

Parental Influences: A Survey Design

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Introduction

Excessive alcohol consumption by college students is a serious national problem. National samples of college students demonstrate that nearly 85% report consuming alcohol within the past year, 70% monthly use, and 40% report binge drinking (Palfai, 2003), defined as consuming 5 or more drinks in one sitting for males and four or more drinks for females (Wechsler & Isaac, 1992). According to Harvard's College Alcohol Study (CAS), half of the students who binge drink, do so more than once a week (Wechsler, Nelson & Weitzman, 2000). Current prevention efforts focus on the norms of the college community, the environment of the community surrounding campus, and the influence of peers on students' drinking behaviors. Done in isolation these efforts produce marginal results. Students are continuing to drink at dangerous levels and negatively affect the college community.

This frequency of binge drinking is not without consequences. Approximately 500,000 college students, age 18-24 suffer unintentional injuries while under the influence of alcohol (Hingson & Howland, 2002). These injuries include educational difficulties, psychosocial problems, antisocial behaviors, injuries, overdoses, high-risk sexual behaviors, and other risk taking, such as alcohol impaired driving (Kuo, Wechsler, Greenberg, & Lee, 2003; Perkins, 2002). Non-drinkers, who attend schools with high rates of binge drinking, experience a greater number of second hand effects including disruption of sleep or studying, property damage and verbal and physical abuse (Wechsler, Lee, Kuo, Seibring, Nelson, & Lee, 2002). Area community members reported increased rates of noise disruption, public drunkenness, crime, property damage and police visits compared to those who do not live near campus (Wechsler et al., 2002). These documented behaviors suggest that binge drinking remains a serious health and safety issue among college students and the college and local communities.

Students, both drinkers and non-drinkers, are aware of the risks, consequences, rules, penalties, and dangers associated with drinking. Even equipped with the necessary information regarding

alcohol and its harmful effects, students are still deciding to binge drink at even higher rates than in previous years (Wechsler, Nelson, Lee, Seibring, Lewis & Keeling, 2003). Given the prevalence of this behavior, it is too simplistic to view alcohol use as a single behavior with a simple cause or solution. Prevention efforts need to diversify their approaches and focus the various environmental and social influences that persuade adolescents to abuse alcohol. Among the factors thought to be related to adolescents' involvement with alcohol are influences provided by person's within adolescents' social networks, including parents, peers, and siblings (Dielman, Butchard, Shope & Miller, 1991). Additional research needs to explore how these social networks influence an adolescent's health choices overtime.

Life transitions, such as leaving home for college, provide many challenges for all family members. While the separation from parents creates a physical barrier between parents and adolescents, several researchers found parental influence to remain significant (Kenny, 1990; Kenny & Donaldson, 1991). Recent literature has emphasized that positive parental support promotes higher grade point averages, general academic attainment, cognitive engagement, and academic persistence (Finn & Rock, 1997). A moderate to strong attachment to parents also enhances an individual's sense of self and promotes higher self-esteem, internal locus of control, and more optimism (O'Koon, 1997).

Previous research suggests a relationship between parental drinking, parents' alcohol-related norms, the quality of the parent-child relationship and the early initiation of alcohol use among adolescents (Biddle, Bank & Marlin, 1980; Ellickson & Hays, 1991). Parents' efforts to control or regulate their adolescent children's drinking can include both general monitoring of their adolescent's behavior outside of home and school and the establishment of alcohol-specific policies or norms. Previous research studies linked higher levels of parental monitoring and support to lower levels of adolescent drinking and drug use (Biddle, Bank & Marlin, 1980). This monitoring behavior begins with awareness. A recent study found that only 34% of parents are aware of their adolescent's use of alcohol (Williams, McDermitt, Bertrand & Davis, 2003). Without awareness parents cannot engage in

meaningful dialogue with their adolescent regarding substance use. Many parents lose the opportunity to influence their adolescent's behavior when they are unwilling or unable to express a standard for adolescent conduct and alcohol consumption (Biddle, Bank & Marlin, 1980).

