

THE PREVELANCE RATE OF UNDERAGE DRINKING AMONG
SCHOOL-AGE ADOLESCENTS RECEIVING SOCIAL WORK
INTERVENTION IN A COMMUNITY MENTAL
HEALTH RESEARCH SETTING

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Abstract

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Adolescents participate in underage drinking across the United States, causing significant consequences to themselves, others, communities, and the state. Underage drinking is one of the nation's leading causes of deaths in American adolescents. The current study examines the prevalence rate of underage drinking among a clinical population. The hypothesis is that peers (peer groups and peer influence) may contribute to underage drinking greater than the impact of families encouraging alcohol. An epidemiological case record review of 100 participants from the years 2012 to 2014 was conducted at the University of Texas at Arlington's Center for Clinical Social Work (CCSW) using systematic random sample. The data suggested that the prevalence rate for the CCSW school-aged clinical population yielded to 21.4%. The prevalence rate of the CCSW was then compared to the national general population prevalence rate, which yielded to 15.8%, suggesting that clinical populations do have higher prevalence rates.

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Chapter 1

Nature of the Problem

The Frequency of Underage Drinking

Underage drinking is a worldwide concern in which adolescents affect their own lives, their families, and their communities (Substance Abuse and Mental Health Services Administration, 2013). Underage drinking defines an individual who is under the age of 21 who consumes alcohol (Cleveland, Reavy, Mallett, Turrisi, & White, 2014; Beccaria & White, 2012). In addition, underage drinking will refer to drinking beer, wine, liquor, brandy, mixed drinks, or cocktails. As cited in the Substance Abuse and Mental Health Services Administration (SAMHSA) (2013) report, there were 6.1 million adolescents who participated in underage drinking. According to SAMHSA (2013), adolescents who participated in underage drinking had a high prevalence rate for future problems, such as alcohol abuse and dependence, sexual activity, and violent behaviors.

There are more implications to underage drinking than risk factors alone. For example, adolescents are unaware of how many drinks they can consume before they reach binge or heavy drinking. Binge drinking, as defined by SAMHSA, is the consumption of five or more standard-size drinks in a row for one day. Heavy drinking is the consumption of five or more standard-size drinks in a row for five or more days. Blood-alcohol concentration (BAC) is a tool that is used to measure the number of drinks the adolescent has before reaching binge or heavy drinking. The average BAC needs to be less than 80 mg/dL for an adolescent to make good judgments.

The concern is when adolescents consume more than 80 mg/dL having 5 or more drinks on one occasion they make impaired decisions (SAMHSA, 2013). Adolescents are not aware that their bodies can reach BAC more rapidly because their bodies are smaller than the average adult (Donovan, 2009). Therefore, when adolescents

reach a level of 80 mg/dL or above, it causes physical and mental impairment (Donovan, 2009). When adolescents drink heavily studies has shown there is potential harm to the brain development, such as cognitive deficits that cause impaired decision-making, problem solving, planning, attention, and learning (Witte & Mitchell, 2012). Adolescents have the tendency to misuse alcohol, which causes negative consequences, such as motor accidents, all types of violent acts, risky sexual activity, educational problems, and alcohol poisoning (Witte & Mitchell, 2012).

Problem

There has been little empirical research on the prevalence rate of underage drinking in regard to the correlation of family, peers, and geographic factors. As noted earlier, research has argued that there is a problem with underage drinking in that it causes disruptive behavior to an adolescent's life, such as consequences that can change their physical and mental health. Most adolescents participate in underage drinking because they are more exposed to the positive influence of family, peer and geographic factors. Moreover, there is a gap between the social interactions (family and peers) of underage drinkers compared to non-underage drinkers, and if underage drinkers have different support systems that cause them to participate in underage drinking.

Purpose Statement

The primary purpose of this exploratory study is to examine the prevalence rate of underage drinking in a clinical population facility and if there is a correlation between family, peers, and geographic factors. The study will focus on adolescents between the ages of 12 to 20, with an emphasis on recognizing the causes of chemical dependency underage drinking of school-referred adolescents in a clinical setting. Exposure of positive influence of underage drinking from family, peers, or geographic factors can

influence the contribution of adolescents' participation for drinking. This study needs to be done because there could be a correlation in which adolescents have accepted underage drinking as a norm due to the contribution of these three factors. The proposal examines the prevalence rate and how each factor contributes to the necessity of adolescents participating in underage drinking. This study will, in essence, solve the research question of what factors contribute to adolescent's decision to drink after finding the prevalence rate. Moreover, it will discover which factor is more prone to encourage adolescent underage drinking through a data extraction form, which can be found in the method section.

Social Context of Alcohol Use

Underage drinking accounts for about 79,000 deaths for each year in the United States, which accounts for the most deaths in society than any other illicit drug (Hahn, Middleton, Elder, Brewer, Fielding, Naimi, Toomey Chattopadhyay, Lawrence, Campbell, & the Community Preventive Services, 2012). In theory, adolescents are more prone to drink when exposed by positive encouragement of drinking by family, peers, or geographic factors. First, findings suggest that adolescent exposure to parental drinking and positive influence of drinking contributes to underage drinking among adolescents (Donovan & Molina, 2014). Second, SAMHSA (2013) found that adolescents, when accompanied by two or more peers, consumed more drinks on average (4.6%) than when alone (2.7%;p. 47). Finally, research has found mixed findings for the geographical factor in having a little effect on adolescent's decision to participate in drinking. For example, Jackson and Ameratunga (2014) found that in the geographical factor, the age of the adolescent had a slight contribution to underage drinking when the community supported drinking attitudes. Understanding the key reason why adolescents drink can help social workers pinpoint an intervention at the correct target.

Alcohol-Related Mental Health Disorders

Research found that underage drinking is related to alcohol addiction, which can lead to alcohol problems among adolescents (Hanes, 2012). To implement an effective intervention, adolescents need to go through an alcohol use disorder (AUD) screening under the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, (DSM-V). The DSM-V integrates the alcohol abuse and alcohol dependence into one disorder called AUD. The AUD screening helps the clinical counselors determine an effective intervention of therapy, which can further help in finding the adequate solution. It is important to understand that underage drinking can lead to AUD, which can cause an interruption of daily tasks to an adolescent. In the United States, 855,000 adolescents' aged 12 to 17 were diagnosed with AUD, with females being the most (444,000) compared to males (411,000; National Institute on Alcohol Abuse and Alcoholism, 2014).

The importance of AUD is to diagnose adolescents correctly. However, adolescents tend to experience additional symptoms of underage drinking that are not included in the diagnostic criteria for AUD (Hanes, 2012). The AUD diagnostic formulation has some limitations when addressing adolescents. For example, some of the symptoms for AUD do not occur frequently with adolescents, such as withdrawal and tolerance, both of which are shown to appear after many years of heavy drinking (Hanes, 2012). As Hanes (2012) mentions, adolescents drink per occasion and not every day, which AUD mostly focuses on reoccurring symptoms.

