An Exploratory Study Analyzing the Impact of Coercion on the Outcomes of Substance Abuse Program Participants

Robyn L. Klein
Lynn University

Follow this and additional works at: https://spiral.lynn.edu/etds

Part of the Education Commons

Recommended Citation
https://spiral.lynn.edu/etds/146

This Dissertation is brought to you for free and open access by the Student Work at SPIRAL. It has been accepted for inclusion in Student Theses, Dissertations, Portfolios and Projects by an authorized administrator of SPIRAL. For more information, please contact liadarola@lynn.edu.
Submitted in Partial Fulfillment of the Requirements for the Degree of
Doctorate in Education

AN EXPLORATORY STUDY ANALYZING THE IMPACT OF COERCION ON
THE OUTCOMES OF SUBSTANCE ABUSE PROGRAM
PARTICIPANTS

By

Robyn L. Klein

Doctoral Program in Educational Leadership at Lynn University,
College of Education

Lynn University
2012
AN EXPLORATORY STUDY ANALYZING THE IMPACT OF COERCION ON
THE OUTCOMES OF SUBSTANCE ABUSE PROGRAM
PARTICIPANTS

Klein, Robyn L., Ed.D.
Lynn University, 2012

Copyright 2012 by Robyn L. Klein. All Rights Reserved

U.M.I.
789 Eisenhower Parkway
Ann Arbor, MI 48106-1346
ACKNOWLEDGEMENTS

There are many individuals to whom I would like to express much gratitude for their patience and understanding throughout the process of this doctoral degree. It was definitely a long road in which I have gathered so much knowledge about the many facets of education, at the same time enhancing my personal values as an educator.

Firstly, I would like to thank my family for encouraging me to remain positive through the many moments of personal doubts. Without the constant support of my loving family: Norma, Dennis, Stacey, Susan, Kristen, Reeg, JoEllen, Carol, Nattie, and my inner circle of loved ones that I have relied on for constant support, this program would have been even more challenging. I cannot thank you enough.

Secondly, I would like to thank the group of individuals from the FACE ITSM program with whom I worked with over the course of this project. Program director Linda Salzman and her wonderful team: Lavidah Johnson, Nate Willis II and Bridgett Augustino-Wilke. I’m delighted and thankful for the opportunity to work with you all.

Saara Saarela-Vening, my partner in this dissertation process. I will hear Bridgett’s words ringing in my ears forever, “that girl will be your friend for life now!” I have learned so much from you and have the deepest respect for your intelligence, loyalty, and friendship. I am truly blessed to have shared this experience with you.

I would also like to acknowledge many dynamic and brilliant professors with whom I have had the privilege to learn with through my masters and doctoral programs.
Dr. Valerie Storey, I appreciate your open-mind and thank you teaching me to remove my emotions from my writing. Dr. William Leary, thank you for your good advice and fun stories. Dr. Priscilla Boerger, I know we only had one class with you, but you have impressed me immensely with your humor and practical teaching style. Finally, Dr. Adam “Papa” Kosnitzky. I feel like you’ve been my teacher for 5800 years, yet it’s only been about 5. Thank you so much for your guidance.

And finally, the biggest thank you to Mrs. Anita Lillian Obstler, my grandmother and my best friend whom I lost while enrolled in this doctoral program. Mar, your simplistic class, compassion for others and generosity has touched my life unimaginable ways. Your overwhelming adoration is appreciated in volumes and I dedicate this degree to you.
Abstract

This study involved the investigation of institutional coercion on the outcomes of program participants in an alcohol, tobacco, and other illegal substance prevention and intervention program. The researcher explored the importance of determining changes in pre-program characteristics of youths participating for 5, 8, or 12 weeks in an alcohol, tobacco, and other illegal substance prevention and early intervention program. Data was utilized to validate trends in participants experiencing compulsory programming on three different levels (parent, school, or court).

Program pre-tests and post-tests survey questions were administered to youths who were at some level, coerced into a treatment program. Data was utilized to measure participant outcomes, including any changes in their attitudes towards illegal substances. Firstly, a five-way analysis of variance explored the link between sociodemographic background of program participants and specific institutional factors in relation to the youths' level of coercion.

The researcher then explored program impact on its participants regarding institutional factors such as number of days skipped at school and how meaningful their schoolwork was to them, also measured the level of coercion the participant had experienced. Finally, data was examined to determine whether participants experienced change in their attitude pertaining to alcohol, tobacco, and other drugs. All analyses indicated no significance for all levels of coercion, implying the program is effective for all participants no matter their level of coercion into the program. The findings may be useful in the future programming of youths being instructed in prevention and
intervention curriculums in order to delve deeper into effective treatment models for youths experiencing coercion prior to treatment.
# Table of Contents

**CHAPTER I: INTRODUCTION**

- Statement of the Problem ................................................................. 4
- Coercion Level .................................................................................. 5
  - Program Effectiveness ..................................................................... 6
- Social Control Theory and Social Bonding Theory ........................... 7
- FACE IT\textsuperscript{SM} Program ...................................................... 8
- Purpose of the Study .......................................................................... 9
- Research Questions ........................................................................... 10
- Rationale of the Study ........................................................................ 10
- Assumptions ...................................................................................... 11
- Scope and Delimitations .................................................................... 11
- Definition of Terms ........................................................................... 12

**CHAPTER II: A REVIEW OF THE LITERATURE** .................................. 14

- Risk Factors for Adolescent Substance Abuse ................................. 16
  - Individuals as Risk Factors to Themselves ..................................... 16
  - Peer Groups as a Risk Factor .......................................................... 16
  - Family Influences as a Risk Factor ................................................. 17
  - School Influences as a Risk Factor .................................................. 19
  - Community as a Risk Factor ........................................................... 19
- Theories of Social Control and Social Bonding ................................. 20
- Alcohol, Tobacco and Other Drug (ATOD) Programming ................. 22
  - Prevention and Intervention ............................................................ 22
- Research-Based Prevention Approaches .......................................... 25
  - Social influence approaches ............................................................ 25
  - Competence enhancement approaches ......................................... 26
- Program Models ................................................................................. 27
  - Minnesota Model ........................................................................... 27
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapeutic Communities</td>
<td>28</td>
</tr>
<tr>
<td>Individual Counseling</td>
<td>29</td>
</tr>
<tr>
<td>Behavioral Treatment Approach</td>
<td>30</td>
</tr>
<tr>
<td>Coercion</td>
<td>31</td>
</tr>
<tr>
<td>Degrees of Coercion</td>
<td>32</td>
</tr>
<tr>
<td>Pretreatment Characteristics</td>
<td>35</td>
</tr>
<tr>
<td>Discussion of the Literature</td>
<td>36</td>
</tr>
<tr>
<td>CHAPTER III: RESEARCH METHODOLOGY</td>
<td>39</td>
</tr>
<tr>
<td>Research Design</td>
<td>39</td>
</tr>
<tr>
<td>Variables</td>
<td>40</td>
</tr>
<tr>
<td>Research Questions</td>
<td>41</td>
</tr>
<tr>
<td>Target Population and Setting</td>
<td>43</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>44</td>
</tr>
<tr>
<td>Domains</td>
<td>44</td>
</tr>
<tr>
<td>Sampling Plan and Procedure</td>
<td>46</td>
</tr>
<tr>
<td>Ethical Considerations</td>
<td>47</td>
</tr>
<tr>
<td>Evaluation of Research Methods</td>
<td>48</td>
</tr>
<tr>
<td>History</td>
<td>48</td>
</tr>
<tr>
<td>Maturity</td>
<td>48</td>
</tr>
<tr>
<td>Testing (pre and post-test)</td>
<td>48</td>
</tr>
<tr>
<td>Selection</td>
<td>49</td>
</tr>
<tr>
<td>Mortality</td>
<td>49</td>
</tr>
<tr>
<td>Hawthorne Effect</td>
<td>50</td>
</tr>
<tr>
<td>Summary</td>
<td>50</td>
</tr>
<tr>
<td>CHAPTER IV: ANALYSIS OF DATA</td>
<td>52</td>
</tr>
<tr>
<td>Sample Demographics</td>
<td>52</td>
</tr>
<tr>
<td>Research Questions</td>
<td>55</td>
</tr>
<tr>
<td>Research Question 1</td>
<td>55</td>
</tr>
<tr>
<td>Research Question 2</td>
<td>56</td>
</tr>
<tr>
<td>Research Question 3</td>
<td>58</td>
</tr>
</tbody>
</table>
List of Tables

Table (4-1) FACE IT\textsuperscript{SM} Participants’ Age ................................................................. 52
Table (4-2) FACE IT\textsuperscript{SM} Participants’ Grade ................................................................. 53
Table (4-3) FACE IT\textsuperscript{SM} Participants’ Gender ................................................................. 53
Table (4-4) FACE IT\textsuperscript{SM} Participants’ Ethnicity ................................................................. 54
Table (4-5) FACE IT\textsuperscript{SM} Participants’ Domicile ................................................................. 54
Table (4-6) Relation of Sociodemographic Background to Coercion .............................................. 56
Table (4-7) Institutional Factors in Relation to Coercion ................................................................. 58
Table (4-8) Attitudes in Relation to Coercion ......................................................................... 60
CHAPTER I: INTRODUCTION

Research has shown there is increasing evidence that upward educational success is more likely to occur when alcohol, tobacco and other drug using students are actively participating in an intervention program (McBride, Midford & Farringdon, 2000; Mann & Reynolds, 2006). Certain professionals and supporters of intervention programs suggested that some form of intervention or treatment should be mandatory for students who have been labeled as delinquent due to their abuse of alcohol, tobacco and other drugs, particularly those caught in school-based settings. Still, others contended that alcohol, tobacco and other drug programming (ATOD) should be made readily available for only those student users who are self-motivated to attend (Wild, Newton-Taylor, Ogborne, Mann, Erickson, & MacDonald, 2001; McGuire, 2010).

Either way, proponents argued that providing access to ATOD school-supported community-based programming to students may be a less expensive alternative than incarcerating them for a drug-related arrest, and particularly less expensive in the long-run in terms of school drop-out (Wild et al., 2001; Wild, Roberts, & Cooper, 2002). At the very least, several studies demonstrated that intervention is cost-effective, with most savings coming from a reduction of deviant behavior by drug abusers following substance abuse treatment (Wild, et al., 2002).
Some researchers and practitioners suggested that coercion into school-supported, community-based ATOD programming is non-therapeutic and, therefore, produced no long-term positive outcomes because individuals have not felt "motivated" to change (Wild et al., 2001). The term coercion is generally defined as "compulsion, enforcement, force or repression" (Merriam-Webster, 2010). Weisner (1990) defined coercion as "a form of institutionalized legal pressure" (p. 579). Coercion often is operationally defined as the suggestion by some institutional system to enter programming or some other type of intervention.

A low level of coercion would include voluntary program participation or involuntary in which the parent of the youth enrolling their child based on their own concerns. Participants attend the minimal number of sessions for the particular program attending. Students who are cited for ATOD possession in schools are often given a choice by school administration to attend programming or to be suspended for up to ten days of school. Sometimes, or, at the very least, referral for enrolling in an intervention program is stipulated as a condition of successful academic performance which suggests coercion. A high level of coercion is court ordered by a youth court judge where youths attend the highest number of sessions in order to complete their sentence.

Substance abuse professionals often stated that the recalcitrant users rarely benefited from non-voluntary program/intervention placement and that space should be reserved for self or parental-referrals (Wild et al., 2001). This can then lead to studies conducted on self-determination in that when one is intrinsically motivated, the activity being completed is with the highest intent (Gagne, M. & Deci, E., 2005). Therefore, one
can hypothesize the possibility of participants within drug intervention programs, who experience high levels of coercion, feel unmotivated when forced to enter a program either by court or school administration.

Families Acting Collaboratively to Educate and Involve Teens (FACE IT$^{SM}$) is an alcohol, tobacco and other drugs (ATODs) prevention and early-intervention program for middle and high school-aged youths since 2004 (Palm Beach County School District, 2010). It is a community-based program requiring the attendance of an adult representative (preferably the parent or guardian) and the youth to attend in a community school setting. Participants attend FACE IT$^{SM}$ under three possible circumstances: voluntarily; as an alternative to suspension (coercion); or as ordered by Youth Court. FACE IT$^{SM}$ was developed by the Prevention Center in the Department of Safe Schools, School District of Palm Beach County, Florida, under a U.S. Department of Education Grant to Reduce Alcohol Abuse (School District of Palm Beach County, 2010).

Volunteer participants are registered by the parent or guardian due to school or familial concerns regarding ATOD use. Alternative to out-of-school suspension students who have possessed or used ATODs on school grounds enter the program in lieu of serving out of school disciplinary action, which ultimately results in missed school days and lowered grades due to the inability to “make-up” missed school work. Adolescents ordered through Youth Court have been apprehended by local authorities for possessing or using ATODs. Participants attend for 5, 8, or 12 weekly sessions in the program, depending on their referral source.
Statement of the Problem

The practice of institutional coercion in use with adolescents is known to be an issue in that youths who are pressured at higher levels than others may contribute to a higher rate of recidivism (White, 1998; Colvin, Cullen, Vander Ven, 2002). In fact, some may argue that any coercion with adolescents, in general or by any institution, is an issue due to their developmental decision-making process due levels of immaturity or a feeling of a loss of their own autonomy (Wild, Newton-Taylor, & Alletto, 1998).

According to Gagne and Deci (2005), autonomy can be described as having the possession and experience of one’s own choice. It further involves acting with a sense of volition and having the experience of choice. Chirkov, Ryan, Kim and Kaplan (2003) described a person is autonomous when his or her behavior is experienced as willingly enacted and when he or she fully endorses the actions in which he or she is engaged and/or the values expressed by them. In other words, one who is autonomous makes decisions at the will of oneself. This is directly related to coercion in that when a youth is coerced into a program at a higher level, there is the possibility that losing autonomy will have a direct effect upon the attitude of the youth, thus impacting program outcomes.

