shown greater improvement in overall social functioning and reduction in substance abuse,

juvenile delinquency, and mental health problems (Amodeo et al., 2008; Burrow-Sánchez et al., 2015). The type of treatment setting and the modality in which treatment is delivered have shown varied results pertaining to engagement, retention, and outcome rates (Amodeo et al., 2008; Burrow-Sánchez et al., 2015). In one study, retention rates were higher for adolescents who received inpatient (63.7%) and residential (58.4%) services in comparison to those who received outpatient (27.1%) services (Burrow-Sanchezet et al., 2015). There are also differences in retention when looking at adolescents by ethnicities (Burrows-Sanchez et al., 2015; Marsh, Tubman, Wagner, & Morris, 2012). Ethnic minorities are less likely to remain in substance abuse treatment in comparison to Caucasian adolescents (Burrows-Sanchez et al., 2015; Marsh, et al., 2012). Some studies have indicated a lack of cultural adaptations, modifications, and accommodations worth considering to increase retention and treatment outcomes (Bernal, 2001; Burrow-Sanchez & Wrona, 2012; Cervantes, Fisher, Cordova, & Napper, 2012; Marsh, et al., 2012; Ramos & Alegria, 2014; Sanisteban, Mena, & Abalo, 2013; Sanisteban, Mena, & McCabe, 2011).

Adolescent engagement and retention continues to be of concern in treating substance abuse (Austin & Wagner, 2006). Austin & Wagner (2006) found that, in their research of programs across 20 states, almost half (49%) of the adolescents (18 years of age and younger) prematurely dropped out of treatment. Ethnic minorities are more likely to drop out of treatment at higher rates in comparison to their Caucasian counterparts (Austin & Wagner, 2006). Fifty seven percent of Latino adolescents dropped out of treatment whereas only 42% non-Latino Caucasian adolescents dropped out prematurely

(Austin & Wagner, 2006). Literature indicates that treatment retention is a significant indicator of positive outcomes (Austin & Wagner, 2006). Research has pointed to various factors worth considering in order to improve retention rates among adolescents (Austin & Wagner, 2006). Race and ethnicity has been researched among both adolescent and adult populations (Austin & Wagner, 2006). In order to improve clinical practices, research suggests that efforts be made to understand how race/ethnicity impacts drug treatment (Austin & Wagner, 2006). Literature also suggests looking into additional research that focuses on "how it works" for this population (Castro et al., 2006). Narrowing the focus would provide supporting research in evaluating adolescent interventions that offer clear strategies, activities, and targeted outcome measures (Castro et al., 2006).

The purpose of this quantitative study was to examine TCU's TRIP intervention and its efficacy in treating Latino/Latina adolescents. The research was unique because it further assessed the efficacy of a specific intervention program that is currently being implemented in several States. Designed by TCU, TRIP is a curriculum-based intervention model that was modified to help adolescents with substance abuse and co-occurring disorders (Knight, Dansereau, Becan, Rowan, & Flynn, 2014). The curriculum was implemented in several residential treatment facilities throughout the United States. The initial pilot study consisted of approximately 519 adolescents (Knight, Dansereau, Rowan, & Flynn, 2014). A large amount of participants consisted of Latino male adolescents (approximately 53%; Knight et al., 2014). It was my interest in determining how effective this current design is in comparison to Latinos/Latinas who participated in

standard operating practices and those who additionally participated in TCU's treatment intervention.

Theoretical Foundation

Cognitive Behavioral Therapy (CBT)

CBT has guided several adolescent interventions to prevent maladjusted behavior by influencing change through cognitive activities (Kendall, 1993). CBT provides educational experiences to address previous or current problems so that adolescents can revisit problematic issues and apply newly learned coping strategies (Kendall, 1993). The treatment goals in such models are for adolescents to develop new cognitive structures or, at the very least, modify their current structures (Kendall, 1993). Through several techniques such as role playing, skills training, and goal setting, adolescents learn to cope through difficult issues associated with aggression, anxiety, and depression (Kendall, 1993).

CBT integrates behavior, affective, social, and contextual strategies into intervention strategies to increase child or adolescent skill building (Kendal, 1993). CBT encourages clients to explore ideas with the therapist and work on developing skills that promote greater independent thinking and problem solving (Kendal, 1993). Such cognitive behavioral models support children and adolescents with learning behavior management techniques, cognitive skills, and emotional regulation (Kendal, 1993). CBT works at supporting adolescents with understanding how they perceive the world through social structures or "schemata" (Kendal, 1993). How an adolescent perceives the social environment are dictated by this schemata and it is through CBT that a

reconceptualization of problems are rebuilt into new coping templates or, at the very least, modifications of current coping templates to help identify and solve problems in an appropriate adaptive manner (Kendal, 1993). In general, the primary focus of CBT is in addressing cognitive dysfunction (Kendal, 1993). There is some differentiation to be made between cognitive deficiency and cognitive distortion as it may impact how certain symptoms and disorders are addressed through interventions (Kendal, 1993). In regards to cognitive deficiencies, an adolescent may demonstrate poor information processing (Kendal, 1993). On the other hand, cognitive distortions are presented not in how information is processed but in how the adolescent engages in a dysfunctional manner (Kendal, 1993). With cognitive deficiency, the CBT intervention focuses on stopping non-thoughtful activity, whereas cognitive distortion CBT intervention may examine faulty thinking patterns and subsequently address the distorted information processing (Kendal, 1993).

Symptoms associated with depression and anxiety have been linked to distorted thinking (Kendal, 1993).Adolescents with depression or anxiety symptoms may have a misperception of the social environment (Kendal, 1993). Additionally, adolescents with aggressive behaviors have been linked to both cognitive deficiency and cognitive distortion (Kendal, 1993). In other words, adolescents may lack ability to appropriately problem solve (information processing) and may present with faulty thinking patterns (Kendal, 1993).

Childhood aggression has been identified as a risk factor for subsequent social problems such as juvenile delinquency, poor academic performance, and substance abuse

(Kendal, 1993). Children with increased aggression have been shown to be more hyper-vigilant of interactions with others and with the social environment (Kendal, 1993). Their perception of hostile intentions and hostile environments are significantly much higher, making them respond in more nonverbal action-oriented manner instead of using memory-retrieval coping strategies to address aversive reactions to social interactions (Kendal, 1993). Children and adolescents presenting with aggressive behaviors have poor insight into identifying what appropriate decisions to make in certain situations, generating alternative options and solutions, and choosing on appropriate behavior to implement a solution (Kendal, 1993).

