AN EXAMINATION OF THE RELATIONSHIP BETWEEN VARIOUS MENTAL

HEALTH PROBLEMS AND THE THREE SUBFACTORS OF THE RUTGERS

ALCOHOL PROBLEM INDEX

by

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Abstract

The Rutgers Alcohol Problem Index (RAPI) is a well-known instrument used as a primary outcome measure in intervention studies with college students. It has been used in studies assessing the developmental trajectory of high-risk drinking and also used in studies which address the predictors of alcohol-related problems among college students (Carey & Correia, 1997; Ham & Hope, 2005; Levy & Earleywine, 2003). Martens et al. (2006) found that the RAPI individual items were able to be grouped in three distinct subfactors (Abuse/Dependence, Personal Consequences, and Social Consequences). The objective of this study was to examine the relationship between various mental health problems (depression, posttraumatic stress disorder, physical abuse victimization, physical abuse perpetration, sexual coercion victimization, sexual coercion perpetration, and self-esteem) and the three subscales of the RAPI. It was anticipated that the mental health problems explain more of the variance on Abuse/Dependence than on Personal or Social Consequences. Results indicated that even though mental health problems explain more of the variance on Abuse/Dependence than on Personal or Social Consequences, the difference did not appear large enough to suggest that the subfactors represent unique domains. In conclusion, it cannot be assumed that the three subfactors measure distinct and exclusive types of consequences. A student that scores high on Abuse/Dependence also may be experiencing Personal and Social Consequences.

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Dedication

Quiero dedicar mi trabajo y expresar mi más profundo agradecimiento a mis amados nonnos, Elisa y Giovanni Scenna, quienes me han brindado, y me siguen brindando, su infinito amor.

CHAPTER 1 - Introduction

Abusive use of alcohol is a major public health concern (Vik, Carello, Tate, & Field, 2000). Heavy drinking among college students is also a significant health risk associated with negative consequences of varying severity for both heavy drinkers and the campus community (Labrie, Pederson, Neighbors, & Hummer, 2000). Those who engage in heavy drinking may experience a wide range of negative consequences such as poor academic and job performance, fights with family members and friends, and participation in high risk-activity such as illicit drug use, unsafe sex, development of illness or health problems (Orona, Blume, Morena, & Perez, 2007). Sometimes, the consequence of drinking is death. In fact, a major cause of death for many adults, age 17 to 24, is accidents involving alcohol consumption (Orona et al., 2007).

Previous studies have tried to differentiate consequences of drinking according to severity or frequency. Vic et al. (2000) divided consequences into three categories: common events resulting from drinking such as arguments, feeling tired, hung-over, or nauseated; less frequent consequences of alcohol use such as memory loss, blackouts, depression, fights, damaging property, impaired relationships, injuries, and school problems; and uncommon problems such as illegal activities, job problems, suicidal ideation, arrests, car accidents, trouble with police, or unsafe sex practices. Many studies examine the relationship between level of drinking and consequences of drinking in the college student population (Berkowitz & Perkings, 1986; Higson, Heeren, Winter, & Wcsler, 2005; LaBrie, Pedersen, Neighbors, & Hummer, 2008 Vik et al. 2000).

Joe Black is an 18-year-old student recently graduated from high school waiting to start the university. He was referred to the Family Center by his friend. Joe was charged with driving under the influence (DUI) after wrecking his truck. Months after this event, he was charged with a minor in consumption (MIC). The court required him to take a drug and alcohol evaluation. The results of the evaluation showed no problems with alcohol even though his consequences can be considered uncommon according to Vic. et al. (2000). Joe believed he did not have a problem with alcohol. He said he went to parties and drank just to have fun or because others were drinking. He said he had three blackouts in the past year and got drunk once a month. He is

currently in therapy but he denies having a problem with alcohol. He believes he has a problem with judgment and making right choices.

Joe is similar to many college students who are required to seek counseling. It is often difficult for clinicians to determine the differences between adolescents with problems with alcohol who may have comorbid mental health problems and those who do not by examining only drinking consequences. Many students who have experienced negative consequences for drinking do not develop a problem with alcoholism. On the other hand, Orona et al. (2007) stated that some students may also drink heavily but do not experience significant aversive consequences as a result of their consumption of alcohol. In one national study of college drinking, only about 20% of students who reported using alcohol in the past year experienced the following alcohol-related problems: missing classes, getting behind in schoolwork, doing something they later regretted, forgetting their actions, arguing with friends, engaging in unplanned sexual activities, and driving after drinking (Martens et al. 2007). This means that almost 80% of those who engaged in drinking in the past year have not reported negative consequences from drinking.

The detrimental effects of alcohol are real, and large. There has been an emphasis in the public health field towards identifying and attempting to reduce these effects (Peele & Brodsky, 2000). The current study attempts to help clinicians working with clients like Joe who claim to have no problems with alcohol. Even though students may report high consumptions of alcohol and little or no negative consequences, they may be experiencing mental health problems (depression, posttraumatic stress disorder, victims and perpetrators of physical abuse, victims and perpetrators of sexual coercion, and self-esteem). Understanding mental health problems and the relation to various types of problems with alcohol (Abuse/Dependence, Personal Consequences, and Social Consequences) identified by Martens et al. (2004) will be the focus of this article.

The Rutgers Alcohol Problem Index (RAPI; White & Labouvie, 1989) is a scale widely used to measure alcohol related consequence in adolescent and young adults including college students (Orona et al. 2007). The RAPI was designed and validated specifically for use with adolescents. It is a 23-item general screening measure which includes consequences of a general nature as well as consequences that are unique to adolescents (Neal, Corbin, & Fromme, 2006). Response options for the RAPI are typically scored on a 0-4 scale.

In previous studies the RAPI scores have been linked with a variety of clinical factors. According to Neal et al. (2006), RAPI was also a good predictor of treatment engagement at higher levels of item endorsement. RAPI's scores from 0 to 7 have no association with treatment engagement. However, the likelihood of engaging treatment increases rapidly with scores of 8 and over. They also stated that different items in the RAPI are indicative of different level of alcohol problems. Low-levels of alcohol problems include psychosocial disruptions such as arguments or fights with friends or causing embarrassment. Moderate level of alcohol problem are reflected in items such as attempts to control drinking, low levels of health consequences such as black outs or fainting, and more severe psychological consequences such as embarrassing others. Severe items appear to be indicative of dependence-type symptoms and include withdrawal, over involvement with alcohol related behaviors, and concerns about the person's drinking from family and friends.