Parental factors may represent an important and understudied protective influence on late adolescent drinking (Jaccard & Turrisi, 1999). Involving families in a particular approach is beneficial because families have strong and persistent influences on their children (Ashery, 1998). Parents have a longer time to influence their adolescent and retain responsibility to represent the standards of the adult world. This survey attempts to explore how perceptions, communication, and monitoring affect students' drinking behavior. The survey specifically addresses the following research questions:

RQ1: How does parental modeling affect college student's drinking behavior in their first year?

RQ2: How does parent-child communication affect college student's drinking behavior in their first year?

RQ3: How does parental monitoring affect college student's drinking behavior in their first year?

Survey

When designing the survey we attempted to group survey questions under the common headings of demographics, alcohol use, parent-child communication, parental modeling and parental monitoring. Grouping is a more efficient way of asking a person to think about a topic and often cuts down the effort required by the respondent to respond (Dillman, 2000). In addition to like items, we also grouped together questions that have similar component parts or scales (Dillman, 2000). Both of these strategies ease the burden placed on the respondent.

We began the questionnaire with questions that are applicable to everyone, interesting and easy to answer (Dillman, 2000). The first three demographic questions fulfill these criteria and increase the respondent's confidence in their ability to complete the remaining survey questions. Following this short section are questions regarding the respondent's communication patterns with their parent or guardian. This arrangement attempts to connect the respondents with the communicated purpose of the survey, again increasing the respondent's motivation to complete the survey (Dillman, 2000).

We researched surveys used to measure parent-child communication. A scale commonly used on college-age students is the Inventory of Parent and Peer Attachment (IPPA) (Armsden & Greenberg, 1987). This scale uses Bowlby's (1969) attachment theory to examine the role of attachment in late adolescence (Armsden & Greenberg, 1987). For this survey, we borrowed questions from the IPPA that measure parent-child communication. Building on this existing scale, we included additional questions regarding mode and frequency of parent-child conversations as well as subject matter.

We also used several questions from the Core Alcohol and Drug Survey to measure alcohol use. The CORE Drug and Alcohol Survey was developed in the late 1980s by the U.S. Department of Education and advisors from several universities and colleges. The survey measures alcohol and other drug usage, attitudes, and perceptions among college students at two and four-year institutions. This survey is well tested and frequently used in the college environment, therefore we borrowed questions that address students' and parents' use of alcohol.

The survey also includes sections on parental modeling and monitoring. As previous research indicates, parental influence represents an important and understudied relationship on late adolescent drinking. We constructed these questions from existing research done on the parental monitoring and modeling of high school students (Williams, McDermitt, Bertrand & Davis, 2003). We analyzed the questions asked in past surveys and discussed areas that still needed exploration. From this exploration we developed questions for the sections on parental modeling and monitoring. Now that the survey is constructed we move into the areas of survey pretesting and implementation.

Method

Evaluation of Instrument

We evaluate each survey question on the quality of its individual content and the effect it has on other survey questions (Dillman, 2000). We want the questions to apply to all respondents, be easy to understand and interesting (Dillman, 2000). To ensure the quality of our instrument will send our

survey to knowledgeable colleagues for evaluation, conduct focus groups and individual interviews on the survey questions, and pilot our survey to a small group of first year students.

Pretesting

The pretesting an instrument is part of the survey design process. This multi-step process is an effective way to elicit feedback regarding survey layout, questions, and design. Specifically, we want to ensure all survey questions are asking the right things (content standards), respondents understand the questions consistently (cognitive standards), and respondents can complete the questionnaire easily and as we intended (usability standards) (Groves, Fowler, Couper, Lepkowski, Singer, Tourangeau, 2004).

During the first phase of pretesting, we will send our survey to knowledgeable colleagues for analysis and commentary (Dillman, 2000). These individuals will review the questions to assess whether the content is appropriate for measuring the intended concepts (Groves, et al, 2004). For the purpose of this survey, we will send our survey to college health educators, survey specialists, and college administrators.