There is a need to explore the loss of autonomy of adolescents in order to determine whether or not youth offenders who have experienced a pattern of high levels of coercion consistently exhibit negative outcomes (Gagne & Deci, 2005). With low productivity of program outcomes, an overall ineffective program is determined. The two research issues to be explored for this study are the coercion factors of participants in
the FACE ITSM program and whether or not the program is economically effective for all levels of coercion.

**Coercion Level**

Coercing people who are treated for drug and alcohol use is an issue that has been exceptionally controversial (Wild et al., 1998; Klag, Creed & O'Callaghan, 2006). Youths who have used ATOD’s and are entering the FACE ITSM program have experienced a form of coercion. This study explored three levels of coercion for youths who attend the program. If youths were court ordered to enter, their level of coercion is higher in that they are entering the intervention program in order to avoid sentencing. At the moderate level, youths were coerced into the program by their school in order to avoid out of school suspension. Out of school suspension resulted in loss of academic school days, thus placing the student behind in classes. A low level of coercion involved youths who have entered the program as a volunteer or upon their parent’s request.

Pre-program characteristics of these youths were studied along with their method of entry. This was measured with sociodemographic data, institutional factors, and attitudes towards illegal substances to identify whether youths and their parents have been coerced into the FACE ITSM program based upon their pre-program characteristics. The researcher was investigating any remarkable disparities between the three coercion groups in regard to assigned level of programming (5 sessions, 8 sessions, 12 sessions).

In justifying the program’s continuation, results must lead in the direction of positive outcomes. By researching the pattern of the ATOD program in selected sites,
beneficial data for future programming will address any significant program distinctions. From there, it will be notable to decide whether or not this program is ultimately worthy of practice.

**Program Effectiveness.** Studies have shown that individuals who did not enter programs at their own will were less likely to perform at their maximum potential (Klag et al., 2006; Wild et al., 2001). Therefore, if a majority of students attending an ATOD program were not willfully participating, meaning they were being institutionally coerced, the possibility of negative program outcomes became an issue; the program could be labeled as ineffective based on statistical data.

Researchers examined that youths who are more strongly attached to their families, schools, and community have better academic success (Wild et al., 2002). Family was the most powerful agent of social and developmental influence on youths (McGuire, 2010). Studies illustrated that those offending youths with strong family ties were more likely to enter and complete the program to avoid further problems concerning ATOD’s. If those delinquents, who received more familial support, made up only the minority of the population who attended FACE IT\textsuperscript{SM} and successfully completed the program, the financial benefits were not meeting criteria. Therefore, the question of whether or not compulsory programming is cost effective is to be answered. These issues must be explored.
School-based ATOD prevention and intervention used coercion when dealing with drug users and offenders in a number of differing ways, including diversion and punishment. The act of employing coercion has been seen as an exercise of power in that it is allowable, and even encouraged to control behavior and to maintain the social order (White, 1998). Further, Messinger and Greenspan (1983) concluded that clearly contending points of social control arranges the connections between studies of the control of deviance and the phenomena of social order (p. 62).

Attempting to align status and delinquent ATOD use by schools is an exercise of power in and of itself, and any attempts to deal with those involved with ATOD possession on school campuses can be seen as forms of institutional or official power over students, and their parents. Hence, what has emerged is a form of social control, and included in this struggle to keep illegal substances off school grounds and out of the pockets of youth, have been school administrators and community-based ATOD providers.

Social bonding theory argued that youths who exhibit close family connections are more likely to avoid criminal activity (Hirschi, 1969). This theory also explored the existence of delinquents and their weak personal ties that bind them together for social support. Youths who experienced low levels of familial interaction have been proven to commit crimes at higher rates than those who have had high familial bonds, including the use of ATOD’s (Hirschi, 1969).
While the school and community partnerships against ATOD use can be tracked back to the 1980s with the advent of “Red Ribbon Week” and the “DARE” program, the 1990s proved to be a major alteration point for theoretical perspectives in delinquency, intervention and rehabilitation (D.A.R.E. America, n.d.) A variety of theories (varieties of social control, labeling) have consisted primarily of the integration of many of the traditional delinquency theories.

Theories of social control and social bonding examined the power of coercion in society. It is with the use of the theory of social control, and the theory of social bonding, that we can examine and describe how different institutions work through the school-supported, community-based ATOD programming to alter the behavior of the substance-using student.

**FACE IT℠ Program**

According to the Palm Beach County School District (2010), Families Acting Collaboratively to Educate and Involve Teens (FACE IT℠) is an alcohol, tobacco and other drugs (ATODs) prevention and early-intervention program for middle and high school-aged youths. Along with their parents, youths are able to explore a healthy and drug-free lifestyle and develop the necessary skills needed to maintain this lifestyle. FACE IT℠ is a community-based program implemented in Palm Beach County since 2004. Participants attend FACE IT℠ under three possible circumstances: voluntarily; as an alternative to suspension (coercion); or as ordered by Youth Court (School District of Palm Beach County, 2010).
FACE IT\textsuperscript{SM} is delivered in three area schools at night once weekly. The sessions begin with both adults and youths in one group together to initiate a comforting atmosphere. The program then splits the adults into one session and the youths into another based upon their age. The curriculum delivered combines life skills, interactive delivery, intensive participation, and consistent implementation (School District of Palm Beach County, 2010).

There are three levels of coercion that were explored in this study for participants of FACE IT\textsuperscript{SM}: 1) youths ordered to participate through Youth Court have been apprehended by local authorities for possessing or using ATODs; 2) alternative to out-of-school suspension students who have possessed or used ATODs on school grounds enter the program in lieu of serving out of school disciplinary action, which ultimately results in missed school days and lowered grades due to the large amount of classwork and homework missed; and 3) on a voluntary basis or through parental initiation. Participants attend for 5, 8, or 12 weekly sessions in the program, depending on their referral source.

**Purpose of the Study**

The purpose of this study was to explore whether pre-program characteristics of students in the FACE IT\textsuperscript{SM} program make the participants more likely to be coerced into this ATOD program. This study will determine whether or not any pre-program characteristics have any measurable effect on program goals and individual outcomes. This study will further examine and describe any differences determined between the three coercion groups in regard to assigned level of programming (5 sessions, 8 sessions, 12 sessions). In addition, the researcher sought to provide data that had a bearing on
decision making of school administrators and parents on whether or not compulsory programming is a viable means to intervention.

**Research Questions**

The main focus of this research will address the following questions:

Q1. Does the sociodemographic background of program participants relate to institutional coercion/compulsory programming?

Q2. Do the institutional factors of program participants relate to institutional coercion/compulsory programming?

Q3. Are individual attitudes towards illegal substances program outcomes related to differing levels of coercion (low, medium, high)?

**Rationale of the Study**

There is a need to examine patterns of institutional coercion/compulsory program participation in use with adolescents, particularly when alcohol, tobacco, or other drugs are part of the presenting problem. It is important to explore whether there are any pre-program characteristics of these students that make them more likely to be coerced into ATOD program participation, and whether or not these pre-program characteristics have any measurable effect on program goals and outcomes.

Further, examining these patterns of coercion may provide better information and understanding about differential outcomes among these students coerced in the FACE IT℠ program. Much time and money could be better allocated if data were to provide
significant strength in the direction of whether or not compulsory programming for youthful offenders is as promising as it is certain.

The FACE IT^SM program currently accepts referrals for program enrollment from three main referral types. These include: court, school, and parent referrals. For this study, each of these referral sources will be aligned with differing levels of coercion to create an index of the strength of coercion/consequences specific types of students might experience, and thus could determine patterns of program success.

Assumptions

This study will be built upon the following assumptions:

1. All students have encountered and been caught with an illegal substance.

2. All program facilitators received appropriate training by FACE IT^SM program trainers based on program criteria.

3. All program participants have attend the required number of sessions with a parent or guardian.

4. All participants took the pre and post program survey.

5. All participants included in the archival data have completed the program.

Scope and Delimitations

This study was limited only to FACE IT^SM participants within Palm Beach County, Florida and is being currently implemented in three other counties (Pinellas County, FL; Sumner County, TN; and Chicago, IL). Therefore, data collection was only limited to a small population within three different states. In certain instances, different
parent or guardians attend FACE IT℠ sessions each week, tampering with the consistency of the program. In order to create a consistent environment for the youth and for the most effective outcomes, the same parent is recommended to be in attendance with the youth participant. Additionally, facilitators at programs sites may have altered positions throughout the course of the program, with certain weeks implementing the FACE IT℠ curriculum to the youths and other weeks working with the parents and guardians. Again, the inconsistencies throughout the program could have altered the program, thus changing the outcomes for the youths based on the pre and post-surveys.

This study consisted of collecting data pertaining to the attitudes of the youth and parent prior to the start of the program and at the completion. Although a large portion of the program focused on the attitudes of youths and their parents in regard to ATOD’s, the attitudes of youths may not have altered because the attitudes of their parents have not altered either. For example, if a parent does not believe that adolescents who engage in drinking is dangerous, there is a better chance that the youths will engage in underdrinking because the parent does not discourage it.

Definition of Terms

Autonomy is defined as involving acting with a sense of volition and having the experience of choice (Gagne & Deci, 2005).

Coercion is defined “as a form of institutionalized legal pressure” (Weisner, 1990).
Compulsory Programming refers to the legislated forced confinement (non-criminal) or civil commitment of individuals for assessment or treatment of their substance abuse problems (Mugford & Weekes, 2006).

Convenience Sample is a group of individuals who are conveniently available for study (Fraenkel & Wallen, 2006).

Delinquent is defined as “a young person who regularly does illegal or immoral things” (Merriam-Webster, 2011).

Diversion transfers the individual experiencing high levels of coercion from the criminal justice system to treatment prior to any sentencing (Weisner, 1990).

Social Control Theory by Hirschi (1969) proposes that “people's relationships, commitments, values, norms, and beliefs encourage them not to break the law”.

Theory of Social Bonding by Cohen (1985) emphasized a society’s continued need for social integration through socialization into common value systems despite trends of increasing individualism.
CHAPTER II: A REVIEW OF THE LITERATURE

Overview

The purpose of this chapter was to explore whether different levels of coercion have an effect on program outcomes for alcohol, tobacco and other drug treatment programs. More specifically, measures were always taken to reduce the use of illegal substances. Nevertheless, it was unclear whether or not compulsory drug treatment was truly effective. The use of coercion for individuals has been a controversial issue for many decades, yet supporters and opposing forces consistently fight to maintain their stance on compulsory treatment of substance abusers (Wild et al., 1998).

Efforts to reduce drug use in adolescence considered a number of approaches in and out of school-based settings. It was proven that adolescent substance abusers meet a unique set of needs that differ from adult users; therefore the need to differentiate treatment models to meet the needs of the youth population has become increasingly important (Muck, Zempolich, Titus & Fishman, 2001; Vourakis, 2005; Winters, Stinchfield, Opland, Weller, & Latimer, 2000). Botvin (2000) discussed school-based prevention tactics that were utilized to support their effectiveness in educational settings and found that targeting middle schools and high schools to serve as a preventative measure if effective due to the ability to reach large numbers of youth who are approaching ages where they are tempted to experiment with ATOD’s.
Studies examined between the years 2002-2007 displayed statistics of adolescents abusing illegal substances as follows: Youths who smoked cigarettes made up 12% of those surveyed; alcohol abuse has been reported to be 17%; and illicit drug use has been recorded at 11% (National Survey on Drug Use and Health, 2009). Further, through the years of 2002-2007, statistics have proven that illegal substances remain a constant infraction on society that enables further research in the area of adolescents and their use of alcohol, tobacco and other drugs. Hill (2008) stated that illegal substances will always be a staple in our society; therefore, limiting the availability of these drugs may potentially lower statistics on youth substance abuse.

The use of alcohol, tobacco and other drugs by adolescents historically produced stagnant statistics that closely resemble each other year after year. According to the Substance Abuse & Mental Health Services Administration (SAMHSA), “Past year alcohol dependence or abuse among youth remained relatively stable between 2002 and 2007 but illicit drug dependence or abuse declined from 5.6% to 4.3%” (2011). Based on SAMHSA’s National Survey on Drug Use and Health, adolescent use of cigarettes, alcohol, and illicit drugs declined between 2002 and 2007, but little change occurred between the years of 2006 and 2007. Between the years 2002 and 2007, past month use by youth of cigarettes declined from 13% to 10%; alcohol from 18% to 16% and illicit drugs from 12% to 9% (SAMHSA, 2011).

The use of ATOD’s is a learned process through demonstration and reinforcement from various social influences that included family members, peers and media (Botvin, Griffin, Diaz, & Ifill-Williams, 2001). A number of risk factors are involved with
adolescent substance abuse. Hawkins, Catalano, and Miller (1992) categorized five risk factors or domains in which adolescents may become at risk for substance abuse: individual, peer, family, school, and community.

**Risk Factors for Adolescent Substance Abuse**

**Individuals as Risk Factors to Themselves.** Individuals at risk followed certain patterns from childhood. Precursors for alcohol, tobacco, and other drug problems can be described as a risk factor (Hawkins et al., 1992). Adolescents who exhibited signs of risk for potentially using illegal substances displayed a number of signs and/or possessed a precursory problem that also may have served as a risk factor. According to Hawkins, Jenson, Catalano and Lishner (1988), antisocial behavior is a major implication of future substance abuse. Their study showed that youths under the age of 10 years of age who displayed antisocial behavior have a higher risk of delinquent behavior in adulthood. As children progress into adolescence and display consistent misbehaviors, aggression and withdrawal, their likelihood of abusing illegal substances increases (Burrow-Sanchez, Jenson & Clark, 2009).