Importance for the Social Work Profession

Literature has found that clinical social workers are not interested in working with underage drinkers even though there is a need for substantial growth in the field (Wells, Kristman-Valente, Peavy, & Jackson, 2013; Fisher, Holton and Wormer, 2013). The National Association of Social Workers (NASW) and the Council on Social Work

Education (CSWE) has identified a need for increase attention on the importance of courses, and training focused on substance use (Wells et al., 2013). On average one out of five social workers are employed in behavioral health clinics, two thirds practice in nonprofit organizations, and ten percent work in private practice for addictions (Wells et al., 2013). Therefore, the present study aims to bring the attention of clinical social workers towards the prevention of underage drinking and why underage drinking should not be dismissed when working with adolescents. Additionally, it allows social workers who are working with the population to understand adolescent values, beliefs, and behaviors when approaching to work with them.

In addition, it will help the mental-health field better understand the dynamics of family, peers and geographic factors and how they interrelate with one another. Understanding the connection between each factor can lead clinical social workers to provide a better approach when providing treatment for underage drinking. For example, in theory the peer and family factors interrelate when they both exhibit the same behavior of drinking to the adolescent. The first hand exposure of alcohol within the family then encourages the adolescent to associate him or herself with peers who exhibit the same behavior.

Chapter 2

Literature Review

National data reported an average of 2,660 adolescents participating in underage drinking per day (SAMHSA, 2013). One reason adolescents participate in underage drinking is the belief that it reduces feelings of social discomfort, promotes feelings of intimacy, and enhances outcomes during social interactions (Fairbairn & Sayette, 2014). Society has programmed into adolescent minds that alcohol consumption may yield emotional rewards, social acceptance, and belonging.

Additionally, adolescents may feel rejected when excluded from groups or social events for not participating in drinking. There is a sense of belongingness and social acceptance among their peers when they drink. An adolescent is developing physically, socially and mentally (Witte & Mitchell, 2012; Wang et al., 2014), and is still trying to figure out his or her self-identity. Therefore, the central concern for this study is to find whether adolescents in a clinical population were more prone to drink because of the effect that family, peers, or geographical location might have had on them.

Causes of Drinking

Some of the possible contributors for the prevalence rate for underage drinking are family, peers, and geographic factors. Each of these factors can interrelate and influence adolescents to drink (Wiers, Fromme, Latvala, & Stewart, 2012). There is a gap in literature in regard to why adolescent chose to drink. This study aims to close the literature gap, in addressing the prevalence rate of underage drinking in a clinical population.

Family Factor

The foundation of the family has a big influence when it comes to the adolescent's decision to drink. The literature has found families having a large

contribution towards an adolescent's social learning experience. The contributors can be broken down into parents, siblings, grandparents, aunts, uncles and so forth. Therefore, each member in the family contributes to the adolescent's social learning as the adolescent learns what behaviors are positive and negative. This section illustrates the family as a contributing factor towards underage drinking.

The theory of attachment suggests that adolescents form attachments with others and form strong bonds that influence adolescents to form beliefs and values from their caregiver (Kochanska and Kim, 2013). The literature has examined the attachment bond between the parent and adolescent, in which the parent is the attachment figure. Research found that when adolescents were secure with both parents, they showed better developmental outcomes, than those who were insecure with both parents (Kochanska and Kim, 2013). Adolescents who had at least one secure parent showed better developmental outcomes than adolescents with insecure attachments (Kochanska and Kim, 2013).

Furthermore, studies found that adolescents with secure attachments scored higher on peer competence, school adjustment, positive self-esteem, and low behavioral problems, compared to adolescents with insecure attachments (Kochanska and Kim, 2013). Adolescents who had insecure attachments showed more externalizing and internalizing problems, such as poor self-image, high levels of behavioral problems, anxious, and withdrawn (Kochanska and Kim, 2013; Kuntsche, Vorst, & Engels, 2008). Research found that insecurely attached adolescents are more vulnerable for substance use because they use alcohol to cope with their relationships to their parents (Kuntsche, Vorst, & Engels, 2008).

Consistent with the attachment theory, according to social learning theory, adolescents vicariously learn the values and norms regarding alcohol consumption and

develop perceptions about its positive and negative functions (Cleveland et al., 2014; Donovan & Molina, 2014; Dickinson, Hayes, Jackson, Ennett, & Lawson, 2014). Parental approval for child tasting and parents' drinking frequency leads to the adolescents' learned belief of positive drinking (Donovan & Molina, 2014; Dickinson et al., 2014). Alati, Baker, Betts, Connor, Little, Sanson, and Olsson (2014) found that when parents had lower levels of alcohol consumption, there was a later onset of drinking among adolescents, whereas a heavy level of drinking by parents was a key marker to early initiation for adolescents. Parents' drinking may have a more central role in the development of underage drinking than adolescents' personal attitudes (Wiers et al., 2012; Alati et al., 2014). Adolescents see parents as role models and observe their parents' drinking practices, therefore, causing a learned behavior for the adolescent to drink accordingly (Wiers et al., 2012).

Additionally, parents can modify what adolescents learn from their social and environmental surroundings by providing appropriate supervision and monitoring strategies (Dickinson et al., 2014; Cleveland et al., 2014). Donovan and Molina (2014) found that parents who strongly disapproved early-onset drinking adolescents were less likely to drink at an early age. A study found that when parents influence adolescents in a warm and supportive relationship, it can decrease the likelihood of early-onset drinking (Cleveland et al., 2014). These positive behaviors contribute to the decrease of underage drinking and the need to seek deviant behaviors (e.g., peers who drink; Cleveland et al., 2014).

Parental Monitoring

Furthermore, research found that parental monitoring is important for adolescents. Low parental monitoring can increase the risks for adolescent to drink, whereas high parental monitoring can decrease the risk for alcohol use (Wiers et al.,

2012; Wang et al., 2014). Research found that good parental involvement can delay the onset of drinking to a later age (Wiers et al., 2012). Good parental monitoring is setting and enforcing reasonable rules for adolescents. Wiers et al. (2012) and Alati et al. (2014) noted that when parents have a positive communication, spend time together, and monitor adolescents, it could delay the age to drink, such as to college age. Good parental monitoring can be effective by limiting opportunities for adolescents to engage in drinking behaviors and create pressure on adolescents to comply with parental expectations (Wang et al., 2014; Alati et al., 2014).

On the other hand, there are also studies that show parental monitoring to be counter-productive with adolescents who are lower-level drinkers compared to higher-level drinkers (Alati et al., 2014). Studies have found that for adolescents on the lower levels of drinking, parental involvement during middle to late adolescence can cause binge drinking. Adolescence at this age can feel overwhelmed by their parent's excessive discipline and feel stressed by trying to abide by their rules. Alati et al. (2014) found that harsh and inconsistent parenting was linked to increased alcohol use. Research found adolescents to consume alcohol because it has an ability to reduce negative affect and increase positive effect across a broad range of stressors (Fairbairn & Sayette, 2014).