CBT interventions help address the various cognitive distortions and deficiencies that are characteristic of aggressive adolescents (Kendal, 1993). CBT intervention models may incorporate various strategies such as role modeling activities (Kendal, 1993). For example, a therapist may verbalize how to assess a particular situation and provide alternative solutions to a given problem (Kendal, 1993). Additionally, a therapist may verbalize the possible consequences to each different solution (Kendal, 1993). Another CBT intervention strategy is role playing, in which an adolescent may be given the opportunity to listen to others in how they engage a situation and work towards solving a problem (Kendal, 1993). Role playing activities help adolescents gain understanding about intentions of others and help build greater empathy for the emotions of others (Kendal, 1993). Social problem solving skills training is a fundamental element of CBT interventions (Kendal, 1993). This type of intervention helps adolescents think in broader scope as to how to perceive a social provocation (Kendal, 1993). Solutions are developed

within the adolescent's social context and behavior is adjusted to increase selected outcomes (Kendal, 1993). CBT has demonstrated significant positive outcomes in the treatment and prevention of conduct and oppositional disorders. It has been implemented in various settings such as psychiatric hospitals and in school-based programs (Kendal, 1993).

CBT Treatment for Adolescents

CBT has been used to treat a variety of disorders among adolescents (Gearing et al., 2013). Considered an evidenced-based treatment, it has been a recommended intervention for adolescents experiencing a range of problems and symptoms (Gearing et al., 2013). Its implementation varies according to primary diagnosis. For example, CBT has been used to treat adolescents with mood and anxiety disorders (Charkhandeh, Talib, & Hunt, 2016; Gearing et al., 2013; Kendall & Peterman, 2015). Some mood disorders that have been treated with CBT have been major depressive disorders, bipolar disorder, and dysthymia (Gearing et al., 2013). Approximately 14-25% of adolescents experience an episode or recurrence of depression before adulthood, increasing the likelihood of associated co-occurring disorders such as social problems and substance abuse (Charkhandeh et al., 2016). Research indicate that youth epidemiological studies on mortality show that substance abuse, depression, and suicide are among the top three causes of death among adolescents (Charkhandeh et al., 2016). In CBT, the main focus for a client experiencing depression is on reducing cognitive distortions that impact mood (Charkhandeh et al., 2016). CBT provides alternative problem solving and coping skills for adolescents to address mood symptoms (Charkhandeh et al., 2016). Negative moods,

interpersonal problems, low motivation and participation in daily activities, and low self-esteem are some areas that CBT attempts to address (Charkhandeh et al., 2016).

Some anxiety disorders that have been treated with CBT have been generalized anxiety disorder, specific phobias (such as obsessive compulsive disorder), and posttraumatic stress disorder (PTSD; Gearing et al., 2013). Approximately 10-20% of adolescents are likely to meet criteria for anxiety disorders, such as social phobia and social anxiety (Kendall & Peterman, 2015). Some impairments associated with anxiety disorders include poor academic performance and poor interpersonal skills (Kendall & Peterman, 2015). Typically, adolescents with anxiety disorders are treated with CBT-based treatments (Kendall & Peterman, 2015). CBT-based interventions provide adolescents with psychoeducational material pertaining to the symptoms (Kendall & Peterman, 2015). CBT also supports adolescents with skill-building, such as teaching them how to relax, identify coping thoughts, and externalization of symptoms (Kendall & Peterman, 2015).CBT is implemented in short term periods, requiring much participation, which may include homework assignments (Kendall & Peterman, 2015). Research indicates that between 50-70% of adolescents with anxiety disorders demonstrate clinically significant improvement (Kendall & Peterman, 2015). Symptom improvements have been measured in assessments, diagnostic interviews, and in self-report (Kendall & Peterman, 2015). Evidence indicate ongoing improvement with a 27-35% remission rate at post-treatment (6month-1 year follow up; Kendall & Peterman, 2015).While remission rates vary from study to study, current research identify CBT as an effective treatment intervention for anxiety disorders among adolescents (Kendall & Peterman, 2015).

CBT has also been implemented to treat adolescents who have experienced multiple and ongoing trauma (Cohen et al., 2012). Complex trauma is characterized by an adolescent who has problems with attachment security, difficulties with affect regulation, dissociation, regulating their own behavior, cognitive distortions about reality and himself/herself (Cohen et al., 2012; Webb et al., 2014). Trauma focused CBT helps address these areas and additional PTSD symptoms through various sessions of psycho-education, including family in sessions via parenting skills, teaching of relaxation skills, affective regulation, and cognitive coping skills building (Cohen et al., 2012; Webb et al., 2014).

Trauma informed CBT have been proven more effective than child-centered or nondirective interventions aimed at reducing PTSD (Webb et al., 2014). Trauma informed CBT has demonstrated significant reduction in internalizing symptoms (e.g., withdrawn, anxiousness, and depression) and externalizing symptoms (e.g., delinquent behavior and aggressiveness) over the course of six months in treatment (Webb et al., 2014).

Intervention characteristics have also been a factor in how CBT-based treatment is delivered (Gearing et al., 2013). Treatment modality and frequency of sessions are two examples of some distinguishing factors worth mentioning, as it impacts outcome measures (Gearing et al., 2013). In general, individual and group CBT have been two broad approaches (Gearing et al., 2013). While each form of intervention presents with benefits and limitations, the variations in CBT interventions have provided individualized treatment necessary for improved outcomes among adolescents who would necessarily be

resistive to traditional treatment methods (Kendal & Peterman, 2015). More specifically, brief CBT interventions condenses core components, allowing for sessions to be delivered in few sessions and, at the same time, maintain empirical support (Kendal & Peterman, 2015). Brief CBT has demonstrated medium to large impact to symptom reduction posttreatment and at six-month follow up (Kendal & Peterman, 2015). CBT has also been effective at targeting specific symptoms versus diagnostic categories (Kendal & Peterman, 2015). Such "transdiagnostic" treatments have been helpful with clients who present with comorbidity (Kendal & Peterman, 2015).

CBT has demonstrated effective outcomes in treating adolescents with substance abuse problems (Liddle et al., 2008). Additionally, CBT has been ranked as one of the most evaluated intervention methods for substance abuse (Walther et al., 2016). CBT-based treatments view substance abuse as a learned behavior, which is influenced by environmental factors (Liddle et al., 2008). In the social learning model, the environment is essential towards behavior development and recognizes cognitive processes in overall health and cognitive dysfunction (Liddle et al., 2008).