**Peer Groups as a Risk Factor.** Peer groups often have a major influence upon an individual. When assessing behavior patterns of substance abuse, Botvin (2000) concluded that adolescent drug use is conceptualized as the result of social influences by peers and media. Botvin et al., (2001) determined that the use of ATOD’s is a process that is acquired through a process of modeling and reinforcing from a variety of peer groups. In other words, peer influences contribute to a major role in whether or not a youth is at risk for being a potential user.
In a study by deKoven (2007), the author concluded that, “by assessing the perceived values and behaviors of a group of youths one can make judgments confidently about the substance abuse patterns of an individual from that peer group” (p. 31). deKoven (2007) further attested that if a “friend” of a youth approves of an illegal substance, that particular adolescent is more at risk of consistently using that particular item. Hawkins et al. (1992) argued that some of the strongest correlations between drug use and adolescents are the peer group in which they associate. From their study, they have concluded that adolescents who socialized with peers who do not abuse illegal substances are less likely to become involved with illegal substances themselves and function with a healthier state of mind. Nelson-Simley and Erickson (1995) also agreed that association with peers who have a favorable attitude towards drug use are more likely themselves to become involved with illegal substances.

Family Influences as a Risk Factor. Family influence plays a major role in adolescent drug use. Not only does the behavior and habits of family members affect adolescents parental influence might also serve as a protective factor by moderating many influences brought upon by peers (Farrell & White, 1998). Studies have indicated that not only parental practices of drug abuse influence youth substance abusers, but the perceived attitudes of parents of youths who use illegal substances also play a major role in the use of ATOD’s (Hawkins et al., 1992).

In their study, Farrell and White (1998) examined family structure and parent-adolescent variables to determine the extent to which the relationship was moderated by peer influences. This study included a total of 630 participants who were all students in
the 10th grade. The researchers utilized The Models for Drug Use Scale, a four question scale used to assess the participant's interactions with illegal substances, who were asked questions relating to their friends and family. The relationship between adolescents and each individual parent was especially targeted in order to gain a better understanding of familial relationships and adolescent drug use.

The results indicated that peer pressure and peer drug models both were related to individual drug use, however, the strength of the relationship was moderated by family structure. Peer relationships with adolescents who were involved with ATODs were significantly less in households with both parents residing with the participant. Additionally, distress between adolescent and parent with strong relationships were less related to illegal substance abuse, as well as peer pressure being a driving factor in the life of the participant.

Fanell and White (1998) further concluded that family structure plays a large role of drug use during adolescence. Between the years 2002-2007, 8.3 million children under the age of 18 years lived with at least one parent who was dependent on or abused alcohol or an illicit drug (National Survey on Drug Use and Health, 2009). Hawkins et al. (1988) also concluded that children and siblings of those who abuse illegal substances have a higher probability of becoming users themselves.

Relationships among family members influence youth substance abuse. Poor parenting practices, lack of bonding between parent and child both result in higher risks for substance abuse. Brook, Brook, Gordon, Whiteman, and Cohen (1990) presented a developmental model consisting of two components: adolescent pathway to drug use and
childhood factors. Like other studies conducted, Brook et al. (1990) concluded that inherited factors from family (including genetic factors and maternal addictions during pregnancy) all play a role in adolescent substance abuse and have contributed to the consistent pattern of family use of ATODs.

**School Influences as a Risk Factor.** Schools have placed students at risk for substance abuse when those students who experience “educational failure” during adolescence are prone to exposure of illegal substances at a higher rate than those who are successful in school (Spooner, 1999). Hawkins et al. (1992) concluded that low commitment to school is affiliated with adolescent drug abuse and that available evidence suggests that social adjustment is more important than academic performance in the early school years when predicting adolescent substance abuse.

Low commitment to school has often been a risk factor associated with the use of ATOD’s and then eventually leading to further delinquent behavior (Hawkins et al., 1985; Hirschi, 1969). Academic problems have acted as a catalyst to turning a youth on to drug use, thus proving to be a barrier to more important functional habits of a functioning adult (Spooner, 1999).

**Community as a Risk Factor.** Research has indicated that adolescents living in certain communities, including many socioeconomically disadvantaged neighborhoods, are at particularly high risk for illicit drug use (SAMHSA, 2011). Hawkins et al. (1992) found that the availability of drugs, including in certain communities, is dependent on the norms of that particular society. Additionally, when poverty is extreme within communities, this can then lead to behavior problems, antisocial tendencies and later on,
higher rates of risk for ATOD use. Referring to his Social Bonding Theory, Hirschi (1969) argued that one reason delinquents commit illegal acts is the low levels of respect for parents, due to their lack of intimate bond with them, which then leads to a lack of respect for community.

Theories of Social Control and Social Bonding

Hirschi's Control Theory (1969) emphasized, the stronger the bond of parent and child, the less likely the adolescent will commit an illegal act. The youth, because he or she is attached emotionally to the parent, is less likely to take risks that an adolescent who is less attached would. Hirschi (1969) further explained that since a majority of adults do not condone delinquent activities, an adolescent who does commit illegal acts has less of an emotional attachment to his or her parent or guardians. Additionally, a youth who has a strong family bond may be less susceptible to participate in illegal behaviors for the simple fact that the family spends a lot of time together and the child is unable to participate in deviant behavior.

Cohen (1985) discussed social control and the manner in which society responds to disorder and the misbehavior of people. According to a study connecting substance abuse to social structure, Spooner (1990) agreed when a low quality of parental role-modeling, abuse or neglect within a family structure is prevalent, and a lack of communication is consistent, youths are then at a higher risk to become what society deems as delinquent.
Brook et al. (1990) also found a connection between peer and family role in substance abuse. For example, peer approval, at times, may act as a supplement for parental approval which can lead to the justification that “all the kids are doing it”. This then becomes a conflict of parental interest who are seeking to educate their children on the dangers of illegal substances, yet do not possess the established bond that their child has with their peers. Consequently, Spooner (1990) found that as an individual progressed into adolescence, the influence of family decreases as the influence of peers increases. Although an initial foundation of a strong family union can suppress this action from the life-long internal family bond, this action still remains to be one of the larger driving forces of adolescent substance abuse.

Further, Brook et al. (1990) also discussed childhood factors in their developmental model. A positive parent-child bond is essential for a relatively normal and healthy upbringing. However, the transition between childhood and adolescence is frequently a catalyst for drug use among youths. Often times, the less available the parent is to their child as they progress into adolescence enhances the risk for substance use. The lack of availability to meet the needs of the child plays a crucial role in placing a youth at high risk for substance abuse due to the loss of perceived quality in the parent-child relationship. It is also concluded that youths who maintained the positive relationship with parents and family are less likely internalize feeling and more likely to repeat positive traditions celebrated by the family core by associating with non-drug users (Brook et al., 1990; Hawkins et al., 1992).
Alcohol, Tobacco and Other Drug (ATOD) Programming

In communities throughout the country, alcohol, tobacco and other drug (ATOD) programming became prevalent due to the increasing number of people involved with illegal substance abuse. According to the National Institute on Drug Abuse (2010), the use of any illicit drug has risen to over 21% at the middle school age over the past five years. By the tenth grade, stagnant trends of approximately 37% of youths have used illegal substance. By the time these youths are seniors in high school, 48% of them have utilized illegal substances. As a result, programs to prevent and provide an intervention towards the use of ATOD’s have been created in order to create strategies to educate youths and their families regarding the dangers involved (Skiba, Monroe, & Wodarski, 2004).

Though the common outcome goals of prevention and intervention programs were to educate adolescents and keep them free of illegal substances, prevention and intervention serve different purposes in the attempt to decrease the number of adolescents that are currently using illegal substances.

Prevention and Intervention. Prevention programs centered on ATOD’s are utilized to educate youth prior to their exposure of these illegal substances. Prevention programs prevent or delay initial use of illegal substances, the major goal being to provide adolescents with the knowledge and skills needed to effectively resist social pressures of ATODs (Botvin et al., 2001). In recent years, schools present prevention programs to their students prior to adolescence, usually the elementary years, in hopes of mentally implanting a correlation of substance abuse and danger for when they reach the
middle school years. Midford (2010) stated that although throughout the 1960’s and 1970’s, prevention programs were very popular in schools, adolescents during those decades still showed high percentages of ATOD use.

According to Hawkins, Catalano and Miller (1992), early preventions approaches in ATOD programming focused upon abstinence and achieving abstinence. However, these programs proved to be ineffective due to the lack of long-term maintenance; in other words, teaching youths to simply abstain from illegal substances does not provide them with necessary life-long skills to prevent eventual use in later years in their lives (Botvin et al., 2001).

Wild et al., (2002) found that addictive behaviors place a strain on one’s physical and mental health. Juveniles who exhibited addictive behavior are often linked to criminal behavior as well (Terry, VanderWaal, McBride, & Van Buren, 2007). Furthermore, the authors found with improved substance abuse treatment in juvenile facilities, rates of recidivism will likely lower, all the while assisting youths with overcoming addictive behaviors.

Since the 1980’s prevention programs have taken a different turn. Although they targeted the same audience, the new strategy prepared youths with the appropriate skills to still be exposed to illegal substances, yet be equipped with the necessary skills to refuse them. These programs were heavily based social influence concepts that included the social theory approach as a primary prevention for adolescents (Midford, 2010).
Interventions will always be a necessity to reduce the amount of alcohol, tobacco, and other drugs in that the availability of these illegal substances will always be prevalent and available to youths (Hill, 2008). Whereas many times prevention programs targeted a number of illegal substances, other instances, intervention programs have targeted just one. Further, interventions should target individuals or populations with multiple risk factors if the prevalence of drug abuse is to be ultimately reduced through prevention efforts (Hawkins et al., 1992).

Hill (2008) found that interventions that target families, schools and individual life skills are effective in that they proved to have an impact of decreasing certain trends in adolescent substance abuse. Further, Hill (2008) attested that intervention programs are possible more effective when tailored to certain domains of culture and community, depending on the setting in which implementation takes place.

The use of ATOD’s by adolescents has been a serious problem that contains an alarming growth rate (Barnes, Welte, Hoffman, & Dintcheff, 1997; Johnston, O’Malley, & Bachman, 1994; Skiba et al., 2004; Marsiglia, Holleran & Jackson, 2000). Efforts to reduce substance abuse have taken many forms, yet target family, schools and community (Botvin et al., 2001). Youths entered ATOD intervention programs for a variety of reasons in existence prior to being enrolled in the program for illegal use of substance. These identifying factors have exhibited trends towards entering ATOD programs include alienation and rebellion (Austin, 2004).
Research-Based Prevention Approaches

Dedicating numerous studies to ATOD abuse among adolescents, individual studies by Botvin, along with additional studies with colleagues, has produced several conclusive explanations that showed etiological factors that enhance the initial use of ATOD’s include: social influences, influence of family and peers and influence of the media. According to Botvin (2000), early prevention approaches were based more on intuition than theory. In essence, prevention programs were not based upon scientific studies until recent years.

Currently, science-based prevention testing has been developed and implemented over the more recent decades to replace programs that were developed based upon the development of what may work in substance abuse prevention. Botvin (2001) stated, “prevention approaches were designed to (1) dispense factual information, (2) promote affective education, or (3) provide healthy alternatives to using drugs” (p. 887).

Social influence approaches. Social influence approaches are a direct result of media and peer association (Botvin, 2000). Further, the researcher concluded that there are three major components of the social influence approach: psychological inoculation, normative education, and resistance skills training. Psychological inoculation includes building up a high mental resistance to substances so that in the event that a youth were surrounded by poor influences, predisposed psychological opinions have already been formed regarding these substances and then youth is less likely to participate, regardless whether or not his or her peers participated.
Normative education revolves around what adolescents perceive as what the "norm" is in society. Evans, Hansen, and Mittelmark (1977) discussed the influence peers have on an individual in terms of normative behavior. In their 1977 study on adolescent smoking, Evans et al., reported that many non-smoking youths reported that they had indeed been smoking, which given the year, was not as uncommon as it is in today’s society. Evans et al., (1977) further explained that many students who reported being a smoker due to “peer group status”. In 1977, when smoking was still heavily advertised and many adults also smoked cigarettes, the psychology of the situation included youths looking “mature” or “cool” if they smoked. Resistance skills trainings included providing adolescents with the necessary tools to recognize high-risk situations, be aware of media influences and understand appropriate refusal skills (Botvin, 2000).

**Competence enhancement approaches.** According to Botvin (2000), competence enhancement approaches taught social skills to promote positive mental health. In his discussion of the competence enhancement approach in relation to drug use, the researcher concluded that drug use is conceptualized and an acquired and functional behavior learned through a process of modeling, imitation, and reinforcement. Poor personal and social skills, as previously described by Hawkins et al. (1988) and Burrows-Sanchez et al. (2009), can increase the likelihood of social influences promoting drug use.

Botvin (2000) concluded that studies testing the competency enhancement approach have demonstrated positive outcomes for decreasing the use of alcohol, tobacco and other drugs. Additionally, by use of longitudinal data, it was noted that effects of
competency enhancement approaches have proven to have long-lasting impacts on individuals to resist temptations and pressure of participating in illegal drug use.

**Program Models**

Several models have been in existence in the area of ATOD prevention and intervention, and there was significant evidence displaying a reduction of substance use and life problems in the year following treatment (Williams and Chang, 2000). In many studies on ATOD use, adolescents have received treatment in outpatient settings, while other offenders received treatment in short-term residential programs (Muck et al., 2001). Treatment models have been typically grouped into four different models (12-Step Treatment Approach, Individual/Family Counseling, Therapeutic Community Treatment Approach and Behavioral Treatment Approach), however, these models do show signs of overlap (Williams and Chang, 2000).