Peer Factor

Social Media Contribution

Social media continuously advertises that drinking alcohol in the company of friends is a positive reinforcement and can increase the chances of being accepted by the social group and not rejected (Fairbairn & Sayette, 2014). The exposure to alcohol advertising on television and ads influences underage drinking and contributes to alcohol-related problems (Grenard, Dent, & Stacy, 2013). Advertising brands of beer and liquor reinforce the adolescent's positive belief expectancies for alcohol use (Grenard, Dent, &

Stacy, 2013). Grenard, Dent, and Stacy (2013) found in their study a significant interaction between exposure to ads and liking alcohol ads are predicted for high levels for alcohol drinking. Alcohol use is a socially learned behavior and promotes emotional rewards to adolescents, such as ease bonding, intimacy, and social affiliation (Fairbairn & Sayette, 2014; Donovan & Molina, 2014).

Wiers et al. (2012) found that adolescents who saw pictures of their peers getting drunk or partying were twice as likely to drink. In the United States, the culture has portrayed alcohol as consumed in the company of other people. The media portrays individuals' consuming alcohol in social contexts as healthy, whereas drinking alone is an indicator of alcohol abuse or dependence (Fairbairn & Sayette, 2014). Society has placed drinking in a social context as a norm, which leads adolescents to seek peers who encourage drinking. However, there is a gap in literature that does not address if adolescents see social drinking as exempt from public condemnation.

Selection Model

The selection model states that adolescents select to join peer groups with similar drinking habits. The influence is bidirectional where adolescents and peers influence one another (Balsa, Homer, French, & Norton, 2011; Cruz, Emery, & Turkheimer, 2012; Kiuru, Burk, Laursen, Salmela-Aro, Nurmi, 2010). Peer groups may have considerable influence on the adolescent behavior by defining the behavior norms within the peer culture (Cruz, Emery, & Turkheimer, 2012), such as gaining acceptance and maintaining their social status (Balsa et al., 2011). However, when associating with peer groups who also participate in drinking, the likelihood of abusing or becoming dependent on alcohol increases (Cruz, Emery, & Turkheimer, 2012). Therefore, drinking becomes the norm and the expectations to drink increase among peers (Cruz, Emery, & Turkheimer, 2012). For example, peer pressure to drink can be direct, such as teasing.

Direct pressure can cause the adolescent to conform to the group norms to avoid the disapproval of the peer group (Kiuru et al., 2010; Martín-Santana, Beerli-Palacio, & Fernández-Monroy, 2014). Additionally, direct pressure is the highest when the peer group reinforces drinking either to reach popularity, social support, or behavioral confirmation (Kiuru et al., 2010; Martín-Santana et al., 2014).

Peers are the strongest influence, which encourages adolescents to binge or drink heavily (Wang et al., 2014; Fairbairn and Sayette, 2014; Kiuru et al., 2010). Adolescents select peer groups that fit their environments, in which they have the same patterns of drinking as they do. Research found that adolescents chose to be with alcohol-using peers to maintain their own drinking rate (Wang et al., 2014; Alati et al., 2014). Fairbairn and Sayette (2014) noted that majority of drinking initiation episodes occurred in social settings.

Research found that adolescents consume more alcohol when drinking with others because of the self-pressure they place on themselves to meet the expectations of their peers (Wiers et al., 2012; Fairbairn & Sayette, 2014). This process is called indirect peer influence, where the adolescents model their peers who drink alcohol. Sometimes adolescents tend to overestimate how much their peers are drinking, causing them to drink more. When alcohol is the center of the adolescent's environment and is widely accepted, there may be peer pressure to drink, to drink faster, and to drink more (Wiers et al., 2012). On the other hand, there is direct peer influence, which includes providing alcohol and encouragement to drink. Drinking in social environments, such as parties, is associated with heavy drinking, violence, and driving while intoxicated (Fairbairn & Sayette, 2014). Therefore, no matter what type of influence is being experienced, direct or indirect, the adolescent is still pressured to participate in what appears to be the norm in underage drinking.

Immigrant and Native Born in the United States

Additionally, it is imperative to take into account how acculturation is related to underage drinking among Latinos because acculturation can have an importance to solving why underage drinking rates are low among immigrants (Cox, Roblyer, Merten, Shreffler, & Schwerdtfeger, 2013; Almeida, Johnson, Matsumoto, & Dionne, 2012; Bacio, Mays, & Lau, 2013). There are mixed findings in the literature, most studies have assessed the differences by nativity (foreign-born vs. US born), generation (first, second and third), length of residency, and English acquisition of substance use across Hispanic groups (Almeida et al., 2012). Almeida et al. (2012) found in their study that recent immigrants had a low risk for substance abuse compared to non-recent immigrants and a high risk for U.S-born adolescents. It is plausible that adolescent immigrants are at a low risk for drinking because they have not assimilated to the U.S. culture, therefore, are more likely to affiliate with other immigrants (Bacio, Mays, & Lau, 2013). When new immigrants arrive to the U.S., the schools place the adolescent in English proficiency classes, therefore, only assimilating with Spanish-speaking peers (Bacio, Mays, & Lau, 2013).

On the other hand, the U.S.-born Latino adolescents are exposed to environmental conditions, such as substance-using peers and parents throughout their development (Bacio, Mays, & Lau, 2013). Research found that U.S-born Latino adolescents were at a higher risk for alcohol use when their parents were a third and later generation in the U.S. compared to foreign-born adolescents whose parents were a first and second generation (Almeida et al., 2012; Bacio, Mays, & Lau, 2013). However, these numbers change for new immigrants after the first four years in the country. Almeida et al., (2012) found that the more time in residency in the U.S. the new immigrants are gradually adopting the behaviors of U.S-born adolescents, particularly

with regards to alcohol. Furthermore, Latino foreign born adolescents who share similar linguistic acculturation to their parents have lower risks of drinking compared to foreign-born adolescents who are more acculturated with the U.S. culture have a high risks of drinking (Cox et al., 2013).

Geographic Factor

There is a gap in the literature in that there are no strong correlations showing that geographic locations impact underage drinking. For example, several studies found that underage drinking occurred regardless of the adolescent's geographic location, and mixed results regarding underage drinking in disadvantaged neighborhoods (Jackson, Denny, & Ameratunga, 2014; Reboussin, Preisser, Song, & Wolfson, 2010; Wang et al., 2014). Reboussin et al. (2010) noted that it was not the neighborhood in which they live, but the community-level characteristics that influenced underage drinking. For example, communities that exposed adolescents' to positive drinking attitudes were associated for high risk drinking (Jackson, Denny, & Ameratunga, 2014).

