and the Fraternity and Sorority Experience:

Recent Research Findings and Suggestions for Advisors

- Bruce D. Bartholow & Susan E. O'Neill

Icohol use and abuse on college campuses has long been a concern among members of the academic community. Recent research findings and highly publicized alcohol-related accidents and deaths on campuses around the United States have raised the level of this concern considerably. Research efforts directed at understanding the nature and extent of college student drinking indicate a troubling and pervasive pattern. At least seven out of eight college students drink (Wechsler & Issac, 1992), and results from large, nationally representative samples (e.g., Wechsler, Dowdall, Davenport, & Castillo, 1995; Wechsler et al., 2002) indicate that nearly half of all college students engage in binge drinking (i.e., heavy, episodic alcohol consumption), a practice associated with elevated risk for acute health problems (e.g., serious injury, accidents), reduced academic performance, and engaging in unplanned or unwanted sexual activity, among other risk factors (e.g., Wechsler, Davenport, Dowdall, Moeykens, & Castillo, 1994; Wechsler, Dowdall, Maenner, Gledhill-Hoyt, & Lee, 1998). Binge drinking also is associated with increased risk for development of alcohol use disorders (e.g., O'Neill, Parra, & Sher, 2001). It is clear that college alcohol use is a normative practice, but one with the potential for serious health risks for both student drinkers and those in their environments.

Given the pervasiveness of college student drinking, considerable attention recently has been focused on highlighting factors that moderate (increase or decrease) the extent of alcohol involvement on campuses. Among the most consistent factors associated with increased drinking is affiliation with a fraternity or sorority. Across many studies utilizing a variety of research strategies, findings indicate that fraternity and sorority members (Greeks) drink more frequently (e.g., Lo & Globetti, 1995; Werner & Greene, 1992) and more heavily (e.g., Alva, 1998; Cashin, Presley, & Meilman, 1998; Haworth-Hoeppner, Globetti, Stem,

& Morasco, 1989; Lo & Globetti, 1995; Prendergast, 1994; Wechsler et al., 1995; Werner & Greene, 1992); show more alcohol dependence symptoms (e.g., Baer, Kivlahan, & Marlatt, 1995); are more likely to initiate and continue abusive alcohol use patterns (e.g., Berkowitz & Perkins, 1986; Lo & Globetti, 1993) and are more likely to experience alcohol-related problems (e.g., Cashin et al., 1998; Engs, Diebold, & Hanson, 1996; Lo & Globetti, 1995; Read, Wood, Davidoff, McLacken, & Campbell, 2002) than are nonaffiliated students (non-Greeks). Such findings are troubling both to fraternity and sorority advisors and to the larger academic communities in which these organizations operate.

Why Do Fraternity and Sorority **Members Drink More than Nonaffiliated Students?**

The knowledge that members of fraternities and sororities consistently drink more than nonaffiliated students has led researchers to focus on understanding the underlying reasons for this so-called "Greek effect.' The question at the heart of this research is whether affiliated students are somehow predisposed toward heavier drinking in college because of personality or other individual difference factors, or if, instead, the environment of fraternities and sororities is simply conducive to heavy drinking, regardless of individual students' propensities. Stated another way, does fraternal affiliation cause increased alcohol use, or do students interested in partying and socializing (and the drinking

To date, research findings examining this question have been somewhat mixed, with some studies suggesting a causal effect of affiliation (e.g., Lo & Globetti, 1993; Sher, Bartholow, & Nanda, 2001; Wechsler et al., 1995), and others finding evidence for self-

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selection factors (e.g., Baer, 1994; O'Connor, Cooper, & Theil, 1996; Read et al., 2002). Although both aspects likely play some role in determining alcohol use in fraternities and sororities, the weight of the extant evidence is most consistent with the causal hypothesis. For example, Sher, Bartholow and their colleagues (e.g., Bartholow, Sher, & Krull, 2003; Sher et al., 2001) reported that although fraternity and sorority members drink more heavily than nonaffiliated students during the college years, affiliated members' drinking levels decrease rapidly following graduation such that this difference is no longer apparent three years later, suggesting that the social environment of the fraternity or sorority chapter plays a large role in the drinking behavior of the members. Moreover, these researchers found that the heavier drinking of affiliated students during college is largely attributable to social-environmental factors, particularly chapter members' perceptions of drinking norms (i.e., beliefs about how much their peers drink), which are biased toward heavier drinking levels (see also Baer, Stacy, & Larimer, 1991). In contrast,



selection factors did not play a significant role in the higher rates of drinking among fraternity/sorority members.

