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The Effect of Perceived Parental Style on Hispanic Adults Receiving Outpatient Substance Abuse Treatment in South Texas

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THE EFFECT OF PERCEIVED PARENTAL STYLE ON HISPANIC ADULTS RECEIVING OUTPATIENT SUBSTANCE ABUSE TREATMENT IN SOUTH TEXAS

A Dissertation

by

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ABSTRACT

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Hirschi's (1969) Social Control Theory proposes that parental relationships serve as a shielding factor and has positive impact in the decreasing delinquency (i.e. substance use/abuse) in young people. This theory provides a framework for understanding substance use/abuse in young adult populations. Other factors including gender, cultural influences, family composition and birth order were also examined in this study.

The Drug Abuse Screening Test – 20 (Skinner, 1982), the Parental Authority Questionnaire (Buri, 1991), and a demographic scale were utilized in a population of 182 adults in outpatient substance abuse treatment centers in South Texas, Texas Gulf Coast and areas in the south–central part of Texas to examine the relationship between substance abuse, gender, birth order, family composition and perceived parenting style. Results suggested correlations between substance abuse and gender (r=.061), birth order (r=.053), perceived parenting style for both parents (mother, r=-.004; father r=.083) and family composition (r=-.010) at the $p<.05$ level. A multiple linear regression showed $R^2=.051$, adjusted $R^2=-.024$, $F(5,176)=1.894$, $p=.098$, indicating no significant findings. Implications for further research are included regarding substance abuse prevention programs.

DEDICATION

I would like to dedicate this dissertation to my brother, Felix Chavez, III. Although you are not here with us, you served as my inspiration to bring this research to fruition in more ways than I can explain. Although words cannot describe how much I would love to present this to you personally, please now that I miss you, I love you and your memory will forever remain in my heart. So, when I see you in heaven, it's "Dr. Lizard" to you!!

Secondly, I dedicate this to my parents, Felix, Jr. and Maria I. Chavez. Without your love and support over the past several years I would not be accomplishing such an awesome feat. Also, I'm not sure how many people can say that their parents were a crucial part of their data collection as you were in mine. You both made the tireless trip with me to gather my data and helping me with LJ, waiting for me in the vehicle for up to an hour or two at a time, without once complaining. On the contrary, you seemed just as excited about this endeavor and you took ownership along with me – you'd ask me how many surveys I had collected and you always knew just how many more I "needed" to get before I would be done. The title of "Dr." is just as much yours as it is mine. Thank you for always loving and caring for me, and for always being a listening ear. Most of all, for parenting my siblings and myself to the best of your abilities and I stand in awe and admiration of your work as our parents!!! I love you both, so much!!

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With my most sincere appreciation, to Dr. Irmo Marini for serving as my inspiration for all things academic, and your guidance through this journey, thank you for your council, input, understanding and most of all, your patience. Thank you for believing in me when I did not believe in myself. Because you saw something in me since the beginning, I am now able to fulfill my promise to my grandma, I am Dr. Elizabeth!!

Dr. Noreen Graf and Dr. Ralph Carlson, thank you for your help in getting this project off the ground and running, and into your very able hands for review. I am indebted to you, always!!

To my sister, Judith Castillo and my nieces, Alissa, Angela & Julianna Olaguez, and Brianna Castillo, for helping take care of LJ on many occasions so I could collect data. You are very much appreciated & I love you all!!

LJ, momma wanted you for 9 years and you arrived at such a great time in my life. You are worth every single second I had to wait for you! Thank you for taking your daily naps so I could write a little bit at a time every day. You helped keep me at a doable pace. Always remember – *I'll love you forever, I'll like you for always, as long as I'm living my LJ you'll be*!

To my dear husband, Jesus Antonio Palacios, my gratitude because you helped me in so many different ways – but mostly, because you always found a way to help keep me motivated to get this thing done. Know you are dearly loved and appreciated!

Last, but certainly not least, I thank God for His guidance and direction in my life, but mostly for always being my rock and shield and my helper in ALL things!!

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CHAPTER I

INTRODUCTION

The United States Department of Health and Human Services (2009a,b) indicates that one in six American's has experimented with cocaine before the age of 30, and roughly 7% of them have tried it before the 12th grade in high school. Marijuana is the most commonly abused illicit drug in the United States, and adolescent and young adult substance use is considered a serious health issue that contributes to their mortality (King & Vidourek, 2011; Substance Abuse and Mental Health Services Administration [SAMSHA], 2006). Indeed, substance abuse is said to be the nation's number one health problem and the leading cause of death of millions of Americans each year (Goodwin, 2009a). Furthermore, Compton, Thomas, Stinson and Grant (2007) found numerous epidemiologic surveys and clinical studies that posit the idea that substance use disorders have robust associations with alcohol use, mood, anxiety and personality disorders (PDs).

Rationale

According to the National Adolescent Health Information Center [NAHIC] (2003), the adolescent and young adult population in the United States is growing and is expected to continue growing through 2050. Within this population, two-thirds reside with both parents. Furthermore, "it is estimated that about 25% of all adolescents have taken part in activities that can be considered to be harmful either to themselves or others"(American Psychiatric Association, 2000; p.3).

Hispanic/Latino adolescents and young adults (21.5%) are statistically at higher risk for substance use/abuse compared to non-Hispanic White (15.2%) individuals (Nagoshi, Marsiglia, Parsai, & Gonzalez Castro, 2011).

SAMSHA (2011) stated in a recent report:

> In 2010, an estimated 45.9 million adults aged 18 or older in the United States had [any mental illness] in the past year. This represents 20.0 percent of all adults in this country. The percentage of adults with [any mental illness] in the past year was highest for adults aged 18 to 25 (29.9 percent), followed by adults aged 26 to 49 (22.1 percent), then by adults aged 50 or older (14.3 percent). (p.7)

Furthermore, it was reported in the same publication:

> Among the 45.9 million adults aged 18 or older with [any mental illness] in the past year, 20.0 percent (9.2 million adults) met criteria for substance dependence or abuse in that period compared with 6.1 percent (11.2 million adults) among those who did not have mental illness in the past year. Among the 11.4 million adults aged 18 or older with [serious mental illness] in the past year, 25.2 percent also had past year substance dependence or abuse compared with 6.1 percent of adults who did not have mental illness. (SAMSHA, 2011, p. 1)

Typically, patterns of behaviors that tend to emerge in early adolescence and young adulthood include: "higher value on independence, increased social activism, decreased religiosity, perceived relaxation of parental standards, and increased reliance on friends relative to parents (Baumrind, 1991; p.59)." Furthermore, factors that are seemingly related to the parental influence or lack thereof are interrelated with independence, the perception by the youth that parents have become lax on parenting standards, and an increased reliance on their friends (Baumrind, 1991).

Baumrind (1967) earlier identified three main parenting styles as being authoritarian, authoritative, and permissive, which examine the main parenting dimensions that include parental warmth, parental control or demandingness and how they relate to rearing children. Much of Baumrinds' work has been paramount in more recent research regarding parenting

styles as they relate to different child outcomes such as attachment, academic achievement, self-esteem and self-concept, depression and/or depressive symptoms, aberrant behaviors, and substance use/abuse (Demo & Cox, 2000; Hoeve et al., 2011; Lamborn, Mounts, Steinberg, & Dornsbusch, 1991; Steinberg, Lamborn, Darling, Mounts & Dornbusch, 1994; Weiss & Schwarz, 1996). Much of the literature before the 1990s posited the benefits of authoritative parenting as opposed to the not-so positive outcomes produced by authoritative and permissive parenting styles (Demo & Cox, 2000).

A great deal of interest has been evident in researching family dynamics and attempting to pin-point the origins of development of delinquent behaviors such as substance use, physical assault and rape (Hoeve et al., 2011). Subsequently, there have been certain family characteristics, parenting in particular, that have been identified as one of the strongest predictors of criminal behaviors in adolescents (Cottle, Lee & Heilbrun, 2001; Grunwald, Lockwood, Harris & Mennis, 2010). Thus, it appears practical that the exploration of the effects of parenting styles as well as a scrutinizing examination of the parent-child relationship be conducted in at risk parenting styles (Demo & Cox, 2000).

Statement of the Problem

Goodwin (2009b) reported findings of the Substance Abuse and Mental Health Services Administration [SAMSHA] (2006) that in the year 2005, just under 4 million individuals aged 12 or older received some type of substance abuse treatment for problems related to the use of alcohol or illicit substances. The substance use/abuse seems to present not only functional effects on the substance user/abuser, but also both directly and indirectly on the substance user/abusers' family (Collins & Messerschmidt, 1993; Lara Muñoz, Medina-Mora, Borges & Zambrano, 2007;

Schneider Institute for Health Policy Report, 2001; U.S. Department of Health and Human Services, n.d; Villarreal & Cavazos, 2005).

The National Center on Alcohol and Substance Abuse at Columbia University (CASA) (2011) cited the following statistics:

> - Ninety percent of people who meet the clinical criteria for addiction began smoking, drinking or using other drugs before they turned 18.
> - People who begin using any addictive substance before age 15 are 6 times more likely to develop addiction than those who delay use until age 21 or older.
> - Of those who start using any addictive substances before they are 18, 1 in 4 will become addicted, compared with 1 in 25 who start at age 21 or later.

There are several health implications as well as psychosocial implications associated to substance use/abuse. For example, Matto (2005) noted in the review of the literature that individuals who use/abuse substances are more likely to contract a variety of sexually transmitted diseases such as HIV/AIDS, hepatitis, and may be more susceptible to a psychiatric disability. Furthermore, SAMSHA (2012) noted that substance users/abusers are twice as likely as non-substance users/abusers to have a co-morbid mental disorder. Moreover, Perkinson (2010) noted of the Texas prison system, "most of the inmates we got had been convicted of drug crimes or property crimes to support a [drug] habit" (p.21). Similarly, Hanson, Venturelli, and Fleckenstein (2012) noted:

> - Drug users in comparison to non-drug users are more likely to commit crimes
> - A high percentage of arrestees are often under the influence of a drug while committing crimes
> - A high percentage of drug users arrested for drug use and violence are more likely to be under the influence of alcohol and./or stimulant types of drugs such as cocaine, crack, and methamphetamines (p. 41)

Being that this research will focus on Hispanics, it is important to note culturally, Hispanics may practice different parenting behaviors from those of mainstream cultures thus

meriting further exploration of the relationship between childrearing as it may or may not relate to young adult delinquent behaviors within the Hispanic population (Domenech Rodriguez, Donovick & Crowley, 2009). Despite the fact that Hispanics constitute the fastest growing of all the larger social/racial groups in the U.S. (Falcon, Aguirre-Molina, & Molina, 2001; Ponzetti, 2003), relatively little is known about the effects of parenting style on the prevalence of substance use/abuse disorders in the young adult population within the Hispanic culture.

Hanson, Venturelli, and Fleckenstein (2012) listed several environmental factors that influence an individual's engagement in abuse of illicit substances. Some of those factors were psychological conditioning, peer pressure, the use as a coping mechanism, due to the quality or lack thereof of role models within the persons' immediate frame of reference, attachment to family, personality characteristics, perceived ethnic and racial disparities and socioeconomic status (social class). Similarly, Alvarez and Ruiz (2001) point to the use of illicit substances as a coping mechanism for environmental factors such as poverty, discrimination and minority status, especially within the Hispanic (i.e. Mexican-American population).

Additionally, there is research that illustrates the role of family and other social influences such as peer groups and friends in deviant behaviors such as substance use/abuse (Baumrind, 1991; Darling & Cumsille, 2003; Weiss & Schwarz, 1996). Nagoshi et al., (2011) found parental monitoring to decrease alcohol, cigarettes, marijuana and inhalant use/abuse in both boys and girls. Similarly, Pokhrel et al. (2008) found that parent-child communication, parental monitoring and parental expectations also decreased cigarette smoking, alcohol and marijuana use/abuse in adolescents. Also, Hoeve, Dubas, Gerris, van del Laan, and Smeenk (2011) found families that had at least one authoritative parent had adolescents with the least incidence of delinquency, and families with both parents engaging in neglectful or permissive

parenting had the highest delinquency. Likewise, Steinberg, Lamborn, Darling, Mounts, and Dornbusch (1994) found that individuals raised in authoritative or authoritarian households were less likely to engage in disruptive behaviors

Whether examining the effects of substance use/abuse on either immediate or nuclear families, further scrutiny of the relationship between parenting style and substance use/abuse in Hispanic young adults (i.e. age 18-25) in order to identify predictive risk factors in target populations is warranted to help aid in the prevention of illicit substance use/abuse in this population, as prevention of substance use/abuse could also reduce the risk or incidence of mental illness (U.S. Department of Health, 2009b).

Purpose of the Study

The purpose of this study is to explore the impact of parenting styles as well as the parent-child relationship, birth order and family composition on the propensity of a young adult (i.e. age 18-25) to engage in high-risk behaviors, specifically substance use/abuse, and thus, the proclivity to be classified with a substance use disorder (SUD). Furthermore, the examination of parental involvement (or lack thereof) and birth order may be an associating factor to substance use/abuse and/or a substance use disorder (SUD).

The perception of each of the parenting styles (i.e. authoritarian, authoritative, permissive and uninvolved) is examined using the Parental Authority Questionnaire (Buri, 1991), while the presence of a substance use disorder (SUD) is measured by Drug Abuse Screening Test - 20 (DAST-20; Skinner, 1982). Gender, birth order and family composition is addressed via a demographic survey.

Significance of the Study

The purpose of this study is to provide information regarding the relationship between child rearing, family composition, gender, birth order and substance use/abuse disorder. Information from this study may offer insight into the effect of parenting children/adolescents in 1) single parent households, 2) those in large families, and 3) those raised in families with parents who do not necessarily see 'eye-to-eye' when it comes to disciplinary measures and parenting tactics. Information gathered through this study may help aid in the development and/or improvement of substance abuse prevention programs geared at helping families thwart adolescent substance use/abuse. As such, the following research questions were proposed:

The following research questions are being posed for this study:

RQ_1: Is substance abuse a function of gender, family composition, parenting style and birth order?

RQ_2: Is there a relationship between substance abuse and birth order?

RQ_3: Is there a relationship between substance abuse and parenting style?

RQ_4: Is there a relationship between substance abuse and family composition?

RQ_5: Is there a relationship between substance abuse and gender?

The following are the research hypotheses posed for purposes of this study:

$H_{1\text{-}1}$: Substance abuse is a function of gender, family composition, parenting style and birth order.

$H_{2\text{-}1}$: There is a relationship between substance abuse and birth order; later-born individuals are more susceptible to substance abuse than first born individuals.

H_{3-1}: There is a relationship between substance abuse and parenting style; individuals raised by permissive and/or authoritarian parents are more susceptible to substance abuse than those raised by authoritative parents.

H_{4-1}: There is a relationship between substance abuse and family composition; individuals raised in single-parent households are more susceptible to substance abuse than those raised in dual-parent households.

H_{5-1}: There is a relationship between substance abuse and gender; males have a higher propensity to engage in substance use/abuse behaviors than females.

The following null hypotheses are:

H_{1-0}: Substance abuse is not a function of gender, family composition, parenting style and birth order.

H_{2-0}: There is no relationship between substance abuse and birth order.

H_{3-0}: There is no relationship between substance abuse and parenting style.

H_{4-0}: There is no relationship between substance abuse and family composition.

H_{5-0}: There is a no relationship between substance abuse and gender.

* All hypotheses will be tested at the .05 level of significance.

Delimitations

This study was delimited to participants currently in outpatient substance abuse treatment facilities in Texas as well as the age group (i.e. adults between the ages of 18-30) and ethnicity (i.e. Hispanics) being targeted in this study.

Limitations

There were several limitations to this study. Some of the limitations found during the course of this study were the unwillingness of the participants to answer in a truthful manner but rather in a socially acceptable manner. Second, since the individuals were solicited during the last portion of their group session, some appeared to answer the survey items carelessly. Last is the limited generalizability of the results of the study due to the very specific population being targeted (i.e. Hispanic young adults in outpatient substance abuse treatment).

Definition of Terms

Parenting Style

The construct of parenting style is used to describe a parents' attempt to socialize and regulate their children through the use of parental responsiveness and parental demandingness (Baumrind, 1991; Maccoby & Martin, 1983).

Parental Responsiveness

Parental responsiveness, which includes parental warmth or supportiveness, love and nurturance refers to "the extent to which parents intentionally foster individuality, self-regulation, and self-assertion by being attuned, supportive, and acquiescent to children's special needs and demands" (Baumrind, 1991, p. 62).

Parental Demandingness

Parental demandingness refers to "the claims parents make on children to become integrated into the family whole, by their maturity demands, supervision, disciplinary efforts and willingness to

confront the child who disobeys" (Baumrind, 1991, pp. 61-62).

Authoritarian Parenting

> The authoritarian parent attempts to shape, control, and evaluate the behavior and attitudes of the child in accordance with a set standard of conduct, usually an absolute standard, theologically motivated and formulated by a higher authority (Baumrind, 1968, p. 890).

Authoritative Parenting

> The authoritative parent attempts to direct the child's activities but in a rational, issue-oriented manner...Therefore she [the parent] exerts firm control at points of parent-child divergence, but does not hem the child in with restrictions. The authoritative parent affirms the child's present qualities, but also sets standards for future conduct (Baumrind, 1968, p. 891).

Permissive Parenting

> The permissive parent attempts to behave in a nonpunitive, acceptant and affirmative manner towards the child's impulses, desires, and actions…She [the parent] attempts to use reason and manipulation, but not overt power to accomplish her ends (Baumrind, 1968, p. 889).

Hispanic

The United States Bureau of the Census (2009b) defines Hispanic individuals to be persons who can trace their origin to Mexico, Puerto Rico, Cuba, and/or any Spanish speaking South and Central American country.

Substance Use Disorder (SUD)

According to the American Psychiatric Association (2000), a substance abuse (aka substance use disorder) is a maladaptive pattern of substance abuse that results in recurrent and

significant negative consequences of substance use that may include disruption of work or school, neglect of family obligations, repeated hazardous behavior, recurrent disorderly conduct and legal problems as well as a continued use of the substance despite negative consequences that is evidenced as clinically significant impairments and/or distress.