In addition, another contributor was income; neighborhoods with high socioeconomic status (SES) had higher drinking rates. Underage drinking was greater in communities with the highest median household income (Reboussin, Preisser, Song, & Wolfson, 2010). Parents who have a higher SES are likely to expose adolescents to higher levels of parental drinking, therefore, adolescents having favorable norms and attitudes towards drinking. One explanation could be that adolescents' have weak social ties with their parents, have a low family interaction, or have a disruptive family process (Jackson, Denny, & Ameratunga, 2014).

Furthermore, Reboussin et al. (2010) found that underage drinking was present in communities that had the least crime and had the largest population size. On explanation for this can be that police patrol is not present because of the small

percentage of crime. Therefore, decreasing the adolescents chance to get caught and increasing the continuation to drink. Another reason could be those adolescents' in high SES experience different types of stressors than adolescent in low SES (Reboussin, Preisser, Song, & Wolfson, 2010). For example, the stressors can be achievement, sport, or extracurricular activity pressure.

On the other hand, adolescents in a low SES experience drinking because there is a lack of supervision by their parents (Reboussin, Preisser, Song, & Wolfson, 2010). Majority of middle-class families are working and do not have time to supervise the adolescent. The lack of supervision has been found to be associated with an increase for underage drinking among adolescents' (Reboussin, Preisser, Song, & Wolfson, 2010). Additionally, the lack of supervision can increase the chance for the adolescent to drink at home or at a peer's house (Reboussin, Preisser, Song, & Wolfson, 2010).

Comparison between Europe and United States

Underage drinking has a higher prevalence rate among European countries. The legal ages to drink in European countries are 16 or 18 years depending on the geographic area. Having the legal age at a young age, European countries are having a difficult time controlling underage drinking. Adolescents report they found it easy to obtain alcohol beverages (Beccaria & White, 2012).

Beccaria and White (2012) noted that the definition of binge and heavy drinking might be more extreme or deviant in different parts of Europe because of the culture. For example, geographic cultures known as the dry and wet cultures can have different norms. The dry cultures consume alcohol in public settings and are more likely to drink beer, whereas in wet cultures, they consume wine and alcohol during meals and social gatherings. Research found that Northern Europe is associated with higher rates of heavy drinking often resulting in intoxication, whereas Southern Europe has low rates of

moderate drinking (Beccaria and White, 2012). One reason for this explanation could be that Southern Europe is modeling a responsible adult caution to drinking.

The median age for European adolescents to begin drinking is at age 13 (Beccaria and White, 2012). The most common alcoholic beverage for adolescents is beer followed by wine. Beccaria and White (2012) found that at age 11, adolescents did not have a preference of beverages, whereas at age 13 and 15, adolescents prefer beer as the dominant alcoholic beverage, followed by wine. Adolescents at age 15 to 16 drink on an average one-liter of beer, but this average varies among countries. Heavy drinking is a common experience for European adolescents. A study performed in Europe found that almost half of the adolescents surveyed had already been intoxicated at least once in their lives (47%), 37 % in the last year, and 17% in the last month (Beccaria and White, 2012). Intoxication increases at least twice significantly with age. Beccaria and White (2012) found that young people from southern European countries (Italy, Greece, and Portugal) generally have a lower prevalence of early drunkenness compared to northern European countries (Estonia, Latvia, and Lithuania).

There are similar comparisons from European countries and the United States for underage drinking. Studies have found drinking for boys and girls to be similar in these countries. Drinking varies by age and gender, with girls slightly higher than males at certain grade levels and vice versa. For example, Beccaria and White (2012) found that in America in the 8th grade, females are slightly higher than males and in the 12th grade, females are slightly lower than males, in drinking. There are lower drinking rates for adolescents in the United States than in European countries. Beccaria and White (2012) found that underage drinking rates have declined in the U.S. recently, whereas in Europe rates have increased. One of the reasons for the lower rates in the United States could be the culture difference.

Chapter 3

Methodology

Case Record Review

In the present study, I have conducted a case record review that investigated evidence of underage drinking among adolescents. The case records were pulled from the clinical records from the Center for Clinical Social Work (CCSW) at the University of Texas at Arlington (UTA). CCSW is a clinical research facility dedicated to increasing the implementation of basic clinical research findings to bring effective strategies into social work practice at all levels. CCSW offers services to Arlington Independent School District (AISD) students, individuals, families, and military/veterans who have an anxiety, personal conflicts, depression, sexual issues, adolescent conflicts, stress, family conflicts, marital issue, and self-esteem issues.

Sample Selection

The case records were from the years 2012 to 2014. Due to the unknown alcohol documentation within the case records, a full sample review was conducted from the indicated years. The case records to be collected for the study includes completed treatments, drop-out participants or exclusion from treatment. Out of the full sample review, a systematic random sample was used to reach a total of 100 case records. A data extraction form was used to extract the data from the 100 cases to determine if the cases were included or excluded from the study. The inclusion criterion for this study includes case records of adolescents between the ages of 12 through 20 and if the adolescent reported drinking. After excluding the records that were not between the ages of 12 to 21, the sample size equaled 56 cases records and when only including underage drinking case records the total was 12. Case records were excluded when records did not contain sufficient information to derive solid conclusions, or were conducted in a

language other than English or Spanish. These characteristics were excluded because they did not provide enough information that was necessary for the study being performed. In the excluded case records, there were 14 for adults, and 28 for children below the age of 12.

Prevalence Rates

Data related to underage drinking of adolescents was extracted from each case record. Informed consent was not required because no participants were recruited to participate in this study. The data was to be collected from the client's case record. Sensitive information (i.e.: identifying information) from the case record was then obscured for the protection of the client by not reporting the demographics of the client in the data extraction form. To determine prevalence rates of underage drinking, synonyms for the term "alcohol" included drink, booze, liquor, smoke, beer, taste, sip, wine, and spirits. When reading the case records the key terms to identify underage drinking included deviant behavior, party, friends, house, and bars.

Data Collection

A data extraction form (Appendix A) was created to obtain information from the case records. The data extraction form includes demographics (age, race/ethnicity, sex, date of birth, zip code, family income, and grade level), mental health diagnosis, referral source (name of school), date of treatment initiation, date of termination, number of clinic visits (completed, rescheduled, and no-show sessions), drinking context (family or peers), termination summary, case notes, duration, frequency, and intensity of alcohol, incidents reported (self-reported, counselor-reported, or guardian-reported), and type of alcohol.

Procedures

The purpose of this descriptive epidemiological is to analyze the prevalence rate of underage drinking exposure. A case record review was used from the CCSW at UTA

as the method for this study. The data extraction form was used to collect the data from each case record. The data extraction form was the independent variable. In addition, to collect the data the researcher used the key terms for underage drinking and the key word alcohol when reading the case notes of the counselors to see if there was underage drinking. The dependent variable was if the adolescent drank.