Marterns et al. (2007) examined whether the RAPI consisted of distinct subfactors among the items. They found that items cluster in three distinct subfactors. Abuse/Dependence items (e.g. "felt physically or psychological dependent on alcohol", "had withdrawal symptoms", and "felt that you had a problem with alcohol") are consistent with the experiences of those who have significant problems related to alcohol use. The second factor, Personal Consequences, is related to consequences that primarily impact only the individual consuming alcohol. Some of the items on this factor are "miss a day of school or work", "not able to do your homework or study for a test", and "neglected your responsibilities". Personal Consequence items are generally less severe or intense. The third factor was labeled Social Consequences. Some of the items for Social Consequences are "had a fight, argument, or bad feelings with a friend, got into fights", "acted bad or did mean things", and "caused shame or embarrassment to someone". These items not only impact the individual drinker, but also with whom he or she interacts. Social Consequence items like Personal Consequence items are not considered as severe as Abuse/ Dependence items. Even though these authors were able to identify three distinct subfactors, they did not attempt to relate these subfactors to distinct risk markers or co-occurring factors.

The RAPI is one of the most commonly used measures to assess alcohol-related problems among college students and it has been used as a primary outcome measure in interventions studies with college students. The purpose of this study is to examine the relationship between mental health problems and the three subfactors of RAPI.

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Theoretical Framework

One theoretical perspective was used to guide this research. The biopsychosocial theory represents the complex interactions of biological, psychological, social and environmental structures and process (Arif & Westermeyer, 1988). This model was developed to better explain the concept of disease. It takes into account elements, which were originally overlooked by the biomedical model. The biopsychosocial model takes into account the complex interaction that ultimately may culminate in active disease or manifest illness (Engel, 1977). This model is used in this study because research and clinical observations over the past several decades has made it increasingly clear that the etiology of problem drinking and alcoholism is multifaceted and highly complex (Oliver, 1992).

It seems for many mental health problems there is a biological factor. In alcohol, the influence of genetic factors is explained as vulnerability for a person to develop a progressive and irreversible condition. This genetic influence also seems to be associated with family history (Ewing, 1976). There is also a biological factor, which plays a role once the person has developed tolerance and physical dependence to the substance (Ogborne, 2003). Some research suggesting the propensity of genetic influence in alcoholism includes studies with twins, adoptions, and marker studies (Oliver 1992).

Psychological factors also play an important role in alcohol use and other mental problems. Regier, Farmer, Rae, Locke, Keith, Judd, et al. (1990) found that over 50% of those who qualified for a diagnosis of drug abuse also had one or more mental disorder at some point during their lifetime. Fifty percent of those with drug use problems also had drinking problems during their lifetime. One of the most common co-morbid problems is depression. Depression, PTSD, and self-esteem will be examined in this study as comorbid psychological problems.

Social and environmental factors also are part of the equation when mental health problems are discussed. Social factors cannot be ignored even if they do not necessarily cause alcoholism in themselves (Ewing, 1976). Ogborne (2003) reports that social and environmental factors contribute to the onset and maintenance of substance use and to relapse. In this study, physical and sexual victimization and perpetration will be examined as comorbid social problems.

It is important to consider the complexity and interconnectedness of the factors that contribute to the explanation of the individual disorder, but more so to the relationship between

disorders. A biopsychosocial theory is inclusive and holistic in the way it explains different mental health problems. It is difficult to think of any human disease that is not best examined from the biological, psychological, and social point of view (Ewing, 1976).

CHAPTER 2 - Literature Review

This chapter presents a review of the literature of alcohol use, mental health problems, and their relationships. The mental health problems selected in this study are depression, posttraumatic stress disorder, victimization and perpetration of physical abuse, victimization and perpetration of sexual coercion, and self-esteem. The literature chapter is divided into sections, which address the correlation between each of the mental heath problems and alcohol use.

Depression and Alcohol Use

A number of studies have shown that drinking alcohol is associated with depression (Aneshensel & Huba, 1983; Camatta & Nagoshi, 1994). Furthermore, depression is the most prevalent mental health disorder in adolescence. In fact, Kim (2002) reported that 60% of adolescents experienced depressive symptoms. Young adults are depressed more often than any other age group. Research has supported the notion that individuals engaging in heavy use of alcohol are more likely to experience symptoms of depression and anxiety than are individuals who do not engage in hazardous alcohol use (Smith & Tran, 2007).

For example, Harrel & Karim (2007) found a positive correlation between higher depressive symptoms and the level of alcohol consumption in a college student sample. However, even though male college students reported more alcohol use than female college students, no gender differences in depressive symptoms were found among their participants. The overall mean for depressive symptoms was high among the entire sample; additionally, the participants had a mean level of depressive symptoms approaching moderate depression.

Christiansen, Vik, & Jarchow (2002) also reported that heavy drinkers experience more depressive symptoms than non-drinkers. They found that those who tend to engage in heavy drinking when alone are more likely to experience more depressive symptoms than those who drink in a variety of social contexts. These authors reported that college students often consider getting drunk as an appropriate behavior in social contexts such as parties, concerts, and on dates. Heavy drinking when alone is not so typical of college students.

Drinking has also been consistently related to coping and negative emotion regulation in both general and college population (Kassel, Jackson, & Unrod, 2000; Peele & Brodsky, 2000). Problem drinkers often anticipate that alcohol will reduce aversive emotional states to a greater extent than do non-problem drinkers. Prior research has also shown that more severe drinking consequences were associated with drinking to manage emotions and expectancies for alcohol use to enhance social behavior (Nelson, Heath, & Kessler, 1998).

It has been suggested that some people may feel motivated to drink to alleviate depressed mood (Aneshensel & Huba, 1983). Other studies of motives for drinking have consistently shown that 10 to 25% of drinkers report drinking to cope with or regulate negative emotions (Cahalan, Cisin, & Crossley, 1969; Parry, Cisin, Balter, Mellinger, & Manheimer 1974). Camatta and Craig (1996) suggested that drinkers who experience alcohol problems are more likely to use alcohol for "self-medicated" reasons such as coping with shyness or emotional upsets. On the other hand, people who drink for "celebratory" reason such as being at a party or with friends may not necessarily have alcohol problems. It seems that those college students that experience more problems with alcohol may use alcohol as a way to cope with issues.

While most studies found a positive relationship between depression and alcohol use, Kim (2002) found different results. Kim examined the relationship between depression and level of alcohol consumption in a week in Korean college student using the Beck Depression Inventory (BDI; Beck & Beamsdenfer, 1974). Kim found that alcohol consumption was influenced by level of depression. Depression had a significant negative effect on alcohol consumption. That is, the higher the depression, the lower the alcohol consumption. This finding was inconsistent with other studies reported here. Kim hypothesized that drinking may be a component of socializing and friendship for college students. Since social contact was positively related to alcohol consumption, those who feel depressed may have less desire to socialize and therefore to drink.

Another explanation to the results found by Kim is that the majority of the Korean students lived with their parents. It is possible that those who felt depressed did not go out and therefore did not drink in social settings. Those who may have felt depressed decided to stay at home and they would choose not to drink heavily when parents are present. This is an important variance when considering college students who live alone vs. college students or adults who

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live with their families. It also brings up a difference between drinking in social events and drinking to cope with depression.

