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Articles

Determining the Effectiveness of an Alcohol Intervention Program With Greek College Students

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The authors examined the perception of college students from Greek organizations on the effectiveness of an alcohol intervention program that included gender-specific programming. Significant reductions in risky alcohol use were found in men who attended and evaluated the program as helpful.

Keywords: Greek organizations, college students, risky alcohol use, alcohol intervention, gender-specific

Excessive alcohol consumption continues to be a major problem on college campuses. Problems can range from regular binge drinking (Ragsdale et al., 2012) to excessive drinking for celebratory occasions, such as the 4th-year fifth, which is when students in their 4th year of college attempt to drink a fifth of liquor on the day of the last home football game (Foster, Bass, & Bruce, 2011). This pattern is even more prevalent in the Greek system, where students view heavy drinking behavior as a tradition and express a sense of accomplishment. Although not all members of the Greek organizations are high-quantity drinkers, over 67% of members could be classified this way (Killos & Keller, 2012).

Drinking Patterns Prior to College

The influence of Greek membership on college drinking patterns presents a complex picture. The question arises of whether becoming a member of a fraternity or sorority contributes to heavy drinking (socialization) or if these drinking patterns existed prior to entering college (selection). Walker, Martin, and Hussey (2015) found that students at an elite university who became members of the Greek system arrived on campus with a greater emphasis on having an active social life. These students also reported a greater prominence of alcohol and other drugs in their social lives on campus

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than did non-Greek members. When the researchers created a matched comparison group that accounted for precollege characteristics, students who were members of Greek organizations still displayed a significantly higher emphasis on socializing and partying. These students also reported a lower satisfaction with college course work and academics but higher satisfaction with social life and were more likely to complete their degree, a factor that may be related to their greater economic resources. Members of Greek organizations were more likely to report alcohol and drugs playing a prominent role in their enjoyment of campus life, but the authors reported this difference as being attributed to precollege characteristics that are more related to selection than socialization. Further research supports the influence of heavy drinking in high school as being predictive of both the amount of drinking and the number of alcohol-related consequences experienced in college, with the numbers being even greater among fraternity members (Larimer, Anderson, Baer, & Marlatt, 2000). Nelson and Engstrom (2013) also found a significant correlation between high school drinking and college binge drinking and viewed 1st-year students as being susceptible to high-risk drinking. Consequently, they recommended that fraternity recruitment be deferred to the second semester of the 1st year or to sophomore year.

However, there is also the process of socialization that occurs once students are in college. Students who join Greek organizations exhibit an increase in drinking and alcohol consequences whereas those who disaffiliate from the Greek system experience decreases in heavy drinking and alcohol consequences (A. Park, Sher, & Krull, 2008). McCabe et al. (2005) examined drinking and marijuana use prior to college and during college in a longitudinal study and found both a selection and a socialization effect. Students who joined fraternities and sororities indicated greater substance use prior to college than nonmembers, but also experienced a greater than average increase of substance use as a function of fraternity and sorority membership while in college. For students who became inactive in a fraternity during their third or fourth year of college, a small decrease in heavy drinking was experienced, which may indicate the socialization aspects of drinking. Capone, Wood, Borsari, and Laird (2007) found a reciprocal influence process where greater involvement with the Greek system was associated with greater use of alcohol prior to college. This greater involvement with the Greek system was also associated with significant increases in drinking during the first 2 years of college.

Social Norms and the Consequences of High-Quantity Drinking

Although there is a stereotype that college students often drink to excess, there may be misperceptions of how much students actually drink. Such normative perceptions have been associated with actual drinking, resulting in the risk that high perceptions of drinking at Greek parties can result in