Furthermore, the associations of year, age, gender, race, and grade for the full sample were conducted to draw conclusions if underage drinking had occurred due to these causes. Second, the association of underage drinking in the sample size included year, age, race, grade, drinking with family, drinking with peers, intensity, location where the alcohol occurred, and the source reporting the alcohol incident. Finally, the association of underage drinking in the diagnostic mental disorders was clinical characteristics of full and underage drinking exposure samples. This procedure allows the researcher to analyze the data by running the frequencies of each variable to see which one influenced underage drinking.

Present Study

There appears to be a gap in the literature in regard to the social factors when it comes to underage drinking. The present study aims to close the gap by examining the prevalence rate of underage drinking among school-age adolescents receiving social work intervention at the CCSW. The prevalence rate is then broken down to represent each social factor in the clinical population. The clients used for this study had completed treatment or were terminated.

Purpose and Hypothesis

The purpose of this study was to obtain the prevalence rate of underage drinking among adolescents between the ages of 12 to 20 in a clinical population. The hypothesis

is that peers (peer groups and peer influence) may contribute to underage drinking greater than the impact of families encouraging alcohol.

Chapter 4

Results

Clinical Population Underage Drinking Prevalence Rate

There were 100 case records that were randomly sampled from the years 2012 to 2013 from a clinical population. Out of the 100 case records, there were a total number of 56 case records that represented school-aged adolescents who sought out social work services during the years 2012 through 2014. Out of the 56 case records, underage drinking incidents were reported in 12 records (21.4%), compared to no underage drinking incidents reported in 44 records (78.6%; see Table 1). This result yields that the prevalence rate of underage drinking exposure among the clinical population of school-age adolescents receiving outpatient social work intervention is 21.4%.

Table 1-1 Clinical Population Underage Drinking Exposure (N = 56)

	Frequency	Percent	Cumulative Percent
Yes	12	21.4	21.4
No	44	78.6	100.0
Total	56	100.0	

Descriptive Statistics

Full Sample size

The 56 case records represented a clinical population of school-aged adolescents and were broken down by demographics: year, age, gender, race, and grade. There were 16 case records collected for the year 2012 (28.6%), 28 case records collected for the year 2013 (50%), and 12 case records collected for the year 2014 (21.4%). Of the 56 case records, 34 belonged to females (60.7%) and 22 belonged to males (39.3%). In regard to geographic location, there were 47 cases records from Arlington (83.9%), and seven case records from Grand Prairie (12.5%; see Table 2).

Table 2-1 Descriptive Statistics of Full Sample (N = 56)

Year	Frequency	Percent	Cumulative Percent
2012	16	28.6	28.6
2013	28	50.0	78.6
2014	12	21.4	100.0
Total	56	100.0	
Gender			
Male	22	39.3	39.3
Female	34	60.7	100.0
Total	56	100.0	
Race			
African American	10	17.9	20.8
Anglo	18	32.1	58.3
Hispanic	19	33.9	97.9
Middle-Eastern	1	1.8	100.0
Total	48	85.7	
Missing	8	14.3	
Total	56	100.0	
Grade Level			
Sixth Grade	2	3.6	4.4
Seventh Grade	8	14.3	22.2
Eighth Grade	10	17.9	44.4
Ninth Grade	12	21.4	71.1
Tenth Grade	7	12.5	86.7
Eleventh Grade	2	3.6	91.1
Twelfth Grade	2	3.6	95.6
Graduated High School	2	3.6	100.0
Total	45	80.4	
Missing	11	19.6	
Total	56	100.0	
Suburb			
Arlington	47	83.9	87.0
Grand Prairie	7	12.5	100.0
Total	54	3.6	
Missing	2	96.4	
Total	56	100.0	
Zip Codes			
75052	1	1.8	2.0
76002	3	5.4	8.0
76006	2	3.6	12.0
76010	2	3.6	16.0
76012	9	16.1	34.0
76013	10	17.9	54.0
76014	4	7.1	62.0
76016	10	17.9	82.0
76017	1	1.8	84.0

Table 2.1-Continued

76018	8	14.3	100.0
Total	50	89.3	
Missing	6	10.7	
Total	56	100.0	

Underage drinking exposure

The 12 case records that reported underage-drinking incidents were broken down by the following: year, age, gender, race, grade, drinking with family, drinking with peers, intensity, location where the alcohol occurred, and the source reporting the alcohol incident. The majority of underage drinking incidents was reported in 2013 (66.7%).

There were nine females (75%) and three males (25%) who reported underage drinking.

The age ranges of those who reported underage drinking were from 12 years old to 18 years old, with the most frequent age being 15 and 16 years old (9th to 10th grade). The age of the sample size ranged from 12 years old to 20 years old, with 14 years old being the most frequent. Finally, in regard to geographic location, there were 10 cases records from Arlington (83.3%) and two case records from Grand Prairie (16.7%; see Table 3).

Table 3-1 Descriptive Statistics of Underage Drinking Sample (N = 56)

Year	Frequency	Percent	Cumulative Percent
2012	2	16.7	16.7
2013	8	66.7	83.3
2014	2	16.7	100.0
Total	12	100.0	
Gender			
Male	3	25.0	25.0
Female	9	75.0	100.0
Total	12	100.0	
Race			
African American	1	8.3	9.1
Anglo	5	41.7	54.5
Hispanic	5	41.7	100.0
Total	11	91.7	
Missing	1	8.3	
Total	12	100.0	
Grade Level			

Table 3.1-Continued

Eighth Grade	2	16.7	18.2
Ninth Grade	4	33.3	54.5
Tenth Grade	1	8.3	63.6
Eleventh Grade	2	16.7	81.8
Twelfth Grade	1	8.3	90.9
Graduated High School	1	8.3	100.0
Total	11	91.7	
Missing	1	8.3	
Total	12	100.0	
Age			
14	2	16.7	16.7
15	4	33.3	50.0
16	4	33.3	83.3
17	1	8.3	91.7
18	1	8.3	100.0
Total	12	100.0	
Suburb			
Arlington	10	83.3	83.3
Grand Prairie	2	16.7	100.0
Total	12	100.0	
Zip Codes			
76012	2	16.7	18.2
76013	5	41.7	63.6
76016	3	25.0	90.9
76018	1	8.3	100.0
Total	11	91.7	
Missing	1	8.3	
Total	12	100.0	

In regard to the type of alcohol that was reported in the case records, there were three cases of drinking beer (25%), and nine cases where the type of alcohol was missing (75%). Underage drinking incidents were commonly reported to have happened with peers, with four cases reporting this (33.3%), and two cases reported at home (16.7%). In regard to who was reporting that underage drinking incidents were occurring, the most common answer was self-reported, which comprised 11 cases (91.7%). When it came to drinking with family, only two cases were reported (16.7%), and six cases were reported (50%) when it came to drinking with peers. Lastly, in regard to intensity, there were two cases where five or more drinks had occurred (16.7%). Four cases were three

to four drinks had occurred (33.3%), and five cases were one to two drinks had occurred (41.7%; see Table 4).