It seems there is some consistency in the literature that positively correlates the use of alcohol and depressive symptoms. Furthermore, the literature seems to point to the possibility that different types of alcohol use (e.g., social versus alone) may be related differently to depression. However, no article has examined how the different three subfactors of RAPI (White & Labouvie, 1989) identified by Martens et al. (2007) (i.e., Abuse/Dependence, Personal Consequences and Social Consequences), may relate differently to depression. It is hypothesized that high scores on the Abuse/Dependence subfactor will be more highly related to depression than will high scores on Social or Personal Consequences.

Victimization and Perpetration of Sexual Coercion and Alcohol Use

Sexual coercion in the university setting is a topic of interest for many researchers. Results consistently show high prevalence rates of sexually coercive experiences among heterosexual dating women (Craig, 1990). Many women report expecting to experience an incident of sexual coercion in a dating situation despite their definite rejection of coercive behavior (Cook, 1995). For the most part, sexual coercion has been defined as a women's issue. However, more recent results have clearly documented that both men and women may be victims of sexual coercion as well as perpetrators of sexual coercion in their heterosexual interactions (O'Sullivan, Byers, & Finkelman, 1998). McConaghy and Zamir (1995) found that 30% of male and 35% of female medical students had experienced physical force to engage in sexual intercourse. In the same study, 4% of men and 2% of women reported having used or threatened to use physical force in a sexual situation. Larimer, Lydum, Anderson, & Turner (1999) also found similar rates between men and women recipients of sexual coercion in the Greek system in college. Almost 21% of male and 27.5% of female college students reported being the recipients of one or more of the five types of unwanted sexual contact they identified. Ten percent of the male college students and 5% of the female college students reported instigating one or more of these types of sexual contact.

O'Sullivan et al. (1998) report that discussing the rates of sexual coercion without further examination of the circumstances may not be providing a complete picture. In their own research, they examined sexual coercion as it is related to alcohol and drug use with 433 college

students. They found that male victims were more likely than female victims to report that they had been given alcohol or drugs, thus impairing their ability to resist the perpetrators attempts. Researchers have found that frequently the (male) offender and less frequently the (female) victim have consumed drugs and/or alcohol prior to an incident of sexual coercion, and that consumption is a useful predictor of assault.

Alcohol-related high-risk sexual activity, including sexual coercion, is fairly frequent for college students of both genders (Larimer et al., 1999). Larimer and colleagues reported that both male and female college student recipients of sexual coercion reported more alcohol quantity per occasion, experiencing greater numbers of alcohol-related negative consequences on the RAPI, and more alcohol dependence symptoms from the ADS (Alcohol Dependence Scale). Alcohol use appears to play a substantial role in sexual victimization experiences for men as well as for women. Alcohol is one of the factors commonly reported as being associated with sexual assault. Use of alcohol is especially relevant to situations involving non-consensual sex between new dating partners (Abbey, Ross, McDuffie, & McAulan, 1996). Koss (1988) found in a population of students of higher education that 74% of the perpetrators and 55% of the victims of rape had been drinking alcohol prior to the incident. A number of surveys suggest that in over 50% of acquaintance and date rape incidents the perpetrator and/or victim had been using alcohol (Benson et al. 2007). Research is consistent in the high correlation between sexual coercion offenses/victimizations and the consumption of alcohol.

The present study will examine how the three subfactors of RAPI (White & Labouvie, 1989) identified by Martens et at. (2007) (i.e., Abuse/Dependence, Personal Consequences and Social Consequences), may relate differently to both victimization and perpetration of sexual coercion. It is hypothesized that high scores on the Abuse/Dependence subfactor will be more highly related to victimization and perpetration of sexual coercion than will high scores on Social or Personal Consequences.

Victimization and Perpetration of Physical Abuse and Alcohol Use

Even though estimates vary widely, approximately 66% of men and 52% of women are victims of physical assault in their lifetimes. Their experiences of violent victimizations may result in serious mental health problems (Tjaden & Thoennes, 2000). Many studies have tried to understand some of the variables related to physical abuse. Research has consistently shown a link between drug use and various types of aggressive and violent behavior and this relationship is seen both in men and women (Fagan, 1993). Alcohol is the substance most commonly identified as an influencing factor for aggressive and violent behavior (Hien & Hien, 1998). Some studies have examined substance use as risk-taking behavior in relation to physical abuse (e.g, Duncan, Saunders, Kilpatrick, Hanson, & Resnick, 1996). Other studies have looked at the relationship between alcohol and physical abuse in other ways.

During the college years, for many students, drinking begins or increases in frequency (Giancola, 2002). A substantial number of college students develop alcohol related problems during these years. In one large study that sampled college students, it was found that 19-24% of students reported being intoxicated while exhibiting verbal aggression, 9-10% reported being intoxicated while engaging in property damage, and 4-6% reported being intoxicated when apprehended by police (Wechlesler, Dowdall, Maenner, Gledhill-Hoyt, & Lee, 1998). The numbers of these negative outcomes were found to be significantly higher in heavier drinkers than in lighter drinkers (Wechlesler, Davenport, Castillo, & Hansen, 1995;Wechlesler et al. 1998).

On this same sample, Wechlesler et al. 1995 found that a large proportion of college students reported being victimized by intoxicated individuals. Twelve percent reported being pushed, hit or assaulted; 20% reported being the recipients of unwanted sexual advances; and 22% reported being involved in verbally aggressive interactions. These results were also found to be higher in heavier drinkers.

The association between substance use and violent victimization may be the result of a direct effect of alcohol use on cognitive and motor impairment, which diminishes one's ability to recognize and potentially avoid risks (Nurius & Norris, 1995). Another explanation may be that involvement in alcohol abuse may be a way for victims to avoid negative emotional state related

to their trauma (Polusny & Follete, 1995). Whether alcohol is the cause or consequence of the physical abuse, studies agree that there is a strong relationship between them.

In study of college students, Fossos, Neighbors, Kaysen, & Hove, (2007) present the importance of considering gender difference. Men are more likely to perpetrate more serious injuries to their partners; however, women were more likely than men to report engaging in mild physical aggression and psychological aggression.

Even though the seriousness of the violence may vary between men and women, researchers have recently found that physical abuse for men and women may have similar rates. Most research on the association between substance use and violence victimization has involved female participants only (Tjaden & Thonnes, 2000); however, many studies find that men are more likely than women to be the victims of physical assault (Kennedy & Forde, 1990; Lauritsen, Sampson, & Laub, 1992; Miethe & Meier, 1990; Sampson & Lauritsen, 1990).