greater drinking activity (Lewis et al., 2011). Even nonfraternity/nonsorority members have been found to exhibit higher blood alcohol concentrations at fraternity/sorority parties than at nonfraternity/nonsorority parties (Glindemann & Geller, 2003). Students generally perceive that all student groups drink more than the actual case (Larimer et al., 2011). Data support the social norm of greater alcohol consumption among Greek members in that Greeks self-reported binge drinking at a significantly higher percentage than the non-Greek population (Chauvin, 2012). Although colleges have made some attempt to integrate social norm strategies into programming to reduce alcohol misuse, Carter and Kahnweiler (2000) raised concerns about the effectiveness of this approach with fraternity men. The presence of proximal injunctive norms (the individual's perceived approval of drinking by socially close peers) may be mediated by social drinking motives in which students who perceive that friends approve of drinking may try to enhance their social experience with their friends through use of alcohol (Halim, Hasking, & Allen, 2012). Given both the social nature of the Greek system and the perceptions about the importance of drinking in this setting, the fraternity/sorority environment may provide a more powerful motivator for drinking than social norm strategies can combat.

Much of the focus of college drinking has been on the negative consequences. Fraternity members who binged frequently were significantly more likely than nonfraternity members who binged to engage in physical fighting, drive under the influence, and engage in unprotected sex, and sorority members who engaged in binge drinking were significantly more likely to be injured, drive under the influence, be sexually victimized, and engage in unwanted sex (Ragsdale et al., 2012). Students who expressed a willingness to experience negative consequences (e.g., hangover, blackout, vomiting, obnoxious behavior) were significantly more likely to experience that consequence (Mallett, Varvil-Weld, Turrisi, & Read, 2011) and not view these consequences as negative (Mallett, Bachrach, & Turrisi, 2008). It has been suggested that the delayed reinforcers that occur when refraining from drinking and avoiding negative consequences were less impactful than the immediate positive consequences of drinking (A. Park, Kim, & Sori, 2013). Thus, the brief, motivational interventions that focus on consequences may be less effective for individuals who are willing to experience negative consequences if they can gain the immediate positive consequences (Mallett et al., 2011). When students experience positive consequences from drinking (i.e., being more social, reduced tension, feeling courageous, etc.), they have an increased likelihood of engaging in the same behavior in the future (A. Park et al., 2013). Among students classified as hazardous drinkers, positive drinking consequences may be predictive of levels of problematic alcohol use (Capron & Schmidt, 2012). In fact, students have reported that they are more strongly influenced by their most positive consequences than by their most negative consequences (C. L. Park, 2004).

Effectiveness of Interventions

Knowing that problematic drinking occurs in college students is just one part of the puzzle, but deciding what can be done to reduce risky drinking is another issue. Just teaching them about the dangers of drinking has not been proven effective in changing behaviors. Walters, Bennett, and Miller (2000) found that those who participated in a brief alcohol class did not demonstrate a significant decrease in drinking after 6 weeks. College administrators have indicated that many approaches have been taken that include alcohol education, with the Greek populations receiving targeted programming; prohibitions on access to alcohol; restrictions on alcohol advertising; alcohol-free housing; and institutional investments in prevention (Wechsler, Kelley, Weitzman, San Giovanni, & Seibring, 2000). Some short-term gains have been shown with fraternity members who received risk-reduction skills-based training that included behavioral rehearsals and role-playing. At the 6-month follow-up, significant reductions in drinking were found, but these differences dissipated by the 12-month and 18-month follow-ups (Caudill et al., 2007).

Brief interventions have typically been used with college students, given their many commitments related to academic work, employment, campus involvement, and social life. Fried and Dunn (2012) utilized the Expectancy Challenge Alcohol Literacy Curriculum—a one-session group-delivered program designed to modify alcohol expectancy processes for alcohol use and reduce alcohol use among children and young adults—with fraternity members to reduce risky drinking and found significant reductions in alcohol use 4 weeks later. Success has been found with employing brief interventions with fraternity members where individually tailored feedback was provided about skills helpful in promoting moderate drinking (Larimer et al., 2001). Significant decreases in drinking and estimated peak blood alcohol levels were found after 1 year in fraternity members who participated in the training, and peer interviewers were found to be as effective as professionals in delivering the intervention. However, meta-analysis of the data by Huh et al. (2015) cautioned colleges about the use of brief motivational interventions because of the small intervention effect. They found that only in-person motivational interventions with personal feedback were effective in facilitating change. Martens, Smith, and Murphy (2013) also supported the importance of in-person personalized normative feedback in reducing alcohol use among students. Furthermore, intervention efforts can benefit from being gender-specific (O'Connor & Stewart, 2010; Thompson et al., 2009); however, the only gender-specific interventions that have been done to date relate to social normative feedback.