Table 4-1 Descriptive Statistics of Exposure to Underage Drinking Sample (N = 56)

Type of Alcohol	Frequency	Percent	Cumulative Percent
Beer	3	25.0	100.00
Missing	9	75.0	
Total	12	100.0	
Site of Drinking			
Home	2	16.7	33.3
With Peers	4	33.3	100.0
Total	6	50.0	
Missing	6	50.0	
Total	12	100.0	
Who Reported			
Self-Reported	11	91.7	91.7
All the above	1	8.3	100.0
Total	12	100.0	
Drinking with Family			
Yes	2	16.7	16.7
Missing	10	83.3	100.0
Total	12	100.0	
Drinking with Peers			
Yes	6	50.0	100.0
Missing	6	50.0	
Total	12	100.0	
Intensity			
5 or more drinks	2	16.7	18.2
3 to 4 drinks	4	33.3	54.5
1 to 2 drinks	5	41.7	100.0
Total	11	91.7	
Missing	1	8.3	100.0
Total	12	100.0	

Logistic regression analysis

A logistic regression analysis of associations between gender was significant with age, age being the dependent variable of drinking. These results are that the overall model was significant ($F = 4.2$; $p = .02$) and that gender was not significantly associated with underage drinking. As expected, underage drinking was associated with older age (B

= -.35; t = -2.65; p = .01). Please see table 5 for a display of the data. No other categorical category (family, peers, suburb, drinking ect.) yielded to be significant.

Table 5-1 Logistic Regression Coefficients for Age and Gender (N = 56)

Model	Unstandardized Coefficients		Standardized Coefficients		p
	B	Std. Error	Beta	t	
Gender	3.21	.50		6.50	.00
Age	-.07	.11	-.08	-.61	.54
Total	-.09	.03	-.35	-2.66	.01

Clinical Characteristics of Full and Underage Drinking Exposure Samples

The clinical characteristics were given based on the Diagnostic Interview Schedule for Children (DISC-IV). Qualified professionals use the DISC-IV as an aid to diagnose for mental health. Out of the total 56 case record sample, seven cases were Anxiety Disorders (12.5%), one case for Substance-Related Disorders (1.8%), 13 cases for Mood Disorders (23.2%; see Table 6). Furthermore, out of the 12 cases that reported underage drinking, one case was for Anxiety Disorders (8.3%), one case for Substance-Related Disorders (8.3%), five cases for Mood Disorders (41.7%; see Table 7).

Table 6-1 Clinical Characteristics of Full Sample (N = 56)

	Frequency	Percent	Cumulative Percent
Trauma- and Stressor-Related	4	7.1	9.5
Anxiety Disorders	7	12.5	26.2
Substance-Related	1	1.8	28.6
Mood Disorders	13	23.2	59.5
Impulse-Control	1	1.8	61.9
Neuro-Developmental	5	8.9	73.8
Elimination	1	1.8	76.2
Disruptive Disorders	8	14.3	95.2
Conduct Disorders	2	3.6	100.0
Total	42	75.0	
Missing	14	25.0	

Table 6.1-Continued

Total	56	100.0
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Table 7-1 Clinical Characteristics of Underage Drinking Sample (N = 12)

	Frequency	Percent	Cumulative Percent
Anxiety Disorders	1	8.3	10.0
Substance-Related Disorders	1	8.3	20.0
Mood Disorders	5	41.7	70.0
Disruptive Disorders	1	8.3	80.0
Conduct Disorders	2	16.7	100.0
Total	10	83.3	
Missing	2	16.7	
Total	12	100.0	

Chapter 5

Discussion

Comparing Clinical and Non-Clinical Population Prevalence Rates

This study determined the prevalence rate of underage drinking among a clinical population of adolescents receiving social work intervention at the CCSW. This study yielded that 21.4% of a clinical population (ages 12 through 20) had experienced underage drinking. According to SAMHSA, the national rate of underage drinking exposure is 15.8% (ages 12 to 20 years old; SAMHSA, 2013, pg.3). The prevalence rate for the clinical population (21.4%) is higher than the national prevalence rate (15.8%)

Possible reasons for this are that alcohol use is higher among these adolescents due to self-regulation deficits associated with mental disorders, due to the stress of coping with mental disorders, or due to peer influence of deviant peers who may be less socially rejecting of adolescents with mental disorders (Thoits, 2013; Enoch, 2011). The higher rate may also be an artifact of a measurement issue in the two different populations. When prior researchers perform studies on the prevalence for underage drinking they use a series of questions to assess binge or heavy drinking in the past year or past month (SAMHSA, 2013). The questions are designed to measure underage drinking from the criteria in the DSM-V. Additionally, these questions are focused for adults and adolescents aged 12 to 17.

For example, the National Survey on Drug Use and Health (NSDUH) uses a gate question, the first question to a series of related questions about underage drinking, to determine if underage drinking is present in order to continue with additional questions (Center for Behavioral Health Statistics and Quality, 2014). It is possible to ask more than one gate question about underage drinking to make sure the adolescent is or is not participating in drinking. Some of the questions include abuse, alcohol use, binge

drinking, heavy drinking, and demographics within the past 12 months, such as: “Are there any problems with family or friends because of use of alcohol or illicit drugs in the past 12 months” and “How long has it been since you last drank an alcoholic beverage” (Center for Behavioral Health Statistics and Quality, 2014).

On the other hand, the diagnostic interview schedule for children (DISC-IV) approach for clinical populations has two different sets of alcohol related questionnaires and is similar to the NSDUH questions. For example, the gate questions are “Have you participated in any illicit drug in the past 12 months” or “Have you ever drunk in your lifetime?” However, unlike the NSDUH which continues to ask more questions to come to a conclusion that there is no underage drinking present, the clinical population questionnaires stop after the first gate question. Furthermore, the screening questions are not asked unless the participant mentions participating in substance use. Underage drinking was found in the counselor’s case notes even though the adolescent had originally stated they had not participated in drinking.

Therefore, the prevalence rate may have been higher in the clinical population compared to the national population because the adolescents felt more comfortable discussing that they had participated in drinking in the context of psychotherapy instead of answering a series of survey questions. The adolescent feels less pressured when they are ready to talk about it than when they feel interrogated. A recommendation would be once the child discloses underage drinking and feels comfortable speaking about it the counselor should perform the screening for alcohol.

Family

The study approached the prevalence rate of underage drinking among family factors, which yielded to 16.7%. The present study supported the hypothesis that peer groups and peer influence may contribute to underage drinking greater than the impact of

families encouraging alcohol. According to SAMHSA (2013), the national prevalence rate was broken down to family categories (parents or guardians and family members). The category for parent or guardian had a higher prevalence rate of 6.5% than the category family member with 9.1%. Furthermore, the data collected in a clinical population resembles the national findings with two of the 12 cases identified drinking exposure by their family. SAMHSA (2013) reported that adolescents obtain alcohol through different family categories, as they grow older. The prevalence rate starts for ages 12 to 14 years mentioned they received alcohol from a parent or guardian (16%), and from the ages 15 to 20 years old they receive it free from an unrelated person (21.7%).