Integrated Judgment and Decision Making Model (IJDM)

Additionally, the TRIP intervention incorporated theoretical advances in cognitive science and components of the IJDM (Knight, Dansereau, et al., 2014). The model aimed at improving adolescents' general thinking and in promoting problem recognition that would consequently influence motivation towards positive change (Joe, Knight, Becan, & Flynn, 2014; Knight et al., 2014). The experiential system of this model provides an

individual with intuitive and preconscious processes from which decision are based on (Dansereau, Knight, & Flynn, 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016).

The IJDM model was incorporated into the TRIP intervention to further support adolescents with making better choices (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016). IJDM is a theoretical foundation for interventions to improve decision making and reduce risky behavior among adolescents (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016). Interventions incorporating the IJDM model target specific behaviors, such as substance abuse, and support adolescents in developing improved decision making (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016). Research on the IJDM model have indicated adolescents as well as adults can make analytical decisions even if also relying on experiential-based thinking (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016). According to the IJDM model, the metacognition element of self-regulation (monitoring and management of ones thought processes) is improved when interaction between the processes (experiential and analytic) supports schema formation which helps improve metacognitive activity (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016).

As indicated earlier, the experiential system of the IJDM model is hypothesized to match perceived or current situations with similar events (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016). Behavioral decisions that are stored in the episodic memory area are what adolescents usually base behavioral decision making (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016). The IJDM

model suggests that changes in episodic memory would promote further development in schematic structures that developmentally change adolescent judgment and decision making (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016;). Another essential change in the experiential system is the incorporation of the analytic system component into episodic memory (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016).

The analytic system is associated with semantic memory, which functions more abstractly and, in comparison to the experiential system, requires greater cognitive effort (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016). The analytic processing system is not necessarily influenced by immediate contexts, such as the experiential system, and has been referenced in comparison to the executive function (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016). As with executive functioning, strengthening of the analytic system requires training and integration of the environment by structuring situations (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016). The experiential and analytic systems are not mutually exclusive, but overlap to help develop what the IJDM model refers to as "expertise/wisdom" (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016;). It is through the integration of both systems that metacognitive cues are triggered in order to respond to a current episode (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016). The formations of new or modified schemas will be based more on an analytical process and less based on social content and emotional responses (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016).

Improving decision quality among adolescents, with an emphasis on analytic system processing and greater attention to the influence of affective processes (emotional states) on decision making, is a targeted area for the IJDM model (Dansereaue et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016;). Application of cognitive behavioral therapy and IJDM model training emphasizes cognitive restructuring as well as applying specific strategies that improve problem solving skills (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016). Cognitive tools may help serve adolescents with improving decisions and further support self-regulation through the formation of greater expertise and wisdom (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016).

Treatment Readiness and Induction Program (TRIP) Intervention

Five residential treatment programs participated in the TCU study (Knight et al., 2016). Every client received treatment; however the sample was separated into two groups. One group continued with standard operating practices (i.e., standard treatment program) and the second group were enrolled into the TRIP program (i.e., standard treatment and TRIP intervention). In addition to this differentiation, the initial phase provided assessments for data comparison. Phase I of the study consisted of six months of assessment and data collection (Knight et al., 2016). Adolescents designated to Phase I only received assessment and were not included into the TRIP intervention component. This group continued participating in each residential program's standard operation practices (Knight et al., 2016). Subsequently, Phase II consisted of TRIP treatment intervention (Knight et al., 2016). Adolescents designated to Phase II received both

assessment and treatment intervention. Posttests consisted of measuring participants psychological functioning (e.g., decision making, drug use dependency), motivation (e.g., treatment readiness, problem recognition), and engagement (e.g., treatment participation, treatment satisfaction) to name a few (Knight et al., 2016). With the research study having a large Latino/Latina adolescent sample, it served as an archival source to identify current practices demonstrating efficacy in substance abuse treatment.

Summary

Bernal (2001) mentioned that very little is known about the efficacy of treatment for ethnic minorities and part of the reason is because researchers either don't specify the ethnicity in detail or unintentionally do not provide a representative sample. Greater efforts should be made to focus on specific ethnic groups rather than comparative research studies (Bernal, 2001). Limited research exists on identifying effective treatment strategies for Hispanics, making this a growing interest among researchers (Guerrero et al., 2013). Many factors come to be considered when assessing the retention and accessibility of adequate substance abuse treatment for Hispanics. For example, studies address the health insurance coverage, cultural competency, and the lack of adequate sample sizes of current treatment interventions (Guerrero, 2013; Guerrero et al., 2013; Volkow, 2006). Evaluating the TRIP intervention data will provide insight into the effectiveness towards treating the Hispanic population. Looking specifically at motivation, engagement, and drug use thinking outcomes, further research on this intervention would provide itself as a valuable tool for substance abuse treatment in the United States.

Chapter 3: Research Method

The purpose of this study was to examine whether the Treatment Readiness Induction Program (TRIP) was effective among the Latino population. I looked specifically at gender and type of intervention as it pertains to motivation, engagement, and drug use thinking. In this chapter I discuss my research design and rationale. I also describe threats to validity and potential ethical concerns of this study.

Research Design and Rationale

The research involved quantitative methodology and proposed a factorial ANOVA. Using TCU's initial pilot program study, I performed secondary analysis to measure during-treatment efficacy of the TRIP on Latinos and Latinas who participated in either the treatment condition or the assessment only condition with respect to three dependent variables. The original study included the Adolescent Screening and Assessment Package, which consists of 11 composite modules (Knight, Becan, et al., 2014), but only three were used as dependent variables in the current study: motivation, engagement, and drug use thinking.

Methodology

The TCU-TRIP initial study consisted of 1,189 adolescents who were admitted into eight residential treatment programs in the United States (Knight et al., 2014). Of those, 39% (463) consisted of Latinos/Latinas (Knight et al., 2014), which constituted the sample of my study. If all 463 had complete and valid data, a small effect size (Cohen's f = .09) would be statistically significantly detectable at alpha = .05 for the main effects and interaction within a factorial ANOVA.

Archival data were retrieved from TCU's Institute of Behavioral Research. Participants who were admitted into the eight designated residential treatment programs and identified as Latino/Latina were included in my study. A stratification of the sample was conducted to help identify male and female adolescents who received the TRIP intervention and those who only participated in the standard operating practices (see Creswell, 2009). Latino/Latina participants (463) were the only sample used for my research study. The other ethnicities were excluded.