**Minnesota Model.** The 12-Step Treatment Approach also known as the Minnesota Model combines the principles of the 12 Steps of Alcoholics Anonymous and the basic principles of psychotherapy (Winters et al., 2000). Treatment were either residential or outpatient that range from 4 to 6 weeks of different treatment components. Individual counseling, group counseling, lectures and family therapy were all elements that assist clients with the recovery process. At the conclusion of treatment, participants were expected to continue treatment in outpatient facilities in order to assist with abstaining from any kind of relapse (Winters et al., 2000; Williams and Chang, 2000).
**Therapeutic Communities.** The therapeutic community treatment approach required the offender to live in a structured residential setting with other adolescents in similar predicaments. In these settings, the community, staff and residents played a major role as catalysts to recovery, often times in recovery themselves (Muck et al., 2001). Traditional therapeutic communities were characterized by confrontational group therapy, treatment phases, a tenure-based hierarchy, and long-term residential care (Huey Dye, Ducharme, Johnson, Knudsen, & Roman, 2009).

According to the National Institute on Drug Abuse (2011), “Peer influence, mediated through a variety of group processes are used to help individuals learn and assimilate social norms and develop more effective social skills”. Furthermore, peers surrounding one another throughout the recovery process at residential facilities typically followed the norms of that community, all the while offering one another support needed. The purpose of therapeutic communities was to provide safe, functional, and nurturing environments that many users have never been exposed to (Muck et al., 2001).

Therapeutic communities have repeatedly been recognized as an effective program model, even with new emerging technologies and studies (Huey Dye et al., 2009). Therapeutic communities were also known to have maintained a very flexible style of treatment that caters to the needs of the individual. Muck et al. (2001) discussed the therapeutic community treatment approach utilizing the community as a family surrogate and necessary supportive environment that was essential for adolescents as they learned to live a substance free lifestyle.
As in all treatment models, it was important that adolescent therapeutic community treatment and adult therapeutic community treatment are each categorized as separate entities. In their study, Terry et al. (2007) differentiated these treatment modifications for adolescents to include: shorter lengths of stay in the program; include the families in the treatment process; focus more on the positive influence in the adolescent’s life; a clearer understanding of one’s own behaviors and allowing the facilitators of the program to maintain all control over decisions and supervision of the program participants.

**Individual Counseling.** Individual counseling and family counseling wa another model utilized in ATOD intervention. Though less in cost, these outpatient programs usually lasted longer in duration (Williams and Chang, 2000). Within this model, the emphasis of family was placed upon the development and maintenance of substance use (Muck et al., 2001). Although there was little evidence to support the effectiveness of parent training, ATOD programs have improved the functionality of family life and decreased risk factors for adolescent substance use (Nelson, 1989).

At some schools, mental health counselors were employed to work one on one with students facing crisis or exhibiting addictive behaviors. Burrow-Sanchez and colleagues (2008) noted that such instances can be defining moments in the life of a youth being that a relationship and level of trust can be developed between youth and counselor. Further, this building sense of trust alleviated the tensions of the youth that have allowed for the counselor to reduce the risk of stress of the student to maintain a confident relationship.
Behavioral Treatment Approach. Behavioral treatment approach taught substance users to unlearn unhealthy habits of abuse (Muck et al., 2001). Callner (1975) referred to the behavioral treatment approach as a way of "counterconditioning" behaviors in order to reverse negative behaviors, especially with substance abuse. Further, another strategy when using the behavioral treatment approach was contingent reinforcement. Contingent reinforcement involved agreements or contracts between patient and counselor that meet attainable goals and slowly begin to alter behaviors by systems of recognition (Callner, 1975; Muck et al., 2001).

The prevalence of ATOD prevention programs within classrooms increased tremendously over the series of recent decades (Midford, 2009). Further, school and communities have embraced and were recognized for their efforts on combating the use of illegal substances. However, according to McBride, Midford and Farringdon (2000), encouraging schools to participate in most recent years has become increasingly difficult due to the current educational issues that demand academic excellence on academic assessments, thus leaving little time for other programs on the school agenda. Also, gaining buy-in and participation from parents has also been a challenge in implementing school drug prevention programs.

ATOD abuse has led to destructive and violent behavior among youths. Early signs of aggressive and deviant behavior are risk signals for young substance abusers (Hawkins et al., 1988). Spooner (1990) suggested that poor relationship with parents or parents who participated in violent behaviors have also been factors that have increased the use of ATOD’s and condone violent acts with adolescents. In essence, children were
mimicking the behaviors of their parents from a very early age, therefore, there was a high correlation of violent behavior and use of illegal substances if the adolescents grew up exposed to similar environmental factors. Further, participation in deviant behavior tended to precede drug use (Hawkins et al., 1998).

Coercion

Coercion has been defined as a form of institutionalized pressure that results with an individual entering treatment (Weisner, 1990). According to Anglin, Prendergrast, and Farabee (1998):

Coercion is not a single well-defined entity; it in fact represents a range of options of varying degrees of severity across the various stages of criminal justice processing. Coercion can be used to refer to such actions as a probation officer’s recommendation to enter treatment, a drug court judge’s offer of a choice between treatment or jail, a judge’s requirement that the offender enter treatment as a condition of probation, or a correctional policy of sending inmates involuntarily to a prison treatment program in order to fill the beds. In other cases, a treatment client’s merely being involved with the criminal justice system is sufficient for him to be brought under the umbrella of coercion. (p.4)

An underlying question regarding coercion is whether or not coerced treatment is effective (Klag et al., 2006). Often times, individuals questioned their autonomy, and whether or not their coercion into ATOD programs is ethical. For instance, previous studies were conducted to determine whether or not people should in fact be coerced, at
any level, into a treatment program (Muck et al., 2001; Wild et al., 2001; Wild et al., 1998; Wild, Newton-Taylor, 2001). These studies have been subject to much debate based upon the analyses of the treated persons all the while taking in to consideration the level of the coercion the participant has encountered.

Offenders entered treatment on several different levels of coercion. Perceived coercion involved the extent to which offenders believed how much choice they had in entering a treatment program (Prendergast, Greenwell, Farabee, & Hser, 2008). For example, if a person who entered treatment is not intrinsically motivated, then their risk of offending was higher than one who was ready to take advantage of a treatment program (Muck et al., 2001; Prendergast et al., 2008; Wild et al., 2001). Also, similar to the self-determination theory discussed in the study conducted by Gagne and Deci in 2005, unless the participant feels ownership in their treatment process, their chances of becoming a repeat offender is significantly higher that one who is determined to make a complete lifestyle change.

**Degrees of Coercion.** Anglin et al. (1998); Joe, Simpson and Broome (1998); and Wild et al. (2001) all agreed that both intrinsic and extrinsic motivation played important roles in both the treatment process and rates of recidivism. Failure to address both types of motivation has affected outcomes for participants. Previous literature on coercion and the differing levels of coercion focused on pressures of individuals to enter treatment for substance abuse by courts, prisons or parole boards (Prendergast et al., 2008). Further, Polcin and Weisner (1999) concluded from their study that the most
common sources of coercive social pressures were family members, and then followed by the legal system.

**High levels of coercion.** High levels of coercion into treatment programs frequently are related to the term “legal” coercion. For higher levels of coercion, often times in order for sanctions to be lifted, the offender was given the option of completing his or her sentence within a criminal justice facility or by entering a rehabilitation program of some sort, depending on the criminal offense. According to Klag, O'Callaghan, and Creed (2005), “legal coercion has become increasingly popular within the criminal justice system, and refers to a broad class of referral mechanisms involving diversionary programs” (p. 1779). With alternatives to serving time in a detention facility, offenders still were considered voluntary in that they had the choice to enter a treatment facility. However, the level of coercion was greater being that the alternative punishment may have been less appealing than a treatment program (Klag et al., 2005).

Weisner (1990) referred to high levels of coercion as diversion. Diversion transferred the individual from the criminal justice system to treatment prior to any sentencing. The offense was considered a crime, but the sentence was carried out in a treatment facility, rather than the criminal justice system. Additionally, unlike a substance abuser who voluntarily sought treatment and may have been faced with time spent on a waiting list, those exposed to high levels of coercion spent little or no time awaiting an available space for treatment (Klag et al., 2005).
Moderate levels of coercion. Moderate levels of coercion included recommendation of treatment in order to maintain employee status, or in the case of schools, as an alternative to out-of-school suspension. According to Weisner (1990), people were much more likely to enter a treatment program with some sort of external pressure. At the moderate level, individuals were confronted by their families, workplace or in the case of this study, their schools to enter a treatment program. Although there were alternatives, including serving time suspended from school or consequences at work, they were not ordered by a court of law to attend treatment nor did they voluntarily commit to attend treatment program.

Low levels of coercion. Low levels of coercion included participants more willing to enter a treatment program or voluntarily enter a treatment program. Joe et al. (1998) discussed the effects of intrinsic motivation with participants had on outcomes. Through their research, Joe and colleagues (1998) concluded that motivation was a predictor of post-treatment improvement and that low pre-treatment motivation was a predictor of early dropout from certain treatment programs.

Prendergast et al. (2008) argued that coerced treatment could only be effective if the person was truly motivated to change. From this, personal autonomy was examined along with whether or not a person who entered a treatment facility voluntarily produced higher outcomes of success than one who was coerced from a higher degree (Wild et al., 1998). Further, Wild et al. (2006) suggested that self-determination theory or whether or not the offender had the power to decide whether or not to enter treatment on their own, affected outcomes of program success. In any event, Wild and colleagues (2006)
presented a notion that those who had control of their treatment produced stronger outcomes.

**Pretreatment Characteristics.** Adolescents have been faced with a number of factors that determined the severity of their punishment or the number of days required to fulfill in treatment. Previous studies determined that a number of different pretreatment factors all influenced the youth. Also necessary and present for this study was the pretreatment characteristics in order to determine whether or not the levels of coercion affected the adolescent and their treatment.

Pretreatment characteristics examined by Rounds-Bryant, Kristiansen, and Hubbard, (1999) drew many interesting conclusions on their study on demographics and admission criteria, particularly in outpatient treatment programs. For outpatient treatment at facilities, almost 25% of those studied were referred to treatment from the legal system. 53% were referred by parents or friends and almost 10% were referred to outpatient treatment through school or employer. A mere 3% were self-referred. With such a low rate of self-referrals and previous studies concluding higher success rates for these participants, the need for additional exploration of coercive treatment is further validated.

Analyzing the statistics of this particular study and using them with degrees of coercion can create great concern. Joe et al., (1998); Predergrast et al., (2008); and Wild et al., (2006) all concluded that low degrees of coercion typically were the individuals who were intrinsically motivated to succeed in treatment and beyond. Therefore, the low number of self-referrals may act as a precursor to the outcomes for programming itself.
With the larger percentages of those in treatment who faced moderate and higher levels of coercion, a concern was focused on the cost of programs and whether or not compulsory programming was one that is cost effective based upon previous data available.

**Discussion of the Literature**

After reviewing the literature on adolescent substance abuse and the differing degrees of coercion within intervention programs for adolescents, several conclusions were drawn. Most importantly, is Hill’s (2008) recognition of adolescent access of illegal substances was and always will be available in society. The creation of programs to prevent and intervene as much as possible has been the most feasible solution to the problem. As Midford (2010) examined, previous decades were very receptive of substance abuse prevention and intervention programs. Even though countless studies were conducted with agreeable outcomes, there really has not been a significant decrease in the use of ATOD’s among the adolescent community.

Botvin et al. (2001) concluded that the use of ATOD’s is a learned behavior and an adolescents surrounding environment greatly contributed to whether or not an individual will engage in delinquent behavior. Further research can be conducted, perhaps focusing on risk factors for one particular group. For example, many previous researchers have described similar risk factors that may foreshadow drug use among individuals segregated into different categories of risk. Although it was possible to focus upon these risk factors from the time adolescents are toddlers, perhaps researching true
community programs that hold parents accountable for their adolescent children will provide a decrease of youth participation in illegal substance use.

Social control theories and social bonding theories emphasized the need for familial support and support of one's peers and community in order to lead a functioning and healthy life. Brook et al. (1990) have concluded that individuals with low family and parental involvement were more likely to seek acceptance from peers. Spooner (1990) emphasized that as a child progressed into adulthood, there was a natural decrease in family influence and an increase in peer influence. However, with a strong family foundational bond, initial internal bonds have surpassed any new peer pressures an adolescent may have faced concerning ATODs.

Furthermore, countless hours and dollars have been poured into prevention and intervention programs, as well as programs that were affiliated with the court system that alleviated a juvenile record for those youths who were caught using substances. Based on several studies, it was concluded that those with higher levels of coercion were more likely to become repeat offenders. It was necessary to make changes within these programs in order to present smaller percentages in rates of recidivism.

The overall perspective of the researcher concluded that previous studies conducted on adolescent substance abuse have been of great promise and good intent to alleviate the use of adolescent substance abuse in society. However, with civilization constantly changing through media and technology, attitudes and perspectives have changed as well. Many of these studies originated from the decade of the 1960's where youths are now parents and grandparents who themselves may have been categorized as
delinquent for their use of illegal substances. If these individuals were still using ATOD’s and also leading productive lives with modern day amenities, why would an adolescent growing up in the same household exhibit any different behavior?

Adolescents historically possessed the “nothing bad will happen to me” attitude, therefore focusing programming to provide information on the harms of illegal substances isn’t befitting for the population with a majority that cannot relate to health problems. Perhaps if a different perspective on programming were taken where the consequences were emphasized (meaning consequences of fines and jail time, not those of physical health consequences), adolescents will have truly realized what was at stake.
CHAPTER III: RESEARCH METHODOLOGY

The following chapter describes the methodology used to explore the impact of coercion on the outcomes of participants in a substance abuse setting. The research questions and hypotheses resulted from gaps in the literature, as well as the need to further examine the role coercion plays in intervention programs. This chapter begins with the research design, and continues with the target population and setting, instrumentation, sampling plan and procedure, ethical considerations, analysis methods, and concludes with the evaluation of this study’s research methods.