Research is consistent in the high correlation between physical abuse and consumption of alcohol. The present study will examine how the three subfactors of RAPI (White & Labouvie, 1989) identified by Martens et al. (2007) (i.e., Abuse/Dependence, Personal Consequences and Social Consequences), may relate differently to victimization and perpetration of physical abuse. It is hypothesized that high scores on the Abuse/Dependence subfactor will be more highly related to victimization and perpetration of physical abuse than will high scores on Social or Personal Consequences.

Self-esteem and Alcohol Use

Many studies have centered on self-esteem as a predictor of adolescent substance use. Self-esteem has also been used as an important topic in many substance use prevention programs. However, most of the studies examining the relationship between self-esteem and substance use have been less than convincing (Swaim, & Wayman, 2004). Schroeder, Laflin, and Weis (1993) concluded that there is a no evidence for a relationship between self-esteem and substance use.

Some studies, which hypothesized a negative correlation between self-esteem and alcohol use, have also found insignificant results. Swaim & Wayman (2004) and Greenburg, Lewis, & Dodd (1999) also found that self-esteem had a no significant correlation with substance use

There is a plausible explanation for those studies that report positive correlation between level of drinking and self-esteem. It may be that the students who drank more often and who misused alcohol were "faking good" on the self-esteem scale (Desimone, Murray, & Lester, 1994). Greenberg et al. (1999) believe that low self-esteem might lead some individuals to seek temporary relief through "mind-altering" substances and activities that in turn may lead to lowered self-esteem.

It seems that despite these theoretical ideas, and opposed to what it may be expected, Desimon, et al. (1994) also found that alcohol use and misuse was positively associated with self-esteem. Even though a number of studies have indicated that adolescents who abstain from drinking alcohol have higher self-esteem than do adolescents who drink (Butler, 1980; Young, Werch, & Bakema 1989), not all studies report an association between alcohol use and low self-esteem (Workman & Beer 1989).

In Wills' (1994) study, no prospective effects of self-esteem on adolescent substance use were observed. Stein, Newcomb, & Bentler (1987) also found no prospective effects between alcohol, cannabis, or hard drugs and self-esteem.

Scheier, Botvin, Griffin, & Diaz (2000) concluded that despite promising theoretical arguments, empirical evidence for a role of low self-esteem in promoting alcohol or drug use is inconclusive. Prospective studies have also provided null findings. Some authors have suggested that the weak relationship between self-esteem and substance use may be due to the use of general, as opposed to dimensional, measures of self-esteem. Scherier et al. (2000) also reported that another reason why the theory and the empirical findings differ is because adolescence is a period of rapid developmental change and thus a lack of stability in either alcohol use or self-esteem, which may affect the overall results.

Although the relationship between self-esteem and substance abuse is inconclusive, no one has examined the relationship between self-esteem and the different subfactors found in the RAPI. It is hypothesized that high scores on the Abuse/Dependence subfactor will be more highly related to low self-esteem than will high scores on Social or Personal Consequences.

Summary

Literature established a positive correlation between the use of alcohol and different mental health problems such as depression, PTSD, victimization and perpetration of sexual

coercion, and victimization and perpetration of physical abuse. The studies had been inconclusive in the relationship between self-esteem and alcohol use. This study attempts to examine the relationship of each of the mental health problems mentioned above and the three subfactors of the RAPI. It is expected that the mental health problems will explain more of the variance on Abuse/Dependence than on Personal or Social consequences.

CHAPTER 3 - Methods

Participants

This study used data collected in 2008 from students at a large Midwestern university. A 237-item survey was distributed to undergraduates in sociology, human nutrition, marketing, political science, and family studies and human services classes. The convenience sample consisted of 305 males and 363 females who voluntarily agreed to participate by completing a survey for research purposes.

Demographic information such as gender, education level, age, race, parents' education levels, family income, and parents' marital status was requested for background information. Questions were also asked regarding participant's dating status and general relationship information. Participants were asked to continue the survey only if they were currently in a relationship lasting at least 1 month. The relationship questions were to be answered on their current or most recent partner. The sample for this study will include only those participants who completed each of the scales used in this study.

Measures

The Rutgers Alcohol Problem Index (RAPI; White & Labouvie, 1989) was used in this study to assess the relationship between problems with alcohol and mental health problems. The RAPI is a 23-item self-report measure used to assess drinking consequences in adolescents and young adults. It has an internal consistency of .93. The instrument instructions ask, "How many times did the following things happen to you while you were drinking alcohol or because of your alcohol use during the past six months?" Items are rated by frequency of occurrence on a 5-point scale ranging from 1 (*never*) to 5 (*more than 10 times*). In this study, this instrument was used divided in three subfactors. Martens et al. (2007) found that items of the RAPI cluster in three distinct subfactors, which were called Abuse/Dependence, Personal Consequences, and Social Consequences. For example, some of the Abuse/Dependence items were "felt physically or psychological dependent on alcohol", "had withdrawal symptoms", and "felt that you had a

problem with alcohol". The second factor, Personal Consequences has items such as "miss a day of school or work", "not able to do your homework or study for a test", and "neglected your responsibilities". Finally, some of the items for Social Consequences are "had a fight, argument, or bad feelings with a friend, got into fights", "acted bad or did mean things", and "caused shame or embarrassment to someone".

     The Revised Conflict Tactics Scale (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996) was used in this study to measure physical and sexual partner violence perpetration and victimization. The CTS2 assesses the frequency with which an individual perpetrates physical, sexual, or emotional abuse against their partner and the frequency of experiencing physical, sexual, or emotional abuse from their partner. Respondents are asked to mark how many times they did each item in the past year as well as how many times their partner did each in the past year. Response choices range in frequency from 0 (*no, this has never happened*) to 5 (*more than 20 times in the past year*).

     The depression subscale from the *Symptom Checklist-90-Revised* (SCL-90R; Derogatis, 1992) was used to assess for symptoms of depression in an individual. The overall reliability of the scale is .93. The respondent is asked to indicate how much discomfort they experience due to specific symptoms on a scale of 1 (*not at all*) to 5 (*extremely*). An example of an item included on the scale is "loss of sexual interest or pleasure".

     Self-Esteem was assessed with a six-item scale that measure global self-esteem. This scale was adapted from the *Rosenberg Self-Esteem Scale*. Respondents are asked to respond to statements such as, "I feel I do not have good qualities," on a scale of 1 (*strongly disagree*) to 4 (*strongly agree*). Items were summed and recoded so that higher scores indicated greater self-esteem (R=6-24). The scale has an overall reliability of .72.

     The Post-Traumatic Stress Disorder Checklist – Civilian Version (PCL; Weathers, Litz, Huska, & Keane, 1994) was used to assess for the presence of symptoms related to PTSD in an individual. This measure has an overall reliability of .93. Respondents are asked to indicate how much they have been bothered by a specific problem on a scale of 1 (*Not at all*) to 5 (*Extremely*). An example of a problem from the checklist includes, "Repeated, disturbing, memories, thoughts, or images of a stressful experience from the past."