Social norms marketing approaches have produced mixed results. When a social norms approach was applied to fraternity men, it was found that these students were influenced more by the people in their networks than by others (Carter & Kahnweiler, 2000). Given that binge drinking

is the norm, problem drinking may be self-perpetuating. Although this approach may work in some settings (Haines & Spear, 1996), social norms marketing campaigns may be less impactful in college settings where alcohol is readily available and visible around the campus (Scribner et al., 2011). Lojewski, Rotunda, and Arruda (2010) provided personalized gender-specific normative feedback and found no significant change in the reported frequency of drinking and number of drinks per drinking occurrence between men and women. In a cross-sectional study, one campus did obtain success in significantly reducing alcohol use and changing perceptions regarding alcohol-use norms through a media campaign over 3 years (Glider, Midyett, Mills-Novoa, Johannessen, & Collins, 2001). Although fraternity/sorority members did participate in the study, these groups were not analyzed separately to see if drinking norms in these groups were equally affected.

Changing drinking patterns on the college campus is a challenging endeavor. Campus culture often is intertwined with drinking as a major part of the social structure (Walters et al., 2000). Even though the majority of students who drink heavily in college will change their behaviors as they mature, there are still many risks encountered by students that need to be addressed. The purpose of this pilot study was to investigate the perception of 1st-year Greek members for two dependent samples (fall, spring) on the effectiveness of an alcohol intervention program that included gender-specific programing and the association on reducing the alcohol consumption of these participants. This research set out to answer the following questions: (a) What were participants' perceptions of the program and did these differ by gender? and (b) Were Greek members' perceptions of attending the alcohol education presentation(s) associated with drinking differences and did these differ by gender?

Method

Participants and Procedure

The population for this study consisted of students who joined the Greek community at a rural, midsized university during one academic year (N = 276). Recruitment of participants was conducted to obtain two dependent samples in the fall and spring semesters by announcements at fraternity and sorority meetings. A total of 250 first-year Greek members completed the surveys in the 2nd week of September (fall) and the 1st week of March (spring), resulting in a response rate of 90.1%. Respondents with missing or invalid data (n = 14, less than 6%) were eliminated via listwise deletion, leaving a total number of 236 participants who took part in both parts of this study, for a final response rate of 85.5%. Fall recruitment took place in September after respondents had pledged to a fraternity or sorority, and spring recruitment took place after the 1st-year

Greek members had the opportunity to attend an alcohol intervention program designed by the first author that included two separate sessions conducted by the first and third authors and sponsored by the university's Greek life office: (a) Straight Talk About Drinking (STAD) and (b) Sex and Alcohol (SAA). The STAD was a 1-hour session conducted during the 2nd week of September. This first session was facilitated by both a female faculty member and a male doctoral student. Both facilitators are licensed professional counselors with specific training and/or licensure in addiction counseling. A discussion format was used, integrating humor and stories to engage and educate Greek members regarding how to drink safely and provide information on how the brain is impacted by alcohol use and the corresponding physiological signs and symptoms. In particular, the training addressed how consuming alcohol affects reasoning and decision-making. The session focused on not "talking at" participants, but talking with them about the topic. Also, the intent was to develop rapport with the participants to engage in a more successful discussion during the second session.

The second session, SAA, was a 2-hour session conducted during the last week of October and was conducted separately by gender. A male doctoral student led the group of Greek members who identified as men and a female faculty member led the group of Greek members who identified as women. Each group was given prompts, then the group leaders facilitated a discussion among the participants. The prompts related to (a) the relationship between alcohol use and being physically attracted to another person, (b) if there is pressure to drink alcohol and where the pressure comes from, (c) the relationship between self-esteem and alcohol use, (d) negative consequences of risky drinking, (e) responsibility when participants witnessed others taking advantage of or being taken advantage of by another person, and (f) how to be safe when drinking alcohol. This format allowed for the participants to engage in an open and honest dialogue regarding gender-specific issues and for the facilitators to give tailored feedback to some individual participants. Prior to participating in this study, the purposes and procedures of the study, confidentiality of data, and participants' rights were explained to participants. All respondents gave informed consent prior to participating. All procedures were approved by first and second authors' institutional review board, and participants were not offered any incentive for completing the survey. Each participant was asked a series of questions to create a unique identification number that linked surveys from fall to spring.