Organization of the Study

In Chapter One, the reader is provided with the direction for the study. The background of the study is described as well as the problem, purpose, and significance of the study. Following the significance of the study is a definition of terms section and the theoretical framework in which the structure used to generate the research questions and hypotheses is delineated. Limitations and delimitations as well as assumptions given, provide readers with information concerning the potential generalizability of the study. Chapter Two is a review of the literature related to findings in the fields of Hispanics and Hispanic culture, parenting styles, substance abuse and birth order. Chapter Three contains the methodology for this study which includes an examination of the research design, data collection, data analysis, and effect size determinations. Chapter Four contains results of the data, followed by the conclusions derived from the analysis of the data in Chapter Five.

CHAPTER II

REVIEW OF THE LITERATURE

Goodwin (2009a) purports that substance use disorders have made a definite negative impact on society, having ruined family and other significant social relationships as well as employment loss. The economic implications associated to substance abuse, including both alcohol and illegal drugs were estimated at more than $414 billion (Schneider Institute for Health Policy, 2001). Furthermore, Goodwin (2009a) reported on a 2005 national survey conducted by SAMSHA (2006) that cited 19.7 million Americans aged 12 and older, were current illicit substance users, and had consumed the substance during the month prior to the study having been completed. This indicates the severity of the substance use/abuse issue and illustrates how this is not only a personal problem, but a societal problem, as well.

When it comes to substance use/abuse, there are various factors that facilitate the reasons for abuse reported in the literature. For example, some research indicates that heredity is a contributing factor and plays a role in substance abuse. Dackis and Miller's (2003) study of the neurobiology of intoxication indicated that "individuals with strong family histories of alcoholism show enhanced β-endorphin release and euphoria after drinking alcohol (p.589)", therefore, suggesting there is a genetic link that may predispose individuals to become alcoholics (Ford, 1996). On the other hand, the "self-medication theory" as described by Montoya, Covarrubias, Patek, and Graves (2003) purports that an individual's emotional response to a particular traumatic event, which in turn causes an emotional disturbance (i.e., anxiety,

irritability, and/or depression) may motivate them to use alcohol and/or illicit substances to relieve the psychological or emotional pain associated with a traumatic event. Bolton, Robinson and Sareen (2009) examined self-medication in community-dwelling adults (n=43,093) who had been diagnosed with a DSM-IV mood disorder (i.e. dysthymia, major depressive disorder, bipolar I and bipolar II disorder). The authors found that almost 25% of the individuals with a mood disorder admitted to have used alcohol and/or drugs to alleviate their mood symptoms. The highest incidence of self-medication occurred in individuals who had anxiety disorders (64.4% in women and 52.2% in men) and those with any lifetime personality disorders (63.9% in women and 69.6% in men). Leweke and Koethe (2008) noted in their research that cannabidiol, a standardized extract from *Cannabis sativa*, has been determined to improve psychotic symptoms and positive symptoms (i.e. hallucinations, delusions) that were induced by a synthetic form of the main psychoactive compound of herbal cannabis preparations, Δ^9-THC-analogon nabilone, implying antipsychotic properties of cannabidiol. Gregg, Barrowclough and Haddock (2007) suggest the idea that substance abuse is seen by individuals experiencing a mood disorder or at the least mood symptomology as a means to alleviate unpleasant affective states, or an attempt to alleviate feelings of dysphoria.

Harris and Edlund (2005) also reported findings from the National Comorbidity Study (NCS), that in a total of 2,851 respondents, approximately half (n=1,633) met the criteria for a substance use/abuse disorder during some time in their lifetime but also met criteria for one or more lifetime mental health disorders; additionally, half of those who met the criteria for a serious mental health disorder (at some time in their lifetime) also met criteria for a substance use/abuse disorder (n=1,872). The National Institute on Drug Abuse (NIDA), cites a report from the United States Department of Health and Human Services (2009b) pointing out that chronic

marijuana use in adolescence may serve as a marker of risk for mental illness, citing genetic and/or environmental vulnerabilities, such as early exposure to drug use or family violence.

Furthermore, substance use/abuse may be a risk factor in developing a psychiatric disorder as suggested by Leweke and Koethe (2008). The authors conducted a meta-analysis of the literature dissecting the endocannabinoid system as well as the neuropharmacological properties of cannabinoids in psychiatric research and its role in major psychiatric disorders such as bipolar disorder, schizophrenia and major depression. The authors indicated the presence of a link between cannabis use and schizophrenia citing that regular cannabis use is linked to a two-fold increased risk of developing schizophrenia versus individuals who did not frequent the use of cannabis. Also, the authors cited the Epidemiological Catchment Area (ECA) study that indicated Bipolar disorder to have the highest rate of substance abuse co-occurrence at 41%, with cannabis being the most regularly abused drug by individuals with Bipolar disorder. Moreover, women with substance abuse issues have a higher incidence of psychiatric comorbidity than their male counterparts (Dawson et al., 2010; Hall, Degenhardt, & Teesson, 2009; Khan et al., 2013; Weiss, Kung & Pearson, 2003) Women who used/abused marijuana as a teenager were stated to be twice as likely as men of being diagnosed with depression and anxiety disorders adulthood (Hall, Degenhardt & Teesson, 2009) and women who reported substance abuse problems were found to have higher rates of psychiatric comorbidities than men (72% vs. 57%, respectively; Weiss, Kung & Pearson, 2003).

Moreover, substance use disorders are associated with alcohol use, mood, anxiety and personality disorders (Dawson et al., 2010; Hall, Degenhardt & Teesson, 2009; Khan, et al, 2013; Weiss, Kung & Pearson, 2003). Axis I and II comorbidity with substance use disorders were associated with several negative behavioral and health consequences; markedly, decreased

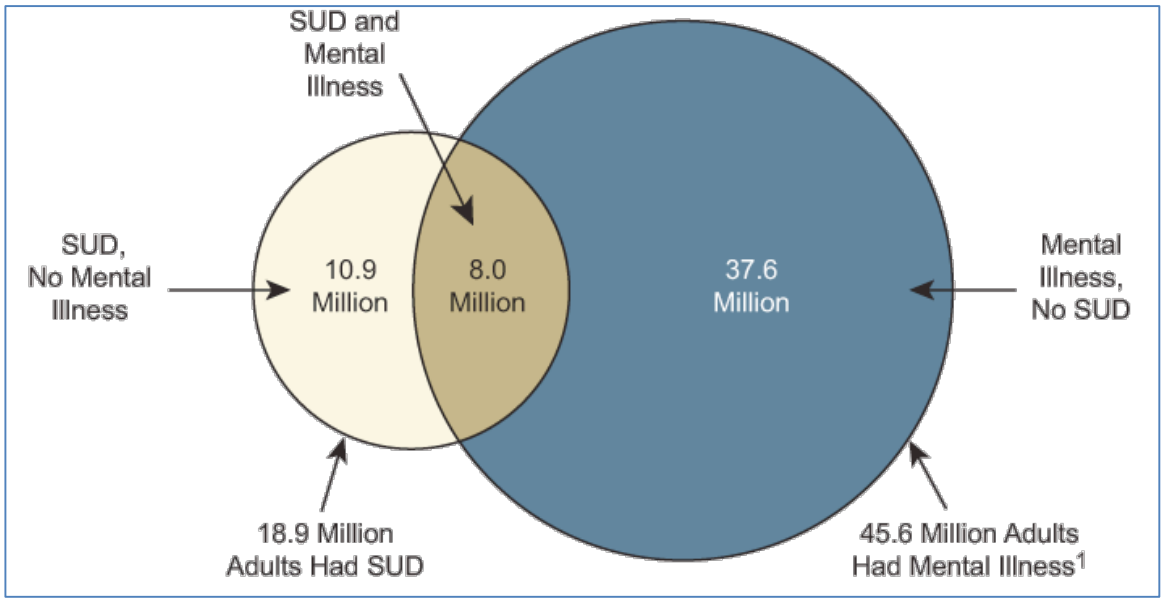
work productivity, social dysfunction, violence, incarceration, a lower probability of recovery, poor treatment outcomes and poor quality of life (Compton, Thomas, Stinson & Grant, 2007; Dawsonet al., 2010). For example, Patton et al. (2002) found depression and anxiety later in life can be predicted by how frequently young females use cannabis. They further noted that the correlation between cannabis use and depression and anxiety has continued to grow and may bring with it an increased risk for the development of depression and anxiety symptomatology. Depression and anxiety were found to increase with higher incidence of cannabis use and discovered daily use of cannabis predicted a high probability of depression and anxiety in female teenagers later in life. Figure 1 is a depiction of co-morbidity in adults in 2011 (SAMSHA, 2012).

Similarly, Leweke and Koethe (2008) found cannabis use to be common among individuals with bipolar disorder, but also that manic symptoms were more often reported within this group than individuals without a bipolar diagnosis. van Laar, van Doresselaer, Monshouwer and de Graaf (2007) examined the correlation between cannabis use and incidence of mood and anxiety disorders in adults and found that individuals who consumed the drug on a daily and/or weekly basis had an elevated risk of mood disorders (OR = 2.8), with the strongest associations for bipolar disorder (OR = 7.6).

In Khan et al. (2013) examination of differences in sociodemographic characteristics, and psychiatric and medical comorbidities seen in the 2001/2002 National Epidemiologic Survey on Alcohol and Related Conditions, the authors found a slightly higher incidence of any personality disorder within 36.53% of women versus 33.26% of men with a lifetime prevalence of a DSM-IV alcohol dependence. Likewise, they found the gender main effect for any psychiatric disorder and lifetime incidence of alcohol dependence was found to be significant with an adjusted odd

ratio (AOR) of 0.85, while any Axis I disorder was found to have an AOR of 0.81.and anxiety disorders to have an AOR of 0.49

Figure 1
Past Year Substance Dependence or Abuse and Mental Illness among Adults Aged 18 or Older: 2011



Note: Adapted from National Survey on Drug Use and Health: Mental Health Findings (2011) This is a representation of adults who had substance use disorder (SUD), number in millions of adults who had serious mental illness (SMI), and the overlap represents the number in millions of adults who had both substance use/abuse disorder and severe mental illness.

van Laar et al., (2007) used information from NEMESIS, a study that was conducted among the Dutch population age range 18-64 years (n=3,854) who met the DSM-III-R criteria for mood or anxiety disorders over the course of a 3-year follow-up study. The authors set out to scrutinize the potential of cannabis to cause severe mental health problems. Since substance abuse may be considered by some as a modern-day epidemic, it is important to note that although the study did not find causality, a slight relationship was evidenced in the data between cannabis use and clinically relevant levels of mood disorders and major depression in adults (7.7% and 5.5% respectively). The authors point to incidences of self-medication as being

evidenced among individuals with bipolar disorder (34.4%). Nonetheless, the authors note that marijuana use was an early symptom that may indicate the start of bipolar disorder in some individuals.

Menary, Kushner, Maurer and Thuras (2011) reported on the tension-reducing properties of alcohol, especially as it relates to anxiety symptoms. The authors found in their population of over 43,000 individuals, a minority 20.3% of the respondents who met diagnostic criteria for an anxiety disorder (6.5%) reported having used alcohol for the precise purpose of coping with their anxiety symptoms. Specifically, those who had reported self-medicating using alcohol consumed more alcohol [$F(1,369)=7.09$, $p=.008$, r=.14] and were more likely to have met diagnostic criteria for alcohol dependence than those who did not report self-medicating (34.5% self-medicating vs. 9.3% non-self-medicating).

Equally important is research that points to substance abuse as a coping mechanism for environmental factors (i.e. poverty, discrimination, minority status) as it pertains to the Mexican American population (Alvarez & Ruiz, 2001). Yet other research has pointed to the role family and/or other social influences (i.e. peer groups/friends) have on an individual's propensity to engage in deviant behaviors such as substance use/abuse (Baumrind, 1991; Darling & Cumsille, 2003; Weiss & Schwarz, 1996). Hanson, Venturelli, and Fleckenstein (2012) list multiple factors that influence an individuals' propensity to abuse a drug, such as:

> Hereditary (genetic factors), psychological conditioning, peer group pressures, inability to cope with stress and anxiety of daily living, quality of role models, degree of attachment to a family structure, level of security with gender identity and sexual orientation, personality traits, perceived ethnic and racial compatibility with larger society and socioeconomic status (social class) (p. 47).

More specifically, within the Mexican and/or Hispanic adolescent and young adult population, Nagoshi et al. (2011) assessed the combined effects of cultural identification and

parental monitoring on substance use/abuse in 354 adolescent Mexican youth. They found decreased alcohol use in both girls ($r=-.23$, $p<.01$) and boys ($r=-.21$, $p<.01$) to be in part attributed to parental monitoring. The use of other substances such as cigarettes, marijuana and inhalants were also negatively correlated with parental monitoring for both boys, ($r=-.28$, $p<.001$; $r=-.23$, $p<.01$ & $r=-.08$, N/S, respectively) and girls ($r=-.15$; $p<.05$; $r=-.19$, $p< .05$ & $r=-.35$, $p<.001$). Similarly, Warren, Wagstaff, Hecht and Elek (2008) examined the relationship between family composition, parental monitoring and substance use/abuse in adolescents in 1,224 low-income Mexican-origin adolescent participants and found that as parental monitoring increased, substance use/abuse decreased. Specifically, an odds ratio of 0.65 was found to be significant within parental monitoring in nuclear families (i.e. biological parents and children) and lifetime substance abuse. Pokhrel et al. (2008) studied the relationship between parent-child communication, parental monitoring, and parental expectations of acculturation on substance abuse in a cross-sectional representation on 1,936 Hispanic youths. A multiple logistic regression showed an inverse relationship between parental monitoring and cigarette smoking ($\beta = -.32$), alcohol use ($\beta = -.25$) and marijuana use ($\beta = -.31$), whereas parent-child communication also decreased the likelihood of cigarette smoking ($\beta = -.14$), alcohol use ($\beta = -.15$), and marijuana use ($\beta = -.15$).

Theoretical Framework

Social Control Theory

Social Control Theory (Hirschi, 1969) suggests that parental relationships serve as a positive influence in the derailment of adolescent delinquency and thus criminal acts among young adults. A parent said to be this influence in the child's life as a result of emotional

attachment and bonding. The parental bond is said to be the emotional attachment to parents, the frequency of interaction with parents and the influential capacity of the parents. Emotional attachment to parents is two-pronged; if the attachment between parents and their children or child and their friends is positive, the propensity towards delinquency will be decreased, while if the attachment is negative in nature, delinquent tendencies will likely increase. Additionally, it purports that everyone has the tendency and/or unrealized potential to commit delinquent behaviors, however, when individuals are emotionally and/or socially bonded to others (i.e parents) they are less likely to be involved in delinquent behaviors, such as substance use.

Moreover, Baumrind (1967) pointed out that the amount of influence a parent has on their child(ren) differs as well as their efficaciousness as a teacher and as a role model. However, Baumrind (1991) pointed out that the adolescent years are spent trying to form ones identity through an emotional disconnection from ones family and an allocation of attachment to ones' peers, as theorized by Erik Erikson's (1950, 1968) psychosocial stages of development. As such, the question posed is – is parental influence on their adolescent strong enough to overshadow peer influence and peer pressure when it comes to use/abuse of substances (i.e. alcohol, marijuana)?

During the adolescent and young adult years, Erikson (1968) illustrates the need to find a sense of belonging and identity within society as well as independence from mom and dad. Hirschi (1969) noted that the frequency of interaction with one's parents leads to a stronger parental bond. Essentially, the more time a child spends with his/her parents, the less likely that child will engage in offensive, delinquent behaviors. Furthermore, Hirschi explained that the more a parent and child interact, the more influential that parents behaviors will become in the child's life. Likewise, Denissen, van Aken, and Dubas (2009) examined Belsky's process model

of parenting found that the interaction history between parent-adolescent and each individuals' personality-type determine the extent to which the relationship progresses as well as the quality of the relationship.

Hirschi (1969) posited that all of us possess a self-indulgent drive to act in the kinds of selfish and aggressive ways that may lead to delinquent and/or criminal behavior, but it was our ability, or lack-thereof, to form social bonds that could control that inherent tendency towards felonious behavior. Still social control theory explains that when one surrounds him or herself with individuals who are socially responsible, they are more likely to form prosocial values (Pratt, 2011). Hirschi (1969) explained that when parents are directly involved in supervision or monitoring their child as well as knowing their child's friends and spending time with them, this can have a positive effect on their child's behavior.

Moreover, social control theory posits that there is a social bond that occurs within everyone which consists of attachment, commitment, involvement and belief (Pratt, 2011; Wiatrowski, Griswold, & Roberts, 1981). Pratt's (2011) interpretation of Hirschi's idea of the social bond of attachment refers to the level of psychological regard an individual possesses for prosocial individuals and/or institutions. Specifically, Hirschi felt the higher a person's regard for parents and school, the more inclined the individual would experience a greater level of social control. Similarly, the social bond of commitment refers to the idea that an individual would not wish to commit a delinquent act in fear of losing a relationship that is valuable to them. The third social bond described by Hirschi refers to the concept of involvement. Involvement is the idea that when an individual is involved in a prosocial behavior, they are much less likely to be tangled in delinquent and/or criminal activity. Lastly, the social bond of belief refers to the degree that one follows the ideals associated with activities that are lawful. Hirschi (1969)

posited that there was indeed an important link between attitudes and behavior, in that if a person has a prosocial attitude, or a positive outlook, they are much less inclined to engage in delinquent acts. According to the theory, the stronger each component of the social bond, the less likely the individual is of committing an offending or criminal act (Hirschi, 1969; Wiatrowski et al., 1981).