Analysis

First, the correlations were run among each of the independent variables to determine if multicollinearity is present. Next, the data from the independent variables (depression, posttraumatic stress disorder, physical abuse victimization, physical abuse perpetration, sexual coercion victimization, sexual coercion perpetration, and self-esteem) were correlated with each of the subfactors of the RAPI to determine the univariate relationship between each independent variable and the subfactors of the RAPI. This indicates which independent variables have the strongest and weakest relationships with the subfactors of the RAPI when examined individually.

Next the independent variables were examined as a whole to understand how they predict subfactors of the RAPI. The strength of each individual independent variable in predicting the subfactors of the RAPI may change based on the inclusion of other variables. To understand the relationship between the independent variables and the subfactors of the RAPI, three multiple regression analyses were conducted. The dependent variable in the first analysis was the Abuse/Dependence subfactor. The dependent variable in the second analysis was the Personal Consequence subfactor. The third analysis was the Social Consequences subfactor. In each analysis the planned independent variables were depression, posttraumatic stress disorder, physical abuse victimization, physical abuse perpetration, sexual coercion victimization, sexual coercion perpetration, and self-esteem. If multicollinearity is a problem, some independent problems may be omitted. The purpose of the analyses is to determine the percent of variance accounted in the entire model and relational strength of each independent variable in the model for each subfactor.

CHAPTER 4 - Results

This chapter summarizes the results of this thesis. The demographics of the sample will be discussed first. Then, a description of the variables will show the mean, range, and frequency of each variable. Also, a dichotomous prevalence for each of the items of the RAPI will be presented. Then, the correlation analysis will explain the major relationships. Correlations between the independent variables and the dependent variables will be explained. Finally, the results chapter will end with the description of the regression analyses for each subfactor of the RAPI subscale.

Demographics

Males

There were 305 men who participated in the present study. Of those, 257 reported that they were presently in or had been in a relationship that had lasted at least one month. Of the 305 men who participated, 10% (n=30 were freshman), 23% (n=69) were sophomores, 38% (n=117) were juniors, 29% (n=87) were seniors, and less than 1% (n=2) were graduate students. As far as ethnicity, 85% (n=257) were Caucasian, 2% (n=6) were Asian, 8% (n=25) were African American, less than 1% (n=1) were Native American, 3% (n=9) were Latin American, and 2% (n=6) identified as other. The mean age for male students was 21.4. There was a range of reported family income by the respondents; however, the majority 60% (n=182) reported having family incomes of $60,000 or more.

Females

There were 363 women who participated in the present study. Of those, 307 were presently in or had been in a relationship that had lasted at least one month. Of the 363 women who participated, 12% (n=44) were freshman, 29% (n=104) were sophomores, 29% (n=106) were juniors, and 30% (n=109) were seniors. As far as ethnicity, 90% (n=326) were Caucasian, 1% (n=4) were Asian, 5% (n=17) were African American, less than 1% (n=2) were Native

American, 3% (n=10) were Latin American, and 1% (n=4) identified as other. The mean age for female students was 20.5. There was a range of reported family income by the respondents; however, the majority 57% (n=205) reported having family incomes of $60,000 or more.

Variable Descriptions

The means, standard deviation, and range were run for all variables. These results can be seen in Table 1. This table illustrates the sample's overall response to the individual scales. As it can be seen, means are relatively low except for the mean for self-esteem which is 3.25 out of 4.00.

Table 1 Variable descriptions

Scales	Mean	Std. Deviation	Range
Abuse/Dependence	1.4	.53	1 - 5
Personal Consequences	1.6	.69	1 – 5
Social Consequences	1.5	.61	1 – 5
Depression	1.6	.61	1 – 5
PTSD	1.6	.62	1 – 5
Sexual Coercion Victimization	.37	.73	0 - 5
Sexual Coercion Perpetration	.34	.70	0 – 5
Physical Abuse Victimization	.27	.67	0 – 5
Physical Abuse Perpetration	.28	.68	0 – 5
Self-esteem	3.25	.44	1 - 4

Range of scores for each subscale of the RAPI

The range of scores for each subfactors of the RAPI were run. These results can be seen in table 2 to 4. In the X-axis can be seen the percentage of the total responses for each score. The Y-axis shows scores rated by frequency of occurrence of negative consequences: 1 = never, 2 = one or two times, 3 = three to five times, 4 six to ten times, and 5 = more than ten times.

**Table 2 Range of the RAPI scores for Abuse/Dependence**
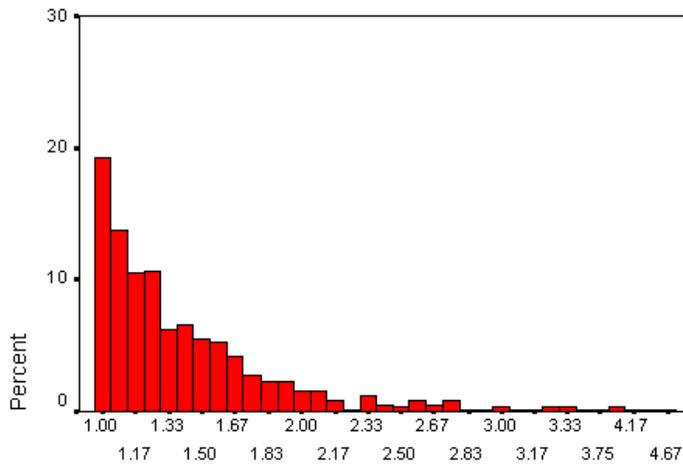
**Table 3 Range of RAPI Scores for Personal Consequences**
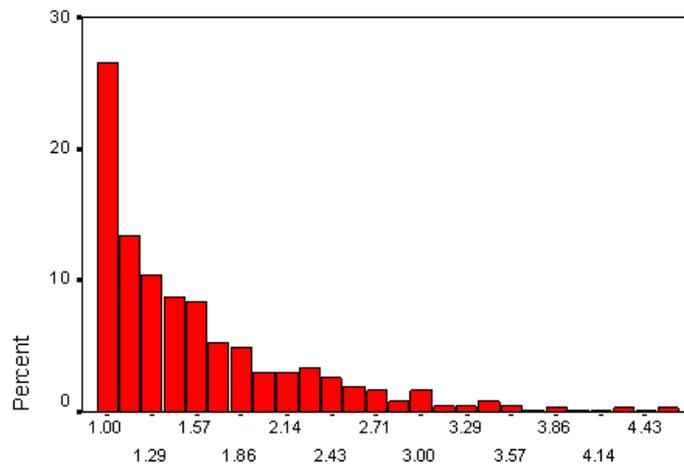
Table 4 Range of RAPI Scores for Social Consequences
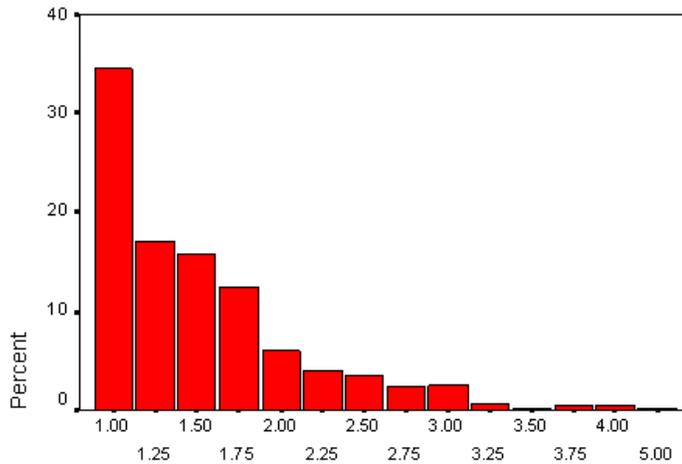
Frequency and percent of participants who agreed with each item of the RAPI