The evidence was scarce towards parental alcohol use and parental disapproval towards underage drinking. The study could not gather enough information to determine if these two causes interacted with the adolescent's behavior to predict underage drinking. In particular, there was no evidence found that parents were associated with adolescents' drinking habits. The scarce findings appear unusual in regards to the predictions of social learning theory in which adolescents model the behavior of parents, which leads adolescents to drink. On the other hand, since the adolescents were being treated for a mental disorder other than substance use disorder, this lack of evidence may merely reflect that the origins of the underage drinking were not the focus of clinical attention and so were not explored.

Peers

Although the influence of family context varied, results of this study suggest that when it comes to peers, it is simpler than what was predicted from the family factor. There was a finding in this study in that underage drinking occurred more frequently with peers than with family because adolescents were more exposed to peers majority of their time than families. The results for peer context are broadly consistent with the predictions

of the selection model, and with earlier-reviewed empirical research demonstrating that peers select their group based on similar characteristics among adolescents (Balsa et al., 2011; Cruz, Emery, & Turkheimer, 2012; Kiuru et al., 2010).

Underage drinking was also more common in peer groups than alone because adolescents had more occasions to drink with groups than by themselves, inferred from the 50% prevalence rate of drinking with peers. For example, the selection model occurs when the adolescent shares common characteristics with others, thus forming a group and partaking in similar activities. The selection model creates an atmosphere that the adolescent chooses to be a part of, not necessarily creating an attachment between peers. I suspect that adolescents' personal experiences of selection of peers may be influenced by the values, beliefs and attitudes of the attachment bond they have with their parents. Future observational research examining the dynamics of the selection model among peers and underage drinking would be helpful.

The importance of the intensity of peer drinking in the peer subculture may contribute towards the adolescent's physical and mental state. The findings in a clinical population for intensity for underage drinking within a peer context had a median of taking 3 to 4 drinks in one setting (33.3%). The intensity rate was higher in magnitude for females (75%) than males (25%), regardless of whether the adolescent drank by himself or with a group. The results are consistent with the empirical research demonstrating that girls are more likely to drink than boys (Donovan, & Molina, 2014; SAMHSA, 2013).

Moreover, in a national population, the intensity was similar to the clinical population. Girls aged from 12 to 14 consumed three or four drinks in the past month (15.9%) compared to boys (10.2%); girls aged from 15 to 17 years old consumed three or four drinks in the past month (26%) compared to boys (20.5%); girls aged from 18 to 20 years old consumed three or four drinks in the past month (30.4%) compared to boys

(21.5%; SAMHSA, 2013). The present findings point to the possibility that underage drinking is more common in adolescent girls with Mood Disorders, followed by Conduct Disorders (see Table 6).

There was limited amount of information with the interactions of family contexts, therefore, the drinking rate for boys warrant exploration. Several explanations are feasible for the low rate of drinking for boys. First, boys may have an insecure attachment towards their parents which decreases the need to participate in alcohol consumption at home. Second, boys may not report that underage drinking is a concern because they may view it as a rite of passage into adulthood. Finally, boys also may not tell the authoritative figure they are drinking as part of their male role. More research is needed on underage drinking with the interactions of family contexts and possibly on drinking rituals among boys.

These findings suggest that the selection model may indeed be a contribution to the adolescent in terms of their identity formation and the need to belong in a group (Fairbairn & Sayette, 2014; Shochet, Smith, Furlong, & Homel, 2011). Furthermore, if the adolescent can choose the correct selection of peers (e.g., those with non-deviant behaviors), the risk of underage drinking, may be reduced. The effect of this finding needs to be replicated to find if the selection model contributes towards underage drinking because this sample size could have skewed the results. If the finding is replicated, the selection model may need enrichment to better serve the data.

Furthermore, the evidence was scarce in the type of alcohol adolescents consumed. In particular, the data found no evidence, in which adolescents consumed alcohol because they wanted to belong to a peer group or that peers influenced adolescents to drink. This information limited the study to find effects of peer influence.

Geographic

There was scarce information regarding if geographic factors contributed to underage drinking. The study focused on the city of the adolescent's residence, and the zip code where the adolescent attends school. Most of the adolescents resided in Arlington and Grand Prairie. The crime rate for Arlington, TX on average was higher (361.7) compared to Grand Prairie (232.0) out of a crime rate legend of zero to 1,000 (City-Data, 2015). Additionally, Arlington's police caught 43 adolescents participating in underage drinking at a large party that was reported by the neighborhood (Carey, 2013). Furthermore, the zip code 76018 reported one incident (33.3%) for possession of alcohol (City of Arlington, TX, 2013), which coincided with the clinical population that reported one incident (8.3%) for underage drinking. Future research needs to be performed with zip codes to compare underage drinking among the disadvantaged versus advantaged neighborhoods in Arlington. This would provide useful information for the community to prevent underage drinking.

Importance of Examining Clinical Population's Prevalence Rate

The prevalence rates in a clinical population suggest that professionals often overlook underage drinking unless it meets criteria for a substance use disorder, which makes adolescents more prone to drink since they may see it as a rite of passage to adulthood provided that the media, peers and family may contribute to underage drinking. By examining underage drinking in a clinical population it can open doors to re-examine the DSM-V AUD criteria for adolescence's. The reexamination of the DSM-V can be beneficial for future prevention and the reduction of risky behaviors associated with underage drinking.

Additionally, examining the prevalence rate of underage drinking in a clinical population contributes to the literature on behalf of adolescents' attachment, selection

and social learning with underage drinking. This research sheds new light in regards to the attachment and the selection model that could trigger peer and family factors associated with underage drinking.

Implications for Practice

Possible implications for practice when being referred to clinical settings would be for clinicians not to overlook underage drinking. One limitation for the study was that adolescents reported underage drinking, but there was no intervention or treatment performed unless criteria were met for substance use disorder. Clinicians would only focus on the adolescent's primary diagnosis, such as mental or disruptive behavior (depression, anxiety, and conduct disorder). Many professionals focus on treating the primary condition due to the limited time to engage the adolescent in that treatment, and only focus on mental health behaviors directly related to that condition.

Evidence for practice on effective methods to eliminate underage drinking is also sparse (Elliott, Morleo, & Cook, 2009), providing few guidelines for social workers. Lack of supervision necessary to prevent illegal behaviors and provision of alcohol to adolescents by parents may constitute child neglect in this country; so underage drinking could be addressed by parental guidance or involvement of child protective services (Cleveland et al., 2010). However, it is important for professionals not to overlook underage drinking as a norm for adolescent behavior but to address the legal, developmental, and health risks of alcohol consumption. The hope of this study is for professionals working in clinical settings or non-clinical settings to not let underage drinking be unaddressed.