Research Design

This study used an exploratory quantitative research design utilizing pre (Appendix B) and post-program (Appendix C) surveys as instruments. Both youths and adults who attended the FACE IT\textsuperscript{SM} program were given both pre-program and post-program surveys to monitor changes in behavior and attitudes towards ATOD’s. This study is non-experimental in that variables were not manipulated and data was gathered based upon variables already in existence (School District of Palm Beach County, 2010).

The data collected was taken from only youth pre-program surveys and post-program surveys from the FACE IT\textsuperscript{SM} program and were utilized to determine if there were any differences based upon characteristics of participants prior to their entry into the program. The data collected for this study was obtained with permission through the FACE IT\textsuperscript{SM} program for utilization in this study. The pre-program surveys (T1) and the post-program surveys (T2) were collected from youth participants by the program and the researcher was then able to use the data for this study. Participants entered the FACE
IT\textsuperscript{SM} program at different levels of coercion. This depended upon the referral source of the participant: parent, school or court. From this, the investigator had an opportunity to explore whether compulsory treatment had an effect on the outcomes of the program.

The researcher collaborated on several occasions with the administrators of the FACE IT\textsuperscript{SM} program through several meetings and weekly phone conferences. There was an establishment of expectations at the start of the data collection. The researcher attended FACE IT\textsuperscript{SM} meetings at three different sites in Palm Beach County, Florida in order to gather observational clarity of the program prior to any data collection. Weekly meetings with the FACE IT\textsuperscript{SM} program personnel followed these observations to ensure data was being collected and provided updates to all members involved.

**Variables**

The independent variables included:

- Age (12-18 years of age)
- Grade (middle and high school students)
- Gender (male and female)
- Ethnicity (White, Black, Hispanic, Asian-American, and Other classification)
- Living arrangements (Both parent, only mother, only father, one parent and step-parent, and other living arrangements)
The dependent variable for this study included the reference source the participant had upon entrance into the program (parent, school, or court). The dependent variable acted as the level of coercion in that the referral source determined the number of sessions required for the participant to attend.

**Research Questions**

Q1. Does the sociodemographic background of program participants relate to institutional coercion/compulsory programming?

The sociodemographic background included: age, grade, gender, ethnicity, and the living arrangements of the youths. The researcher linked the sociodemographic background of participants to their level of coercion by utilizing a multiple ways analysis of variance (ANOVA). The results obtained indicated if there is any significance when measuring levels of coercion to sociodemographic data. Multiple ways of ANOVA was utilized for this question to eliminate any Type 1 errors that could possibly occur by using a pair sample t-test. ANOVA takes into account the number of groups being compared in this study, and provided the researcher with more certainty in concluding significance while analyzing multiple groups.
Q2. Do the institutional factors of program participants relate to institutional coercion/compulsory programming?

The institutional factors for this study were: number of days skipped school in four weeks; whether the youth felt schoolwork was meaningful; how interesting the courses were to the participants; importance of courses; how often participants enjoyed being in school and; how often participants did their best in school.

The researcher answered Research Question 2 by using a multivariate analysis of covariance (MANCOVA). This method of analysis was chosen so that each independent variable is addressed, analyzed and answered. Using a MANCOVA accounted for pre-test effects, and with no control of the participants in this study, the researcher found this form of analysis to be most appropriate to answer this question.

Q3. Are individual attitudes towards illegal substances program outcomes related to differing levels of coercion (low, medium, high)?

The questions asked for Research Question 3 pertaining to the attitudes of the youths were: how wrong is it to drink; how wrong is it to smoke cigarettes; how wrong is it to use smokeless tobacco; how wrong is it to smoke marijuana; how wrong is it to use other illegal drugs and; how wrong is it to use prescription drugs non-medically.

The researcher again utilized a MANCOVA in order to answer Research Question 3. The levels of coercion of attitudes towards illegal substances were analyzed in order to determine any significance in the results of this study. By utilizing the MANCOVA for this particular question, the classification of differences in group means in multiple
dependent variables (levels of coercion) occurred, all the while controlling for covariates within the study.

**Target Population and Setting**

The target population for this study was the youths who had attended at least five FACE IT℠ sessions in Palm Beach County. Youths who attended FACE IT℠ had experienced some form of institutional coercion (low, medium, and high) depending on their personal experience or offense.

Participants ranged from the ages of 12-18 years of age and were recorded as being in grades 6-12. These youths were required to have an adult present with them for the duration of the intervention. The program was open to students within the School District of Palm Beach County, however, it was also made available to students who attended private school.

A low level of coercion included those participants who were referred to the program by their parents and are labeled as “volunteer”. Those participants who experienced a medium level of coercion were referred to by their school after being associated with some sort of illegal substance on campus. These youths had chosen to participate in FACE IT℠ to avoid an extended period of out of school suspension. A high level of coercion involved those students who were referred to the program by a juvenile justice system. Each youth and parent who attended the FACE IT℠ sessions took both the pre and post-program surveys. The researcher collected information from
only the youth surveys, then disaggregated the data obtained in order to determine the effects of compulsory treatment on program participants.

**Instrumentation**

This study utilized both the T1 and T2 evaluation surveys developed by the FACE ITSM program. Both youths and their attending parent/guardian were administered the T1 surveys at the first session attended and the T2 at their final session, regardless of the number of sessions attended.

Youth participants answered a 25 question survey and the adult participants answered a 10 question survey. Although the number of questions differed for youth and adults, the domains were the same. The T1 and T2 surveys questioned the participants utilizing the same questions. The purpose of the surveys was to determine any significant changes in the domains over the period of time the participants attended the program.

The T1 and T2 surveys for the youth offenders included questions that involved the participant’s current use of illegal substances, their attitudes towards these substances, perceived risk and their communication with their parents or guardian. These anonymous surveys were administered to participants by the coordinators of the FACE ITSM program. After collection, these surveys were used by the researcher for this study.

**Domains.** The T1 and T2 surveys provided by FACE ITSM contained four domains for which there are a number of questions for participants to answer: 1) history of alcohol, tobacco and other drug use; 2) the attitudes towards alcohol, tobacco, and
other drug use; 3) the perceived risk of alcohol tobacco, and other drug use; and 4) adult-child communication and family practices.

For the surveys, first there were initial background questions pertaining to the personal background of the youth (independent variables) and their feelings towards school. The remainder of the questions were geared around each of the 4 domains. Sample questions taken directly from the T1 and T2 program participant surveys included:

- **Domain 1 (history of alcohol, tobacco and other drug use)**
  - On how many occasions (if any) have you had alcoholic beverages (beer, wine, or hard liquor) to drink — meaning more than just a few sips?
  - On how many occasions (if any) have you used marijuana (weed, pot) or hashish (hash, hash oil)?

- **Domain 2 (attitudes towards alcohol, tobacco, and other drug use)**
  - How wrong do you think it is to drink beer, wine, or hard liquor (e.g., vodka, whiskey, or gin) regularly?
  - How wrong do you think it is to smoke cigarettes?

- **Domain 3 (the perceived risk of alcohol tobacco, and other drug use)**
  - How much do you think teens risk harming themselves if they smoke marijuana regularly?
  - How much do you think teens risk harming themselves if they take one or two drinks of alcohol on a daily basis?
• Domain 4 (adult-child communication and family practices)
  o My parent(s)/guardian(s) usually asks if I’ve gotten my homework done.
  o If I skipped school, my parent(s)/guardian(s) would be likely to catch me.

The domains provided a basis for understanding the perceptions and attitudes of the youths who were attending the program, along with the relationships they had with their parents or guardians. These domains were measured from the T1 and T2 tests by the FACE IT\textsuperscript{SM} personnel to analyze where any changes within the domains had occurred. The researcher for this study took this information collected from the 131 participants and applied it to analyzing levels of coercion in substance abuse programs. The domains provided an organized template for determining whether levels of coercion played a role in recovery for the participants attending the FACE IT\textsuperscript{SM} program.

**Sampling Plan and Procedure**

The plan for this study involved a population of youths and their adult counterparts who attended the designated number of sessions. Participants attended for 5, 8, or 12 weekly sessions in the program, depending on their referral source (parent, school, or court). Participants were referred to FACE IT\textsuperscript{SM} through a different level of coercion.
A convenience sample, taken over a period of six months, was utilized in order to analyze the outcomes of 131 youths for the T1 and T2 surveys. A convenience sample is one in which a group of individuals are conveniently available for study (Fraenkel & Wallen, 2006). Participants who attended FACE IT<sup>SM</sup> had already been institutionally coerced into attending at either the low, medium, or high level, therefore, utilizing the data from the T1 and T2 surveys was considered a convenience sample.

**Ethical Considerations**

The data collection method for this research study was collected by an identifying code which was intended only for research. Ethical considerations included keeping all of the participant’s names unknown, even when linking the T1 and T2 surveys. Participants utilized a specific code to protect their identity in the program and for the purpose of research. The code utilized consisted of the initials of the youth’s mother and the numbers of their street address. When utilizing the T1 and T2 data, the researcher matched all participants by their code, thus having no knowledge of and of their personal information.

The researcher obtained permission through FACE IT<sup>SM</sup> to use the T1 and T2 data collected (Appendix A). IRB forms were submitted to the Lynn University Institutional Review Board. Permission was obtained by the Institutional Review Board (IRB) for the study through Lynn University. Data collection was not initiated until IRB approval was obtained. This research was considered a sub-study in that the researcher is using data and samples that have already been collected by the FACE IT<sup>SM</sup> program administrators for the purposes of the program. It was not necessary to obtain permission for the study.
through Palm Beach County School District since this data was approved for collection by the FACE IT<sup>SM</sup> program. Although this data is existing data from the FACE IT<sup>SM</sup> program, the researcher was utilizing it to address alternative initiatives, such as levels of coercion.

**Evaluation of Research Methods**

The following controlled variables were utilized for strength in the study:

**History.** This study required both the youths and the adults attending to work with their respective group facilitators. A problem could have occurred if there was lack of consistency in the delivery of the program or something as simple as a change of facilitators had occurred. The researcher minimized as many inconsistencies as possible, maintaining loyalty to the written script provided to facilitators to administer and attempting to keep the same facilitators with the same groups of youths and parents was noted as an important variable to the study.

**Maturity.** Being that there were no unexpected changes that occurred during the study, there was no threat to validity for maturation. Although psychological maturation of participants during the allotted sessions was a threat to validity, it was out of the control of the researcher.

**Testing (pre and post-test).** The testing in this study may have been affected being that participants were given the T1 survey at the beginning of their treatment and then administered a T2 survey once they had completed their allotted number of sessions. The T1 acted as a threat to validity since participants may have feared being truthful
about their attitudes and behaviors towards ATOD's. The T2 acted as a threat to validity given that the attitudes of the youths and the adults may not have been altered at all by attending the program. If this is the case, the answers provided by participants for the T2 post-test may not be valid. The T2 measured whether or not the behavior and attitudes of participants had transformed after attending the FACE ITSM program for the assigned number of sessions.

Additionally, for this particular study, the researcher did not have any control over the data utilized for this study. Therefore, any inconsistencies or coding errors acted as a threat to validity due to the lack of control of the participant survey collection and data entry.

**Selection.** This variable tied very well into this study because of its relation to entry of the program. Selection pertains to the possibility that groups in a study may have possessed different characteristics and that those differences may have affected results. Since this study was studying the different levels of coercion, the entry method into the program was different at three different levels (low, medium, and high).

**Mortality.** Mortality refers to the loss of participants to a study. Participants attended FACE ITSM under three possible circumstances: voluntarily; as an alternative to suspension (aka coercion); or as ordered by Youth Court. FACE ITSM has a required attendance. Therefore the mortality rate within the program did not pose a considerable threat to the study. If participants did not attend their sessions, they were then faced with an alternative punishment. Being that an adult was required to attend the sessions with
the youth, the mortality rate was deemed to be significantly lower than a program that
does not require adult participation.

**Hawthorne Effect.** The Hawthorne Effect refers to participants involved in an
experiment who possess awareness that they are part of an intervention (Gillespie, 1991).
Participants in the FACE IT℠ program were asked questions on the T1 and T2 surveys
pertaining to their attitudes and behaviors pertaining to illegal substances. Due to
skepticism pertaining to who the recipients of the completed surveys were, the
Hawthorne Effect may have contributed to a lack of truthfulness. This may have posed a
threat to the outcomes of the study.

**Summary**

This study explored the outcomes of a program known as a prevention and early
intervention to substance abuse for youth participants enrolled in the FACE IT℠
program. The sample size was taken over a period of six months and produced 131
participants in Palm Beach County, Florida who had completed both the T1 surveys prior
to the program and T2 surveys upon exiting the program.

Participants of FACE IT℠ had motivation to complete the program so that they
were able to resume their normal routines, including not missing days of school due to
suspension or time spent in a youth correction facility. A strong limitation to the
methodology included the responses of participants for the T1 and T2 surveys.
Presuming that the surveys could further impact their situations, there is no way in
determining if the youth participants were answering survey questions openly and
honestly. It could be likely that students of this study answered survey questions based upon the desired results of the program and not based upon their true feelings.
Chapter 4 summarizes results for the research questions, including tables and discussions. The chapter will begin with a description of the sample statistics and then focus on each individual research question.

Sample Demographics

A total of 131 youth participants of the FACE IT® program completed both the T1 and T2 surveys. All respondents attended either 5, 8, or 12 sessions at one of three designated sites within Palm Beach County, Florida. Each youth participant was required to be accompanied by an adult.

Participants ranged in age from 12 to 18 years, with the highest percentage of participants being 15 years old at almost 30% (Table 4-1). The largest population of grade level was 10th grade at 28%. The majority participants were high school level, with only 18% of participants enrolled in middle school (Table 4-2).