Hirschi (1969) also contended that the emotional attachment or bonding to one's parents occurs in that: a) the parent-child relationship or bond is strengthened when children spend increased periods of time with their parents; b) the parent child relationship or bond has the capacity to reduce delinquency when the parent is emotionally present. When temptation to commit a crime occurs, children would be more prone to ask themselves what their parents would do or say or even think about such behaviors. Additionally, Hirschi pointed out that parental supervision will both intensify the strength of the parental bond as well as lessen the likelihood of the child committing a delinquent act, while a lack of monitoring or disregard for a child's behaviors would increase the probability of them engaging in delinquent acts. Similarly, Adams (1972) extended the scope of influence within the family system to include siblings. Specifically, he suggested that Sibling Influence Theory delineates the influence that molds our personality comes from our siblings, because they serve both as role models and competitors with each other.

Payne and Solotti (2007) found in their research of 747 college students examining the capability of social control and social learning theories to predict college students' criminal/delinquent behavior via self-report surveys, that attachment to their college professors revealed statistically significant correlations ($p<.01$), with not only criminal behaviors (i.e. property crimes, $r = -.161$; and violent crimes, $r = -.171$), but with drug use ($r = -.140$) as well. The authors also found that parental attachment (or lack thereof) was statistically significant

($p<.05$) in their measure of substance use ($r = -.086$).

Birth Order

Alfred Adler called the child's position within the family constellation to attention. He posited that a child "must stake out a piece of "territory" that includes the attributes or abilities that are hoped will give a feeling of worth (Mosak, 2005; p.63)." Adler (1930/1970) believed that we were all born with an inferiority complex that we somehow must make up for. When the child feels they have achieved their place within the family, they will attempt to live the more "useful side of life"; however, if and when the child feels as if they have not reached this position within the family, this could inevitably cause a child to engage in disturbing behaviors in their effort to achieve their place. As a result, he felt that each birth position (e.g., first-born and last-born individuals) contained distinct physiognomies as no two children are reared under the exact same circumstances (Adler, 1930/1970).

Leman (2009) used the following terms to exemplify some of the attributes consistent with first born, middle born, last born, and the only children, respectively:

- Perfectionist, reliable, conscientious, a list maker, well-organized, hard driving, a natural leader, critical, serious, scholarly, logical, doesn't like surprises, a techie
- Mediator, compromising, diplomatic, avoids conflict, independent, loyal to peers, has many friends, a maverick, secretive, used to not having attention
- Manipulative, charming, blames others, attention seeker, tenacious, people person, natural salesperson, precocious, engaging, affectionate, loves surprises
- Little adult by age 7, very thorough, deliberate, high achiever, self-motivated, fearful, cautious, voracious reader, black-and-white thinker, talks in extremes, can't bear to fail, has very high expectations for self, are comfortable with people who are older or younger (p.18)

Adler (1928) explained the concept of dethronement of the oldest child. Dethronement occurs when the oldest child, having had sole claim on the attention from his parents is

eventually dethroned by a younger sibling, as he/she is then thrust into a competition of sorts with siblings to reestablish his/her place of importance in his/her parents' eyes. The middle child is never in a position to have sole claim on parents' attention and the youngest sibling is said to never undergo dethronement, since he/she has their parents' attention all to themselves once siblings have left the family home.

Stein, De Miranda, and Stein (1988) stated that children are influenced by birth order when it comes to emotional issues and circumstances. Specifically, it is alleged that older children may have an edge on their younger counterparts when it comes to time spent with their parents and economic resource availability. However, due to higher standards, expectations and responsibility placed on the older progeny, the younger children may in fact hold an even greater emotional advantage. Similarly, Isaacson (1991) stated:

> Largely, you are what you are because of your position in your family as a child. Your birth order helped determine your expectations, your strategies for dealing with people, and your weakness. However, if birth order developed from parents, treating each child differently would be due to his or her position in the family. The fact that children usually spent more time with their siblings than with parents and the impact they had on each other…birth order characteristics may arise from siblings coping and influencing each other rather than from just parent child interaction, (p, 1).

Sulloway (1996) illustrated the impact that birth order has on an individual as the necessity of a child to vie with their sibling for their parents' attention, therefore the need for each child to implement distinctive tactics from their siblings in order to achieve this. Furthermore, he purports that children within a sibling group will normally compete with one another for family resources, including parental attention, and affection. He cited instances of a first born that exude power and authority as well as being more self-confident, socially dominant, ruthless, protective of their status, and distrustful than their younger siblings. Moreover, the author described a later born, or the "underdogs" (p.xiv), as being more apt to go against the norms, more prone to question those norms and more likely to rebel than the first-born

individual.

Hispanics and Cultural Influences

The United States Hispanic population has experienced an influx over the past 20 years and recent census data suggests that Hispanics make up 13.3% of the U.S. population, and is predicted to nearly double to 25% by the year 2050 (Falcon, Aguirre-Molina & Molina, 2001), with only Mexico having a higher population of Hispanics (U.S. Census Bureau, 2009b). According to the Bureau's latest data, as of July 2006, there were approximately 44.3 million Hispanics in the U.S., which translated into 14.8% of the total (299 million) U.S. population and it is projected that this number will be over 100 million in 2050 (U.S. Census Bureau, 2009a). Similarly, Diller (2011) explains that the Latino (Hispanic) population has become the largest racial minority in the U.S., and being heavily concentrated in Texas, California, Arizona, New Mexico, and Illinois.

Furthermore, the enormity of the socially diverse Hispanic population, Hispanics/Latinos/Spanish families in the U.S. were described by Ponzetti (2003) to include individuals of any race, Asians, Native Americans, Europeans, African, or Middle Eastern. In addition, it was reported that Hispanics are the fastest growing social/racial group. The Hispanic Research Center (2002) reported that the Hispanic or Latino population in the Rio Grande Valley ranges from 75% to 95%. Wallisch and Spence (2006) defined the Rio Grande Valley as Starr, Hidalgo, Cameron, and Willacy counties, house a 10% non-Hispanic population. After surveying a group of 1,200 adults along the US-Mexico border, the authors found that about 81.1% of individuals who were surveyed in their study had an incidence of alcohol abuse or dependence during their lifetime, and about 33.2% of the responders had substance abuse or dependence

during their lifetime. Within the Rio Grande Valley, those numbers were 78.4% and 32.3%, respectively.

Culturally, there are several concepts that are particularly relevant to the Hispanic culture. Ponzetti (2003) described that Latino families are considered the main sources of nurturance and affection as well as the skills and tactics that enable the family's members to survive outside the family realm. The husband/father is noted to be the person in charge in controlling family situations. Furthermore, the authoritative structure of the family includes "conformity, obedience, deference to authority, and subservience" (Diller, 2011; p. 227) to the individual 'in charge' of the family – that is to say, the male-figure or the person assuming the authoritative role. Cultural characteristics that were noted by Niemeyer, Wong and Westerhaus (2009) as being possible safeguards to risk factors such as substance use and academic underachievement as adolescents or adults were familialismo and traditional socialization of the children, which may include gender differences in supervision of the adolescents. The study found Mexican American cultural values such as "familialismo" may have served as preventative or protective factors when compared to non-Hispanic Whites. Familyism or familialismo is the idea that family is the most central source of social support within the Hispanic culture as well as the notion that it consists of "maintaining close bonds with family, fulfilling familial obligations and holding strong beliefs in family support" (Niemeyer et al., 2009, p.615). Similarly, Halgunseth, Ispa and Rudy (2006) noted that familialismo indicates a person's obligation to family over one's own personal needs or wants. Warren et al., (2008) described the concept as an explanation of the respect for one's parents, which are said to "work to keep adolescents from risk behaviors, such as delinquency and substance use, while enhancing resiliency in the face of environmental difficulties" (p.285). Diller (2011) explains familialismo as the "importance of the family, both

nuclear and extended" (p. 226). Diller quoted Garcia-Preto (1996) in her description of the nature of the Hispanic (Latino/a) families as follows:

> There is a deep sense of family commitment obligation and responsibility. The family guarantees protection and caretaking for life as long as a person stays in the system. The expectation is that when a person is having problems others will help especially those and stable positions (p. 226).

In relation, Hirschi's Social Control Theory (1969) illustrates the concept of attachment as involving a sympathetic understanding of the needs and/or feelings of others as well as how well they regard others and love and respect between the parent and their child(ren). Lowered levels of emotional attachment to one's parents will likely predict delinquent behaviors regardless of race and/or ethnicity, social class, or peer irresponsibility. However, as a result of acculturation, there are less and less adolescents that subscribe to the familialismo tendencies and thus reject traditional roles, norms and cultural influences (Warren et. al., 2008).

Gender and Hispanics

Similarly, Stewart, Karp, Pihl and Peterson (1997), sought to examine the relationship between anxiety, drug use/abuse and the reasons for drug use/abuse between gender groups. Using a theoretical framework premised in the traditional tension-reduction theory, the authors posit drug use/abuse is a learned behavior that carries tension-reducing properties which in turn negatively reinforces drug use. In their study of university students examining the reinforcing properties of varying substances (i.e. marijuana, alcohol, nicotine and caffeine) in a sample population of 219 university students, the authors speculated that substance use carries with it a tension-reducing property that in turn negatively reinforces drug use/abuse behavior. The authors found women were more likely to use/abuse alcohol and cigarettes (n=154 and n=49,

respectively) for tension-reduction than men (n=53 and n=18). Reasons for drug use were found for its tension reducing properties: coping with fear, stress, excitement, and/or impatience. Reasons were noted in the study as coping strategies and an effort to avoid or reduce anxiety symptoms. Individuals with high sensitivity to anxiety were reported to display a tendency to use/abuse substances in an attempt to help reduce anxiety-related symptoms more often than to help reduce depression-related symptoms. The primary reasons for substance use, both alcohol and cannabis, were reported by the authors as being for social purposes (alcohol, females z=-0.28, males z=-0.25; marijuana females z=0.17 and males = 0.00) followed by alcohol used as a coping mechanism (females z= 0.30; males z=0.33). Furthermore, the authors noted individuals with high anxiety sensitivity being at a greater risk of developing substance related-problems with certain drugs with stress-reducing properties.

Relatedly, Hispanic women are often expected to portray several of the characteristics of the Virgin Mary – Jesus' mother. This is commonly referred to in Hispanic culture as Marianismo (Alvarez & Ruiz, 2001). Cultural ideals such as altruism, passivity, duty to the family, and chastity are those to be emphasized in Hispanic females. Gloria and Peregoy (1996) refer to marianismo as signifying the presence of strength, determination, flexibility and survival skills. Hispanic females are expected to be nurturing, submit to males, and demonstrate unselfish tendencies, furthermore, they are taught early in domiciliary activities and often behaviorally restricted in comparison to their male siblings (Diller, 2011).

Moreover, masculinity or the masculine sphere is described as "ambitious, assertive, rational, analytical, individualistic, competitive, dominant, and aggressive" (Mirandé, 1997, p. 9). "Machismo" is further defined as being comprised of two main characteristics, aggressiveness and hyper-sexuality, that is allegedly caused by feelings of inferiority within the

individual. However, much of the research conducted within the United States has been restricted to populations within lower socioeconomic groups, and people of higher socioeconomic status are less likely to exhibit machismo characteristics than those in lower class societies (Ingoldsby, 1991). With this machismo attitude comes an array of different characteristics that are only implied by the aggressiveness and hyper-sexuality characteristics that Ingoldsby (1991) described. Similarly, Diller (2011) mentioned machismo to consist of a male's demonstration of strength, virility, dominance, and provision for his family. In Neff's review (2001), he explained that machismo entails attitudes of physical and sexual aggression, bravery and emotional suppression, and implied features of power for the individual that exhibits machismo traits. Similarly, Diller (2011) explained that specific to the Hispanic/Latino culture, is that male children are often given more freedom than their female counterparts by their parents and/or caregivers, and are also encouraged to be aggressive and act in a manly fashion. Therefore, if the individual feels as if he is acting bravely and is exhibiting aggressive tendencies, they are deemed as being powerful and manly.

However, machismo actually contains both positive and negative connotations. A positive side of machismo is the sense of honor and well-being of the family, benevolence, strong work ethic, and high level of responsibility. Alvarez and Ruiz (2001) describe machismo as being a set of traits that the Hispanic [Mexican-American] male possesses which include bravery, strength and being an apt provider for the family. Contrariwise, the concept also includes behaviors such as heavy drinking, engaging in high-risk behaviors, domestic violence issues as well as oppression and suppression of women, and the reluctance to admit a problem as being a sign of weakness (Alvarez & Ruiz, 2001; Villarreal & Cavazos, 2005).

Opland, Winters and Stinchfield (1995) examined gender differences in 2,281 drug-using adolescents. A one-way ANOVA was conducted on the drug onset and found that male adolescents reported earlier onset of marijuana use than females, $F(1,2279) = 13.2$, $p<.001$. Moreover, it was also found that males showed a higher inclination ($p<.001$) versus females of using/abusing marijuana, LSD, and other psychedelics, with significant *F* ratios as follows 47.9 (1,2279) for marijuana, 22.8 (1,2279) for LSD, and 14.9 (1,2279) for other psychedelics. Kahler, Read, Wood and Palfai (2003) went on to examine social environmental factors on college student drinking patterns. In a sample of 868 individuals, male college students were noted to have a 15% increase in the amount of alcohol consumed and a 13% increase in likelihood of drinking to point of intoxication when compared to female students.

Specifically, males and females differ in the reasons why they consume substances. When considering gender difference in substance abuse behaviors, Hsieh and Hollister (2004) investigated substance abuse behaviors and treatment effectiveness in 2,317 adolescents. They attributed substance abuse behaviors to be evident in individuals with certain risk factors. Socially-related problems such as substance abuse history, sexual abuse experiences, family problems, defined as family stress and substance abuse within the family system, as well as other psychological variables, such as depression were considered within this study. Implementing a t-test analysis, the authors found that females were more likely to engage in substance abuse behaviors than their male counterparts as a result of psychological variables, family-related issues and sexual abuse experiences (T=-14.98, T= -4.42, T= -11.29, respectively).

Parenting Styles

Baumrind (1967) identified three different parenting styles: authoritative, authoritarian, and permissive. Each of these styles was identified in relation to how much parental control or demandingness and parental warmth that is exerted by parents to their children. Denissen et al., (2009) define parental warmth as the "amount of affectionate care that is expressed between parents and children" (p. 928) and control as the amount of constraint placed on the child's behavior and goal achievement by the parent. Previous research on parenting styles tends to stem from these three (Domenech Rodriguez, Donovick & Crowley, 2009; MacCoby & Martin, 1983; Meyer, 2004). The styles were based on nurturing maturity demand communication and control of the child's behavior.

Baumrind (1967) posits that authoritative parenting styles (i.e. high warmth, high control) tend to lead to children who are happy, capable, and successful. The authoritative parents are said to be demanding of their children, but they are also responsive to their needs.

> They monitor and impart clear standards for their child's conduct. They are assertive, but not intrusive and restrictive. Their disciplinary methods are supportive rather than punitive. They wan their children to be assertive as well as socially responsible, and self-regulated as well as cooperative (Baumrind, 1991, p.62).

Authoritarian parenting (i.e. low warmth, high control) is shown to typically lead to children who are obedient and proficient but are not happy and less socially competent as well as have lower self-esteem than their counterparts. Baumrind (1991) described such parents as being respect and rank oriented, and expects their orders to be obeyed without a need for explanation.

Permissive parenting (i.e. high warmth, low control), on the other hand, often yields children who rank low in both happiness and self-regulation. Children who have been parented permissively are more likely to experience problems with authority and tend to perform poorly in school. This style of parenting is referred to as indulgent, nondirective or sometimes even

neglectful parenting. Parents who are permissive in nature are said to be more approachable and warm than they are strict. They are nontraditional and indulgent, in that they allow the child to self-regulate and often elude conflict with the child in not addressing certain issues that may result in conflicted relations (Baumrind, 1991).

Hoeve, Dubas, Gerris, van der Laan, and Smeenk (2011) found in their study, both cross-sectional and long term associations between a father and mothers' parenting style and male and female delinquency in their sample of 330 Dutch families with adolescents ages 14-22 over a 5 year period. In a three-way ANCOVA in which parenting style, age and gender were examined, adolescents with an authoritative father were significantly less likely to develop alcohol abuse/dependency. Moreover, the presence of at least one authoritative parent resulted in the lowest incidence of delinquent behaviors and the highest delinquency in families with two permissive parents, which was also dependent on the gender of the child [$F(10,246) = 2.7$, $p<.01$, $\eta^2 = .10$].

Moreover, Meyer (2004) reported that young adults who reported having been raised in an authoritative home reported higher in the happiness and less depressive symptoms than those raised in a permissive home. Young adults raised with authoritative parents were likely to be more energetic and happy and more satisfied and interesting than those having experienced a permissive parental style. The author points to two dimensions important in the socialization of children; the first dimension is parental responsiveness and includes love, warmth and nurturance. This dimension was also conceptualized through the idea of parental acceptance. The second dimension described by the author is that of parental demandingness and control, which includes discipline and punishment, further defined to include parental firmness (Steinberg, 2005).

When scrutinized carefully, the literature contends that the authoritative parenting is one of the most consistent and best predictors of competence from early childhood through adolescence (Meyer, 2004). Namely, children raised in authoritarian families are inclined to perform well in school and have less deviant behaviors overall, however, they have poor social skills, low self-esteem, and higher levels of depressive symptoms. Table 1 illustrates each of the parenting styles and characteristics associated to each of the styles.