Instrumentation

The TCU Adolescent Screening and Assessment Package is used to measure variables such as psychological functionality and to identify a participant's age, gender, ethnicity, motivation, engagement, general thinking, criminal thinking, and peer and family relationships (Knight et al., 2014). The items applicable to the current study are presented in Appendices A, B, and C. Evaluation and documentation of the psychometric properties were completed by the initial researchers (Knight et al., 2014). The psychometric properties for each scale were performed for the adolescent population (Knight et al., 2014). Internal validity, principal component analysis, and confirmatory factor analysis were conducted and results were based on Pearson correlations (Knight et al., 2014). Internal reliability of each scale was also performed (Knight et al., 2014). For treatment motivation and engagement scales, the Cronbach's alpha (.82) indicated high reliability (Knight et al., 2014). For the drug use thinking scale, the Cronbach's alpha (.70) was considered generally reliable (Knight et al., 2014). Two of the three subscales

for drug use thinking were high in reliability (.70) while the Control over Personal Drug Use subscale (.65) was slightly lower (Knight et al., 2014).

Research Questions and Hypotheses

There were two independent variables in the study: (a) sex (Latino versus Latina), and (b) intervention (standard practice versus TRIP). There were three primary dependent composite variables: (a) engagement, (b) motivation, and (c) drug use thinking. In addition to the overall composite score, each of these has subscale scores (delineated below) that were analyzed separately.

RQ1- Quantitative: What differences in engagement (specifically in treatment participation, treatment satisfaction, counseling rapport, and peer support) exist between Latinos and Latinas who participated in TRIP versus those who only received standard operating practices?

Null 1: There are no differences in engagement by intervention.

Alternative 1: There are engagement differences between groups who participated in the intervention and those who only received the standard operating practices.

Null 2: There are no differences in engagement between sex (i.e., Latinos and Latinas).

Alternative 2: There is a difference in engagement between sex (i.e., Latinos and Latinas).

Null 3: There is no interaction effect of intervention by sex on engagement.

Alternative 3: There is an interaction effect of intervention by sex.

RQ2- Quantitative- What differences in motivation (i.e., treatment readiness, desire for help, and problem recognition) exist between Latinos and Latinas participating in TRIP versus those who did not receive treatment intervention?

Null 4: There are no differences in motivation by intervention

Alternative 4: There are differences in motivation between groups who participated in the intervention and those who only received the standard operating practices.

Null 5: There are no differences in motivation by sex (i.e., Latinos and Latinas).

Alternative 5: There is a difference in motivation by sex (i.e., Latinos and Latinas).

Null 6: There is no interaction effect of intervention by sex on motivation.

Alternative 6: There is an interaction effect of intervention by sex on motivation.

RQ3-Quantitative: What differences in drug use thinking (i.e., control over personal drug use, drug culture, and drug resistance) exist between Latinos and Latinas participating in TRIP intervention versus those who only received standard operating practices?

Null 7: There are no differences in drug use thinking by intervention.

Alternative 7: There is a difference in drug use thinking by intervention.

Null 8: There are no differences in drug use thinking by sex (i.e., Latinos and Latinas).

Alternative 8: There is a difference in drug use thinking by sex (i.e., Latinos and Latinas).

Null 9: There is no interaction effect of intervention by sex on drug use thinking.

Alternative 9: There is an interaction effect of intervention by sex on drug use thinking.

Data Analysis Plan

Three separate 2 x 2 factorial ANOVAs, one for each dependent variable (engagement, motivation, drug use thinking) were proposed to test the main effects of sex and intervention and their interaction. Results indicated whether there were statistically significant ($p < .05$) mean differences between Latinos and Latinas or between TRIP and standard operating practices on engagement, motivation, or drug use thinking. Results also indicated whether differences on any of the dependent variables between the two interventions depend on being Latino or Latina (the interaction effect).

Factorial ANOVA was the most appropriate analysis to test the hypotheses and answer the research questions because it allowed me to simultaneously test each effect while controlling for the other effects in the model and because it yielded directly interpretable group mean differences. The independent *t* test could not simultaneously test each effect while controlling for other effects. Although multiple regression could have been used to simultaneously test each effect, its output would not have been conducive to direct interpretation of group mean differences.

Threats to Validity

The lack of random assignment to treatment conditions in TCU's original intervention and the lack of pretest were threats to sampling equivalence on variables of interest. In addition, differential selection of participants into the two treatment

conditions could not be ruled out. Because the TRIP condition was lengthier than the standard operating condition, maturation could have impacted the results, as well as a selection-maturation interaction effect.

Ethical Procedures

Prior to starting my study, I contacted TCU's Institute of Behavioral Research to describe my dissertation topic. I received a verbal commitment to support me with data once my proposal was approved. Permission to use data for my study was shared. TCU ensured that the confidentiality of clients' identities remained protected. Each individual was given a numerical code to track outcomes. I did not have the linking code, so for my secondary analysis the data were anonymous. A data use agreement and access to the data were authorized once my proposal was approved by my committee and Walden University's Institutional Review Board (approval number 08-23-17-0361547). The data will be kept secured for 5 years on a password protected computer, after which it will be deleted. Only I and my Chair had access to the data. A summary of the data analysis results will be provided to TCU's Institute of Behavioral Research.

Summary

In this chapter I described the research design, nature of the archival data that I received from TCU, independent and dependent variables, instruments used to measure the variables, and the analysis plan to test nine hypotheses and answer three broad research questions. I also discussed threats to validity and ethical considerations to ensure the protection of the anonymous data. In Chapter 4, I provide my statistical results, and in

Chapter 5 I discuss the findings and recommendations, including implications for positive social change.

Chapter 4: Results

The purpose of this quantitative study was to examine the impact of TCU's TRIP intervention on Latino/Latina adolescents in comparison to Latinos/Latinas who only received standard operating practices for substance abuse treatment. Engagement, motivation, and drug use thinking from the Adolescent Screening and Assessment Package were used to assess differences among the groups. There were four engagement scales: treatment participation, treatment satisfaction, counseling rapport, and peer support. Motivation scales included treatment readiness, desire for help, and problem recognition. Drug use thinking scales included an overall drug use expectancies and two subscales: control over personal drug use and drug culture. The drug use thinking scales measuring drug resistance, which was originally expected, were not in the archival data set provided by TCU.

Data Collection

After I received approval from Walden University's IRB, I contacted my research site and began to collect archival data. The time frame for the data collection was approximately 15 days. During that period, I collaborated with my partner organization and obtained data specific to participants' motivation, engagement, and drug use thinking. Data were inputted into an Excel spread sheet.