Table 4-1

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>3</td>
<td>2.3</td>
</tr>
<tr>
<td>13</td>
<td>7</td>
<td>5.3</td>
</tr>
<tr>
<td>14</td>
<td>23</td>
<td>17.6</td>
</tr>
<tr>
<td>15</td>
<td>37</td>
<td>28.2</td>
</tr>
<tr>
<td>16</td>
<td>25</td>
<td>19.1</td>
</tr>
<tr>
<td>17</td>
<td>28</td>
<td>21.4</td>
</tr>
<tr>
<td>18+</td>
<td>8</td>
<td>6.1</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 4-2

FACE IT<sup>SM</sup> Youth Grade

<table>
<thead>
<tr>
<th>Grade</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th</td>
<td>1</td>
<td>.8</td>
</tr>
<tr>
<td>7th</td>
<td>5</td>
<td>3.8</td>
</tr>
<tr>
<td>8th</td>
<td>17</td>
<td>13.0</td>
</tr>
<tr>
<td>9th</td>
<td>24</td>
<td>18.3</td>
</tr>
<tr>
<td>10th</td>
<td>37</td>
<td>28.2</td>
</tr>
<tr>
<td>11th</td>
<td>21</td>
<td>16.0</td>
</tr>
<tr>
<td>12th</td>
<td>26</td>
<td>19.8</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Among the participants, 83 were male and 48 were female. Eighty-seven participants were White, non-Hispanic; 8 were Black; 23 were Hispanic; 4 were Asian-American; and 8 were classified as other. There was one respondent who did not answer the question of ethnicity.

Table 4-3

FACE IT<sup>SM</sup> Participant Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>83</td>
<td>63.4</td>
</tr>
<tr>
<td>Female</td>
<td>48</td>
<td>36.6</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 4-4

*FACE IT*® Participant Ethnicity

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, Non-Hispanic</td>
<td>87</td>
<td>66.4</td>
</tr>
<tr>
<td>Black</td>
<td>8</td>
<td>6.1</td>
</tr>
<tr>
<td>Hispanic</td>
<td>23</td>
<td>17.6</td>
</tr>
<tr>
<td>Asian American</td>
<td>4</td>
<td>3.1</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>6.1</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>.8</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Participants were asked with whom they live. Forty-one percent responded that they live with both parents. Participants who live with just their mother were recorded at 30% and 9% with only their father. Approximately 20% of participants were residing with a parent and step-parent or recorded living in other arrangements.

Table 4-5

*FACE IT*® Participant Domicile

<table>
<thead>
<tr>
<th>Domicile</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both Parents</td>
<td>54</td>
<td>41.2</td>
</tr>
<tr>
<td>Mother Only</td>
<td>40</td>
<td>30.5</td>
</tr>
<tr>
<td>Father Only</td>
<td>12</td>
<td>9.2</td>
</tr>
<tr>
<td>Mother and Stepfather</td>
<td>13</td>
<td>9.9</td>
</tr>
<tr>
<td>Father and Stepmother</td>
<td>5</td>
<td>3.8</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>5.3</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Research Questions

Research Question 1. Does the sociodemographic background of program participants relate to institutional coercion/compulsory programming?

The linking of sociodemographic backgrounds to institutional coercion was tested by utilizing the following variables: age, grade, gender, ethnicity, and living arrangements. Pre-program characteristics of these youth participants and their referral source were selected as variables. The identification whether youths and their parents were coerced into the FACE ITSM program was based upon their pre-program characteristics.

Multiple ways of ANOVA was conducted to determine if there was a relation of the effect of coercion (parent, school, or court) to sociodemographic background. All categories were measured and there was no indication of a significant effect on sociodemographic background for the five dependent variables. When measured, age of participant \( F(2, 128) = .057, p > .05 \); grade \( F(2, 128) = 1.525, p > .05 \); gender \( F(2, 128) = .869, p > .05 \); ethnicity \( F(2, 128) = .272, p > .05 \); and living arrangements \( F(2, 128) = .486, p > .05 \). Being there were no significant data displayed between groups, the researcher did not utilize post hoc testing to assess differences within groups.

These results suggested that referral source does not relate to sociodemographic background when youths are referred to the FACE ITSM program. Specifically, the results indicated that regardless of the sociodemographic background of the youth, the outcomes on those referred by parent, school or court have no significance (Table 4-6).
Table 4-6

Relation of sociodemographic background to coercion

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2</td>
<td>.057</td>
<td>.945</td>
</tr>
<tr>
<td>Within Groups</td>
<td>128</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2</td>
<td>1.525</td>
<td>.222</td>
</tr>
<tr>
<td>Within Groups</td>
<td>128</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2</td>
<td>.141</td>
<td>.869</td>
</tr>
<tr>
<td>Within Groups</td>
<td>128</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2</td>
<td>.272</td>
<td>.762</td>
</tr>
<tr>
<td>Within Groups</td>
<td>128</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living Arrangements</td>
<td>2</td>
<td>.486</td>
<td>.616</td>
</tr>
<tr>
<td>Between Groups</td>
<td>128</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Research Question 2. Do the institutional factors of program participants relate to institutional coercion/compulsory programming?

Institutional factors for this study included the following: the number of days the participant has skipped school in the past month, attitude towards schoolwork, interest in coursework, importance of school for the future, attitude towards school itself, and how often the participant did their best work in school.

These institutional factors were measured against the referral source to the FACE ITSM program. Twenty-five youths were court-ordered into the program, 90 were referred by their schools, and 16 youths had been referred by their parents.
The second research question utilized a multivariate analysis of covariance (MANCOVA) with results from T1 surveys as covariates, T2 surveys as dependent variables, and coercion as the fixed factor. The institutional factors measured for both the pre and post-program surveys were: the number of days the participant has skipped school in the past month, attitude towards schoolwork, interest in coursework, importance of school for the future, attitude towards school itself, and how often the participant did their best work in school cofactor for all dependent variables resulted with no significance.

MANCOVA was employed because it was the intention to differentiate all six groups of institutional factors in relation to coercion. Furthermore, the MANCOVA was used to set forth the necessitated use of planned comparisons. This procedure also made it possible to determine the combined variance accounted for in all of the dependent variables (Table 4-7).

MANCOVA results indicated the following: for number of days skipped school within the last month, Wilks’ $\lambda=.991$, $F(6, 117) = 9.91$, $p>.05$; attitudes towards schoolwork Wilks’ $\lambda=.979$, $F(6, 117) = .860$, $p>.05$; interest in coursework Wilks’ $\lambda=.932$, $F(6, 117) = .211$; importance of school for the future Wilks’ $\lambda=.974$, $F(6, 117) = .797$; attitude towards school itself Wilks’ $\lambda=.958$, $F(6, 117) = .532$; and how often the participant did their best work in school Wilks’ $\lambda=.950$, $F(6, 117) = .418$.

The MANCOVA revealed no significance multivariate main effect for the measured dependent variables. Wilks’ Lambda was calculated to determine a generalized variance for the entire set of dependent variables. The results of the Wilks’ Lambda were all $p>.05$ level, therefore showing no significance for institutional factors on level of
coercion.

Table (4-7)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>How wrong is it to drink</td>
<td></td>
<td>2</td>
<td>.523</td>
</tr>
<tr>
<td>Contrast</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>121</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How wrong is it to smoke cigarettes</td>
<td></td>
<td>2</td>
<td>.770</td>
</tr>
<tr>
<td>Contrast</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>121</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How wrong is it to use smokeless tobacco</td>
<td></td>
<td>2</td>
<td>.535</td>
</tr>
<tr>
<td>Contrast</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>121</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How wrong is it to smoke marijuana</td>
<td></td>
<td>2</td>
<td>1.102</td>
</tr>
<tr>
<td>Contrast</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>121</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How wrong is it to use other illegal drugs</td>
<td></td>
<td>2</td>
<td>.993</td>
</tr>
<tr>
<td>Contrast</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>121</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How wrong is it to use Rx drugs non-medically</td>
<td></td>
<td>2</td>
<td>.616</td>
</tr>
<tr>
<td>Contrast</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>121</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Research Question 3.** Are individual attitudes towards illegal substances program outcomes related to differing levels of coercion (parent, school, and court)?

In order to obtain any knowledge on whether attitudes towards illegal substances before and after treatment programs are affected based on levels of coercion, paired sample statistics were utilized. Six questions taken from the pre and post-surveys were examined for attitude: how wrong is it to smoke marijuana, how wrong is it to drink alcohol, how wrong is it to smoke cigarettes, how wrong is it to use illegal drugs, how wrong is it to use prescription drugs, and how wrong is it to use smokeless tobacco (Table 4-8).

MANCOVA was also utilized for the third research question due to the use of pre and post-test questions taken from youth surveys. Again, the Wilks’ Lambda was
calculated to determine a generalized variance for the entire set of dependent variables. The results of the Wilks’ Lambda were all $p > .05$ level, therefore showing no significance for institutional factors on level of coercion.

MANCOVA results indicated the following: how wrong is it to smoke marijuana Wilks’ $\lambda = .984$, $F(6, 116) = .927$; how wrong is it to drink alcohol Wilks’ $\lambda = .986$, $F(6, 116) = .947$; how wrong is it to smoke cigarettes Wilks’ $\lambda = .996$, $F(6, 116) = .999$; how wrong is it to use illegal drugs Wilks’ $\lambda = .915$, $F(6, 116) = .108$; how wrong is it to use prescription drugs Wilks’ $\lambda = .913$, $F(6, 116) = .095$; and how wrong is it to use smokeless tobacco Wilks’ $\lambda = .997$, $F(6, 116) = .999$. 
Table 4-8

*Attitudes in relation to coercion*

**Institutional Factors in Relation to Coercion**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>School skipped in last four weeks</td>
<td>300.614</td>
<td>2</td>
<td>150.307</td>
<td>.665</td>
<td>.516</td>
</tr>
<tr>
<td>Is Schoolwork meaningful &amp; important</td>
<td>27565.161</td>
<td>122</td>
<td>225.944</td>
<td>.279</td>
<td></td>
</tr>
<tr>
<td>Importance of courses later in life</td>
<td>558.535</td>
<td>2</td>
<td>279.268</td>
<td>1.291</td>
<td>.279</td>
</tr>
<tr>
<td>How interesting are your courses</td>
<td>26386.709</td>
<td>122</td>
<td>216.284</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance of courses later in life</td>
<td>703.313</td>
<td>2</td>
<td>351.656</td>
<td>.740</td>
<td>.479</td>
</tr>
<tr>
<td>How often did you enjoy being in school</td>
<td>57968.661</td>
<td>122</td>
<td>475.153</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How often did you do best work in school</td>
<td>933.512</td>
<td>2</td>
<td>466.756</td>
<td>1.175</td>
<td>.312</td>
</tr>
<tr>
<td>Importance of courses later in life</td>
<td>48470.761</td>
<td>122</td>
<td>397.301</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How often did you enjoy being in school</td>
<td>742.119</td>
<td>2</td>
<td>371.059</td>
<td>.782</td>
<td>.460</td>
</tr>
<tr>
<td>How often did you do best work in school</td>
<td>948.240</td>
<td>2</td>
<td>474.120</td>
<td>1.202</td>
<td>.304</td>
</tr>
</tbody>
</table>

The F tests the effect of “who referred you to the FACE IT℠ program”.

**Summary**

The summary of research questions concluded that no matter the level of institutional coercion (low, medium, or high), there is no substantial data that indicated any significance regarding the outcomes of the FACE IT℠ program. The first research question indicated that age is the variable that comes closest to being significant, yet, still illustrated that it does not show any effects on program outcomes. Utilizing information from pre and post-tests for the second and third research questions has exposed evidence
that coercive measures in relation to institutional factors and attitudes towards ATODs do not have significant impacts on program outcomes. From this information, there was no need for post-hoc testing for all of the research questions. Post-hoc testing compares within groups and being there was no significance between the data extracted from the T1 and T2 data, there was no need to further investigate comparisons within specific variables.

The first research question indicated no significance between sociodemographic background and the level of institutional coercion that was experienced by the youth upon entering the program. In gaining the knowledge of this information, the researcher concluded that no matter the background of the participant and their level of coercion, the program has proven to be effective for all participants.

The second research question examined institutional factors and level of coercion. Based on information taken from T1 and T2 program surveys, there was no significance displayed in the data that determined that institutional factors of program participants related to institutional coercion for this particular study. Therefore, although compulsory programming was a variable in the study on three different levels, participant outcomes displayed no effect based on those variables.

The third research examined the attitudes towards illegal substances in relation to institutional coercion. Data taken from pre-program and post-program surveys demonstrated no significance in relating individual attitudes of illegal substances to differing levels of coercion (parent, school, and court). Again, although levels of coercion acted as the dependent variables, outcomes displayed no significance on program participants.
The overall results of the research questions revealed that this program is effective for all participants, regardless of their level of coercion. For the FACE IT℠ program, this information is very useful in strengthening the core foundations of the program to verify the effectiveness of the program to all participants. No matter the background or family dynamics and offense of each youth, this program is indicating a successful outcome for all possible program participants.
Chapter V: Discussion

The purpose of this study was to explore whether different levels of institutional coercion have an effect on program outcomes for alcohol, tobacco and other drug treatment programs. This research further explored whether compulsory programming is truly effective for youths or if prevention and early intervention programs are ineffective, causing higher rates of recidivism for youth participants. This study utilized data from the FACE IT\textsuperscript{SM} program, a youth prevention and intervention program administered through the School District of Palm Beach County.

In this study, coercion was examined in three different levels of referral to programming: low (parent), medium (school), and high (court). Coercion is defined as a form of institutionalized pressure that results with an individual entering treatment (Weisner, 1990). The intention of the study was to measure the effects of coercion on the outcomes of a sample population who attended the FACE IT\textsuperscript{SM} program to explore whether the level in which they were coerced played a significant role on the outcomes of the study.