Table 1
Impression of the Three Parenting Styles

Authoritative Parenting
- Animated and cheerful disposition
- Self-confident about capacity to master tasks
- Well developed emotional regulation
- Adequately developed social skills
- Less rigid about gender-role and stereotypical traits (e.g. boys ability to be sensitive and a girls ability to be independent)

Authoritarian Parenting
- Apprehensive, reserved, and depressed disposition
- Poor response to stress
- Good school performance
- Not likely to engage in disruptive behaviors (e.g. drug and alcohol abuse, vandalism, gangs)

Permissive Parenting
- Poorly developed emotional regulation
- Defiant and disrespectful when challenged by persons in authority
- Decreased determination to demanding tasks
- Rebellious, and disruptive behaviors

(Based on Baumrind, 1971)

Steinberg, Lamborn, Darling, Mounts, and Dornbusch (1994) note that parental warmth and discipline or punishment practices as well as consistency of implementation in child rearing are each associated with positive developmental outcomes in children. Likewise, adolescents from indulgent and neglectful homes engage in drug and alcohol use ($r=.13$; $p<.01$) and exhibit misconduct within the school system ($r=.02$; $p<.05$). The authors examined the differences in

adolescent adjustment as a function of their parents parenting style in a socioeconomically heterogeneous population consisting of 2,300 participants, ranging in ages 14 to 18 and psychosocial development school achievement, internalized stress and behavioral problems associated with variations in parenting style. They examined four parenting styles: authoritarian, authoritative, permissive and neglectful. The authors found authoritative parenting skills are highly beneficial to the level of self-reliance ($r=.04$; $p<.10$) while neglectful parenting proved consequential ($r=-.06$; p.05). In addition, adolescents with authoritative or authoritarian parents were less involved in disruptive/delinquent behaviors ($r=-.02$ & $r=-.03$, respectively) while those from neglectful parenting styles ($r=-.11$) were deemed to be significant at the $p<.001$ level. Additionally, the authors posited that several of the effects of parenting styles appear to have been moderated by the adolescent's ethnicity, with authoritativeness being more prevalent among European and American families and middle-class families.

Maccoby and Martin (1983) also described the concept of parenting. They used the two dimensions of support and control to back their theoretical framework, also referred to as warmth and strictness in earlier literature. They defined four parenting styles, relatively consistent with Baumrinds' model (1971), in relation to support and control exerted by the parent. For example, authoritarian parents (i.e. strict but not warm) were determined to exercise low support and high control, were as authoritative (i.e. strict and warm) parents were said to demonstrate high support and high control, while the permissive parent (i.e. warm but not strict) was one who render high support and low control. Moreover, Garcia and Gracia (2009) found evidence that high levels of warmth and high levels of control make for the best parenting strategy or that the authoritative style of parenting is the style of parenting that yield the best or ideal outcomes in one's progeny.

Substance Abuse

According to the Diagnostic and Statistical Manual of Mental Disorders 4th Edition, Text Revised (American Psychiatric Association, 2000), substance abuse (aka substance use disorder) is a maladaptive pattern of substance abuse that results in recurrent and significant negative consequences of substance use. This may include disruption of work or school, neglect of family obligations, repeated hazardous behavior, recurrent disorderly conduct and legal problems as well as a continued use of the substance despite negative consequences that is evidenced as clinically significant impairments and/or distress. Additionally, Schierbeek and Newlon (1990) posit that adolescents and young adults tend to seem prone to the use of drugs as a means of solving social and medical problems.

Hanson et al., (2012) differentiate the types of substance users/abusers as experimenters, compulsive users and floaters or chippers. Experimenters are those who being using a given substance due to peer pressure and/or curiosity. Compulsive users are those who expend a considerable amount of time and energy consuming their substance of choice. Floaters aka chippers are those who use other people's drugs without keeping a private supply for their own use.

CASA Columbia (2005) found that half of all American children lived in a home where a parent or other adult uses tobacco, drinks heavily, or uses an illicit substance. The authors noted that 23.7% of children live in a home where a parents or other adult is a heavy or binge drinker and 12.7% live with a parent or other adult that uses illicit substances. In addition, it was later found that:

> 85 percent of inmates committed their violent crimes while high on alcohol or some other drug, stole money to buy drugs, were alcohol or drug addicts or abusers, or violated drug and alcohol laws; 70 percent of children in child welfare programs are there because of drug and alcohol abusing parents; and about half of

> all college students binge drink or abuse illegal or prescription drugs, and a quarter of them meet the medical criteria for addiction. (CASA, 2011; p.3)

Substance abuse within the American public is cause for concern. Goodwin (2009a) reported that according to the Schneider Institute for Health Policy Report (2001):

> There are more deaths, illnesses, and disabilities from substance abuse than from any other preventable health condition. Of the more than two million deaths each year in the United States, approximately one in four is attributable to alcohol, tobacco and illicit drug use, with tobacco causing 430,700 deaths, followed by more than 100,000 for alcohol and nearly 16,000 for illicit drugs. (p.6)

The U.S. Department of Health and Human Services (n.d.) noted some of the major causes of disability closely revolve around substance abuse, violence, and poor mental health. Caetano, Ramisetty-Mikler, Walisch, McGrath and Spence (2008) found that men who are very Mexican or bicultural Mexican are at an increased risk of alcohol abuse and/or dependence compared to their very Anglo/Anglicized male counterparts.

According to Vega, Alderete, Kolody, and Aguilar-Gaxiola (2000), Mexican men are less likely to consume alcohol on a daily basis; however, when they do, they often consume more alcohol than their Anglo counterparts. Markides, Krause, and Mendes de Leon (1988) defined this practice as fiesta drinking. Vega et al. (2000) also noted that drinking practices are highly influenced by country of origin, generation status, how long the individual has made residence in U.S., matrimonial status, socioeconomic status, and gender. Wilkinson, Shete, Spitz, and Swann (2011) looked at the different factors associated with every use of alcohol among Mexican origin youth such as parent-child communication, availability of alcohol within the home, familial cohesion parental use of alcohol and parental attitudes towards the use of alcohol. All were reported by the author to increase the likelihood of the Hispanic adolescent (14.3%) to consume alcohol at any age and more likely to have an alcohol-related disorder than 14-15 year-olds of all ethnicities in the U.S. (13.1%). Specifically, the authors noted that individuals raised in families

with lower family cohesion were found to have consumed alcohol (OR=2.08; p<.001) versus their peers who had not. Likewise, the authors indicated some of the reasons as to why youth drink alcohol as being as a coping mechanism with anxiety and to appear cool (social acceptance – positive reinforcement) and thus, concluded that youth who reported positive family relations were less likely to be inclined to drink alcohol. The authors indicated the need for effective primary prevention programs that focus on young adolescents. Some of the risk factors that increased the likelihood of alcohol use were parent-child communication, availability of alcohol in the home, parental use, and attitudes of peers and parents toward alcohol while communication about risky behaviors, such as alcohol, drug and/or tobacco use could very well prevent the risky behavior from occurring, all together within that family. (Wilkinson et al., 2011). Additionally, Weiss et al. (2003) point out that ethnic minority groups as well as individuals who are jailed or displaced may be less likely to have access to treatment, regardless of the gravity or comorbidity patterns.

Murguia, Chen and Kaplan (1998) examined family attachment and school attachment and the effects of both in Hispanic and non-Hispanic White adolescents in a longitudinal study conducted over the course of the 1970s and 1980s (initial measure in 1971, subsequent measures in the 1980s). The authors based their study on social control, family interactional and peer cluster theoretical framework. Findings indicated generational distance (number of generations born outside of Mexico) from Mexico as a factor contributing to an increase in substance use. Certain cultural characteristics that were listed as being possible safeguards or risk factors to substance use as adolescents or adults were familismo and traditional socialization of the children, which may include gender differences in supervision of the adolescents. The study

found Mexican American cultural values familismo may have served as preventative or protective factors when compared to non-Hispanic Whites.

Relatedly, Alvarez and Ruiz (2001) noted that Mexican American individuals use drugs and alcohol as a coping mechanism with the adversities related to poverty, discrimination, and minority status. Argys, Rees, Averett, and Witoonchart (2006) found that adolescents who lived with both of their parents were much less likely to have used alcohol (males r=-0.094, females r=-0.130) tobacco (males r=-.127, females r=-0.150) and marijuana (males r=-0.101, females r=-0.126) by the time they were adults. Furthermore they noted that being raised by both parents was associated with lower probability of engaging in delinquent (males r=-0.092, females r=-0.079) and/or risky behaviors, such as substance use/abuse and early sexual experiences (males r=-0.136, females r=-0.148).

Monroe (2004) examined Akers' social learning theory as the theoretical framework for the study which utilized data previously collected by the U.S Department of Health and Human Services, National Center for Health Statistics (NCHS) in 1989. The dependent variable in the study was the smoking status of adolescents (ages 11-19) as the author wanted to test whether smoking is a learned behavior. There were four social learning concepts the author studied; differential association, differential reinforcement, definition and imitation. The strongest association ($r=.61$, $p<.01$) found was between differential association and smoking in the past month. Therefore it was deduced that an adolescent who smokes will tend to associate themselves with others who smoke as well. Another factor that was looked at by the author was the adolescent's external environment. Other factors that were risks to adolescents include associations with friends and family members who smoke, and the presence of role models who smoke. The author concluded that refusal skills alone were not adequate in preventing tobacco

use in adolescents. The best prevention programs target beginner adolescents or adolescents whom are experimenting with cigarette smoking.

In addition, there is research that posits environmental factors such as family environment, parenting style, neighborhood in which the person is raised, and the schools attended can influence adolescent misconduct, such as smoking marijuana, cheating on examinations in school, leaving the home without parental permission and increase risky sexual behaviors (Verweij, Zeitsch, Bailey & Martin, 2009). The authors examined risky sexual behaviors and adolescent misconduct in a sample of twins (N=4,904). According to the authors, risky sexual behaviors and adolescent misconduct is a cause for concern due to the increased risk of contracting sexually transmitted diseases and unplanned pregnancy/teenage pregnancy. Although they noted a substantial (56%) genetic influence on adolescent misconduct ($p=<0.001$), there was also a modest (12%) environmental influence ($p=0.02$) that was found.

Furthermore, the Hispanic culture also plays into substance abuse treatment. For example, Alvarez et al. (2007) found although U.S.-born Hispanics are more likely to utilize treatment programs and services than immigrants, they are said to have a negative perception of treatment, are more likely to terminate from services prematurely, more likely to relapse upon termination of services, and have poorer outcomes after substance abuse treatment than European Americans. Further, cultural 'values' such as machismo may in fact promote substance abuse within Hispanic individuals, primarily in males.

Birth Order and Substance Use/Abuse

Warren (1966) suggested that firstborns are typically more susceptible to stress, whereas later-born children were more likely to develop alcohol abuse related disorders, and further

reported later-born individuals, could even be more often associated with mental illness, such as schizophrenia, than their firstborn counterparts. Warren (1966) noted that in a sample of women with schizophrenia who were hospitalized (n=120), more of them were born in the last-half of their sibship that in the first-half ($p<.05$). Within those who displayed catatonic features, there were three times as many women born later in their sibship than those in the first-half. According to the study, later-born children seemed to outnumber first-borns almost two to one. Similarly, Adams (1972) mentioned in passing in his meta-analysis of the literature on birth order that there are more last-born females that meet characteristics of schizophrenia to be true in large, middle-class families.

Relatedly, Argys et al., (2006) noted that birth order has been shown to be a determinant of personality, success and intelligence – not to mention delinquency and risky behaviors (i.e. substance use/abuse, sexual intercourse, use of firearms) in adolescents. In their examination of the data from the National Longitudinal Survey of Youth – 1979, the association between birth order and adolescent behaviors such as smoking, drinking and marijuana use and other delinquent behaviors was reviewed. Specifically, females with older siblings were 8% more likely to have smoked cigarettes than their firstborn counterparts. Likewise, later-born males were 6.2% more likely to consume alcohol and 5.1% from having smoked marijuana than their first-born counterparts. Moreover, Rahav (1980) argued that middle-born children are [25%] more likely than first-borns and later-born individuals to engage in delinquent behaviors as a result of less attention and interaction with their parent due to the need to vie for their attention with the other children in the sibling group. In the examination of the birth order and behavioral correlates in delinquency of Israeli adolescents, the author scrutinized data from the Youth Probation Service of Israel. The author explained that middle-children tend to be ambitious and

try to surpass his/her siblings as well as increasingly aggressive, less well-liked and less socially responsive. Also, the author noted the importance of family size in relation to delinquency amongst the adolescents in that the larger the family (i.e. the more children in the sibship), the more likely the adolescents will engage in delinquent behaviors. Specifically, delinquency rates rose from 0.61 per 1,000 for only children to 15.49 for children in sibships of six or more.

According to Adams (1972), children in families where they are the only offspring have "only-child uniqueness" (p. 413) about them. They are said to be characteristically different from individuals with siblings, as they are very early on directed towards adult ways and concerns due to a lack of same-aged peers or *age-mates* in the family. Only-children were reported to have a tendency towards egocentrism and self-centeredness as a result of having undivided attention from his/her parents. However, he further pointed out that as a result of the lack of siblings or age-mates, the only child is often left to him or herself often and is expected to work through circumstances by his own resources and understanding.

Laird and Shelton (2006) conducted a study that examined binge-drinking patterns reported by 254 college students enrolled at a historically African-American university. According to sibling birth order by using the CORE Alcohol and Drug Survey the authors found significant differences between first-born and last-born participants ($z(120) = -3.67$, $p < .001$, ($\Phi = .338$) with weekly drinks and binge frequencies, as last-born participants reported a higher risk for alcohol-related behaviors than first-borns.

Argys et al. (2006) suggest that birth order might be related to child outcomes through parental involvement with their children. Certain parental inputs, such as monitoring and regulation, may become increasingly important as the child matures, especially in the incidence of high-risk or delinquent behaviors. The authors posited that older-born siblings could act as a

positive role model for the younger-born siblings, with their failures serving as cautionary tales of what not to do. Similarly, Adams (1972) noted that according to the Sibling Influence Theory, much of the influence that molds our personality comes from our siblings, because they serve both as role models and competitors with each other. However, in the case of only children, they are not exposed to such an influence.

The following is a list compiled by Flanagan and Morison (2007) explaining each of the birth order characteristics. See table 2.

Table 2
Birth Order Characteristics

The Firstborn

The firstborn receives undivided attention from parents until the next child arrives. He is often described as:

- serious
- conscientious
- goal-oriented
- rule-conscious
- high-achieving
- detail-oriented
- a leader
- determined
- conservative
- organized
- responsible

The Middle Child

The middle child is often "squeezed' between an ambitious older sibling and a precocious younger one. Many times, he looks for acceptance and recognition among peers instead of family. He may experience feelings of neglect from his parents because his siblings' strong personalities demand attention. Traits common among middle children are:

- flexible and adaptable
- diplomatic
- peacemaker or mediator
- generous
- outgoing
- social
- competitive
- has strong peer relationships

The Youngest Child
The youngest child frequently gets the most attention from family members. Often coddled by older siblings, the youngest child is sometimes indecisive and slow to commit. Used to getting her own way, the baby of the family can be demanding and even spoiled. Some other descriptions:
● charming
● manipulative
● affectionate
● persistent
● attention-loving
● impatient
● uncertain

The Only Child
The only child is special because, either by choice or circumstance, she is the only chance her parents will have at parenting. She is often described with the same words used for the firstborn with "super" in front. She is portrayed as:
● creative
● possessing strong language skills
● comfortable with adults
● having difficulty with peers
● having trouble sharing
● a perfectionist

(Flanagan & Morision, 2007; p. 1-2)

Parenting Style, Substance Abuse and Birth Order

Belsky's process model of parenting (1984) points out that the parental function is influenced by three dynamics: personal psychological resources of the parent(s), characteristics of the child, and contextual sources of stress and support. Rowe, Rodgers, and Meseck-Bushey (1992) noted that family circumstances (e.g. parenting styles, and parental behaviors) have been linked to delinquency in empirical studies since the 1950s. Hayatbakhsh et al., (2007) offered a description of a longitudinal study they conducted in Australia. They examined age of initial cannabis use in relation to anxiety and depression in a sample of 3,239 young adults. The authors noted potential confounding factors, or factors that could interact and interfere with one another were identified as being child's gender, mother's age and educational level, mother's marital

status and quality, family income, maternal mental health, maternal substance use, adolescent mental health and adolescent smoking status. The authors also found that females (OR=0.8) were moderately less likely than their male (OR=1.0) counterparts to use cannabis by early adulthood and the strongest association to be in children who were raised in good quality and poor quality broken homes (OR=2.5 & 2.3, respectively) versus being raised in a good quality or bad quality intact household (OR=1.0 & 1.6, respectively). The presence of maternal anxiety or depression (OR=1.4 & 1.3, respectively), maternal smoking (OR=1.7) or maternal alcohol consumption (OR=1.6) when the child was 14 also associated with greater risk of later cannabis use. They concluded that cannabis abuse might lead to social problems, which in turn may lead to mental health issues.

Adams' (1972) review of the literature confounded many working theories regarding birth order, alcoholism, personality, and educational achievement. He was able to pinpoint research that indicated that early-born males as well as later-born females were more likely to engage in delinquent acts or be considered troublemakers. In his analysis of the literature, he noted that later-born females were also found to have a higher incidence of alcohol abuse than later-born males and early-born females. Unfortunately, it was also found that first and last born children are more likely to commit suicide than middle children.

On the other hand, Merikangas et al., (2009) examined substance abuse/use and other psychiatric disorders among first-degree relatives and/or spouses of probands, that is to say, the first person to seek treatment within a family with cannabis disorders. In a sample of 123 individuals who met the inclusion criteria for the study, it was found that marijuana abuse and dependency are strongly associated with psychiatric disorders (OR=0.9), but also identify risk factors associated with cannabis use, abuse and dependence. Specifically, heritability of abuse

and dependence through their review of adoption studies citing genetic factors play a major role in etiology of severe patterns of abuse or dependence (OR=4.5). Siblings and adult children of the probands with cannabis abuse or dependence were at greater risk (OR=4.3) of developing a cannabis use disorder themselves. Probands with cannabis use disorders were also found to have a spouse with a cannabis use disorder, specifically, 47% of husbands and 25% of wives of probands who met criteria for a cannabis use disorder also met criteria for a cannabis use disorder. However, there were several factors associated with cannabis use disorders among family members such as behavior modeling, shared environment, accessibility and genetic factors that were deemed to be common.