The demographic information indicated participants were predominantly male (56.8%, $n = 134$) and Caucasian (91.1%, $n = 215$), with 99.2% ($n = 234$) of students under the age of 21. The participants were classified as freshmen (78.0%, $n = 184$), sophomores (21.2%, $n = 50$), and juniors (0.8%, $n = 2$). In addition to demographic information, respondents were asked to complete the Alcohol Use Disorders Identification Test–Consumption

(AUDIT-C) to obtain participants' alcohol use (Babor, Higgins-Biddle, Saunders, & Monteiro, 2001; Bush, Kivlahan, McDonell, Fihn, & Bradley, 1998). These three questions assess frequency of drinking: (a) "How often do you have a drink containing alcohol?" (*Never* = 0 points, *Monthly or less* = 1 point, *2 to 4 times a month* = 2 points, *2 to 3 times a week* = 3 points, and *4 or more times a week* = 4 points); (b) "How many drinks containing alcohol do you have on a typical day when you are drinking?" (*1 or 2* = 0 points, *3 or 4* = 1 point, *5 or 6* = 2 points, *7 or 9* = 3 points, *10 or more* = 4 points); and (c) "How often do you have six or more drinks on one occasion?" (*Never* = 0 points, *Less than monthly* = 1 point, *Monthly* = 2 points, *Weekly* = 3 points, *Daily or almost daily* = 4 points). Responses to each item are scored from 0 to 4, generating a maximum possible score on the AUDIT-C of 12. Higher scores reflect higher intensity of drinking. For men, a score of 4 or above and for women, a score of 3 or above indicates hazardous drinking or an active alcohol use disorder (Bush et al., 1998). The AUDIT-C has been found to have sound psychometric qualities to produce valid and reliable scores among college students (Barry, Chaney, Stellefson, & Dodd, 2015). In the spring, participants were also asked if they attended the STAD and/or SAA presentations and whether these programs changed their perceptions of high-risk drinking (yes or no).

Data Analysis

The Statistical Package for Social Sciences (SPSS) software (Version 22) was utilized to screen and analyze the data. To answer the first research question, we performed cross-tabulations to determine the differences regarding participants' gender and perception of high-risk drinking changing after attending the alcohol intervention program. To answer the second research question, we used one-way analysis of variance (ANOVA) test to determine differences in gender. Furthermore, general linear model (GLM) repeated measure analyses were used to test for AUDIT-C score differences related to participants' attendance at the session(s) and to analyze if there were differences in AUDIT-C scores and whether participants thought the alcohol intervention program was beneficial.

Results

Participants' Gender-Specific Perceptions of the Intervention Program

All participants (N = 236) attended the STAD presentation and 61.0% (n = 144) believed attending this program changed their perception of high-risk drinking. Of the 209 participants who attended the SAA session, 74.2% (n = 155) reported this discussion session changed their perception of high-risk drinking. A chi-square test of independence was performed to examine

the relationship between a participant's gender and his or her perception of high-risk drinking changing after attending the STAD session. The relationship between these variables is significant, $\chi^2(1, N = 236) = 4.37$, $p < .05$. This test suggests that women and men differ in perception. Women, more than men, believed this session changed their perceptions (69% and 55% respectively). The chi-square test regarding the participant's gender and his or her perception of high-risk drinking changing after attending the SAA presentation resulted in significant differences as well, $\chi^2(1, N = 209) = 21.54$, $p < .00$. This test suggests that women and men differ in perception. Women, more than men, believed this session changed their perceptions (91% and 63%, respectively).