The levels of coercion were measured with pre-program characteristics gathered through a survey administered to all participants. The characteristics included sociodemographic data, institutional factors, and attitudes towards ATODs. Participants attended their designated number of sessions and were then administered a post-program survey. The results of the pre and post-program statistical data were explored to
determine whether the level of coercion, along with pre-program characteristics, institutional factors and attitudes, played a significant role in the treatment of participants.

The results from the research of this study showed no significance at any level of coercion for the FACE IT\textsuperscript{SM} program when answering the research questions. Each question explored the outcomes of institutional coercion on the participants of the FACE IT\textsuperscript{SM} program. Ultimately, all outcomes disagreed with the research explored prior to the analysis of the actual data with the exception of Hill (2008), who found interventions that target families are more effective. FACE IT\textsuperscript{SM} requires the attendance of both youth and adult in order to successfully complete the program, which can be the missing component in successful treatment.

A common theme among the research examined prior to the collection of data led the principal investigator to believe that coercion would play a major role in outcomes of the participants of the FACE IT\textsuperscript{SM} program. However, the data showed no significance when measuring levels of coercion to sociodemographic backgrounds of participants, institutional factors of participants and the attitudes of individuals towards illegal substances.

This study explored different levels of coercion and analyzed results to implicate the effects of institutional pressure on program participants on program outcomes. In the past, institutional coercion has been a topic of much scrutiny. Critics of institutional coercion have argued that those who are forced into programming through compulsory measures feel a loss of autonomy, therefore the individual is unmotivated and the program is deemed ineffective for those individuals (Muck et al., 2001; Wild et al., 1998;
Wild et al., 2001; Wild, Newton-Taylor, 2001). However, the results of this study implicated that no matter the level of coercion, participants are showing outcomes that illustrate the level of coercion has no significant effect upon the participants.

Botvin (2000) examined the nature of youths and their experiences with ATOD’s and found that preventative measures are effective when reaching youths in a school setting due to the large number of individuals that are capable of being reached. FACE ITSM is a district funded program that is administered on school sites. Schools within the district were able to refer students caught with illegal substance on campus to the program, therefore, participants remained in the school setting for the program all the while making it available to all students within the district.

Research has shown that youths who were surrounded by both peers and adults who did not condone the use of illegal substances has resulted in a lower risk towards substance abuse and a lifelong skill set to keep these same attitudes of these individuals (Botvin, 2000). Parent participation was mandatory in order to successfully complete the FACE ITSM program, forcing students and parents to face this issue together, learning tactics to overcome illegal substance abuse as a family unit.

For this study, the researcher utilized participants from the FACE ITSM program and measured levels of coercion based upon three questions. These questions measure levels of coercion to sociodemographic statistics that utilized the following variables: 1) age, grade, gender, ethnicity, and living arrangements; 2) institutional factors that include the number of days the participant has skipped school in the past month, attitude towards schoolwork, interest in coursework, importance of school for the future, attitude towards
school itself, and how often the participant did their best work in school; and 3) attitudes towards illegal substances, including six questions taken from the pre and post surveys were examined for attitude: how wrong is it to smoke marijuana, how wrong is it to drink alcohol, how wrong is it to smoke cigarettes, how wrong is it to use illegal drugs, how wrong is it to use prescription drugs, and how wrong is it to use smokeless tobacco.

**Cost reduction**

In order to justify the program’s validity for this study, it was important to determine whether the outcomes for participants were effective and that the cost of the program was proving to be worthy. Klag et al. (2005) discussed high levels of coercion into programming causing possible higher rates of recidivism, due to a low level of motivation by the participant. By researching specific patterns of this program, the benefits for future programs plays a significant role in obtaining grants and producing realistic results that are financially worth the time and effort. From there, it will be notable to decide whether or not the program is worthy of practice.

This study of the FACE ITSM program demonstrated no significance in any outcomes when measured with sociodemographic data, institutional factors, and attitudes towards illegal substances. It has been implied that youth drug and alcohol treatment programs costs the public money. At the same time, incarcerating youths over these crimes is also costly to society. Though there are studies arguing that compulsory treatment goes against the basics rights of humans, the bottom line is cost and whether providing treatment at any level of coercion is a financially feasible based upon the results of this study. Treatment for substance abuse is high-costing and it is important
that current treatment programs are targeting the proper strategies to enable low rates of recidivism (Hawkins et al., 1992). Further research can be conducted to see the actual cost a substance abuser is to society financially. This data can then be associated with coercion and familial relations.

In this study, evidence has proven that levels of coercion showed no significance on program outcomes. According to Wild et al. (1998), studies have been conducted to determine whether or not coercing adolescents on any level is worth the financial burden society because youths may not be motivated to change their behavior. This would then cause high rates of recidivism, where youths would again caught using illegal substances. However, the outcomes of this study have proven otherwise and the funds that FACE IT™ receives have confirmed to be more than their worth.

Supporters of treatment programs for youths have found that the cost benefits to ATOD programming are substantial (Gerstein & Harwood, 1990). Clinicians who have responded to opposing forces of compulsory planning have been noted for recommending professionals having the right to exercise unrestricted power over citizens in need of treatment (Wild et al., 1998). In other words, high levels of coercion are both cost-effective and produce positive results in minimizing the number of repeat offenses among participants. Yet again, this study has proven an effective treatment program for all individuals, regardless of their level of coercion.
Limitations

FACE IT™ is currently implemented in four school districts throughout the United States: Palm Beach County, FL., Pinellas County, FL., Sumner County, TN., and Chicago, IL. However, this study was only conducted in Palm Beach County, Florida and only to a small sample population of 131 participants, therefore, the researcher does consider this to be a limitation to this particular study.

The T1 and T2 surveys utilized for this study were taken from the actual surveys administered to youths who were attending the FACE IT™ program. This can be categorized as another limitation to this study due to the possibility of these participants responding to the survey in a manner that is not truthful for fear of not completing the program or in the event of any sort of repercussion for not displaying enough progress when completing the post-tests. Although the surveys did not have the names of the youths on them, a special code was administered for the purpose of research which may have influenced responses to questions. This could alter the true outcomes of the programs because the participants may not be completely truthful.

An additional limitation to this study is from the data collected and the lack of control and access the researcher had to the data. The researcher of this study inherited the data for the 131 participants from the FACE IT™ program administrators. The data was inputted into the Statistical Package for the Social Sciences (SPSS) by the FACE IT™ administrators; however, the researcher was faced with careful examination of the data for the possibility of any coding errors prior to any analyses. Although the FACE IT™ program administrators were extremely cooperative and supportive with this study,
the control of the actual numbers was not in the hands of the researcher from the beginning of data collection.

**Recommendations for Future Research**

Recommendations for future research revolve around the dynamics of the FACE ITSM program. After a thorough review of the literature, the researcher was unable to locate similar programming that requires the weekly involvement of parent or guardians. This particular study showed no significance in the outcomes, therefore future research in the area of familial involvement is recommended.

The requirement for participation of a parent or guardian for the FACE ITSM program showed no significance on program outcomes for all of the research questions. Future studies regarding the role of parental participation in substance abuse programming is a necessary recommendation. The researcher highly recommends the parental component for future research of youth prevention and intervention programs.

Additionally, examining the outcomes of youth prevention and intervention programs that occur on school sites will also be useful for future research. Botvin (2000) explored the effects of programming on school campuses and found the success rate of youth programming shows great significance in outcomes. FACE ITSM is administered at school sites and has shown that no matter the level of coercion, this program can be successful for all youths who attend at these school sites while being accompanied by a parent or guardian.
For future research, this study can continue to monitor participants well beyond their treatment period to determine whether levels of coercion plays a significant role beyond the required 5, 8, or 12 week sessions required for treatment. The purpose of this would be to determine rates of recidivism for offenders, and utilizing their level of coercion of their previous offense and using their level of coercion into the program for their most current offense.

Implications for Practice

FACE IT℠ utilized parent or guardian participation in order for all youths to complete the required sessions. Although the researcher had analyzed a number of programs for youths with a history of ATOD use, the FACE IT℠ program utilized the parent/guardian mandatory attendance factor for the program. Based on the findings in this study, recommending other substance abuse programs to follow the parental requirement for FACE IT℠ is highly recommended.

It can be hypothesized that although participants were categorized under three different levels of coercion, the parental component enabled all statistical outcomes to be non-significant in this study. This can implicate that even the participant with the most severe offense can be categorized with a participant with a less serious infraction for status of recovery. The component that all participants of the FACE IT℠ program share is their parent or guardian attended each session in order to complete the required number of sessions. Future practice should include and recommend the parental component for future programming.
REFERENCES


Midford, R. (2010). Drug prevention programmes for young people: Where have we been and where should we be going? Addiction, 105(10), 1688-1695. doi:10.1111/j.1360-0443.2009.02790.x


APPENDIX A: INSTITUTIONAL REVIEW BOARD APPROVAL
October 27, 2011

Robyn Klein

Dear Robyn:

The submission that you have submitted, "Community-based Substance Abuse Program Outcomes for Coerced Versus Volunteer Participants" has been granted for expedited approval by the Lynn University's Institutional Review Board.

You are responsible for complying with all stipulations described under the Code of Federal Regulations 45 CFR 46 (Protection of Human Subjects). This document can be obtained from the following address:

http://phrp.nihtraining.com/users/login.php

Form 8 (Termination Form) IRB Form 8: IRB Report of Termination of Project (.pdf, 162K) needs to be completed and returned to Ms. Teddy Davis at [redacted] when you fulfill your study. You are reminded that should you need an extension or report a change in the circumstances of your study, an additional document must be completed.

For further information, please click on the following
   http://www.hhs.gov/ohrp/humansubjects/anprmchangeable.html

Good luck in all your future endeavors!

Warmest regards,

Dr. Theodore Wasserman

Dr. Theodore Wasserman
IRB Chair

Cc: Dr. G. Cox
   File #2011-010
   Dr. A. Kosnitzky
   Dr. V. Storey

/td
APPENDIX B: YOUTH POST-PROGRAM SURVEY

Survey Instrument
**FACE IT℠ YOUTH PROGRAM PRE-SURVEY**

<table>
<thead>
<tr>
<th>FACE IT℠ Location</th>
<th>Date: 1/20</th>
<th>Participant ID:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How old are you?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O 11</td>
<td>O 12</td>
<td>O 13</td>
</tr>
<tr>
<td>2. What grade are you in?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O 6th</td>
<td>O 7th</td>
<td>O 8th</td>
</tr>
<tr>
<td>3. Are you a male or female?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O Male</td>
<td>O Female</td>
<td></td>
</tr>
<tr>
<td>4. What ethnicity do you consider yourself to be?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O White, Non-Hispanic</td>
<td>O Asian American</td>
<td></td>
</tr>
<tr>
<td>O Black</td>
<td>O Native American</td>
<td></td>
</tr>
<tr>
<td>O Hispanic</td>
<td>O Other</td>
<td></td>
</tr>
<tr>
<td>5. Who do you live with?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O Both parents</td>
<td>O Mother and stepfather</td>
<td></td>
</tr>
<tr>
<td>O Mother only</td>
<td>O Father and stepmother</td>
<td></td>
</tr>
<tr>
<td>O Father only</td>
<td>O Other</td>
<td></td>
</tr>
<tr>
<td>6. Who referred you to FACE IT℠?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O Parent(s)</td>
<td>O Court</td>
<td></td>
</tr>
<tr>
<td>O School</td>
<td>O Other</td>
<td></td>
</tr>
<tr>
<td>7. How many sessions are you required to attend?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O 5</td>
<td>O 6</td>
<td>O 7</td>
</tr>
<tr>
<td>8. During the LAST FOUR WEEKS how many whole days of school have you skipped or cut?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O 0</td>
<td>O 1-2</td>
<td>O 3-4</td>
</tr>
<tr>
<td>9. How often do you feel that the schoolwork you are assigned is meaningful and important?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>10. How interesting are most of your courses?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Dull</td>
<td>Slightly Interesting</td>
<td>Quite Interesting</td>
</tr>
<tr>
<td>11. How important do you think the things you are learning in school are going to be for your later life?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Important at all</td>
<td>Slightly Important</td>
<td>Quite Important</td>
</tr>
<tr>
<td>12. Now, thinking back over the past year in school, how often did you...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Enjoy being in school?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>B. Hate being in school?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>C. Try to do your best work in school?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
</tbody>
</table>

**ALCOHOL, TOBACCO, AND OTHER DRUG USE**

The next section asks about your experience with alcohol, tobacco, and other drugs. Remember, your answers are confidential.