Argys et al., (2006) found that birth order, specifically middle born and last born children are more likely to engage in substance, namely marijuana, alcohol and cigarette (tobacco), use and become sexually active earlier than their first born counterparts. The authors explained that as a child matures, the parental input, such as level of supervision and monitoring, he/she receives is important in determining whether they will engage in delinquent and/or risky behaviors. The authors pointed out that older children who are more than four (4) years older than their younger siblings tend to inherit monitoring responsibility be viewed as an authority figure by the younger sibling(s) and are at times used as a means of supervision rather than the parent. Therefore, making the older siblings' influence that much greater on their younger counterpart, as behavioral norms and aspirations may be determined by a child's role model. This allows for the older sibling to serve as either a positive or negative role model for the younger sibling(s). The negative role model example set by the older sibling may introduce behaviors earlier than would otherwise be the case. Likewise, in a much older study, yet a study that prepared the way for research into ordinal position and family size, Murrell (1974) found

that first-borns are much more socially adaptive and less likely to exhibit unsocialized-psychopathic conduct, having had more responsibility training as well as a greater influence to shoulder adult responsibilities at an early age. Bègue and Roché **(**2005) pointed out that parental involvement and monitoring is directly involved with the birth order effect. They purported that the amount of monitoring or supervision provided by a parent is negatively related to family size; the larger the family size, the less parental monitoring occurs. Furthermore, they made the inference that middle born and later born individuals have less parental monitoring than their first born counterparts.

Weiss and Schwarz (1996) further point out that adolescents raised in a "directive home" (p.2101) where parents are regulatory, firm, and traditional, were more likely to resist drug use compared to their counterparts raised in "non-directive homes" (p. 2101), in which parents are more lax, supportive, and unconventional, or permissive as well as those raised in "democratic homes" (p. 2101) where the parents were inclined to be unconventional yet unpretentiously firm. Through their investigation of 178 college students and their families, they concluded that children reared in permissive homes had the highest incidence of alcohol use ($x=57.3$; $p=.002$)) by their senior high school year, followed by those raised in democratic households ($x=54.4$; $p=.002$)

Family Composition

When examining family composition and family structure, Warren (1966) found that lastborn children raised in single parent households were more likely to develop alcoholic tendencies than those raised by both parents. Furthermore, Warren et al., (2008) noted that Hispanic, namely Mexican adolescents raised in single-parent households were more likely to engage in substance use earlier than those raised in dual-parent households. Similarly, CASA

(1999) found that children raised by a single mother had a 30% increased risk of substance use/abuse than those raised in traditional families (i.e. both parents).

Likewise, Barrett and Turner (2006) studied substance abuse in 1,760 non-White young adults (i.e. 18-23) by family composition. An ordinary least squares (OLS) regression was implemented to model the association between family composition and substance use/abuse symptomatology. When the authors controlled for race-ethnicity and gender, individuals who were raised in single parent households were found to have a significantly higher instance of severity in substance abuse symptoms than those raised in traditional families ($b=0.127$; $p<0.001$) where there is a single parent and other relatives ($b=0.017$; $p=.06$) or in stepfamilies ($b=0.032$; $p=.05$). Correspondingly, Denton and Kampfe's (1994) review of the literature proposed that there is a significant number of adolescents who engage in substance use/abuse behaviors were raised in single-parent homes or in families where there is an absent parent due to divorce or separation/estrangement.

Caldwell, Silver and Strada (2010) examined 438 detained juvenile offenders between the ages of 11 and 18. Although the sample was comprised of a high percentage of single parent families (African American males = 53.6%, African American females = 34.6%, Caucasian males 37.8%, Caucasian females = 35.4%, Hispanic males 37.87%, Hispanic females 41.8%) represented within the sample, significant findings were not found between those raised in single-parent households versus those raised in intact, reconstituted and other types of families (i.e. raised by grandparents siblings, or other relatives). Likewise, Hoffman (2002) used the data from the National Educational Longitudinal Study (NELS) to explore the relationship between family structure and adolescent drug use. Specifically, the author noted that adolescents raised in single-parent households were more like to report the highest levels of use compared to those in

mother-father families, specifically, mother-only families showed a 12.7% increase, while father-only families showed a 23.4%.

Friedman, Terra and Glassman (2000) reported on 326 court-adjudicated African-American adolescent low socioeconomic status males. They examined family structure, the nature of the relationship as predictors in engagement in illegal behavior and substance use/abuse. For those individuals who lived with both parents for all and most of their lives, there was a trend in reporting less alcohol use/abuse (partial r=-.08, p=.08) than those who were raised in other types of family structures. However, when controlling for family structure, the relationship (or lack of) measures were shown to account for 5.8% of the variance in the most recent substance use/abuse and 13.25% of the variance in engagement in illegal behaviors.

Summary

The studies in this chapter illustrate the intricacies of the relationship between substance use, parenting styles, culture, and birth order. As a result of both varying and conflicting results from reviewing the literature, continued scrutiny of this relationship is warranted. As suggested by the social control theory, the relationship between social bonding between parents and their adolescent children is related to their propensity to engage in high-risk behaviors, namely, substance use, and with the adolescent and young adult population of the US estimated to continue to grow through 2050 (NAHIC, 2003), this study proves to be of importance for future adolescent and young adult cohorts as well as their parents/guardians and immediate nuclear families.

CHAPTER III

METHODOLOGY

The following section provides the methodology the researcher used to conduct the current study. To reiterate, the purpose of the current study was to explore the impact of parenting styles including the parent-child relationship, gender, family composition and birth order on the propensity of an adult to be classified with a substance use disorder (SUD). Selection of the participants was delineated, followed by an in depth explanation of the procedures used to conduct the study. A detailed description of instrumentation that was used as well as their psychometric properties was also addressed. Finally, the section will conclude with a specification of the variables in the study and an account of the research design utilized.

In this study, the following research questions appear valid to be considered:

RQ_1: Is substance abuse a function of gender, family composition, parenting style and birth order?

RQ_2: Is there a relationship between substance abuse and birth order?

RQ_3: Is there a relationship between substance abuse and parenting style?

RQ_4: Is there a relationship between substance abuse and family composition?

RQ_5: Is there a relationship between substance abuse and gender?

The researcher in this study is posing the following null hypotheses:

$H_{1\text{-}0}$: Substance abuse is not a function of gender, family composition, parenting style and birth order.

$H_{2\text{-}0}$: There is no relationship between substance abuse and birth order.

$H_{3\text{-}0}$: There is no relationship between substance abuse and parenting style.

$H_{4\text{-}0}$: There is no relationship between substance abuse and family composition.

$H_{5\text{-}0}$: There is a no relationship between substance abuse and gender.

The following are the research hypotheses being posed for purposes of this study:

$H_{1\text{-}1}$: Substance abuse is a function of gender, family composition, parenting style and birth order.

$H_{2\text{-}1}$: There is a relationship between substance abuse and birth order; later-born individuals are more susceptible to substance abuse than first born individuals.

$H_{3\text{-}1}$: There is a relationship between substance abuse and parenting style; individuals raised by permissive and/or authoritarian parents are more susceptible to substance abuse than those raised by authoritative parents.

$H_{4\text{-}1}$: There is a relationship between substance abuse and family composition; individuals raised in single-parent households are more susceptible to substance abuse than those raised in dual-parent households.

$H_{5\text{-}1}$: There is a relationship between substance abuse and gender; males have a higher propensity to engage in substance use/abuse behaviors than females.

A non-experimental, descriptive, quantitative research cross-sectional survey method was utilized in this study to examine the influence various variables, namely gender, family

composition (e.g. single versus dual parent households), parenting styles and birth order have on substance use among adults over the age of 18.

Selection of the Participants

Participants for this study were drawn from five substance abuse treatment facilities which provide substance abuse outpatient services to adults over the age of 18 in different areas within the region known as Deep South Texas as well as areas along the Texas Gulf Coast and areas in the south–central part of Texas, specifically in the southwestern corner of an urban region known as the Texas Triangle. The inclusion criteria included being of Hispanic descent, enrollment in substance abuse treatment, and between the ages of 18 through 25 years; however, individuals of all ethnicities, and all ages were asked to participate in order to collect a more representative sample.

The participants were recruited by asking group facilitators for 10 minutes of group session time to introduce the study and participants were asked to volunteer and complete materials and survey packet at their leisure. A power analysis was conducted to anticipate the number of participants needed to obtain a medium effect size and a desired power of .80, and indicated 80 participants was the minimum number of participants.

Measures and Observational Scales

The researcher for purposes of this study developed one of the measures used in this study and its usage was determined by recommendations from dissertation committee suggestions. The information obtained via this tool includes age, gender, family composition, birth order, ethnicity, family socioeconomic status as perceived by the young adult, history of

known substance use within the family, and religious affiliation. No scoring scale was used for this assessment, as it is categorical in nature, and data gathered was used for descriptive statistics. The other two scales utilized in this study have been validated previously by each of their respective authors' and are addressed in this section.

Parental Authority Questionnaire (Buri, 1991)

Parental Authority Questionnaire is a scale comprised of three subscales, unbeknownst to the respondent that qualifies the answers in each subscale to signify the parenting style implemented by their mother and/or father, depending on whom the respondent was raised by. The participants completed the scale for mother or father or both parents depending on what type of family they were raised in; however, in cases where the respondent was raised by a grandparent and/or other relatives, they were advised to respond to the questionnaire in terms of the individual who was their maternal and/or paternal figure, respectively. Appendix A represents the complete PAQ scale – both mother and father – as presented to the participants.

This questionnaire was developed by its author to measure Baumrind's 1971 parental authority prototypes, permissive, authoritarian and authoritative. The questionnaire is a 30-item survey per parent (i.e. mother and father) and provides the adult examiner with scores for both mother and father on permissive, authoritarian and authoritative scales. There are 10 items for the permissive scale, 10 items for the authoritarian scale and 10 items for the authoritative scale. Responses to these items are made using a 5-point Likert scale, strongly disagree (1), disagree (2), neither agree nor disagree (3), agree (4), and strongly agree (5).

Reliability is as follows: .81 for mother's permissiveness, .86 for mothers authoritarianism, and .78 for mothers authoritativeness; .77 for father's permissiveness, .85 for father's authoritarianism, and .92 for fathers authoritativeness. Cronbach alpha values were

reported for each of the six parental authority scales: .75 to mother's permissiveness, .85 for mother's authoritarianism, .82 for mother's authoritativeness, .74, for father's permissiveness, .87 for father's authoritarianism, and .85 for father's authoritativeness.

In the Parental Authority Questionnaire, questions for each of the parenting styles are embedding randomly in the questionnaire. Items 4, 5, 8, 11, 15, 20, 22, 23, and 27 are those items related to the Authoritative nature of parents, that is to say parents whom are flexible, rational, have and maintain firm and clear boundaries, use reason with their children and are consistent in the expectations they have of their children's behaviors. For example, item #23 "My mother/father gave me direction for my behavior and activities as I was growing up and she/he expected me to follow her/his direction, but she/he was always willing to listen to my concerns and to discuss that direction with me" and item # 27 "As I was growing up my mother/father gave me clear direction for my behaviors and activities, but she/he was also understanding when I disagreed with her/him" hint at the parent-child relationship and parent-child communication that is perceived by the responder.

Items 2, 3, 7, 9, 12, 16, 18, 25, 26, and 29 are all the items associated with an Authoritarian parenting style. This is the style of parenting in which there is an attempt to maintain obedience from the children that is not questioned, in which punishment is used as an attempt to control the child's behavior. For example, item # 3 states "Whenever my mother/father told me to do something as I was growing up, she/he expected me to do it immediately without asking any questions." This item is representative of gaps in communication and relationship between parent and child.

Lastly, items 1, 6, 10, 13, 14, 17, 19, 21, 24, and 28 are those that are said to pertain to the permissive style of parenting. The permissive parent is one who tends to be relatively

kindhearted, non-demanding and regulatory of their child. Item # 4 states "Most of the time as I was growing up my mother/father did what the children in the family wanted when making family decisions", which again, hints that parent-child communication is existent and hints that parent-child attachment is present, as well.

To score the *PAQ*, the individual items for each of the three parenting styles were summed, thus yielding a subscale score with a minimum score of 10 to a maximum score of 50 for each parent.

Drug Abuse Screening Test – 20 (DAST-20)

The Drug Abuse Screening Test -20 (DAST-20; Skinner, 1982) is a 20 item, self-report survey with its score computed by summing all items that are endorsed in the trend of increased substance use problems, resulting in a total score range from 0 to 20. Administration of the DAST-20 takes approximately ten to fifteen minutes to complete. The Drug Abuse Screening Test – 20 is a scale comprised of whether the respondent identified with a target substance use/abuse related-behavior, by answering affirmatively or negatively to a series of 20 questions. The individual items consisted of behaviors such as admitting to poly-substance abuse, neglect of family, friends, or employment due to drug use, medical problems, including but not limited to the experiencing of withdrawal symptoms, and the legal ramifications of engaging in substance abuse behaviors, to name only a few. The items on this scale are very closely associated to the formal diagnosing criteria of the DSM-IV TR. Appendix B lists each individual item.

The assessments' author reported the DAST-20 to demonstrate good internal consistency and high test-retest reliability (r=.88) as well as demonstrated substantial internal composition (.92), and a one-dimensional factor structure, which accounted for 45.4% of the total variance. In

general, the DAST-20 parallels the 28 items of the DAST developed by Skinner (1982). The DAST has been shown to have relatively good reliability with a Cronbach alpha of .92 and validity ranging from .19–.55 and it was found to be minimally swayed by response style biases (Skinner, 1982).

For the Drug Abuse Screening Test – 20, each item is scored with a binary code of either a 0 or 1 depending on the responders answer to each item. An affirmative answer (i.e. "Yes") to a question will receive a value of 1; conversely, a negative answer (i.e. "No") will receive a score of 0, with the exception of items 4 and 5, in which the converse scoring is applied. The following scale was used to score the assessment: A score of 0 indicates there is no substance abuse reported, a score of 1-5 indicates a low level of substance abuse reported, a score of 6-10 indicates a moderate level of substance abuse reported, a score of 11-15 indicates a substantial level of substance abuse reported, and finally, a score of 16-20 indicates a severe level of substance abuse reported. According to the author of the questionnaire, an individual with a summed score of 6 or higher will likely meet DSM criteria for a substance abuse disorder. Furthermore, the author noted that individuals scoring at a low level of substance abuse are likely to require brief intervention, while an individual scoring within the moderate level of substance abuse is likely to require intensive outpatient treatment, and all other levels (i.e. substantial and severe levels of substance abuse) are recommended to complete intensive inpatient treatment.

The demographic scale (Appendix C) was developed by the researcher and consists of items to gather information regarding family composition, gender, age, birth order, history of known substance use/abuse within respondents family of origin (if known), religious affiliation (if any) as well as other independent variables to be analyzed at a later date by the researcher.

Procedure

The researcher obtained approval from the Institutional Review Board (IRB) at the University of Texas-Pan American to ensure the participants was not harmed during their participation in this study. Following IRB approval, contact with substance abuse outpatient treatment facilities was made with those who had already agreed to allow access to participants, to arrange times and dates for the researcher to visit each of the different sites. Upon arrival to each of the five different facilities, the participants were introduced to the researcher by the group facilitator during their regularly scheduled group session and were requested to participate by the investigator during the last few minutes of the substance abuse facilities' group counseling session. The participants were greeted by the investigator and explained the purpose and format of the study as they were read the recruitment script/informed consent verbatim (See Appendix F), after which the researcher handed out the survey packet and a pencil to each individual. Informed consent was acquired by each of the participants upon completion of their individual survey packet, therefore signatures, names, and/or any form of identifying information was not requested of the participants. The participants were also advised that they were able to withdraw at any time and that participation was strictly voluntary. Participants were asked to complete a demographic questionnaire that included the consent form for participation in the study, ethnicity, age and other questions relating to the participants' rearing as it related to the study. The participants were then asked to complete the Drug Abuse Screening Test – 20 (DAST-20) and the Parental Authority Questionnaire (PAQ) to determine what they believed was the parenting style implemented by their parent(s) during their upbringing as well as identify whether or not a substance abuse disorder may exist. The DAST-20 took approximately 10-15 minutes to complete and each of the PAQs (i.e. mother and/or father) took approximately 15-20

minutes to complete, per parent. Once all surveys were completed and collected, the experimenter thanked the participants for their time. No names and/or signatures were obtained in order to safeguard confidential information, but completion of the survey attested to individual consent. All information was kept confidential and no identifying information was present on any of the questionnaires themselves. All participants were made aware that all names would be withheld and no personal information would be disclosed at any point in time during this study and/or any reporting of findings. Individuals within the group setting were allowed to ask questions about the study when they had completed any role in the study (i.e. participant or otherwise) to help ensure that they had no misconceptions and/or worries related to the study. The study did not involve deception. Efforts were made to prevent any distress for being involved in this study by providing a mental health service toll-free telephone number and email of the researcher, her faculty advisor as well as the IRB telephone number and email address.

Data Analysis

The variables examined in this study are categorical in nature. The dependent variable (i.e. substance use/abuse disorder) was measured by the *Drug Abuse Screening Test -20 (DAST-20)*. The single categorical dependent variable consisted of the following levels: no substance abuse reported, low substance abuse reported, moderate or intermediate substance abuse reported, substantial substance abuse reported, and severe substance abuse reported. The independent variables (i.e. gender, birth order and family composition) were assessed using the demographic scale, while parenting style were determined using the Parental Authority Questionnaire (Buri, 1991). Permission to use above-mentioned instruments was requested and granted by their corresponding authors and/or copyright holders (See Appendices D and E).

It was expected that the high scores on the DAST-20, indicating the possible presence of a substance use disorder, would occur more frequently in first-born or last-born males raised by a single parent exhibiting parenting skills consistent with an Authoritarian or Permissive parenting style, as remembered and reported by the adult subject. Therefore, it was hypothesized that substance abuse as measured by the DAST-20, was a function of gender (i.e. male), family composition (i.e. single parents), birth-order (i.e. first-borns or last-born) and parenting style (i.e. Permissive or Authoritative), as measured by the PAQ.