Attendance at Intervention Program and Drinking Differences

For women, AUDIT-C scores were not significantly different between those who attended only the STAD presentation ($M = 3.47$, $SD = 2.53$) and those who attended both alcohol education sessions ($M = 4.62$, $SD = 2.06$), $t(100) = 1.93$, $p = .169$. A significant difference was not found in the AUDIT-C scores of the participants who reported that attending the STAD session was helpful ($M = 4.49$, $SD = 1.90$) compared to the scores of those who did not feel the session was beneficial ($M = 4.38$, $SD = 2.68$), $F(1, 100) = 0.06$, $p = .812$. Additionally, there was not a significant difference in the AUDIT-C scores of the participants who reported that attending the SAA session was helpful ($M = 4.58$, $SD = 1.86$) compared to the scores of those who did not feel the session was beneficial ($M = 5.00$, $SD = 3.70$), $F(1, 85) = 0.30$, $p = .588$.

For men, AUDIT-C scores were not significantly different between those who attended only the STAD presentation ($M = 5.67$, $SD = 3.09$) and those who attended both alcohol education sessions ($M = 5.11$, $SD = 3.49$), $t(132) = –0.528$, $p = .221$. It was also found there was no significant difference in the AUDIT-C scores of the participants who reported that attending the STAD session was helpful ($M = 4.72$, $SD = 3.32$) compared to the scores of those who did not feel the session was beneficial ($M = 5.72$, $SD = 3.55$), $F(1, 132) = 2.83$, $p = .095$. Additionally, there was no significant difference in the AUDIT-C scores of the participants who reported that attending the SAA session was helpful ($M = 5.00$, $SD = 3.37$) compared to the scores of those who did not feel the session was beneficial ($M = 5.30$, $SD = 3.71$), $F(1, 120) = 0.22$, $p = .642$.

In applying the GLM to the women's pre- and posttest AUDIT-C scores and their perceptions of the impact of alcohol program, no significant differences were found (See Table 1). Applying the GLM to men's pre- and posttest AUDIT-C scores and their perceptions of the impact of alcohol program, there was a significant interaction for time of the AUDIT-C measure and whether training was perceived as helpful, $F = 7.84$, $p < .007$. Men who evaluated the programming as helpful scored higher initially on the AUDIT-C and significantly lower after the training, $t = 5.15$, $p < .000$,

TABLE 1

Mean Scores and Standard Deviations by Semester, Gender Responses to AUDIT-C Scores, and Evaluation of Programming

		Fall AUDIT-C Scores		Spring AUDIT-C Scores	
Variable	***n***	***M***	***SD***	***M***	***SD***
Straight Talk About Drinking session					
Women					
Helpful	70	4.43	2.60	4.49	1.90
Not helpful	32	4.22	2.35	4.38	2.69
Men					
Helpful	74	6.97	2.78	4.72	3.32
Not helpful	60	6.00	3.47	5.72	3.55
Sex and Alcohol session					
Women					
Helpful	79	4.30	2.48	4.58	1.86
Not helpful	8	3.25	2.66	5.00	3.70
Men					
Helpful	76	6.84	2.90	5.00	3.37
Not helpful	46	5.76	3.54	5.30	3.49

Note. AUDIT-C = Alcohol Use Disorders Identification Test–Consumption.

whereas those who did not find the program helpful did not experience a significant change, $t = 0.48$, $p < .631$.

Discussion

One of the primary findings of this study is related to the high rate of drinking among both fraternity and sorority members even after attending an alcohol intervention program. Both men and women continued to use alcohol at hazardous rates throughout the academic year. On the AUDIT-C, risky drinking is defined as a score of 4 or above for men and 3 or above for women. Even after educational programming, both groups of students were drinking at high levels. In fact, sorority members' AUDIT-C scores increased. These findings are very consistent with other studies, which found students in fraternities and sororities consume alcohol at higher rates compared with other students (Capone et al., 2007; Ragsdale et al., 2012; R. C. Smith, Bowdring, & Geller, 2015). However, targeting programming for members of the Greek community can still be an important endeavor, although student perception of the helpfulness of the programing was not always related to a decrease in drinking except for those men who had significantly high levels of drinking when entering the fraternity. There appears to be a gap between knowledge about risky drinking and behaviors around risky drinking. Brief intervention has proven effective when paired with individual feedback (Larimer et al., 2000), so perhaps the next step for students in the Greek organizations on this campus would be to add an opportunity for individual feedback to all participants. Using additional components to involve students in trainings may be beneficial. Clickers