The TRIP implementation started in November 2011, and participation dates for the eight TRIP sessions were indicated in the data set to differentiate session activities (Mapping 1 and 2, Nudge 1 and 2, Downward Spiral 1 and 2, and Work-it 1 and 2). The Excel spreadsheet columns were codified in the following manner: Mapping 1 session =

FU, FV = Mapping 2, FW = Nudge 1, FX = Nudge 2, and so on. Those who did not participate in the intervention, FU-GB, were left blank. To differentiate between TRIP+SOP versus SOP only clients, TCU measured participation of at least four of the eight TRIP sessions as being considered TRIP+SOP clients. Those with half of the 8 sessions may have had enough TRIP to be included. Including those who had half or less of the sessions could confound the data. Grouping of variables indicated that TRIP included 87 cases and SOP included 317. The 20 cases missing half or more of the 8 sessions were excluded. After excluding cases with missing data on any of the key study variables, the final *N* was 137 (29 TRIP, 108 SOP).

Statistical Results

In this section, I discuss the results from the data analysis from the archival records obtained from TCU. Results include descriptive statistics of the sample, descriptive statistics of the dependent variable subscales, and inferential analyses to test the hypotheses and answer the research questions.

Descriptive Statistics of Sample

Table 1 provides descriptive statistics of the sample. Of the 137 cases, 77 (56.2%) participants were male and 60 (43.8%) were female. The age of participants ranged from 13 to 17, with a mean of 15.7 (*SD* = 1.05) and median of 16. The last completed grade of school ranged from 5^{th} to 12^{th} grade, with a mean of 9.25 (*SD* = 1.05) and median of 9. To determine whether male and female participants were disproportionately represented in TRIP or SOP, I performed a chi-square test of independence. There was not a proportionately different distribution, $\chi^2(1, N = 137) = 1.30$, $p = .255$, indicating that male

and female participants did not differently self-select into volunteering for the expanded TRIP portion.

Table 1

Descriptive Statistics of the Sample

Variable	Frequency	Percent
Treatment group		
SOP	108	78.8
SOP+TRIP	29	21.2
Sex		
Male	79	56.0
Female	62	44.0
Age at admission		
13	3	2.6
14	11	9.6
15	31	27.2
16	40	35.1
17	29	25.4
Last grade completed		
5th	1	0.9
6th	1	0.9
7th	2	1.8
8th	26	22.8
9th	36	31.6
10th	28	24.6
11th	19	16.7
12th	1	0.9

Descriptive Statistics of Dependent Variables

All of the dependent variables were represented in the archival data set as precalculated composites of each scale's respective items. The items were originally responded to on a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The composite scores were the average across the items times 10, yielding final scores that ranged from 10 to 50. Descriptive statistics of the dependent variables are presented

in Table 2. All of the dependent variables had adequate variance for analysis, and all were within acceptable ranges of normality (absolute value of skewness < 3.0, absolute value of kurtosis < 7.0; see Kline, 2016).

Table 2

Descriptive Statistics of Dependent Variables

Variable	*M*	*SD*	Mdn	Min.	Max.
Problem recognition	31.6	9.9	33.0	10.0	50.0
Desire for help	33.6	9.2	35.0	10.0	50.0
Treatment readiness	33.7	7.7	33.8	12.5	50.0
Treatment participation	38.1	6.7	38.3	13.3	50.0
Treatment satisfaction	36.5	7.4	38.3	10.0	50.0
Counseling rapport	37.4	7.3	39.2	10.0	50.0
Peer support	33.8	6.9	35.0	13.3	50.0
Drug culture	26.8	8.2	28.6	10.0	50.0
Control over drug use	27.6	7.8	26.8	10.0	44.0
Drug use expectancies	27.1	7.0	27.5	10.0	46.7

Correlations among dependent variables are shown in Table 3. After exclusion of correlations between the two drug use thinking subscales, correlations ranged from an absolute value of .86 between problem recognition and desire for help, to an absolute value low of .005 between treatment readiness and drug culture. Generally, as would be expected, the drug use thinking overall scale was negatively related to most other dependent variables.

Table 3

Correlations (Upper Diagonal) and p Values (Lower Diagonal) Among Dependent Variables

Variable	1	2	3	4	5	6	7	8	9	10
1. Problem recognition		.86	.67	.33	.40	.27	.33	.29	-.08	.17
2. Desire for help	<.001		.73	.46	.51	.40	.37	.15	-.16	.03
3. Treatment readiness	<.001	<.001		.39	.53	.34	.41	.01	-.38	-.16
4. Treatment participation	<.001	<.001	<.001		.82	.82	.63	-.23	-.17	-.23
5. Treatment satisfaction	<.001	<.001	<.001	<.001		.81	.67	-.13	-.14	-.15
6. Counseling rapport	.001	<.001	<.001	<.001	<.001		.61	-.21	-.10	-.19
7. Peer support	<.001	<.001	<.001	<.001	<.001	<.001		-.17	-.22	-.21
8. Drug culture	<.001	.088	.953	.008	.145	.015	.046		.54	.93
9. Control over drug use	.363	.059	<.001	.044	.100	.245	.010	<.001		.81
10. Drug use expectancies	.046	.709	.058	.006	.085	.027	.012	<.001	<.001	

Inferential Analysis to Test Hypotheses and Answer Research Questions

The primary independent variable of interest was involvement in TRIP versus SOP intervention. Sex as an independent variable was included to control for any confounding differences between male and female participants. There was no disproportionate difference of male and female participants in the two interventions. To further screen for sex as a potential confound, I performed independent group *t* tests to determine whether sex was significant on any of the dependent variables and needed to be included along with type of intervention. There was no statistically significant difference in engagement (treatment participation, satisfaction, counseling rapport, and peer support), motivation (treatment readiness, desire for help, problem recognition), or drug use thinking (control, drug culture, overall drug use expectancies) among female and male participants. As a result of sex not being significant, independent group *t* tests, rather than proposed 2 x 2 factorial ANOVA, were used to analyze the effect of SOP

verses TRIP. This required modifications to the originally proposed research questions and hypotheses. The revised research questions and hypotheses are as follows:

RQ1: Quantitative: What differences in engagement (specifically in treatment participation, treatment satisfaction, counseling rapport and peer support) exist between those who participated in TRIP versus those who only received standard operating practices?

Null 1: There are no differences in engagement by intervention

Alternative 1: There are engagement differences between groups who participated in the intervention and those who only received standard operating practices.

RQ 2: Quantitative: What differences in motivation (i.e. treatment readiness, desire for help, and problem recognition) exist between those participating in TRIP versus those who did not receive treatment intervention?

Null 2: There are no differences in motivation by intervention.

Alternative 2: There are differences in motivation between groups who participated in the intervention and those who only receive the standard operating practices.

RQ3: Quantitative: What differences in drug use thinking (i.e., control over personal drug use, drug culture, and drug resistance) exist between those participating in TRIP intervention versus those who only received standard operating practices?

Null 3: There are no differences in drug use thinking by intervention.