Tests for comparisons and analyses were performed using Predictive Analytics SoftWare (PASW) Statistics (SPSS – 17). As there were multiple independent or predictor variables, a multiple logistic regression/multiple linear regression (Pearson, 1908) was conducted. This was done in order to explain the variance in the dependent or criterion variable as measured by the DAST-20, as a function of several explanatory, predictor variables (i.e. gender, birth order, parenting style, and family composition). As conventional, alpha p=.05 was used to establish significance. The null hypotheses in the present study were tested with the $\underline{t}$ and $\underline{F}$ distributions, at the .05 level of significance.

An effect size statistic was calculated to determine the size of the statistically significant results (Cohen, 1988). Cohen (1988) purported three main constructs that determine the strength of a statistical analysis, which are level of significance or alpha level and the effect size. Effect size helps examine the strength between the differences and the relationships among the sample groups being researched (Creswell, 2005). Effect size is important to report because it illustrates the scale or strength of the findings, thus the practical significance is relayed to those interested in the study (American Psychological Association [APA], 2010).

Summary

The aforementioned included a brief description of the purpose of this study (i.e. to explore the impact of parenting styles and being classified with a substance use disorder) as well as the hypotheses to be investigated in the current study. Participant recruitment and demographics were identified as well as the procedures conducted by the researcher. Each of the assessment measures was defined with applicable reliability and validity data. Additionally, the independent and dependent variables were described, as were the statistical procedures to be utilized in the analysis.

CHAPTER IV

DATA ANALYSIS AND RESULTS

The following section is an explanation of the analysis of the data collected for this study. The composition of the sample and demographic information as well as descriptive and inferential statistics are explained as they relate to the research questions and hypotheses delineated in Chapter 1. Correlation and multiple regression analyses were conducted to examine the relationship between substance use/abuse disorders and various potential predictors. The dependent variable assessed pertained to the participants' substance use/abuse disorder as categorized by a self-report survey (i.e. DAST-20). The independent variables were gender, birth order, family composition as described by the participant in the demographic scale, and perceived parenting style of participants' parent/guardian (i.e. mother and/or father) as assessed by the Parental Authority Questionnaire (PAQ).

In this study, the following research questions were considered:

RQ_1: Is substance abuse a function of gender, family composition, parenting style and birth order?

RQ_2: Is there a relationship between substance abuse and birth order?

RQ_3: Is there a relationship between substance abuse and parenting style?

RQ_4: Is there a relationship between substance abuse and family composition?

RQ_5: Is there a relationship between substance abuse and gender?

The following research hypotheses were posed for purposes of this study:

$H_{1\text{-}1}$: Substance abuse is a function of gender, family composition, parenting style and birth order.

$H_{2\text{-}1}$: There is a relationship between substance abuse and birth order; later-born individuals are more susceptible to substance abuse than first born individuals.

$H_{3\text{-}1}$: There is a relationship between substance abuse and parenting style; individuals raised by permissive and/or authoritarian parents are more susceptible to substance abuse than those raised by authoritative parents.

$H_{4\text{-}1}$: There is a relationship between substance abuse and family composition; individuals raised in single-parent households are more susceptible to substance abuse than those raised in dual-parent households.

$H_{5\text{-}1}$: There is a relationship between substance abuse and gender; males have a higher propensity to engage in substance use/abuse behaviors than females.

Sample Composition and Demographic Data

This project employed the use of participants recruited from five different substance abuse treatment facilities within the Rio Grande Valley in South Texas as well as areas along the Texas Gulf Coast and areas in the south–central part of Texas, specifically in the southwestern corner of an urban region known as the Texas Triangle. The total sample (N=232) consisted of 49.1% Mexican/Mexican American (N=114), 30.1% Other Hispanic (N=69), 13.8% Caucasian (N=32), and 6% other races/ethnicities (N=14). In terms of gender, the sample consisted of 184 male and 44 female participants, whose ages ranged from 18 to 68, with an average age of 34.7 years. The percentage of male and female participants was 79.7% and 19%, respectively. All

missing/non-response items were omitted from the final analyses (four participants) resulting in a total sample population of 228 respondents. However, further distinctions were made upon analyzing the data, and on individuals who identified themselves as pertaining to Hispanic population group were used, therefore the final sample size is n=182.

Substance abuse and gender were correlated and Table 3 represents the DAST-20 scoring (i.e. Zero, Low, Intermediate/Moderate, Substantial & Severe) between gender group. Although the sample was comprised primarily of males, females reported more severe substance use/abuse disorders than their male counterparts. For example, females had a higher percentage of scores falling within the Likely to meet DSM-IV criteria of a substance abuse disorder levels than males (78.13% versus 63.33%). Research question one examined substance abuse as a function of gender, family composition, parenting style and birth order, but was unsubstantiated through this study.

Table 3

DAST-20 & Gender

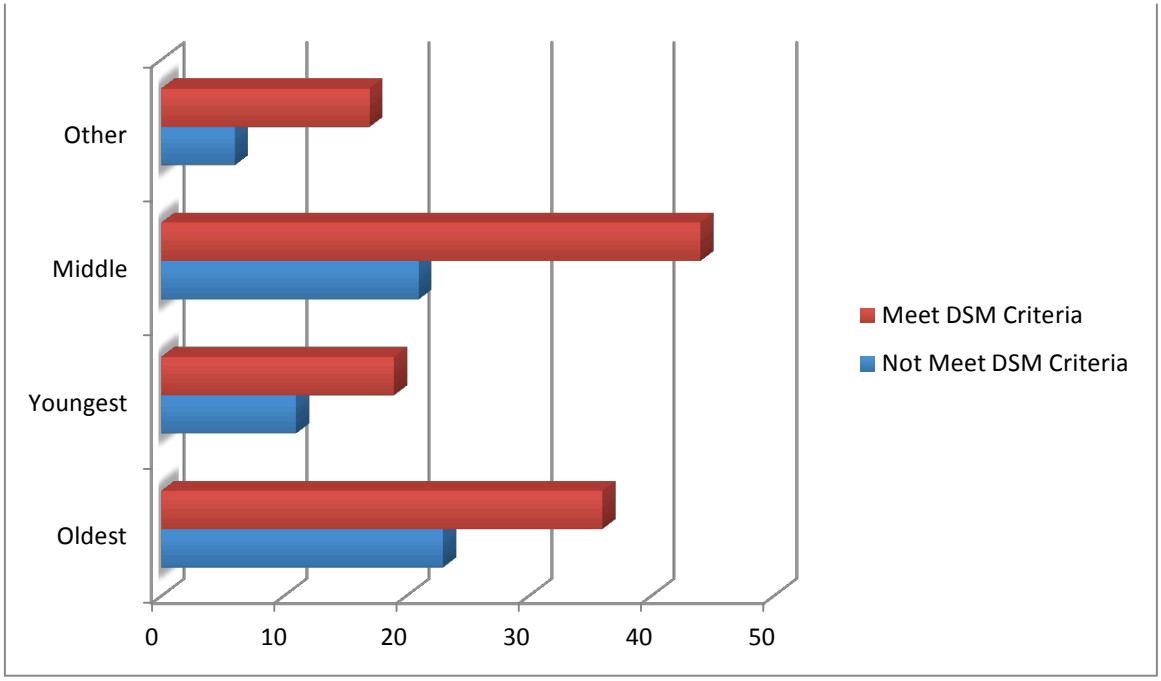
DAST-20 (DSM-IV)	N	Gender	Percent
Not Likely Meet DSM-IV Criteria	62	Males (55)	36.67%
		Females (7)	21.88%
Likely Meet DSM-IV Criteria	120	Males (150)	63.33%
		Females (32)	78.13%

***Individuals who scored in the Intermediate/Moderate range or above are likely to meet criteria for a DSM substance use/abuse disorder.**

Research question two regarding whether a relationship exists between substance abuse and birth order; first-borns are more susceptible to substance abuse than later born individuals. As evidenced in Figure 2, the cross tabulation analyses show a significant number of middle-born

individuals scoring highly in each of the levels; namely, those who feel in to the likely to meet DSM-IV criteria of a substance abuse disorder levels of the DAST-20, when compared to later-born individuals, thus not supporting the hypotheses that first-born individuals are more likely to be diagnosed with a substance use/abuse disorder (19.7%) than later-born individuals (10.44%) when compared to the middle-born individuals (24.18%).

Figure 2
DAST-20 Severity & Birth Order

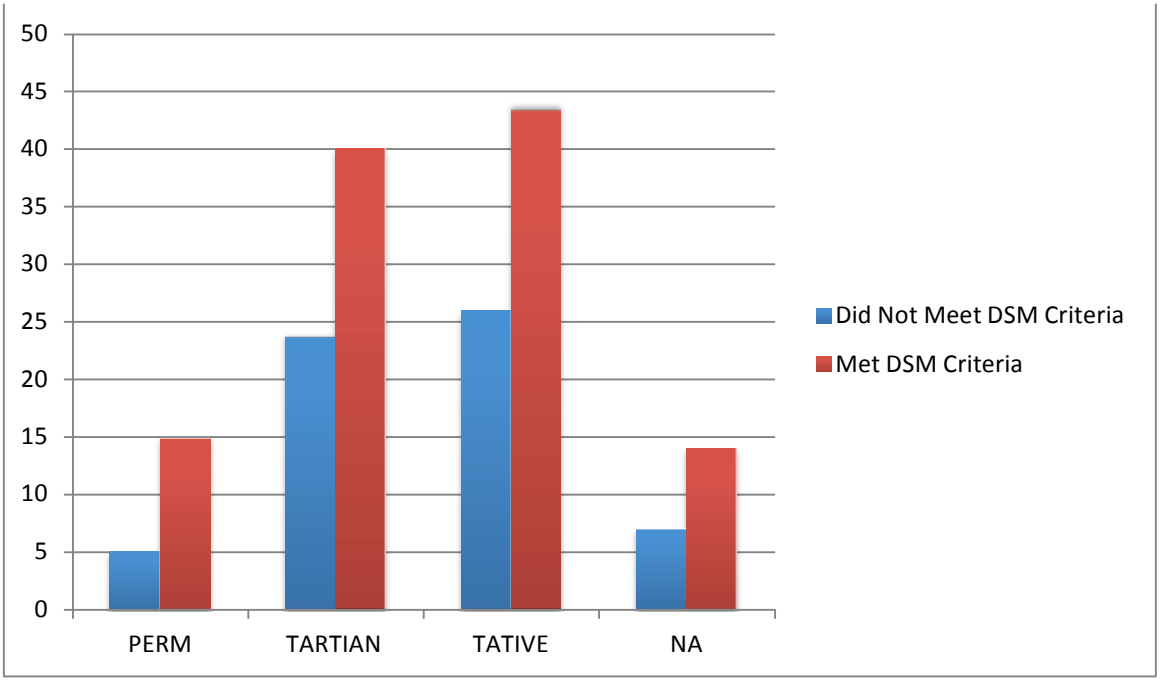


Note: Birth order is listed as, only child, middle child, youngest child and oldest child, with a category for those who hold another place in their sibship.
***Individuals who scored in the Intermediate/Moderate range or above are likely to meet criteria for a DSM substance use/abuse disorder.**

Research question three was hypothesized that a relationship existed between substance abuse and parenting style; specifically, individuals raised by permissive and/or authoritarian parents are more susceptible to substance abuse than those raised by authoritative parents. As seen in Figure 3, respondents reported having been raised in predominantly Authoritarian (n=64)

or Authoritative (n=70) households with little difference between the two. Figure 4 represents the child-rearing practices employed by the parents of the respondents. Specifically, 11% of the respondents noted they were reared in a permissive household, 35.16% in an Authoritarian household and 38.50% in an Authoritative household. Moreover, 8% of those who feel into the likely to meet DSM criteria category were raised by permissive parent(s), 22% raised by Authoritarian parent(s) and a slightly higher 24% were raised by Authoritative parent(s). These results did not support the third hypothesis.

Figure 3
DAST -20 & Parental Style

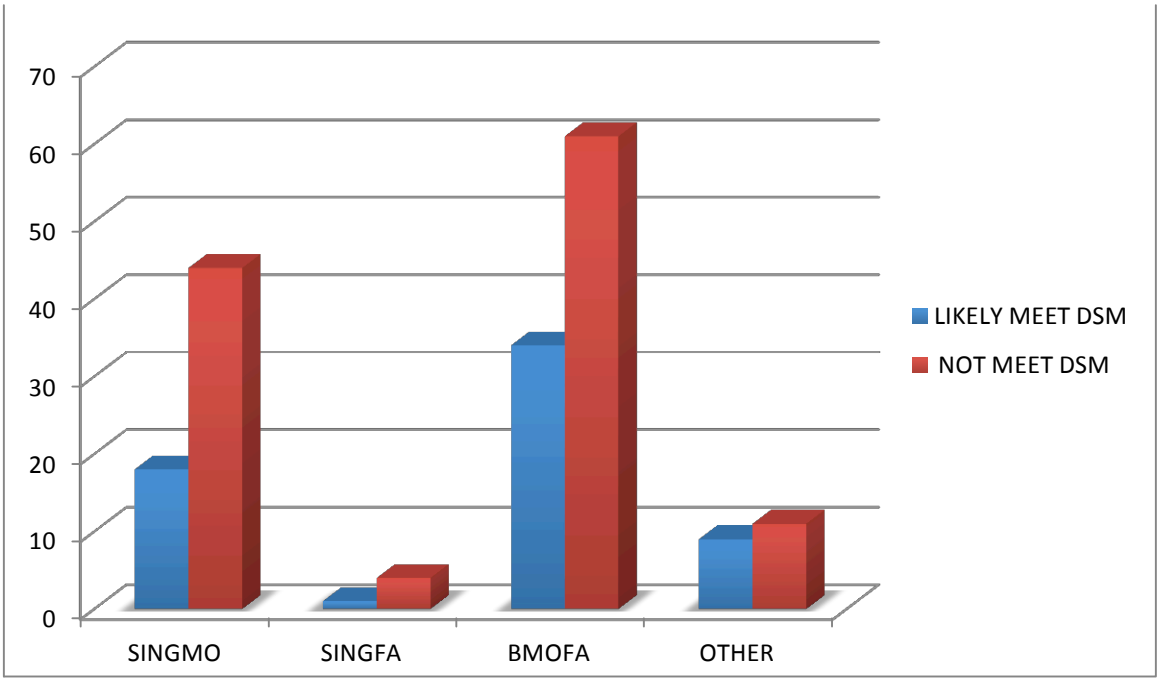


Note: PERM = Permissive, TARIAN= Authoritarian, TATIVE = Authoritative, NA = Responder did not provide a valid response, MO = Mother, FA = Father.

Finally, research question four hypothesis was that a relationship existed between substance abuse and family composition; namely, individuals raised in single-parent households are more susceptible to substance abuse than those raised in dual-parent households. However, Figure 4

shows that individuals raised by both parents as having represented over half (52.2%) of the sample, with 33% of those individuals likely to meet the DSM criteria of a substance use/abuse disorder. Those raised by a single mother represented 24.18% of those individuals who were likely to meet the DSM criteria of a substance use/abuse disorder. Figure 3 presents a cross-tabulation analysis of the severity of the substance abuse as measured by the DAST-20 and family composition. Results show greater numbers of individuals raised by both parents having a higher incidence of substance abuse evidenced by higher DAST-20 scores, and again, likelihood of meeting DSM criteria of a substance use/abuse disorder.

Figure 4
DAST-20 Severity & Family Composition



Note: SINGMO = Single Mother, SINGFA= Single Father, BMOFA = Both Mother & Father, GAPRS = Grandparents, OTHRELA = Other Relatives, OTHER = Other Individuals (non-relatives)
***Individuals who scored in the Intermediate/Moderate range or above are likely to meet criteria for a DSM substance use/abuse disorder.**

Although there were correlations that were determined between substance use/abuse and each of the predictor variables (i.e. gender, family composition, birth order and parenting style), neither of those correlations were deemed significant. Table 4 presents the correlational matrix.

Table 4
Correlation Table DAST-20 & Independent Variables

	DAST-20
Gender	.061
RaisedBy	-.010
Birth Order	.053
PAQ-Mother	-.004
PAQ-Father	.083

DAST-20 (Drug Abuse Screening Test – 20), PAQ (Parental Authority Questionnaire)
*** p< 0.01 level (2-tailed)**
****p<0.05 level (2-tailed)**

It should also be noted that 120 individuals (65.9%) who completed the DAST-20 fell into the category in which they would "likely meet DSM criteria" of a substance abuse disorder (See Table 1) and of those, 150 (81.5%) were male and 32 (17.5%) were female. When the DAST-20 scores were tabulated, the overall mean was 2.81, with males yielding a mean score of 2.793 and females yielding a slightly higher mean score of 2.886. This indicated that female respondents reported having a slightly higher incidence of substance abuse symptoms and greater severity of symptoms than their male counterparts. As a result of DAST-20 score tabulations, the respondents were put into categories depending on the yielded score (Zero, Low, Intermediate/Moderate, Substantial and Severe). Of the participants who were likely to meet the DSM criteria of a substance use/abuse disorder, 40% (N=48) were raised by a single parent, 50.8% (N=61) were raised by both biological parents, 9.1% (N=11) were raised by their grandparents or other relatives or other individuals (See Figure 3). Furthermore, participants who fell into the category "likely to meet DSM criteria" of a substance abuse disorder, 30% (N=36)

were the oldest in their sibling group (i.e. first-borns), 10.4% (N=19) were the youngest in their sibling group (i.e. last-born), 36.67% (N=44) were the middle child, and 14.2% (N=17) were only children.

A linear regression analysis was conducted to evaluate the prediction of substance abuse as evidenced by the DAST-20 score. This analysis included five predictors: gender, family composition, birth order and parenting styles for each mother and/or father, when applicable. Each of the regression coefficients were not significant, R^2=.051, adjusted R^2=-.024, $F(5,176)=1.894$, p=.098. Results indicated that first-born males who were raised in Authoritarian and/or Permissive single parent households are just as likely as any other combination of factors to engage in substance abuse behaviors. Table 5 is a representation of the linear regression analysis conducted.