Frequency and percent of participants who agreed with each item of the RAPI were run. These results can be seen in Table 5. As can be seen, in the items for Abuse/Dependence, 7.8% of the students agreed with the statement "felt physically or psychologically dependent on alcohol" (N= 52). The highest percentage for this subfactor is 31.7 % "Felt that you needed more alcohol than you used to in order to get the same effects" (N=212). The lowest percentage for Personal Consequences is 22.3 % "missed out on other things because you spent too much money on alcohol" (N=149). The highest percentage for this subfactor is 43 % "neglected your responsibilities" (N=287). For Social Consequences, the lowest percentage is 34.4 % "cause shame or embarrassment to someone" (N=230) and the highest percent is 42.4 % "got into fights, acted bad or did mean things" (N= 283). As can be seen, there are fewer participants agreeing with items in the Abuse/Dependence subfactor than in the Personal and Social Consequences subfactors.

Table 5 Frequency and percent of participants who agreed with each item of the RAPI

ITEMS	PERCENT	FREQUENCY
ABUSE DEPENDENCE		
Felt that you had a problem with alcohol	13.2	88
Felt physically or physiologically dependent on alcohol	7.8	52
Tried to control your drinking by trying to drink only at certain times of day or certain places.	22.8	152
Had withdrawal symptoms, that is, felt sick because you stopped or cut down on drinking	9.0	60
Kept drinking when you promised yourself not to	20.7	138
Had a relative avoid you	6.0	40
Noticed a change in your personality	22.5	150
Tried to cut down or quit drinking	29.8	199
Were told by a friend or neighbor to stop or cut down on drinking	13.2	88
Felt you were going crazy	11.8	79
Kept drinking when you promised yourself not to	20.7	138
Felt that you needed more alcohol than you used to in order to get the same effects	31.7	212
PERSONAL CONCEQUENCES		
Missed a day (or part of a day) of school or work	35.8	239
Not able to do your homework or study for a test	33.7	225
Neglected your responsibilities	43.0	287
Suddenly found yourself in a place that you could not remember getting to	35.3	236
Went to work or school high or drunk	23.5	157
Passed out or fainted suddenly	35.5	237
Missed out on other things because you spent too much money on alcohol	22.3	149
SOCIAL CONCEQUENCES		
Had a fight, argument or bad feeling with a friend	40.7	272
Got into fights, acted bad or did mean things	42.4	283
Cause shame or embarrassment to someone	34.4	230
Had a bad time	40.1	268

Correlation Analyses

Correlations were run between all variables. These results can be seen in Table 6. First, the correlations show the strength of relationships among the independent variables. The highest intercorrelation among independent variables was .93, which was between perpetration and victimization of physical abuse. Some of the other high related scores were between perpetration and victimization of sexual coercion ($r = .82$) PTSD and Depression were also highly related ($r = .70$). Self-esteem and depression had the highest negative correlation ($r = -.46$) indicating that in

many instances, the higher the depression the less self-esteem the individual reports. These four correlations were significant at the .001 level. Secondly, the correlation data determined the univariate relationship between each independent variable and the three subfactors of the RAPI.

Inter-correlations between independent variables and the dependent variables

Abuse/Dependence subfactor of RAPI

As can be seen in Table 6, depression ($r = .32$), PTSD ($r = .39$), and sexual coercion victimization ($r = .28$) were all positively correlated with the Abuse/Dependence subfactor of RAPI at the .001 level of significance. Abuse/Dependence is also correlated with perpetration of sexual coercion ($r = .27$), physical abuse victimization ($r = .26$) and perpetration of physical abuse ($r = .27$) all at the .001 significance level. Self-esteem was also related to the Abuse/Dependence subfactor ($r = -.17$, $p < .001$); however, the relationship was negative, indicating that the less self-esteem a person has, the more likely they are of scoring high on the Abuse/Dependence subfactor scale. These relationships indicate that individuals who indicated higher scores in the Abuse/Dependence subfactor also reported having higher scores on depression, PTSD, sexual coercion victimization and perpetration, physical abuse victimizations and perpetration, and lower self-esteem.

Personal Consequences subfactor of RAPI

Depression ($r = .16$), PTSD ($r = .24$), and sexual coercion victimization($r = .17$) were positively correlated with Personal Consequences subfactor of the RAPI at the .001 level. As it was seen in the Abuse/Dependence inter-correlation, Personal Consequences had a .001 level of significant to perpetration of sexual coercion ($r =. 21$), physical abuse victimization ($r =. 18$) and perpetration of physical abuse ($r =. 17$). Self-esteem was also negatively related to the Personal Consequences subfactor ($r = -.15$, $p < .001$).

Social Consequences subfactor of RAPI

Depression ($r = .24$), PTSD ($r =. 30$) and sexual coercion victimization ($r = .17$) were significantly related to Social Consequence subfactor of the RAPI at the .001 level. Perpetration of sexual coercion ($r = .20$), perpetration of physical abuse ($r = .22$), and physical abuse

victimization ($r = .21$) are also correlated significantly at the .001 level. Self-esteem ($r =. -14$, $p < .001$) showed a negative relationship to Social Consequence.