13. On how many occasions (if any) have you had alcoholic beverages (beer, wine, or hard liquors) to drink — meaning more than just a few sips?
   - A. Number of occasions in your LIFETIME? | O 0 | O 1-2 | O 3-5 | O 6-9 | O 10-19 | O 20-39 | O 40 or more
   - B. Number of occasions in the past 30 DAYS? | O 0 | O 1-2 | O 3-5 | O 6-9 | O 10-19 | O 20-39 | O 40 or more
14. On how many occasions (if any) have you used smokeless tobacco (chew, snuff, plug, dipping tobacco, or chewing tobacco)?
   - A. Number of occasions in your LIFETIME? | O 0 | O 1-2 | O 3-5 | O 6-9 | O 10-19 | O 20-39 | O 40 or more
   - B. Number of occasions in the past 30 DAYS? | O 0 | O 1-2 | O 3-5 | O 6-9 | O 10-19 | O 20-39 | O 40 or more
15. How frequently have you smoked cigarettes during the past 30 days?
   - O Not at all
   - O About 1 pack per day
   - O About 1-2 packs per day
   - O About 2 packs per day
   - O About 3 packs or more per day
16. On how many occasions (if any) have you sniffed glue, breathed the contents of an aerosol spray can, or inhaled other gases or sprays for the purpose of getting high?
   - A. Number of occasions in your LIFETIME? | O 0 | O 1-2 | O 3-5 | O 6-9 | O 10-19 | O 20-39 | O 40 or more
   - B. Number of occasions in the past 30 DAYS? | O 0 | O 1-2 | O 3-5 | O 6-9 | O 10-19 | O 20-39 | O 40 or more
17. On how many occasions (if any) have you used marijuana (weed, pot) or hashish (hash, hash oil)?
   - A. Number of occasions in your LIFETIME? | O 0 | O 1-2 | O 3-5 | O 6-9 | O 10-19 | O 20-39 | O 40 or more
   - B. Number of occasions in the past 30 DAYS? | O 0 | O 1-2 | O 3-5 | O 6-9 | O 10-19 | O 20-39 | O 40 or more
18. On how many occasions (if any) have you used cocaine or crack?
   - A. Number of occasions in your LIFETIME? | O 0 | O 1-2 | O 3-5 | O 6-9 | O 10-19 | O 20-39 | O 40 or more
   - B. Number of occasions in the past 30 DAYS? | O 0 | O 1-2 | O 3-5 | O 6-9 | O 10-19 | O 20-39 | O 40 or more
19. On how many occasions (if any) have you used methamphetamine (meth, crystal meth, crank)?
   - A. Number of occasions in your LIFETIME? | O 0 | O 1-2 | O 3-5 | O 6-9 | O 10-19 | O 20-39 | O 40 or more
   - B. Number of occasions in the past 30 DAYS? | O 0 | O 1-2 | O 3-5 | O 6-9 | O 10-19 | O 20-39 | O 40 or more
FACE II™ YOUTH PROGRAM PRE-SURVEY

20. On how many occasions (if any) have you used prescription drugs (e.g., Adderall®, Xanax®, Valium®, Oxycodone) non-medically?
   A. Number of occasions in your LIFETIME?
      | Very Wrong | Wrong | A Little Bit Wrong | Not Wrong at All |
      | 0          | 1-2   | 3-5                | 6-9               | 10-19            | 20-39            | 40 or more       |
   B. Number of occasions in the past 30 DAYS?
      | 0          | 1-2   | 3-5                | 6-9               | 10-19            | 20-39            | 40 or more       |

21. On how many occasions (if any) have you used other illegal drugs (e.g., Ecstasy, GHB, Ketamine, Heroin)?
   A. Number of occasions in your LIFETIME?
      | Very Wrong | Wrong | A Little Bit Wrong | Not Wrong at All |
      | 0          | 1-2   | 3-5                | 6-9               | 10-19            | 20-39            | 40 or more       |
   B. Number of occasions in the past 30 DAYS?
      | 0          | 1-2   | 3-5                | 6-9               | 10-19            | 20-39            | 40 or more       |

ATTITUDES TOWARD ALCOHOL, TOBACCO, AND OTHER DRUG USE

22. How wrong do you think it is for someone your age to:
   A. Drink beer, wine, or hard liquor (e.g., vodka, whiskey, or gin) regularly?
      | Very Wrong | Wrong | A Little Bit Wrong | Not Wrong at All |
      | 0          | 0     | 0                  | 0                 | 0                 |
   B. Smoke cigarettes?
      | 0          | 0     | 0                  | 0                 |
   C. Use smokeless tobacco (chew, sniff, plug, dipping tobacco, or chewing tobacco)?
      | 0          | 0     | 0                  | 0                 |
   D. Smoke marijuana (weed, pot, hash)?
      | 0          | 0     | 0                  | 0                 |
   E. Use other illegal drugs (e.g., LSD, cocaine, amphetamines)?
      | 0          | 0     | 0                  | 0                 |
   F. Use prescription drugs (e.g., Adderall®, Xanax®, Valium®, Oxycodone) non-medically?
      | 0          | 0     | 0                  | 0                 |

PERCEIVED RISK OF ALCOHOL, TOBACCO, AND OTHER DRUG USE

23. How much do you think teens risk harming themselves (physically or in other ways) if they...
   A. Smoke one or more packs of cigarettes per day?
      | No Risk | Slight Risk | Moderate Risk | Great Risk |
      | 0       | 0           | 0             | 0          |
   B. Use smokeless tobacco (chew, sniff, plug, dipping tobacco, or chewing tobacco) regularly?
      | 0       | 0           | 0             | 0          |
   C. Try marijuana (weed, pot, hash) once or twice?
      | 0       | 0           | 0             | 0          |
   D. Smoke marijuana (weed, pot, hash) regularly?
      | 0       | 0           | 0             | 0          |
   E. Use prescription drugs (e.g., Adderall®, Xanax®, Valium®, Oxycodone) non-medically?
      | 0       | 0           | 0             | 0          |
   F. Take one or two drinks of an alcoholic beverage (beer, wine, or hard liquor) nearly every day?
      | 0       | 0           | 0             | 0          |

ADULT-CHILD COMMUNICATION AND FAMILY PRACTICES

24. Mark one response to the following statement or question...
   A. My parent(s)/guardian(s) usually asks if I’ve gotten my homework done.
      | Strongly Agree | Agree | Disagree | Strongly Disagree |
      | 0              | 0     | 0        | 0                |
   B. My parent(s)/guardian(s) would know if I did not come home on time
      | 0              | 0     | 0        | 0                |
   C. When I am not at home, my parent(s)/guardian(s) knows where I am and whom I am with.
      | 0              | 0     | 0        | 0                |
   D. The rules in my family are clear.
      | 0              | 0     | 0        | 0                |
   E. My family has clear rules against alcohol and other drug use.
      | 0              | 0     | 0        | 0                |
   F. If I drank some beer, wine, or hard liquor (e.g., vodka, whiskey, or gin), it is likely my parent(s)/guardian(s) would catch me.
      | 0              | 0     | 0        | 0                |
   G. If I skipped school, my parent(s)/guardian(s) would be likely to catch me.
      | 0              | 0     | 0        | 0                |
   H. My parent(s)/guardian(s) usually ask me what I think before most family decisions affecting me are made.
      | 0              | 0     | 0        | 0                |

25. If I have a personal problem, I can ask my ___ for help.
   O Parent  O Both parents  O Guardian  O Both guardians  O All of the above  O None of the above
APPENDIX C: YOUTH POST-PROGRAM SURVEY

Survey Instrument
### FACE IT™ Location

1. Who do you live with?
   - □ Both parents
   - □ Mother only
   - □ Father only
   - □ Other

2. How many FACE IT™ sessions did you attend?
   - □ 5
   - □ 6
   - □ 7
   - □ 8
   - □ 9
   - □ 10
   - □ 11
   - □ 12

3. Who attended the most FACE IT™ sessions with you?
   - □ Both parents, 1–8 times
   - □ Both parents, 9–12 times
   - □ Mother only, 1–8 times
   - □ Mother only, 9–12 times
   - □ Father only, 1–8 times
   - □ Father only, 9–12 times
   - □ Other, 1–8 times
   - □ Other, 9–12 times

4. During your time in the FACE IT™ program how many whole days of school have you skipped or cut?
   - □ 0
   - □ 1–2
   - □ 3–4
   - □ 5–6
   - □ 7–8
   - □ 9–10
   - □ 11+

5. How often do you feel that the schoolwork you are assigned is meaningful and important?
   - □ Never
   - □ Sometimes
   - □ Often
   - □ Always

6. How interesting are most of your courses?
   - □ Very Dull
   - □ Slightly Interesting
   - □ Quite Interesting
   - □ Very Interesting

7. How important do you think the things you are learning in school are going to be for your later life?
   - □ Not Important At All
   - □ Slightly Important
   - □ Quite Important
   - □ Very Important

8. Now, thinking back over the past 30 days in school, how often did you...
   - □ A. Enjoy being in school?
     - □ Never
     - □ Sometimes
     - □ Often
     - □ Always
   - □ B. Hate being in school?
     - □ Never
     - □ Sometimes
     - □ Often
     - □ Always
   - □ C. Try to do your best work in school?
     - □ Never
     - □ Sometimes
     - □ Often
     - □ Always

### ALOCHOL, TOBACCO, AND OTHER DRUG USE

The next section asks about your experience with alcohol, tobacco, and other drugs. Remember, your answers are confidential.

9. On how many occasions (if any) have you had alcoholic beverages (beer, wine, or hard liquor) to drink — meaning more than just a few sips?
   - □ Number of occasions in the past 30 DAYS? □ 0
   - □ 1–2
   - □ 3–5
   - □ 6–9
   - □ 10–19
   - □ 20–39
   - □ 40 or more

10. On how many occasions (if any) have you used smokeless tobacco (chew, snuff, plug, dipping tobacco, or chewing tobacco)?
   - □ Number of occasions in the past 30 DAYS? □ 0
   - □ 1–2
   - □ 3–5
   - □ 6–9
   - □ 10–19
   - □ 20–39
   - □ 40 or more

11. How frequently have you smoked cigarettes during the past 30 days?
   - □ Not at all
   - □ 1–2 cigarettes per day
   - □ 3–5 cigarettes per day
   - □ About 1/2 pack per day
   - □ About 1 pack per day
   - □ About 2 packs per day
   - □ About 3 packs or more per day

12. On how many occasions (in the past 30 days) have you sniffed glue, breathed the contents of an aerosol spray can, or inhaled other gases or sprays for the purpose of getting high?
   - □ Number of occasions in the past 30 DAYS? □ 0
   - □ 1–2
   - □ 3–5
   - □ 6–9
   - □ 10–19
   - □ 20–39
   - □ 40 or more

13. On how many occasions (in the past 30 days) have you used marijuana (weed, pot) or hashish (hash, hash oil)?
   - □ Number of occasions in the past 30 DAYS? □ 0
   - □ 1–2
   - □ 3–5
   - □ 6–9
   - □ 10–19
   - □ 20–39
   - □ 40 or more

14. On how many occasions (in the past 30 days) have you used cocaine or crack?
   - □ Number of occasions in the past 30 DAYS? □ 0
   - □ 1–2
   - □ 3–5
   - □ 6–9
   - □ 10–19
   - □ 20–39
   - □ 40 or more

15. On how many occasions (in the past 30 days) have you used methamphetamine (meth, crystal meth, crank)?
   - □ Number of occasions in the past 30 DAYS? □ 0
   - □ 1–2
   - □ 3–5
   - □ 6–9
   - □ 10–19
   - □ 20–39
   - □ 40 or more

16. On how many occasions (in the past 30 days) have you used prescription drugs (e.g., Adderall®, Xanax®, Valium®, OxyContin) non-medically?
   - □ Number of occasions in the past 30 DAYS? □ 0
   - □ 1–2
   - □ 3–5
   - □ 6–9
   - □ 10–19
   - □ 20–39
   - □ 40 or more

17. On how many occasions (in the past 30 days) have you used other illegal drugs (e.g., Ecstasy, GHB, Ketamine, Heroin)?
   - □ Number of occasions in the past 30 DAYS? □ 0
   - □ 1–2
   - □ 3–5
   - □ 6–9
   - □ 10–19
   - □ 20–39
   - □ 40 or more
## ATTITUDES TOWARDS ALCOHOL, TOBACCO, AND OTHER DRUG USE

18. How wrong do you think it is for someone your age to:  

<table>
<thead>
<tr>
<th>Activity</th>
<th>Very Wrong</th>
<th>Wrong</th>
<th>A Little Bit Wrong</th>
<th>Not Wrong at All</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Drink beer, wine, or hard liquor (e.g., vodka, whiskey, or gin) regularly?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>B. Smoke cigarettes?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C. Use smokeless tobacco (chew, snuff, plug, dipping tobacco, or chewing tobacco)?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>D. Smoke marijuana (weed, pot, hash)?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>E. Use other illegal drugs (e.g., LSD, cocaine, amphetamines)?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>F. Use prescription drugs (e.g., Adderall®, Xanax®, Valium®, Oxycodone) non-medically?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

## PERCEIVED RISK OF ALCOHOL, TOBACCO, AND OTHER DRUG USE

19. How much do you think teens risk harming themselves (physically or in other ways) if they...  

<table>
<thead>
<tr>
<th>Activity</th>
<th>No Risk</th>
<th>Slight Risk</th>
<th>Moderate Risk</th>
<th>Great Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Smoke one or more packs of cigarettes per day?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>B. Use smokeless tobacco (chew, snuff, plug, dipping tobacco, or chewing tobacco) regularly?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C. Try marijuana (weed, pot, hash) once or twice?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>D. Smoke marijuana (weed, pot, hash) regularly?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>E. Use prescription drugs (e.g., Adderall®, Xanax®, Valium®, Oxycodone) non-medically?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>F. Take one or two drinks of an alcoholic beverage (beer, wine, or hard liquor) nearly every day?</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

## ADULT-CHILD COMMUNICATION AND FAMILY PRACTICES

20. Mark one response to the following statements...  

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. My parent(s)/guardian(s) usually asks if I've gotten my homework done.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>B. My parent(s)/guardian(s) would know if I did not come home on time.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C. When I am not at home, my parent(s)/guardian(s) knows where I am and whom I am with.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>D. The rules in my family are clear.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>E. My family has clear rules against alcohol and other drug use.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>F. If I drank some beer, wine, or hard liquor (e.g., vodka, whiskey, or gin), it is likely my parent(s)/guardian(s) would catch me.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>G. If I skipped school, my parent(s)/guardian(s) would be likely to catch me.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>H. My parent(s)/guardian(s) usually ask me what I think before most family decisions affecting me are made.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

21. If I have a personal problem, I can ask my ____ for help.  

- [ ] Parent  
- [ ] Both parents  
- [ ] Guardian  
- [ ] Both guardians  
- [ ] All of the above  
- [ ] None of the above