Alternative 3: There is a difference in drug use thinking by intervention.

Table 4 presents the means and standard deviations on each dependent variable by type of intervention and shows the results of the independent groups *t* tests. Levene's test of the assumption of homogeneity of variance had *p* values greater than .05 for each dependent variable, so the assumption was met. Only two of the 10 dependent variables showed statistically significant differences between SOP and TRIP.

The SOP group (M = 34.4, SD = 9.2) had higher scores on the motivation subscale of desire for help than the TRIP group (M = 30.5, SD = 8.8), $t(135) = 2.02$, p = .045, Cohen's d = .42 (a medium-size effect). The SOP group (M = 34.5, SD = 6.5) also had higher scores on the engagement subscale of peer support than the TRIP group (M = 30.9, SD = 7.9), $t(135) = 2.59$, p = .011, Cohen's d = .54 (a medium-size effect).

Table 4

Dependent Variable Means, Standard Deviations, and t *Test Results*

	SOP	TRIP				
Variable	*M* (*SD*)	*M* (*SD*)	95% CI	*t*	*p*	Cohen *d*
Problem recognition	32.0 (10.0)	30.1 (9.7)	[-2.2, 6.0]	0.91	.364	0.19
Desire for help	34.4 (9.2)	30.5 (8.8)	[0.1, 7.6]	2.02	.045	0.42
Treatment readiness	34.2 (7.8)	32.1 (7.2)	[-1.1, 5.3]	1.31	.192	0.27
Treatment participation	38.3 (6.4)	37.2 (7.7)	[-1.6, 3.9]	0.84	.402	0.18
Treatment satisfaction	36.6 (7.1)	35.9 (8.6)	[-2.3, 3.9]	0.49	.622	0.10
Counseling rapport	37.7 (6.9)	36.1 (8.7)	[-1.4, 4.6]	1.04	.298	0.22
Peer support	34.5 (6.5)	30.9 (7.9)	[0.9, 6.5]	2.59	.011	0.54
Drug culture	26.2 (8.4)	26.5 (8.5)	[-3.7, 3.2]	0.15	.882	0.03
Control over drug use	28.0 (6.9)	28.3 (8.4)	[-3.2, 2.8]	0.15	.880	0.03
Drug use expectancies	27.0 (6.8)	27.2 (7.8)	[-3.2, 2.6]	0.18	.857	0.04

Summary

There were three areas of focus (engagement, motivation, and drug use thinking) among Latinos/Latinas who participated in SOP versus those who received SOP+TRIP intervention. In terms of sex, there was no statistical significance between the groups.

Contrary to expectations, an independent *t* test indicated the SOP group had statistically significantly higher scores on the motivation subscale of desire for help and on the engagement subscale of peer support.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this quantitative study was to examine differences between Latino/Latina adolescents who participated in standard operating practices versus those who received standard operating practices with TRIP intervention. The archival data were provided by TCU. The initial results indicated that sex was not significant for the study, which warranted a *t* test to determine whether differences between SOP and SOP+TRIP existed.

Only two of the 10 dependent variables showed statistically significant differences between SOP and TRIP. The SOP group had higher scores on the motivation subscale of desire for help and higher scores on the engagement subscale of peer support. The findings were surprising because I presumed that engagement, motivation, and drug use thinking would have been different between sexes. However, my finding was consistent with Knight et al.'s (2014) across all other ethnic groups, in that there were no statistically significant sex differences on any of the motivation, engagement, or drug use thinking subscales. The findings in my study seemed consistent with the entire sample. Additionally, Knight et al.'s (2016) TRIP group had higher means on problem recognition, treatment participation, counselor rapport, treatment satisfaction, and peer support, but results on my study were the opposite, with the SOP group having higher means on the scales.

Interpretation of Findings

The TRIP intervention was designed to focus on specific areas of substance abuse treatment. One of its theoretical frameworks was cognitive behavioral theory (CBT). It is

through CBT that substance abuse treatment addresses both the substance abuse and any mood or psychiatric disorders that may impact engagement, motivation, and drug use thinking (Gearing et al., 2013). It is through CBT that adolescents were asked to evaluate their decisions that speak to substance use and abuse (Knight et al., 2016). CBT provides treatment interventions to consider affective, social, and environmental behavior as variables supporting treatment goals and objectives (Kendal, 1993). Additionally, CBT helps with increasing adolescents' awareness of their perception of substance abuse and how they make decisions that support their sobriety and life goals (Kendal, 1993). CBT's emphasis on addressing cognitive dysfunction was addressed through various TRIP activities that encouraged adolescents to evaluate decisions based on outcomes (Knight et al., 2016). Any presentation of cognitive deficiency and cognitive distortion can be assessed by further open-ended questions and prompting for the adolescent to explain his or her rationale (Kendal, 1993).

Additionally, the IJDM supports the TRIP intervention by providing experience-based thinking exercises for adolescents to process their decisions on substance use and abuse ((Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016). The second theoretical model, IJDM, targeted cognitive functioning, which included decision-making to reduce risky behavior among youths (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016). Through incorporation of IJDM, adolescents received scenarios in which experience-based thinking was promoted (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016). It is through these TRIP activities that the IJDM model helps to address specific target areas that may be negatively

impacting an adolescent's decision to maintain sobriety (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016). The TRIP intervention is typically a 10-week intervention in which each session supports self-regulation by reframing schemas (Dansereau et al., 2013; Jacobs & Klaczynski, 2002; Knight et al., 2016). With both theories in mind, it is unclear how CBT addresses the spectrum of psychiatric conditions impacting executive functioning. Although research indicated that CBT is an effective approach in substance abuse treatment, it is unclear how it compares to various severities of mental health disorders, including substance abuse disorders. Another area of inquiry is the length of sobriety following TRIP versus SOP-only intervention. It is worth evaluating the impact on an adolescent's ability to maintain sobriety posttreatment.

Based on my study findings, further investigation of TRIP, especially the factors that account for motivation, engagement, and drug use thinking, is warranted. The TRIP intervention offers valuable options for adolescents seeking help for substance abuse. The clients in the SOP+TRIP sample appeared to stay longer in treatment compared to those who were designated to the SOP group. On the other hand, there was higher engagement and motivation in the SOP group compared to the SOP+TRIP group. It is possible that because of the additional intervention, clients in the SOP+TRIP group felt may have felt more supported and may not have felt they needed additional care. A significant finding was in sex not having any statistical significance. Further studies with a larger sample may provide additional insight into sex and treatment outcomes.