Table 6 Correlation Matrix

	Abu/Dep	Personal	Social	Depre	Ptsd	Vic/sex	Per/sex	Vic/phy	Per/phy	Esteem
Abu/Dep	1.00**									
Personal	.73**	1.00**								
Social	.73**	.69**	1.00**							
Depre	.32**	.16**	.24**	1.00**						
Ptsd	.39**	.24**	.30**	.70**	1.00**					
Vic/sex	.28**	.17**	.18**	.14**	.11*	1.00**				
Per/sex	.27**	.21**	.20**	.03	.04	.82**	1.00**			
Vic/phy	.26**	.18**	.21**	.10*	.098*	.79**	.79**	1.00**		
Per/phy	.27**	.17**	.22**	.13**	.14**	.75**	.82**	.93**	1.00**	
Esteem	-.17**	-.15**	-.14**	-.46**	-.36**	-.17**	-.11**	-.15**	-.15**	1.00**

N= 611   * p<.05   **p<.001

Abu/Dep= Abuse/Dependence   Vic/sex= Sexual coercion victimization
Personal= Personal Consequences   Per/sex= Sexual coercion perpetration
Social= Social Consequences   Vic/phy= Physical abuse victimization
Depre= Depression   Per/phy= Perpetration of physical abuse perpetration
Ptsd= Posttraumatic Stress Disorder   Esteem= Self-Esteem

Regression Analyses

In the preceding correlation analyses, the correlations among the subscales of the CTS (Perpetration of sexual coercion, sexual coercion victimization, perpetration of physical abuse, and physical abuse victimization) ranged from $r = .72$ to $r = .92$), therefore a concern was raised about the possibility of multicollinearity. Multicollinearity is a statistical phenomenon that may occur when two or more independent variables are highly related. High correlation will not affect the predictive power or reliability of the model as a whole but it may affect calculations regarding individual predictors (Field, 2005). Therefore, I decided to include only one subscale of the CTS2 (Perpetrate Physical Abuse) in the following regression analyses. This subscale was selected because after computing Means of each subscale, perpetration of physical abuse had the highest mean level, i.e., perpetration of physical abuse $m= 3.4$, physical abuse victimization $m= 3.3$, perpetration of sexual coercion $m= 2.4$ and sexual coercion victimization $m= 2.6$)

The correlation analyses reported above indicated that most of the independent variables were more strongly correlated to the Abuse/Dependence subfactor than they were to the Personal and Social subfactor of RAPI. Therefore, it was anticipated that when the independent variables were combined in a multivariate analysis, the model would account for more variance for the Abuse/Dependence subfactor than it would for the Personal Consequence and Social Consequences subfactors. In order to test this hypothesis, a regression analyses was conducted for each subfactor. Each of the subfactors was tested separately with each of the four independent variables (depression, PTSD, perpetration of physical abuse, and self-esteem) entered simultaneously. This shows the strength of the model (composed of the four independent variables) in predicting each subfactor.

Regression analysis for Abuse/Dependence subfactors

Perpetration of physical abuse was the strongest predictor of Abuse/Dependence and was significant at the .001 level ($t = 4.8$). The other variable that was significant in predicting Abuse/Dependence was PTSD. PTSD was also significant at the .001 level ($t = 4.6$). However, Self Esteem and Depression were not significant predictors of Abuse/Dependence. When each of the four independent variables were entered, the total model predicted 19% of the variance in Abuse/Dependence.

Table 7 Regression Analysis Summary for Abuse/Dependence

Variables	B	β	P
Perpetration/Physical abuse	.014	.226	.001
Self esteem	-.033	-.029	.583
PTSD	.241	.297	.001
Depression	.035	.042	.532

Note. R^2 = .19 (N = 381, p < .001)

Regression analysis for Personal Consequences subfactors

Perpetration of physical abuse was also the strongest predictor of Personal Consequences and was significant at the .002 level (t=3.1). PTSD (p <.015, t=2.4) and Self-esteem (p <.019, t=-2.3) were also significant predictors. When each of the four independent variables were entered, the total model predicted 8% of the variance in Personal Consequences.

Table 8 Regression Analysis for Personal Consequences

Variables	B	β	P
Perpetration/Physical abuse	.013	.157	.002
Self esteem	-.197	-.130	.019
PTSD	.183	.170	.015
Depression	-.074	-.068	.346

Note. R^2 = .08 (N = 384, p < .001)

Regression analysis for Social Consequences subfactor

Consistent with the other two subfactors, Perpetration of physical abuse was also the strongest predictor of Social Consequences (p <.001, t=4.0). PTSD was also significant at the .001 level (t = 3.4). However, Self Esteem and Depression were not significant predictors of Social Consequences. The total model predicted 11% of the variance in Social Consequences when each of the four independent variables were entered.

Table 9 Regression analysis for Social Consequences

Variables	$\underline{B}$	β	$\underline{P}$
Perpetration/Physical abuse	.015	.196	.001
Self esteem	-.01	-.007	.894
PTSD	.227	.234	.001
Depression	.005	.005	.946

Note. $\underline{R}^2$ = .11 ($\underline{N}$ = 384, $\underline{p}$ < .001)

CHAPTER 5 - Discussion

This chapter includes a summary of overall findings and a discussion on how findings relate to each mental health problem relate to previous research. Next, is included the finding related to theory, limitations, and future research. Finally, implications for therapy are discussed.

Overall findings

The hypothesis established for this research, i.e., that the mental health problems explain more of the variance on the Abuse/Dependence subfactor than on Personal or Social Consequences subfactors of the RAPI was supported by the findings. However, after examining the relationship between each subfactor of the RAPI and the mental health problems included in this study, it appears that there were no major differences in the ways the mental health problems related to each subfactor. Even though mental health problems explain more of the variance on Abuse/Dependence than on Personal or Social Consequences, the difference did not appear large enough to suggest that the subfactors represent unique domains.

In addition, each of the subfactors was significantly related to each of the mental health problems. In turn, the subfactors were highly correlated with each other. Abuse/Dependence and Personal Consequences are correlated at $r = .73$. Abuse/Dependence and Social Consequences are correlated at $r = .73$. Finally, Social Consequences and Personal Consequences are correlated at $r = .69$. It is possible that those students who reported high scores in one subfactor also reported high scores on the others. Consequently, it cannot be assumed that the three subfactors measure distinct and exclusive types of consequences. A student that scores high on Abuse/Dependence also may be experiencing Personal and Social Consequences.

The relationship between mental health problems and scores on the RAPI

Depression

Depression was positively correlated with each of the Subfactors of the RAPI. As predicted, it appears to be most highly related to Abuse/Dependence. This supports previous

research including that reported by Christiansen, Vik, & Jarchow (2002) who found that heavy drinkers experience more depressive symptoms than non-drinkers.

PTSD

PTSD was the most highly correlated mental health problem with each of the subfactors of the RAPI. Although, as predicted, it appears to be most highly related to Abuse/Dependence, PTSD is also significantly related to the Personal and Social Consequences. Previous research including, Edwards et al. (2006) reported that traumatic stress symptoms are highly related to the use of alcohol in college students. Our study supports this finding.

Sexual Coercion

Both perpetration and victimization of sexual coercion are positively correlated with each of the subfactors of the RAPI. As predicted, they appear to be most highly related to Abuse/Dependence. The literature also established a high correlation between perpetrators and victims of sexual coercion and consumption of alcohol. A number of surveys suggested that over 50% of acquaintance and date rape incidents the perpetrators and/or the victims had being using alcohol (Benson et al. 2007). The current study supports previous research.