Next, we will conduct individual interviews and focus groups to evaluate the cognitive and motivational qualities of our survey questions (Dillman, 2000). Since this is a self-administered questionnaire, we will use retrospective interviewing technique. During this process, we will watch while respondents fill out the questionnaire noting any skipped questions, hesitations, confused expressions, or other problem behaviors (Dillman, 2000). Once the respondent completes the questionnaire we will ask the respondent about their behavior and their interpretation of the questions (Groves, et al, 2004). Through this process, we want to ensure all respondents can understand and interpret question wording in the same manner. During a focus group, will we meet with the members of the target population and explore what they know and think about the issues addressed in the questionnaire (Groves, et al, 2004).

In stage three of the pretest process, we will conduct a small pilot study (Dillman, 2000). To the best of our ability we will try to emulate the procedures for the main study. We will distribute the pilot study to first year college students during their fall semester. During this process we hope to solidify our categories and extend them where needed. Several of our questions have a category labeled "other." If an answer appears frequently in this category we may consider adding it to the final list of categories. Following any necessary changes from the pilot study, we will have a few individuals external to the survey development process complete the survey. We hope that this final step will catch any errors missed during prior pretests.

Target Population

Stemming from our research questions, how do perceptions of parental norms, parental monitoring and modeling affect college students' drinking behavior in their first year, our determined target population was first year students. First year students are our population of interest because we are interested in capturing the students' transition from high school drinking behavior to college drinking behavior and the influences of their parents. Surveying upperclass students would not accurately capture their perceptions of their parents drinking behavior and the resulting influence.

We decided to distribute our survey at a four-year residential campus with a traditional aged population. We felt this type of institution would capture the population we were interested in without having a large number of ineligible units responding to our survey. For instance, the number of non-traditional students, transfers, and non-degree seeking students would be limited. Our sampling frame will be first year students at a liberal arts college. The college selected will need to have a required first year seminar course held in the fall semester. A required first year seminar course will ensure that we capture the maximum amount of students in one distribution of the survey. Distributing a survey within a required class for all first years would decrease our non-response rate.

Mode of Collection

We will utilize a census survey design. We will survey first-year students in their first-year seminar classes after midterms. The decision to survey students at this time recognizes the time lapse needed for exposure to the drinking climate and influences experienced at college. Surveying first year students at orientation would not be able to capture any change in alcohol behavior.

Our goal is to achieve a high response rate from respondents. We utilized and modified Dillman's (2000) five needed elements for achieving high response rates as part of his Tailor Design Method to improve our response rate. Recognizing this would be a cross-sectional distribution, we felt that contact with first year students prior to the survey distribution was essential. We also needed to take into consideration social exchange theory and the needed elements of reward, cost, and trust (Dillman, 2000). We would be unable to provide a financial incentive to the students, but would be able to provide other types of rewards appealing to individuals.

Dillman provided good examples of providing rewards, reducing social cost, and building trust that guided us. After spending some time gaining institutional buy-in from senior administration, the faculty governance board, and the student government association, we will have an e-mail sent out by the University president outlining the value and importance of the survey two weeks before the survey. The week of the survey distribution, students will receive another e-mail this time from the student government president. Both contacts will communicate to first year students a high regard for their thoughts and experiences with their parents on health issues. Students will receive notification that their responses will assist college administrators and peer groups to gain a better understanding of their relationships with their parents around issues of alcohol. Dillman (2000) states an appropriate social reward can be the knowledge that their responses will provide a social usefulness. The results will guide health programming for them and their parents through their transition to college.

The day the survey is distributed peer orientation leaders will disseminate the survey to each first year seminar class. Survey distribution will occur at the beginning of each class versus at the end

of class period. This timing decision ensured students did not feel rushed completing the survey because of any time constraints. Upon distribution, peer leaders will restate the significance of the study and their participation. Peer leaders will be prepared to answer questions.

All first- year students will receive an e-mail later in the week from the President thanking them for participation and notifying students that results of the study will be disseminated to students later in the spring semester. The results will provide an opportunity for dialogues around health issues amongst students and administrators.