A recommendation for effective approaches for providers who treat underage drinkers for other mental health problems in a clinical setting would be to use the Screening and Brief Intervention (SBI). SBI has been found to be an effective treatment

with short-term interventions in primary care and emergency department settings (American Public Health Association and Education Development Center, 2008; Heather, 2012). The purpose of SBI is to increase awareness of the adolescent's alcohol use and motivate the adolescent to decrease drinking or seek treatment (American Public Health Association and Education Development Center, 2008). SBI has been found to be effective for adolescents between the age groups of 12 to 20 in reducing alcohol-related harm (Patton Deluca, Kaner, Newbury-Birch, Phillips & Drummond, 2014; Heather, 2012).

Furthermore, SBI contains two effective screening tools in which social workers can use for underage drinkers, which are CRAFT and AUDIT questionnaire. CRAFT is a brief screening tool "with good discriminative properties for determining high risk" of alcohol consumption (Committee on Substance Abuse, 2011, p. 1332) and AUDIT "was found to have greater sensitivity and specificity" (Patton et al., 2014, p. 208). Additionally, SBI contains two forms of brief interventions in which social workers can choose from that have been effective, which are brief structured advice and brief motivational interviewing. Brief structured advice is time-limited that typically last between five to 10 minutes and provides information on "drinking risk levels, the status of the patient's own drinking in relation to those levels, encouragement to cut down and, often accompanied by self-help material" (Heather, 2012, pg. 2). Brief motivational interviewing (MI) is more flexible that typically last between 20 to 40 minutes and includes follow-up sessions (Heather, 2012; Patton et al., 2014).

SBI is a reasonable approach for social workers when "time does not permit a full psychosocial interview" (Committee on Substance Abuse, 2011). When social workers meet an adolescent for the first time it is important to ask the screening tools to determine if alcohol is present. Social workers can choose from two different screening tools that

have been effective with adolescents, which are CRAFT or AUDIT before moving on to the primary condition. As mentioned earlier part of the screening process is to increase awareness of alcohol use. Therefore, even if the adolescent does not present underage drinking the adolescent can become aware of how alcohol can affect their emotional and physical state of mind. Increase of awareness creates a movement of change within the adolescent (Heather, 2012). If the adolescent presents underage drinking the social worker should provide a brief intervention and not leave the matter unattended. The social worker can choose from two interventions that have been effective with adolescents, which are brief structured advice and brief motivational interviewing. If time does not permit and further treatment needs to be done the social worker needs to make an appropriate referral for treatment.

Moreover, SBI has been performed mostly in primary care facilities because the practitioners are more exposed to adolescents when doing routine clinical care and can refer the adolescents to social workers on site if underage drinking is present (Committee on Substance Abuse, 2011). The literature found that when social workers used SBI on adolescents it “reduced alcohol-related harms and alcohol consumption, and increased an improvement in knowledge regarding alcohol” (Patton et al., 2014, p. 208). Additionally, Patton et al. (2014) found when MI was used in a school based population with adolescents aged 12 to 18 years old the MI “intervention groups had significant reduction in alcohol use” (p. 209). Conversely, mental health facilities do not use SBI because they have their own set of screening tools, such as the CAGE questionnaire that targets individuals who require more extensive testing and possible treatment. CAGE has been found to be more effective with adults than adolescents because the CAGE screens for alcohol abuse and dependence (Pilowsky & Wu, 2012). One reason mental health facilities use CAGE is because it is faster to screen, and the practitioners are

overwhelmed with the pressure to screen for multiple psychiatric disorders (Pilowsky & Wu, 2012).

Study Limitation

The results need to be considered with the perspective of some research limitations. First, the analysis of the data could not determine whether there was a relationship among the intensity rate between peers and family context. Second, history and maturation can never be ruled out. Third, the adolescent reported the measure of intensity for underage drinking, which is a somewhat a limited measure of amount of drinking in that adolescents may not fully tell the truth or simply cannot remember. Finally, underage drinking may provide a stress reliever to the adolescent, which does not follow under attachment, social belonging or the selection model (Thoits, 2013).

Future Research

Despite these limitations, this study adds to the literature of underage drinking in a clinical population. Future research should focus on a replicating this study by using a mixed method or a qualitative study of 12 participants. Furthermore, in theory the family context can be a contributor to peer drinking. To establish such mechanisms further research is needed on the extent to which family-drinking context leads to peer drinking and on the extent to which adolescents' drinking motives contribute to this association. Additionally, future research should focus on a longitudinal study to see if there is a correlation between underage drinking and mental illnesses among adolescents. More research needs to examine if mental illness impacts underage drinking or if underage drinking leads to future mental illness, which can expand the empirical-based practice. This study found that adolescents participate in underage drinking during a mental illness, but there were no data to determine if drinking impacted the mental illness. Finally, there needs to be future research examining the contribution of parent-adolescent

discussion about underage drinking and if it impacts the adolescent's decision not to drink.

Conclusion

The current study examined the prevalence rate of underage drinking in an outpatient clinical population. The prevalence was higher than in the general population. The prevalence rate was then broken down by categories: family, peer, and geographic factors. The results suggest that age has contributions to engaging in underage drinking. Underage drinking was associated with older age as expected. However, additional research is needed on age and peered context and the modification of prevention programs that target adolescents at different age groups. Adolescents' selection of peers is very important because it influences the adolescent's outcome of future underage drinking. This literature found that peer influence was common with underage drinking, consistent with the selection theory model. The current study makes a literature contribution to research on the development of adolescents' exposure to drink. Understanding the prevalence of adolescents' consumption of alcohol and clarifying the importance of peer contributions to adolescents are crucial for effective interventions.

Appendix A
Data Extraction Form

Data Extraction Form

Year:

Demographics

- Age:
- Race/Ethnicity:
- Sex:
- Suburb:
- Family Income:

Grade Level:

Referral Source (Name of School):

Mental Health Diagnosis:

Number of Clinic Visits:

Drinking in context of

- Family:
- Peers:
- Termination Summary:
- Case Notes:

Incidents of Intensity Mentioned:

Site of Drinking Incident:

Source Reporting Alcohol Incidents

- Self-reported:

- Counselor-reported:
- Guardian-reported:

Type of Alcohol:

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Karen Abonza earned her Bachelor of Arts in Psychology and her Master of Science in Social Work from the University of Texas at Arlington (UTA). She has volunteered at a Domestic Shelter and interned at Parkland Community Clinic, and at CitySquare. Her research interest is the cause of underage drinking among adolescents. Her future plan is pursue a mental health career to gain more knowledge within the field of social work. From there, she plans to obtain a Doctorate degree and open a private firm.