Limitations of the Study

The general limitations of my study were related to the methodology. Archival data limited my involvement with the population who participated in the initial study. Another limitation was gender participation. A larger sample may have provided greater insight into the effectiveness of TRIP in a residential treatment setting. The methodology of my research also limited my access to the population. A mixed methodology would have provided options to conduct follow-up qualitative studies on motivations for continuing or not continuing with treatment services. Additionally, the sample was obtained from residential treatment facilities, and it is unclear whether results would have been different in other treatment settings such as outpatient, intensive outpatient, or other forms of treatment options for adolescents.

In terms of generalizability, the Latino population includes various cultures and ethnic differences that may impact long-term treatment outcomes (Guerrero et al., 2013). With the Latino population increasingly seeking substance abuse treatment, identification of effective treatment strategies is necessary (Guerrero et al., 2013). The literature indicated a need to modify treatment interventions and practices to increase sobriety and reduce further health problems (Guerrero et al., 2013). The data provided did not address differences among the Latino population. For example, ethnic-based follow-up inquiries were not provided, and therefore it was unclear whether the sample was immigrants, first-generation, or second generation. The literature associates assimilation and integration of U.S. culture as important factors worth considering during treatment. One rationale is that non-U.S. citizens may not be challenged with language and English comprehension.

Although my study addressed a broad representation of adolescent Latinos/Latinas in substance abuse treatment, findings suggested a need for further research into how culture considerations may support adolescents from various backgrounds (Bernal, 2001; Bravo et al., 2014; Quezada, Shaw, & Zárate, 2012). Furthermore, my study findings aligned with previous literature in that ethnic-based studies are needed to increase favorable outcomes for Latino/Latina subethnicities (Bernal, 2001). It is unclear what percentages of the population are of Mexican, Central American, or South American descent. Aside from country of origin, it is also unclear whether immigration status impacts motivation, engagement, and drug use thinking among this population (Bernal, 2001; Holden et al., 2014).

Recommendations

My study provided insight into different aspects of residential treatment and considerations that need to be made when admitting a Latino/Latina client. One recommendation for further research is to look at the TRIP intervention assessment tool. Language spoken and immigration status have been mentioned as factors worth considering during intake to increase the likelihood of engagement and motivation. Additionally, evaluating the efficacy of the intervention in other treatment settings could prove insights for adolescents seeking other types of substance abuse treatment. For example, outpatient and school-based substance abuse counseling may support the need for such intervention to be implemented in such settings. Additionally, a mixed-methods approach would provide meaningful findings regarding the reasons why adolescents maintain engagement and motivation in residential treatment. Lastly, although not

mentioned in the research, a longitudinal study may help to understand relapse prevention strategies for individuals who engage in substance use during their adolescent years. Findings may be used to increase awareness and direct resources to the Latino/Latina adolescent population before they move into adulthood.

Implications

Mixed methodology may provide insight into the individuals' experiences in residential treatment and how treatment interventions supported their goals of sobriety. Mixed-methods studies may help understand Latino/Latina experiences in treatment, their families' perceptions of substance abuse treatment, and how each subethnicity differs in that regard. Additionally, qualitative research with treatment counselors and clinicians may provide insights into treatment practices. Understanding treatment challenges from direct counseling staff may help increase clients' engagement and motivation. Lastly, treatment outcomes may be better understood through longitudinal studies. Because the Latino population receiving substance abuse treatment has doubled over the past 10 years, effective treatment strategies that support long-term sobriety are needed (Guerrero et al., 2013). Long-term research may provide insight into how individual treatment may address the environmental and social pressures associated with relapse.

Conclusion

My study provided insight into Latino/Latina adolescent treatment interventions that target clients seeking support for drug abuse. Acclimating and engaging a person for treatment requires a full picture of who they are, their experiences, and their motivation for entering a program. Organizational cultural competency increases the likelihood that

clinicians will respond and treat clients with cultural sensitivity. Furthermore, incorporating cultural factors may facilitate early engagement and treatment motivation that may foster a positive experience in residential treatment for adolescents from various backgrounds. Sensitivity to cultural differences may increase autonomy among Latino/Latina adolescents, increase organizational competency, and promote a cohesive community. As the U.S. population continues to change in diversity, it is worth looking at practices that will best serve a changing culture.

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Appendix A: TCU Adolescent Motivation Form

TCU ADOL MOTFORM

Please indicate how much you AGREE or DISAGREE with each statement.

	Disagree Strongly (1)	*Disagree (2)*	*Uncertain (3)*	*Agree (4)*	*Agree Strongly (5)*
1. You need help dealing with your drug use.	O	O	O	O	O
2. You need to be in treatment now.	O	O	O	O	O
3. You have family members who want you to be in treatment.	O	O	O	O	O
4. This treatment gives you a chance to solve your drug problems.	O	O	O	O	O
5. Your drug use is a problem for you.	O	O	O	O	O
6. This kind of treatment program is not helpful to you.	O	O	O	O	O
7. You need help with your emotional troubles.	O	O	O	O	O
8. Your drug use is more trouble than it's worth.	O	O	O	O	O
9. You have friends who want you to be in treatment.	O	O	O	O	O
10. Your drug use is causing problems with the law.	O	O	O	O	O
11. Your drug use is causing problems in thinking or doing your school work.	O	O	O	O	O
12. It is urgent that you find help immediately for your drug use.	O	O	O	O	O
13. You will give up your friends and hangouts to solve your drug problems.	O	O	O	O	O
14. You feel a lot of pressure to be in treatment.	O	O	O	O	O

	Disagree Strongly (1)	Disagree (2)	Uncertain (3)	Agree (4)	Agree Strongly (5)
15. You need individual counseling sessions.	O	O	O	O	O
16. Your drug use is causing problems with your family.	O	O	O	O	O
17. You expect to be sent to a juvenile detention facility if you are not in treatment.	O	O	O	O	O
18. This treatment program gives you hope for recovery.	O	O	O	O	O
19. You need educational or job training services.	O	O	O	O	O
20. Your drug use is causing problems with school attendance.	O	O	O	O	O
21. You want to be in drug treatment.	O	O	O	O	O
22. Your life has gone out of control.	O	O	O	O	O
23. You need group counseling sessions.	O	O	O	O	O
24. Your drug use is causing problems with your health.	O	O	O	O	O
25. You are ready to leave this treatment program.	O	O	O	O	O
26. You are tired of the problems caused by drugs.	O	O	O	O	O
27. You are at this treatment program only because it is required.	O	O	O	O	O
28. Your drug use is making your life become worse and worse.	O	O	O	O	O
29. You have serious drug-related health problems.	O	O	O	O	O
30. You want to get your life straightened out.	O	O	O	O	O

	Disagree Strongly (1)	Disagree (2)	Uncertain (3)	Agree (4)	Agree Strongly (5)
31. You need medical care and services.	O	O	O	O	O
32. Several people close to you have serious drug problems.	O	O	O	O	O
33. Your drug use is going to cause your death if you do not quit soon.	O	O	O	O	O
34. You have legal problems that require you to be in treatment.	O	O	O	O	O
35. You are not ready for this kind of treatment program.	O	O	O	O	O
36. Your drug use is causing problems with your friends.	O	O	O	O	O

Appendix B: TCU Adolescent Engagement Form

TCU ADOL ENGFORM

Please indicate how much you AGREE or DISAGREE with each statement.