Post-Collection Processing of Data

Prior to processing the data, we will construct a categorical framework to help classify all survey responses. This process, called coding, translates nonnumeric material into numeric data (Groves, et al, 2004). This translation allows the ability to use statistical methods to analyze the results of the survey. For example, we will create a coding system that separates the female (1), male (2), and transgendered (3) students. Each coding system developed will have the following characteristics: “a unique number, a text label, total exhaustive treatment of answers, mutual exclusivity, and a number of unique categories that fit the purposes of the analyst” (Groves, et al, 2004, p. 306).

Not all of the answers will fit a predetermined coding structure. Following data collection, we will compare the data with our existing coding structure and make the necessary changes. Not all questions will produce useable information. For respondents who fail to give an answer that meets the question's objectives, we will designate a code labeled “uninformative” (Groves, et al, 2004). Skip questions also need additional coding structure. Based on previous answers, certain members of the sample will skip a question because it does not apply to them. Since we do not want the data to be counted as missing, we will assign a category of “non applicable” for the respondents to whom the question does not apply (Groves, et al , 2004). Respondents, unintentionally or intentionally, may not answer every question. If the amount of item missing data is small, we will use list wise deletion, eliminating the cases with missing data from any statistical procedures. If the amount of item missing

data is large, we will need to revisit the specific survey items in question and decide if item is even usable.

Often processing error does arise during the coding process. Human coders are not always consistent when making coding decisions (Groves, et al, 2004). Coders vary in their "use of a given code category, their interpretation of certain response words as cues for a given code category, and their tendency to use a residual code" (Groves, et al, 2004, p. 316). In an attempt to reduce coder variance, we will code a handful of surveys together, discuss our decision making process before coding the entire sample on our own. After coding our data, we will need to run descriptive statistics on our data. The descriptive statistics on our data is part of the editing process, which occurs before we conduct statistical analysis (Groves, et al, 2004). We will check for range edits, check for high and low values to detect outliers, as well as, checks for consistency edits (Groves, et al, 2004).

Limitations

Our study is a voluntary study conducted at one liberal arts college. Coverage, sampling, and nonresponse error can exist because of this and our sample design. The target population of first-year students will not match perfectly the sampling frame we have utilized. There may still be ineligible units that complete the survey such as a non-traditional student. Coverage error will exist. Students can also refuse to complete the survey. There are not only students who will elect not take the survey, but also will not attend class the day the survey is distributed. Our results attained from those surveyed may be different from the response of students who did not respond leading to nonresponse error (Groves et al, 2004).

Another limitation may be measurement error, we have decreased this error by conducting a pre-testing of our instrument. Measurement error may still exist. Some students may not understand the wording of a question or misinterpret the question and respond in a manner that is inaccurate or unusable. We are also asking students sensitive questions. Some students may not respond to a single question leading to non-response error.

Peer leaders may also serve to bias the results. There is no way to ensure that students will communicate the value and significance of students' participation in a consistent manner. Also, depending on the performance of the peer leader during orientation may also influence students' response. For example, if the peer leader was not very good in answering questions and mentoring students during orientation students may discount the importance of the survey. Another limitation may be the respondents producing socially desirable responses. The climate created around the survey may induce students to respond in a socially desirable way (Dillman, 2000). For example, students receive an e-mail from the president of the institution and the student government president, as well as faculty buy-in. This amount of attention may encourage students to respond in ways that make them look favorable or provide responses they believe others desire of them.

The purpose of our study is to gain a better understanding of the influences of students drinking behavior. Past studies conducted on the drinking behavior of college students focused on peer influence and environmental factors but do not explore the influence of parents. Our study intends to gain a better understanding of the role parental monitoring and modeling play in the behavior choices of their children. The results of this study will provide colleges with an understanding of the role parents play in influencing their child's drinking behavior. With this information, college administrators are equipped to create programs and engage in dialogues that are reflective of the influences on college students' drinking behavior.

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