Table 5
Standardized Regression Coefficients Between the Criterion Variable (DAST-20) and Predictor Variables (Gender, Family Composition, Birth Order and PAQ)

Variable	β	r^2
Gender	.12	.0144
Family Composition	-.06	.0036
Birth Order	.10	.01
PAQ		
Mother	.14	.0196
Father	.04	.0016

Summary

Analysis of the data and the obtained results offered in this chapter were addressed in response to the four research questions and hypotheses offered in Chapter One. Male participants indicated less severe substance abuse symptoms than their female counterparts. Likewise, middle children and first-born individuals were highly represented within this sample, seemingly

consistent with literature that suggests older siblings (i.e. first-borns) are more likely to experience difficulties with substance use/abuse. There was no significant finding in parenting style; however, individuals raised in Authoritarian and Authoritative made up a great majority of the sample. Finally, individuals raised by both parents had the highest incidence of substance use/abuse in each of the DAST-20 categories, followed closely by those raised by a single mother. Results again, were not significant.

CHAPTER V

DISCUSSION

This chapter provides a brief summary of the study and relates the findings to prior research as well as suggests possible directions for future studies. The objective of this study was to observe the relationship between substance abuse and gender, family composition, birth order and parenting style. The problem as explored from a review of the literature is that child rearing is sometimes a factor that is looked at when examining substance abuse within populations. One of the primary difficulties in examining these relationships is the number of confounding factors and their association with one another.

Participants report of parental rearing style (i.e. Permissive, Authoritarian, Authoritative) specifically the Permissive and/or Authoritative styles were not statistically significantly related to the participants' substance abuse. However, a great number of respondents did not provide information to yield very useful information on this scale. Specifically, there were 64 individuals who did not provide a PAQ form for the absent parent (i.e. father), therefore, that may account for the lack of significant findings. The result was in contrast of research indicating that adolescents raised in authoritative households are significantly less likely to develop alcoholic abuse/dependency (Hoeve et al., 2011; Nagoshi, 2011; Steinberg et al., 1994) and those raised in authoritarian homes have less deviant behaviors in general (Meyer, 2004). Yet, the number of individuals raised in Authoritarian and Authoritative households was highly represented in this sample. A possible explanation could be that the parenting style of one parent over the other may

provide a sort-of protective factor for the individual or there may be other protective factors within the family system or in the individual him/herself besides rearing style that play into the engagement in substance and alcohol abuse behaviors (Hanson et al., 2012; Mas-Bagà, 2000). Furthermore, the presence of at least one authoritative parent resulted in a lower incidence of delinquent behaviors such as substance use/abuse (Hoeve et al., 2011), while other potential risk factors may be present within the family constellation or individual him/herself.

Some of the insights gained from this analysis relate to the correlations or lack thereof between parenting style, birth order, family composition, and gender as it pertains to substance use/abuse. Birth order was no more telling than the parenting style by which the respondents were reared, as were gender and parenting styles of both or either parent. Findings were not significant at the $p<.05$ level. Argys et al. (2006) posited that birth order was a determinant of delinquency and risky behaviors such as substance abuse. The incidence of substance abuse is increased in later-born individuals than others within their sibship that was not supported here. Specifically, Adams (1972) posed birth order as an indicator of alcohol abuse, where later-born males and early-born females were said to have a higher incidence overall.

In addition, family composition also yielded a correlation which was not significant between being raised by both parents versus being raised by a single parent and substance abuse. Results conflicted with Warren's (1966) study, who that found lastborn children raised in single parent households were more likely to develop alcoholic tendencies than those raised by both parents. Likewise, this was in contrast to Friedman, Terra and Glassman's (2000) findings that stated individuals raised by both parents seemed to have a lower incidence of substance use/abuse issues than those raised by a single parent. This may be in part due to the differences in parenting practices employed by each individual parent. Furthermore, it hints at the fact that

two parents are not necessarily better than one parent when it comes to preventing substance use/abuse in adolescents. However, further scrutiny of the family and practices within the family constellation could indicate the presence of substance use/abuse within the family of origin. Specifically, if a parent models substance use/abuse behaviors, the progeny may imitate the behavior and engage in substance abuse also (Hanson et al., 2012). Therefore, this obviously points to probability of other influences/factors that were not studied via this research in the incidence of substance abuse within Hispanic adults (Wilkinson et al., 2011).

No significant findings between family composition and substance use/abuse. It should be noted that much of the literature in substance abuse treatment includes the family component as both a risk factor and protective or preventative measure against substance abuse (Pokhrel et al., 2008). For example, when considering the cultural aspect of familialismo, or the centrality of the family within the Hispanic culture, the primary source of social support is a culturally competent clinician who would be aware of the importance a Hispanic individual places on his/her family (Niemeyer et al., 2009).

Being that values and morals are imparted by ones' family (Paz, 2002), it is important to note that the family plays a very crucial part in not only preventing a substance use/abuse disorder, but also in its treatment (Garza & Watts, 2010). As such, one could argue that family could be both a risk factor or a contributing factor (Hanson et al., 2012; Hawkins, Catalano, & Miller, 1992; King & Vidourek, 2010; Monroe, 2004) in addition to acting as a protective or a preventative factor (Garza & Watts, 2010; Hanson et al., 2012; Hawkins et al., 1992; King & Vidourek, 2010) in the case of substance use/abuse. Consequently, it is important to include the family in the treatment of a substance use/abuse disorder in accordance with the familialismo ideal which in turn draws on the sense of interdependence in family and community (Garza &

Watts, 2010; Gloria, Peregoy, 1996; Monroe, 2004). Paz (2002) suggests that when at least one member of the family is included in substance abuse treatment, change may soon ensue both in the individual and in the family system.

Additionally, because many individuals are introduced to certain gateway substances (i.e. alcohol, tobacco/nicotine) (Hanson et al., 2012) via their familial relations (Bahr, Hoffmann, Yang, 2005; Barrett & Turner, 2006; Hawkins et al., 1992; Monroe, 2004), it is important to clarify for the individual undergoing substance abuse treatment as well as his/her family, that alcohol and tobacco are in fact drugs and can be abused, thus the implications of their use/abuse. When a family is introduced with information that is educational, it could very well serve as a protective factor for future progeny in that younger children within the family may benefit from psycho-education regarding substance use/abuse (Garza & Watts, 2010).

A culturally competent substance abuse clinician is one who can effectively validate diversity of thoughts, values and demonstrate skill and knowledge when providing services to individuals from a different cultural background (Diller, 2011; Garza & Watts, 2010; Paz, 2002). Similarly, Garza and Watts (2010) suggested the usefulness of culturally sound, filial therapy as a positive counseling experience in order to lessen the stigma of counseling that is prevalent in the Hispanic culture. As the Hispanic culture is comprised of a variety of different ideals (i.e. machismo, marianismo, familialismo) as well as a heavy reliance on religious/spiritual beliefs, it is important to take a holistic approach to prevention and/or treatment of a substance use/abuse disorder (Gloria & Peregoy, 1996; Hanson et al., 2012; Mas-Bagà, 2000).

Zayas, Evans, Mejia and Rodriguez (1997) further noted the importance of the mental health professional incorporation of connecting to others in the attempt to foster a personal bond.

Zayas et al., (1997) were quoted in Garza and Watts (2010) paper explaining the importance that therapeutic rapport and relationship really is when working with Hispanic individuals:

> The need in relationships to appear involved, "known" by the family, and authentic when working with Hispanic persons rather than taking a neutral, anonymous, or impersonal stance. Additionally…the importance of becoming part of the family system while maintaining clear, professional boundaries and relying on some self-disclosure to gain trust and leverage as well as to foster change. (p. 409)

Moreover, most of the literature regarding substance abuse treatment points out that the best treatment is not treatment at all, but rather prevention of substance use/abuse (Hanson et al., 2012; King & Vidourek, 2011; Nagoshi et al., 2011; Pujazon-Zazik & Park (2009). Hawkins et al. (1992) noted the risk-focused approach seeks to thwart substance abuse by removing, reducing, or mitigating its precursors, which in turn allows for prevention.

Limitations

There are several limitations to this study. Participants that are in substance abuse treatment due to their legal and/or probationary status may not be a representative sample of individuals seeking substance abuse treatment in general. A more diverse participant pool in terms of gender may have produced different answers from those found in this study, given the small number of female participants. Another limitation is the time-lapse between the parenting implementation and the perceived parenting style reported by the participant; specifically, many individuals were past their adolescent years and may not have fully remembered nuances of each parents' style. In spite of these limitations, there is practical and clinical value to these findings. The study also had some logistic limitations as well. For example, the PAQ had both a mother form and a father form; therefore, if a single parent raised a participant, only the form for that parent was completed (i.e. individuals raised by single mothers only completed the mother form).

Also, some of the participants appeared confused because the questions were worded and ordered in the exact same fashion for both the mother and father forms, only the directions changed – from responding for their mother or father. As such, some participants became somewhat upset at the need to answer the exact same questions over again.

Implications for Further Research and Summary

It is hoped that this research is replicated with the following modifications; a more diverse sample is needed in terms of gender, ethnic and cultural backgrounds as well as use of a population not in substance abuse treatment as a result of their legal/probationary status. Additionally, it is recommended that research be conducted to examine substance use/abuse within the family of origin. This, along with examining attitudes towards substance use/abuse of the family of origin, may to help determine whether Hispanic adolescents who live in a home with a parent or others who consumes and/or abuses alcohol or drugs influences the adolescents substance use behavior (CASA, 2011).

Finally, some the insights gained from this research suggest that further research needs to explore other factors in adolescence and young adulthood that influence experimentation and initial drug use. Although parenting style, birth order, family composition and gender may play some role in substance abuse, future research should aim at uncovering any other social and/or familial influences on this particular age group. Continued research in this direction is the first step in possible prevention of substance abuse in young adults.

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APPENDIX A

APPENDIX A

PARENTAL AUTHORITY QUESTIONNAIRE

Instructions: For each of the following statements, circle the number of the 5-point scale (1 = *strongly disagree,* 5 = *strongly agree)* that best describes how that statement applies to you and your **mother**. Try to read and think about each statement as it applies to you and your **mother** during your years of growing up at home. There are no right or wrong answers, so don't spend a lot of time on any one item. We are looking for your overall impression regarding each statement. Be sure not to omit any items.

1 = Strongly disagree
2 = Disagree
3 = Neither agree nor disagree
4 = Agree
5 = Strongly Agree

1. While I was growing up my mother felt that in a well-run home the children should have their way in the family as often as the parents do. **1 2 3 4 5**

2. Even if his children didn't agree with his, my mother felt that it was for our own good if we were forced to conform to what she thought was right. **1 2 3 4 5**

3. Whenever my mother told me to do something as I was growing up, she expected me to do it immediately without asking any questions. **1 2 3 4 5**

4. As I was growing up, once family policy had been established, my mother discussed the reasoni behind the policy with the children in the family. **1 2 3 4 5**

5. My mother has always encouraged verbal give-and-take whenever I have felt that family rules and restrictions were unreasonable. **1 2 3 4 5**

6. My mother has always felt that what his children need is to be free to make up their own minds and to do what they want to do, even if this does not agree with what their parents might want. **1 2 3 4 5**

7. As I was growing up my mother did not allow me to question any decision she had made. **1 2 3 4 5**

8. As I was growing up my mother directed the activities and decisions of the children in the family through reasoning and discipline. **1 2 3 4 5**

9. My mother has always felt that more force should be used by parents in order to get their children to behave the way they are supposed to. **1 2 3 4 5**

10. As I was growing up my mother did *not* feel that I needed to obey rules and regulations of behavior simply because someone in authority had established them. **1 2 3 4 5**

11. As I was growing up I knew what my mother expected of me in my family, but I also felt free to discuss those expectations with my mother when I felt they were unreasonable. **1 2 3 4 5**

12. My mother felt that wise parents should teach their children early just who is boss in the family. **1 2 3 4 5**

13. As I was growing up, my mother seldom gave me expectations and guidelines for my behavior. **1 2 3 4 5**

14. Most of the time as I was growing up my mother did what the children in the family wanted when making family decisions. **1 2 3 4 5**

15. As the children in my family were growing up, my mother consistently gave us direction and guidance in rational and objective ways. **1 2 3 4 5**

16. As I was growing up my mother would get very upset if I tried to disagree with her. **1 2 3 4 5**

17. My mother feels that most problems in society would be solved if parents would *not* restrict their children's activities, decisions, and desires as they are growing up. **1 2 3 4 5**

18. As I was growing up my mother let me know what behavior she expected of me, and if I didn't meet those expectations, she punished me. **1 2 3 4 5**

19. As I was growing up my mother allowed me to decide most things for myself without a lot of direction from her. **1 2 3 4 5**

20. As I was growing up my mother took the children's opinions into consideration when making family decisions, but she would not decide for something simply because the children wanted it. **1 2 3 4 5**

21. My mother did not view herself as responsible for directing and guiding my behavior as I was growing up. **1 2 3 4 5**

22. My mother had clear standards of behavior for the children in our home as I was growing up, but she was willing to adjust those standards to the needs of each of the individual children in the family. **1 2 3 4 5**

23. My mother gave me direction for my behavior and activities as I was growing up and she expected me to follow her direction, but she was always willing to listen to my concerns and to discuss that direction with me. **1 2 3 4 5**

24. As I was growing up my mother allowed me to form my own point of view on family matters and she generally allowed me to decide for myself what I was going to do. **1 2 3 4 5**

25. My mother has always felt that most problems in society would be solved if we could get parents to strictly and forcibly deal with their children when they don't do what they are supposed to as they are growing up. **1 2 3 4 5**

26. As I was growing up my mother often told me exactly what she wanted me to do and how she expected me to do it. **1 2 3 4 5**

27. As I was growing up my mother gave me clear direction for my behaviors and activities, but she was also understanding when I disagreed with her. **1 2 3 4 5**

28. As I was growing up my mother did not direct the behaviors, activities, and desires of the children in the family. **1 2 3 4 5**

29. As I was growing up I knew what my mother expected of me in the family and she insisted that I conform to those expectations simply out of respect for his authority. **1 2 3 4 5**

30. As I was growing up, if my mother made a decision in the family that hurt me, she was willing to discuss that decision with me and to admit it if he had made a mistake. **1 2 3 4 5**

Instructions: For each of the following statements, circle the number of the 5-point scale (1 = *strongly disagree,* 5 = *strongly agree)* that best describes how that statement applies to you and your **father**. Try to read and think about each statement as it applies to you and your **father** during your years of growing up at home. There are no right or wrong answers, so don't spend a lot of time on any one item. We are looking for your overall impression regarding each statement. Be sure not to omit any items.

1 = Strongly disagree
2 = Disagree
3 = Neither agree nor disagree
4 = Agree
5 = Strongly Agree

1. While I was growing up my father felt that in a well-run home the children should have their way in the family as often as the parents do. **1 2 3 4 5**

2. Even if his children didn't agree with his, my father felt that it was for our own good if we were forced to conform to what he thought was right. **1 2 3 4 5**

3. Whenever my father told me to do something as I was growing up, he expected me to do it immediately without asking any questions. **1 2 3 4 5**

4. As I was growing up, once family policy had been established, my father discussed the reasonin behind the policy with the children in the family. **1 2 3 4 5**

5. My father has always encouraged verbal give-and-take whenever I have felt that family rules and restrictions were unreasonable. **1 2 3 4 5**

6. My father has always felt that what his children need is to be free to make up their own minds and to do what they want to do, even if this does not agree with what their parents might want. **1 2 3 4 5**

7. As I was growing up my father did not allow me to question any decision he had made. **1 2 3 4 5**

8. As I was growing up my father directed the activities and decisions of the children in the family through reasoning and discipline. **1 2 3 4 5**

9. My father has always felt that more force should be used by parents in order to get their children to behave the way they are supposed to. **1 2 3 4 5**

10. As I was growing up my father did *not* feel that I needed to obey rules and regulations of behavior simply because someone in authority had established them. **1 2 3 4 5**

11. As I was growing up I knew what my father expected of me in my family, but I also felt free to discuss those expectations with my father when I felt they were unreasonable. **1 2 3 4 5**

12. My father felt that wise parents should teach their children early just who is boss in the family. **1 2 3 4 5**

13. As I was growing up, my father seldom gave me expectations and guidelines for my behavior. **1 2 3 4 5**

14. Most of the time as I was growing up my father did what the children in the family wanted when making family decisions. **1 2 3 4 5**

15. As the children in my family were growing up, my father consistently gave us direction and guidance in rational and objective ways. **1 2 3 4 5**

16. As I was growing up my father would get very upset if I tried to disagree with him. **1 2 3 4 5**

17. My father feels that most problems in society would be solved if parents would *not* restrict their children's activities, decisions, and desires as they are growing up. **1 2 3 4 5**

18. As I was growing up my father let me know what behavior he expected of me, and if I didn't meet those expectations, he punished me. **1 2 3 4 5**

19. As I was growing up my father allowed me to decide most things for myself without a lot of direction from his. **1 2 3 4 5**

20. As I was growing up my father took the children's opinions into consideration when making family decisions, but he would not decide for something simply because the children wanted it. **1 2 3 4 5**

21. My father did not view herself as responsible for directing and guiding my behavior as I was growing up. **1 2 3 4 5**

22. My father had clear standards of behavior for the children in our home as I was growing up, but he was willing to adjust those standards to the needs of each of the individual children in the family. **1 2 3 4 5**

23. My father gave me direction for my behavior and activities as I was growing up and he expected me to follow his direction, but he was always willing to listen to my concerns and to discuss that direction with me. **1 2 3 4 5**

24. As I was growing up my father allowed me to form my own point of view on family matters and he generally allowed me to decide for myself what I was going to do. **1 2 3 4 5**

25. My father has always felt that most problems in society would be solved if we could get parents to strictly and forcibly deal with their children when they don't do what they are supposed to as they are growing up. **1 2 3 4 5**

26. As I was growing up my father often told me exactly what he wanted me to do and how he expected me to do it. **1 2 3 4 5**

27. As I was growing up my father gave me clear direction for my behaviors and activities, but he was also understanding when I disagreed with him. **1 2 3 4 5**