	Disagree Strongly (1)	*Disagree (2)*	*Uncertain (3)*	*Agree (4)*	*Agree Strongly (5)*
1. You trust your counselor.	O	O	O	O	O
2. Time schedules for counseling sessions at this program are convenient for you.	O	O	O	O	O
3. It's always easy to follow or understand what your counselor is trying to tell you.	O	O	O	O	O
4. This program expects you to learn responsibility and self-discipline.	O	O	O	O	O
5. Your counselor is easy to talk to.	O	O	O	O	O
6. You are willing to talk about your feelings during counseling.	O	O	O	O	O
7. This program is organized and run well.	O	O	O	O	O
8. You are motivated and encouraged by your counselor.	O	O	O	O	O
9. You have made progress with your drug/alcohol problems.	O	O	O	O	O
10. You are satisfied with this program.	O	O	O	O	O
11. You have learned to analyze and plan ways to solve your problems.	O	O	O	O	O
12. You have made progress toward your treatment program goals.	O	O	O	O	O
13. You always attend the counseling sessions scheduled for you.	O	O	O	O	O
14. Your counselor recognizes the progress you make in treatment.	O	O	O	O	O

	Disagree Strongly (1)	Disagree (2)	Uncertain (3)	Agree (4)	Agree Strongly (5)
15. Your counselor is well organized and prepared for each counseling session.	O	O	O	O	O
16. Your counselor is sensitive to your situation and problems.	O	O	O	O	O
17. Your treatment plan has reasonable goals.	O	O	O	O	O
18. Your counselor views your problems and situations realistically.	O	O	O	O	O
19. Other clients at this program care about you and your problems.	O	O	O	O	O
20. You have stopped your drug use while in this program.	O	O	O	O	O
21. Your counselor helps you develop confidence in yourself.	O	O	O	O	O
22. You always participate actively in your counseling sessions.	O	O	O	O	O
23. You have made progress in understanding your feelings and behavior.	O	O	O	O	O
24. Other clients at this program are helpful to you.	O	O	O	O	O
25. You have improved your relations with other people because of this treatment.	O	O	O	O	O
26. The staff here are efficient at doing their job.	O	O	O	O	O
27. You are similar to (or like) other clients of this program.	O	O	O	O	O
28. You have made progress with your emotional or psychological issues.	O	O	O	O	O

	Disagree Strongly (1)	Disagree (2)	Uncertain (3)	Agree (4)	Agree Strongly (5)
29. Your counselor respects you and your opinions.	O	O	O	O	O
30. You have developed positive trusting friendships while in this program.	O	O	O	O	O
31. You give honest feedback during counseling.	O	O	O	O	O
32. You can depend on your counselor's understanding.	O	O	O	O	O
33. There is a sense of family (or community) in this program.	O	O	O	O	O
34. You can get plenty of personal counseling at this program.	O	O	O	O	O
35. Your friendships at this program have gotten you in trouble with the staff.	O	O	O	O	O
36. Other clients at this program make it hard for you to focus on your treatment.	O	O	O	O	

Appendix C: TCU Adolescent Drug Use Thinking Form

TCU ADOL THKFORM B

Please indicate how much you AGREE or DISAGREE with each statement. If you neither agree nor disagree, mark UNCERTAIN.

	Disagree Strongly (1)	*Disagree (2)*	*Uncertain (3)*	*Agree (4)*	*Agree Strongly (5)*
1. Overall, I expect more good things to happen to me than bad.	O	O	O	O	O
2. It's easier for me than other kids to overcome obstacles.	O	O	O	O	O
3. I can talk my way out of most problems when other kids can't.	O	O	O	O	O
4. I'm always optimistic about my future.	O	O	O	O	O
5. It is easier for me to get away with things other kids get in trouble for.	O	O	O	O	O
6. I think of myself as having more ability than others.	O	O	O	O	O
7. I hardly ever expect things to go my way.	O	O	O	O	O
8. I rarely count on good things happening to me.	O	O	O	O	O
9. I am more likely than others to do things my way no matter what anyone else says.	O	O	O	O	O
10. If something can go wrong for me, it will.	O	O	O	O	O
11. Compared to others, I don't get hurt when I do risky things.	O	O	O	O	O

I am confident that I can –	Disagree Strongly (1)	Disagree (2)	Uncertain (3)	Agree (4)	Agree Strongly (5)
12. walk away from a fight.	O	O	O	O	O
13. express my opinions when others disagree with me.	O	O	O	O	O
14. find ways of reducing stress, that don't involve alcohol/drugs.	O	O	O	O	O
15. be proud of the goals I have for my life.	O	O	O	O	O
16. admit when I am wrong.	O	O	O	O	O
17. be patient and stick with something hard.	O	O	O	O	O
18. make friends with people who don't use alcohol/drugs.	O	O	O	O	O
19. stand firm to someone who is asking me to do something unreasonable.	O	O	O	O	O
20. finish things on time.	O	O	O	O	O
21. get adults to help me when I have a problem.	O	O	O	O	O
22. resist the temptation to use alcohol/drugs when others around me are using.	O	O	O	O	O
23. remain calm when things get heated.	O	O	O	O	O
24. arrange a place where I can concentrate.	O	O	O	O	O
25. stand up for myself when I feel I am being treated unfairly.	O	O	O	O	O
26. resist pressure to do things that can get me in trouble.	O	O	O	O	O

	Disagree Strongly (1)	Disagree (2)	Uncertain (3)	Agree (4)	Agree Strongly (5)
27. ask others to stop annoying me or hurting my feelings.	O	O	O	O	O
28. find things to do that I enjoy but that don't involve alcohol/drugs.	O	O	O	O	O
29. find ways to get myself started on difficult tasks.	O	O	O	O	O
30. get a friend to help me when I have a problem.	O	O	O	O	O
31. avoid situations and people where alcohol/drugs are present.	O	O	O	O	O
32. resist the urge to give up easily when I run into problems.	O	O	O	O	O
33. say "NO" when I need to.	O	O	O	O	O