have been used as a way to address the social norm perceptions of heavy drinking with college students (Killos, Hancock, Wattenmaker, McGann, & Keller, 2010). It may be beneficial to use a clicker to determine the engagement level of participants as the intervention program sessions are being conducted. This approach could assist in dissecting which aspects of the program are working better than others.

The finding that men decreased their levels of drinking is certainly an encouraging result as related to the importance of intervention programs. Given there was not a control or comparison group, conclusions about causation cannot be drawn. However, self-reported decreases in alcohol use support the need for further investigation of the impact of brief programming. Those students who started at higher levels of drinking were the students who made the most significant decreases in alcohol consumption, which may provide some direction for intervention and further study. Future investigation could examine whether the decrease was specifically due to the intervention or to maturing. Perhaps those men who reported they did not benefit from the training believed they were already aware of this information and saw no need to change their drinking behavior. It may be that these students had not been exposed to the information before and benefited from information on managing alcohol in college. Knowing more about the students' current knowledge about alcohol consumption and its consequences may help education to be tailored to individual student needs.

Most surprising is the lack of change among sorority members, particularly given the focus on the relationship between alcohol and sexual risks. The literature has indicated the increased risk of sexual victimization for women when engaging in binge drinking (Ragsdale et al., 2012). One might assume this type of education would increase sensitivity among women about the risks of heavy drinking. However, drinking among college women may serve multiple purposes. Women have reported pregaming, which refers to drinking with their primary group of friends before an event, as a way of building group cohesion and connection (M. A. Smith & Berger, 2010). The women in the M. A. Smith and Berger (2010) study also reported that a strong motivation for drinking was to engage socially with men. It may be that their levels of drinking may reflect the men's level of drinking.

Another trend that may be at work is the narrowing of the gap between men and women in the percentage of students engaging in high-risk drinking (O'Malley & Johnston, 2002). Over the years, the gender gap in the percentage of college students who binge drink has decreased. Young, Morales, McCabe, Boyd, and d'Arcy (2005) found that female college students perceived they were more attractive to male college students when they could drink large quantities of alcohol. In addition, these women observed that men were attentive to the drinking habits of others. Thus, "drinking like a guy" (Young et al., 2005, p. 256) appeared to help women feel like

they had a special position within the male group. Consequently, even if men decrease their alcohol intake, women in this study may have perceived a need to keep up with the men in their drinking. One consideration about the lack of impact of the intervention on the drinking patterns of sorority members is the fact that many of their drinking activities occur at fraternity houses. Even as men decrease their rates of drinking, it appears that sorority women are still drinking more on a typical day and binge drinking more often than other students.

Implications

Despite numerous methods of providing alcohol consumption interventions to fraternity and sorority members, the literature suggests that programs on college campuses have yielded limited effectiveness (Caudill et al., 2007; Huh et al., 2015; Walters et al., 2000). The results of this current study appear to strengthen these findings that limited sessions are not effective for all students. Although women reported that the knowledge gained from the intervention was helpful, it did not affect behavior change. This is important information for professional counselors and Greek Life administrators to be aware of. Although one-time group interventions are cost-effective and easy to administer, they may not be effective in reducing drinking behavior among Greek students. Professional counselors also need to be mindful that women may be more inclined to provide the socially desirable response when reporting the effectiveness of alcohol interventions.

Although the intervention program used in this study appears to have been effective at targeting the specific perceptions that lead to decreased high-risk drinking habits for fraternity members, the same effects were not observed for sorority members. Therefore, it is suggested that separating the two populations would allow for group facilitators to create material that is unique to gender, such as societal pressures and biological responses to alcohol consumption. Moreover, smaller groups would provide counselors with the opportunity to give increased personalized feedback to participating individuals by increasing the capacity for interaction between facilitators and members. Personalized feedback has been shown to have a significant impact related to reducing alcohol consumption (Larimer et al., 2001) as well as the use of personalized normative feedback that compares the individual student to a similar reference group (LaBrie et al., 2013; Martens et al., 2013).