28. As I was growing up my father did not direct the behaviors, activities, and desires of the children in the family. **1 2 3 4 5**

29. As I was growing up I knew what my father expected of me in the family and he insisted that I conform to those expectations simply out of respect for his authority. **1 2 3 4 5**

30. As I was growing up, if my father made a decision in the family that hurt me, he was willing to discuss that decision with me and to admit it if he had made a mistake. **1 2 3 4 5**

APPENDIX B

APPENDIX B

DAST- 20 (DRUG ABUSE SCREENING TEST – 20)

1. Have you used drugs other than those required for medical reasons? **YES NO**
2. Have you abused prescription drugs? **YES NO**
3. Do you abuse more than one drug at a time? **YES NO**
4. Can you get through the week without using drugs (other than those required for Medical reasons)? **YES NO**
5. Are you always able to stop using drugs when you want to? **YES NO**
6. Have you had "blackouts" or "flashbacks" as a result of drug use? **YES NO**
7. Do you ever feel bad about your drug abuse? **YES NO**
8. Does your spouse (or parents) ever complain about your involvement with drugs? **YES NO**
9. Has drug abuse ever created problems between you and your spouse or parents? **YES NO**
10. Have you ever lost friends because of your use of drugs? **YES NO**
11. Have you ever neglected your family because of your use of drugs? **YES NO**
12. Have you ever been in trouble at work because of drug abuse? **YES NO**
13. Have you ever lost a job because of drug abuse? **YES NO**
14. Have you gotten into fights when under the influence of drugs? **YES NO**
15. Have you engaged in illegal activities to obtain drugs? **YES NO**
16. Have you ever been arrested for possession of illegal drugs? **YES NO**
17. Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs? **YES NO**
18. Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, or bleeding)? **YES NO**
19. Have you ever gone to anyone for help for a drug problem? **YES NO**
20. Have you ever been involved in a treatment program specifically related to drug use? **YES NO**

APPENDIX C

APPENDIX C

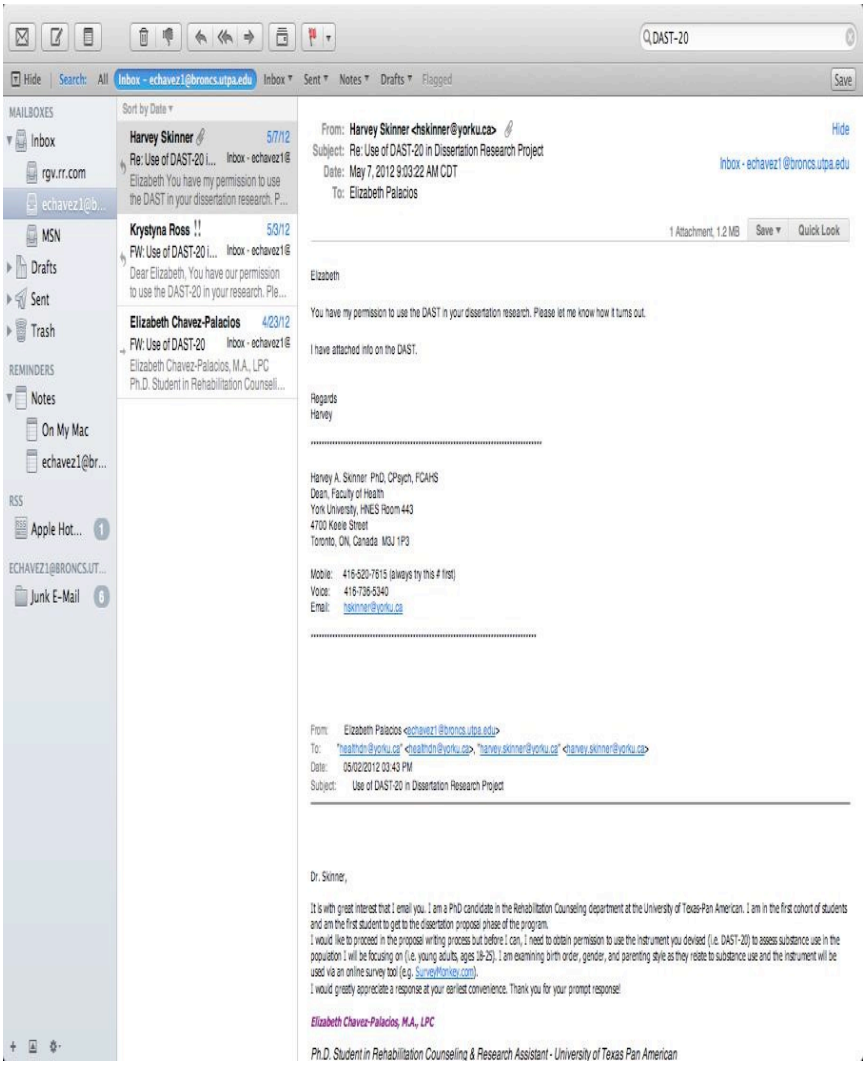
DEMOGRAPHIC SCALE

1. Age: ____
2. Gender (check one): □Male □Female
3. Ethnicity (check one): □Caucasian □Mexican-American □Other Hispanic □Other: _____
4. Are you still in school (check one)? □Yes □No
    a. If so, what level? □High School □ Undergraduate □ Graduate □ Technical/Vocational
5. Who mostly raised you as a child (check one): □ Single/Birth Mother □Single/Birth Father □Both Birth Parents □Adoptive/Foster Parents □Grandparents □Other Relatives □Other: _____
    a. Were you adopted (check one)? □Yes □No
6. How many brother(s)/sister(s) do you have? _____
    a. I am the (check one): □ Oldest □ Youngest □ Middle child □ Other#: ___
7. How would you rate your family in terms of money as a child (check one)?
    □ "We were struggling, didn't have enough" ("We were considered poor")
    □ "Well-Off" ("We had more than one good, working car")
    □ "We were rich" ("We owned a big house, a fancy car/truck, boat or condo")
8. Did your parents use illegal drugs/alcohol when you were younger (check one)? □Yes □No □ Not sure
    a. If yes, did your parents "allow" you to use illegal drugs/alcohol while you lived at home with them (check one)? □Yes □No
9. When did your illegal drug/alcohol use start (at what age)? _____
10. Did you or your family go to church regularly (check one)? □Yes □No
11. Did you regularly eat meals together (check one)? □Yes □No
12. Were both your parents (i.e. people who raised you) away a lot (check one)? □Yes □No
13. What language was spoken in your home growing up? _____
14. Did your parents ever talk to you about drugs, alcohol and/or sex? □Yes □No
15. Were the boys in your family treated differently than the girls in your family (check one)? □Yes □No
    a. Would you say the boys in your family were given more 'freedom' than the girls (check one)? □Yes □No

APPENDIX D

APPENDIX D

REQUEST TO USE / PERMISSION FOR DAST-20



DAST-20

Hide | Search: All | Inbox - echavez1@broncs.utpa.edu | Inbox | Sent | Notes | Drafts | Flagged | Save

MAILBOXES
- Inbox
  - rgv.rr.com
  - echavez1@b...
  - MSN
- Drafts
- Sent
- Trash

REMINDERS
- Notes
  - On My Mac
  - echavez1@br...

RSS
- Apple Hot... 1

ECHAVEZ1@BRONCS.UT...
- Junk E-Mail 6

Sort by Date

Harvey Skinner 5/7/12
Re: Use of DAST-20 i... Inbox - echavez1@
Elizabeth You have my permission to use the DAST in your dissertation research. P...

Krystyna Ross 5/3/12
FW: Use of DAST-20 i... Inbox - echavez1@
Dear Elizabeth, You have our permission to use the DAST-20 in your research. Ple...

Elizabeth Chavez-Palacios 4/23/12
FW: Use of DAST-20 Inbox - echavez1@
Elizabeth Chavez-Palacios, M.A., LPC
Ph.D. Student in Rehabilitation Counseli...

From: Harvey Skinner <hskinner@yorku.ca> Hide
Subject: Re: Use of DAST-20 in Dissertation Research Project
Date: May 7, 2012 9:03:22 AM CDT Inbox - echavez1@broncs.utpa.edu
To: Elizabeth Palacios

1 Attachment, 1.2 MB Save Quick Look

Elizabeth

You have my permission to use the DAST in your dissertation research. Please let me know how it turns out.

I have attached info on the DAST.

Regards
Harvey

Harvey A. Skinner PhD, CPsych, FCAHS
Dean, Faculty of Health
York University, HNES Room 443
4700 Keele Street
Toronto, ON, Canada M3J 1P3

Mobile: 416-520-7615 (always try this # first)
Voice: 416-736-5340
Email: hskinner@yorku.ca

From: Elizabeth Palacios <echavez1@broncs.utpa.edu>
To: "healthdn@yorku.ca" <healthdn@yorku.ca>, "harvey.skinner@yorku.ca" <harvey.skinner@yorku.ca>
Date: 05/02/2012 03:43 PM
Subject: Use of DAST-20 in Dissertation Research Project

Dr. Skinner,

It is with great interest that I email you. I am a PhD candidate in the Rehabilitation Counseling department at the University of Texas-Pan American. I am in the first cohort of students and am the first student to get to the dissertation proposal phase of the program.
I would like to proceed in the proposal writing process but before I can, I need to obtain permission to use the instrument you devised (i.e. DAST-20) to assess substance use in the population I will be focusing on (i.e. young adults, ages 18-25). I am examining birth order, gender, and parenting style as they relate to substance use and the instrument will be used via an online survey tool (e.g. SurveyMonkey.com).
I would greatly appreciate a response at your earliest convenience. Thank you for your prompt response!

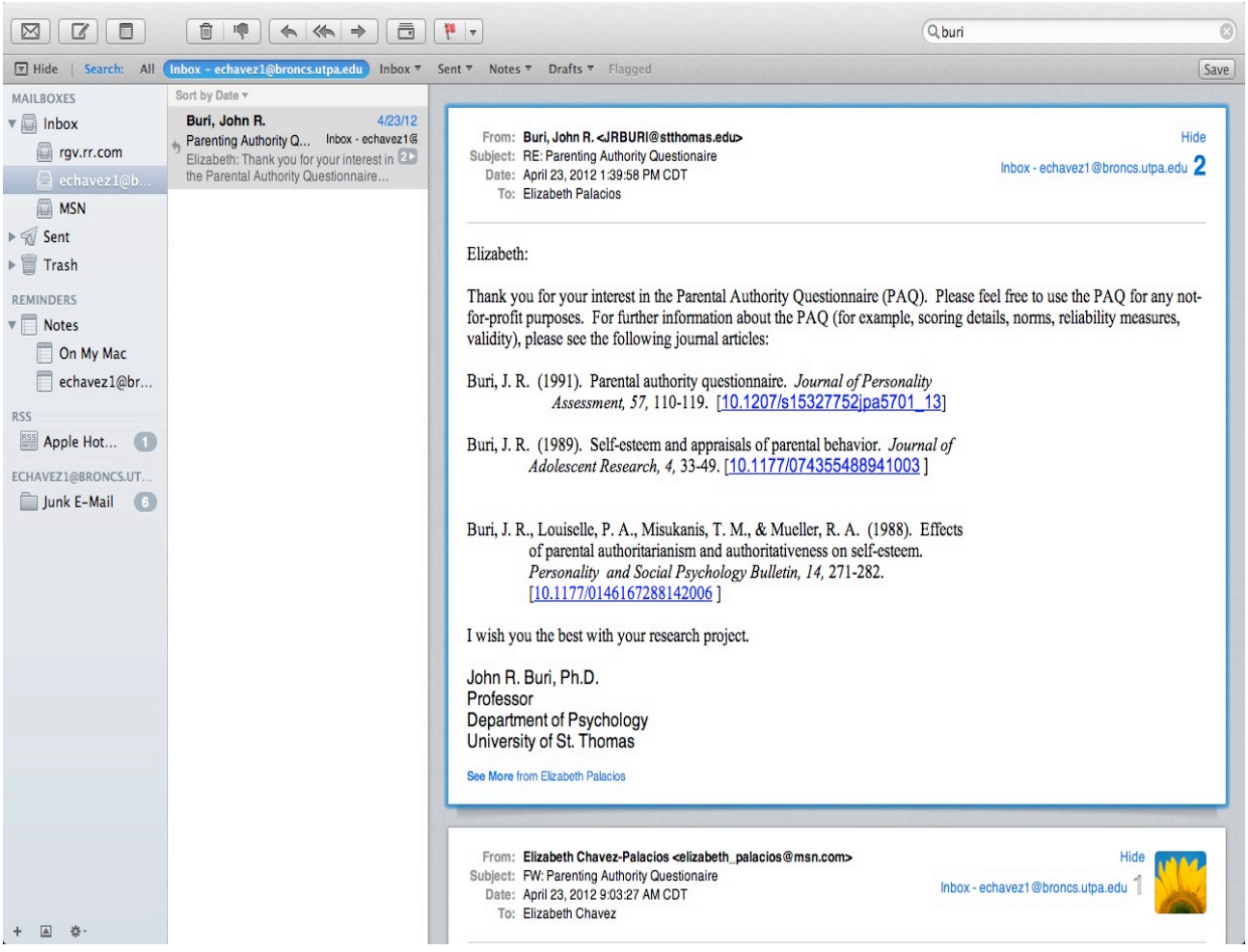
Elizabeth Chavez-Palacios, M.A., LPC

Ph.D. Student in Rehabilitation Counseling & Research Assistant - University of Texas Pan American

APPENDIX E

APPENDIX E

REQUEST / PERMISSION FOR PARENTAL AUTHORITY QUESTIONNAIRE



buri

Hide | Search: All Inbox - echavez1@broncs.utpa.edu Inbox Sent Notes Drafts Flagged Save

MAILBOXES
Inbox
rgv.rr.com
echavez1@b...
MSN
Sent
Trash
REMINDERS
Notes
On My Mac
echavez1@br...
RSS
Apple Hot... 1
ECHAVEZ1@BRONCS.UT...
Junk E-Mail 6

Sort by Date

Buri, John R. 4/23/12
Parenting Authority Q... Inbox - echavez1@
Elizabeth: Thank you for your interest in the Parental Authority Questionnaire...

From: Buri, John R. <JRBURI@stthomas.edu>
Subject: RE: Parenting Authority Questionnaire
Date: April 23, 2012 1:39:58 PM CDT
To: Elizabeth Palacios

Hide
Inbox - echavez1@broncs.utpa.edu 2

Elizabeth:

Thank you for your interest in the Parental Authority Questionnaire (PAQ). Please feel free to use the PAQ for any not-for-profit purposes. For further information about the PAQ (for example, scoring details, norms, reliability measures, validity), please see the following journal articles:

Buri, J. R. (1991). Parental authority questionnaire. *Journal of Personality Assessment, 57,* 110-119. [10.1207/s15327752jpa5701_13]

Buri, J. R. (1989). Self-esteem and appraisals of parental behavior. *Journal of Adolescent Research, 4,* 33-49. [10.1177/074355488941003]

Buri, J. R., Louiselle, P. A., Misukanis, T. M., & Mueller, R. A. (1988). Effects of parental authoritarianism and authoritativeness on self-esteem. *Personality and Social Psychology Bulletin, 14,* 271-282. [10.1177/0146167288142006]

I wish you the best with your research project.

John R. Buri, Ph.D.
Professor
Department of Psychology
University of St. Thomas

See More from Elizabeth Palacios

From: Elizabeth Chavez-Palacios <elizabeth_palacios@msn.com>
Subject: FW: Parenting Authority Questionaire
Date: April 23, 2012 9:03:27 AM CDT
To: Elizabeth Chavez

Hide
Inbox - echavez1@broncs.utpa.edu 1

APPENDIX F

APPENDIX F

INFORMED CONSENT

My name is Elizabeth Chavez-Palacios, and I am a PhD student from the Department of Rehabilitation Counseling at The University of Texas – Pan American. I am conducting research independent of this treatment facility as well as, United States Federal Probation, Texas State Probation and/or Parole, and/or any other federal, state, county or municipal agency.

I would like to invite you to participate in my research study to look at the perceived parenting style and substance abuse in Hispanic young adults. You may participate if you are between the ages of 18 and 25.

As a participant, you will be asked to complete a survey, which shouldn't take more than 30-45 minutes of your time. Please know this is a survey for research – not for treatment purposes.

If you would like to participate in this research study, please complete the survey packet. If you do not, just turn in the blank survey packet in the drop-box. Please be aware that this research is not tied in with your treatment at this facility and your treatment in this program will not be effected in any way, whether you chose to participate or not.

Participation in this study is strictly voluntary. You may decline to answer any of the survey questions if you so wish. Further, you may decide to withdraw from this study at any time without any negative consequences by advising the researcher.

All information you provide is completely confidential. Your name will not be in any report resulting from this study. There are no known or likely risks to you as a participant in this study. However, if you feel Emotional Distress as a result of participating in this research, please call 1-800-LIFENET (1-800-543-6338).

Do you have any questions now? If you have questions later, please contact me at Elizabeth_palacios@msn.com or you may contact my advisor, Dr. Irmo Marini, at imarini@utpa.edu.

This research has been reviewed and approved by the Institutional Review Board for Human Subjects Protection (IRB). If you have any questions about your rights as a participant, or if you feel that the researcher did not adequately meet your rights as a participant, please contact the IRB at 956-665-2889 or irb@utpa.edu. You are also invited to provide anonymous feedback to the IRB by visiting www.utpa.edu/IRBfeedback. *Please keep this sheet for your reference.*

BIOGRAPHICAL SKETCH

Elizabeth Chavez-Palacios earned her Bachelor of Arts degree in Psychology from the University of Texas-Pan American in 2003. In 2006, she earned her Master of Arts degree in Clinical Psychology from the University of Texas –Pan American. Her current degree (Doctorate of philosophy) is being awarded in Rehabilitation Counseling by the University of Texas –Pan American. She resides at 2112 King Road, San Juan, Texas 78589. She is currently a Licensed Professional Counselor –Supervisor and is employed as a Lecturer in the Rehabilitation department at the University of Texas–Pan American.