Physical Abuse

Physical abuse victimization and perpetration were highly related to each of the subfactors of the RAPI. As predicted, both perpetration and victimization of physical abuse were more highly related to Abuse/Dependence. These findings support previous ones. Consistent high relationship between physical abuse perpetration and victimization and consumptions of alcohol is well established. Previous research found higher levels of physical abuse with heavier drinkers (Wechlesler et al. 1995).

Self-Esteem

Self-Esteem was found to be negatively related to each of the subfactors of the RAPI. Again, it appears to be most highly related to Abuse/Dependence. Furthermore, even though Self-esteem had the lowest correlation of the mental health problems with each subfactor, it was still significant at the .001 level. These results were inconsistent with Greenburg, Lewis, & Dodd

(1999); Schroeder, Lafin, and Weis (1993); and Swaim & Wayman (2004) who found that self-esteem was not significantly correlated with substance use.

One possible explanation for the inconsistent findings between problems with alcohol and self-esteem may be that different self-esteem measures fail to conceptualize the self-esteem construct in a consistent manner (Schroeder et al., 1993). Different scales may measure different aspects of self-esteem which produce different results depending on the scale used. For example: some self-esteem scales may be constructed to assess internal factors (e.g., "I like myself") while others may be external assessment of self-esteem (e.g., "Other people my age like me") (Swaim & Wayman, 2004).

Another possible explanation is the different ways that research measures drinking. It is possible that those who report negative consequences also report having lower self-esteem because they are experiencing problems with alcohol. Instead, some students who drink heavily but have no negative consequences may feel they are in control; consequently, they are more likely to experience high self-esteem.

Theory

As a systemic thinker, it is important to be aware and explore how different parts of the whole may relate to each other. Phenomena are complex and may call, in many occasions, for researchers to use wide lenses to better understand them. This is one of the main reasons why we chose biopsychosocial theory. Mental health problems such as depression, PTSD, and self-esteem were examined in this study as comorbird psychological problems. Sexual coercion and physical abuse victimization and perpetration were examined as social problems. Congruent with the conceptualization of the theory, a distinct relationship was found among each of the psychological comorbid problems (depression, PTSD, and self-esteem) and the social problems (sexual coercion and physical abuse victimization and perpetration). However, each of the mental health problems was similarly related to each of the subfactors of the RAPI.

Limitations

One of the limitations of this research is the use of secondary data. The independent variables were chosen from a collected data set. Other mental health problems could have been

included. It is possible that some mental health problems may be more exclusive to one subfactor of the RAPI than to the other two.

In order to better understand the drinking behavior of college students other questions need to be included. The amount of alcohol drunk per setting and frequency of drinking could provide more thorough information on the relationship between negative consequences and amount of alcohol consumption. Other questions such as personal history of alcohol abuse would have also been important in determining the patterns of drinking. Moreover, history of alcohol use in the family can provide not only insight in the biological/genetic aspect of drinking but also the learned behavior aspect of the drinking. Finally, previous alcohol treatment could possibly have a higher positive relationship with one subfactor than with the others.

The data in this study was gathered through a self-report survey. This form of data collection imposes two main considerations. Respondents could have minimized their problems and may have purposefully or unconsciously uncovered trivial negative consequences but covered serious negative consequences.

Finally, the participants may not represent the responses of the general college population. Gathering data from a university in a metropolitan area with higher numbers in various races could have portrayed different results.

Future Research

Further research could explore other predictors that may contribute to the model for Abuse/Dependence. Some of the variables that could be explored are family history of use, abuse, and dependence on alcohol. The amount of drinking and location where it takes place as well as circumstances when drinking could also be explored. Another important concept that emerged from one of the international research studies discussed in the literature review is the difference in students living arrangement (on campus, off campus, fraternities, sororities, and living with parents). Attitudes about drinking could also help researchers distinguish subgroups of students and how they may relate differently with different types of consequences.

This study does not look at the individual university students' scores for each of the subscales. Instead, in this research we examined overall scores. Future research could examine how students who score high on a particular subscale differ from those who score high on another subscale. Since each item has the option of 5 different answers depending on the

frequency of the consequence experience in a period of time, differentiating the students' scores can provide more information also.

Also, this study did not look at gender differences. Further research could examine how female students may differ from male students in the experience of different consequences of drinking. There are many studies done in the area of each of the individual mental health problems (depression, PTSD, sexual coercion victimization and perpetration, physical abuse victimization and perpetration, and self-esteem) and their relationship with drinking. However, I found no research that explores the different negative consequences of drinking for female and male students in relation to the mental health problem.

Finally, further qualitative research could contribute in areas where quantitative research may not be suitable. For example, issues like personal experience with negative consequences related to alcohol and mental health problems could be explored. Other issues that qualitative research could better address are why some individuals may experience more negative consequences than others; why some use different safety plans, such as a designated driver that some drinkers utilize; and the implications of social support in reducing negative consequences.

Implications for Therapy

This study found that each subfactor was significantly related to each of the mental health problems examined. Martens et al. (2007), who originally developed these subfactors, suggested that knowing the domains would allow professionals to target treatments. He suggest that "an individual with a high score on the Abuse/Dependence Symptoms subscale may be referred to a treatment program that provides an elevated level of care, whereas briefer intervention or prevention programs may be more appropriate for those with high scores on the Personal and /or Social Consequences subscale" (page 605). The current study questions this suggestion.

When working with clients like Joe Black, discussed on chapter 1 of this study, it is important to consider that any kind of negative consequences the client is experiencing with alcohol use could be associated with important mental health problems. Therefore, when clients report any negative consequences with the use of alcohol, the therapist should explore mental health problems as part of the general assessment. This study established significant relationships between each of the three subfactors of the RAPI and mental health problems. Helping the client understand that alcohol related consequences are often related to different comorbid conditions,

such as those we have examined in this research, can give the therapist leverage for interventions.

It may not matter if the client is experiencing Abuse/Dependence symptoms, Personal, or Social consequences, mental health problems may be experienced with high scores on any subfactor. This relationship brings other issues in mind. One is the fact that there seems to be little distinction between each of the consequences and the mental health problems. The second one is that therapists need to be aware that the report of some kinds of consequences may be highly associated with other consequences that possibly are not being reported by the client.

Family therapists can use this research to guide their conceptualization of a case when working with adolescents who engage in drinking and report experiencing some negative consequences. The high correlation among each of the subfactors shows the possible prevalence of social consequences and of problems with family members. This research shows that it could be safe to assume that relationship between family members and the client can be conflictive if the student is experiencing problems with drinking. Working with the whole family could help the adolescent or young adult deal with his emotions and behaviors and reduce negative consequences with drinking.

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