Furthermore, the results indicate that many similar one-size-fits-all approaches to working with fraternity and sorority populations operate out of the assumed features of fraternity populations. Assumptions about sorority populations based on fraternity population characteristics must be bracketed by professional counselors while engaged in educating roles. When working with college-age clients, gender-specific normative perceptions regarding protective factors have been demonstrated to be of

importance to mental health treatment (Lewis, Rees, & Lee, 2009). Thus, it would seem providing other gender-specific interventions would be beneficial. Given that fraternity and sorority members are likely to have differing views related to heavy drinking behaviors, counselors must assess for these individual perceptions during counseling. This assessment is especially vital when a client's presenting issues are centered on alcohol use. Once the underlining frameworks for these perceptions are identified, the counselor and client are likely to be in a better position to collaborate on effective treatment objectives. Although there is no formal inventory that focuses on the assessment of gender-specific perceptions related to alcohol use, counselors can utilize the Alcohol Use Inventory (Wanberg, Horn, & Foster, 1977) to gain increased understanding of a client's beliefs about alcohol. This inventory includes scales related to perceived social benefits and social-role maladaptation. The field of counseling would benefit from researchers developing an inventory to measure gender-specific perceptions regarding alcohol usage.

In order to provide increased individualized feedback, college campuses should develop intervention models that incorporate small-group sessions. For example, an alcohol prevention seminar could mix large-group discussions with various small-group sessions comprised of four to eight participants. Small-group discussions should specifically target perceptions related to gender roles and alcohol consumption. To maximize the level of social engagement, it is suggested that facilitators separate the fraternity and sorority populations and call on student group members to cofacilitate the discussions. Conducting interventions using this method is likely to help establish gender-specific perceptions of women in sororities and men in fraternities related to high-risk alcohol consumption. Better understanding of these perceptions will allow for alcohol intervention facilitators to adapt this program so that it may better address these perceptions and work toward decreasing the unique consequences of high-risk alcohol consumption experienced by this population. Upon the completion of this type of program, future researchers would be in a position to contribute new data to the field of alcohol binge drinking prevention.

Limitations

This study has five main limitations. First, a convenience sample of Greek members from one university was used for this study; therefore, it is not likely to be representative of the population of all Greek community members. Second, volunteers may have answered the survey questions differently than those members of the population who did not agree to participate in this study. However, the vast majority of new Greek members did participate in both aspects of the study. Third, there was no control group for this study. Thus, it cannot be determined if the change in alcohol use of fraternity members is due to the intervention or a result of the maturing-out process or other confounding variables. Fourth, to

determine the effectiveness of the intervention, only one dichotomous item was used. More detailed feedback related to the success of the program would be beneficial. The final limitation is related to the survey being a self-report measure. Participants may have provided answers that would not be representative of their authentic behaviors. Nevertheless, previous research has found a statistically significant relationship between college respondents' self-reported alcohol use when compared with a collateral informant (Hagman, Cohn, Noel, & Clifford, 2010).

Conclusion

The results of this pilot study provide needed insight regarding how Greek college students perceive the effectiveness of attending an intervention program. Although women more than men reported believing the sessions changed their perceptions of risky drinking, no significant difference was found in their alcohol use. On the other hand, men who perceived the programming was beneficial were found to have a significant reduction in risky drinking after attending the sessions. In particular, Greek members who initially reported higher levels of drinking were the students who made the greatest reduction in alcohol use. Regardless, high rates of drinking were found among both fraternity and sorority members even after attending alcohol education sessions. Given these results, it appears there is a need to develop more effective interventions with this population because a one-size-fits-all approach to alcohol education may not be as beneficial. This study was the first to examine the perception of effectiveness of gender-specific programing. However, more specific small-group interventions that can be tailored related to gender, knowledge about risky drinking and behaviors, and current alcohol use behaviors would be advantageous.

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