Other recent studies have reached largely the same conclusions concerning the importance of the social environment of the chapter house. For example, Glindemann and Geller (2003) randomly

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sampled the blood alcohol concentration (BAC) levels of over 1,500 students attending either fraternity parties or private (nonfraternity) parties, and found that BAC levels were consistently and significantly higher among students at fraternity parties. Importantly, there were no differences associated with fraternity or sorority membership at either type of party, suggesting that all students drink more when in the social context of the chapter house, and less when in other drinking contexts (see also Bartholow et al., 2003). Another recent study involving nearly 13,000 students also found that drinking rates at fraternity parties were higher than in other settings, including off-campus private parties and bars (Harford, Wechsler, & Seibring, 2002). Wechsler, Kuh, and Davenport (1996) also reported more alcohol use among students who live in fraternity and sorority houses compared to members who live elsewhere, suggesting that increased exposure to an environment associated with heavy drinking leads to increased use, a point echoed by Bartholow and colleagues (2003). Other research also indicates that alcohol and alcohol-related expectations are central features of the socialization practices and overall climate of many fraternities and sororities (e.g., Borsari & Carey, 1999; Carter & Kahnweiler, 2000; Dorsey, Scherer, & Real, 1999). Taken together, these findings strongly suggest that aspects of the social-environmental context prevalent chapter houses, including - but certainly not limited to - biased beliefs and expectations about drinking

levels at fraternity parties, lead both members and nonmembers to drink more than they otherwise would.

Are Fraternity/Sorority Drinking **Effects Similar for Men and Women?**

One of the most consistent findings in the college drinking literature is that male students drink more than female students.

> This finding raises the question of whether similar differences exist within the fraternity/sorority community. In other words, is the "Greek effect" driven entirely by the drinking of fraternity men, or do sorority women also drink more than nonaffiliated women (though not necessarily as much as fraternity men)? The answer to this question has implications for whether

potential interventions should be directed broadly to the entire fraternity/sorority community, or if strategies targeting primarily fraternities would be more useful.

Several recent studies have found evidence indicating that the "Greek effect" is much stronger for fraternity men than for sorority women. For example, Bartholow and colleagues (2003) found that all chapter members (men and women) engaged in heavier drinking during the freshman year than did nonmembers, but that heavy drinking among sorority women decreased significantly over the next 3 years, whereas heavy drinking among the men most involved in fraternity life significantly increased during this same 3-year period. Regarding negative consequences associated with heavy drinking, Read and colleagues (2002) noted that alcohol-related problems were more strongly associated with affiliation for men than for women. Similarly, Cashin and colleagues (1998) surveyed more than 25,000 students nationwide and found that although negative consequences from drinking were experienced by both fraternity and sorority members more often than by nonaffiliated students, for most problem categories, fraternity men were more likely to experience negative consequences than were sorority women. However, Cashin et al. also found significantly higher rates of alcohol use and binge drinking among sorority women than among nonaffiliated women, a finding echoed by other researchers (e.g., Ozegovich, Bikos, & Szymanksi, 2001).

Unfortunately, whether or not sorority members engage in problematic levels of heavy drinking themselves does not appear to protect them from negative alcoholrelated consequences. Larimer, Anderson, Baer, and Marlatt (2000) found that both high and low drinkers in sororities indicated similarly elevated rates of alcohol-related negative consequences. Similarly, in a study examining predictors of sexual assault on campus, Jordan-Simmons (2002) reported that sorority women and other women who dated or "hooked up" with a high proportion of fraternity men reported significantly more sexual assaults, the majority of which occurred after the perpetrators, victims, or both had consumed alcohol. These findings are consistent with a more general phenomenon on college campuses in which students' drinking has second-hand negative consequences for other students who are not drinking themselves (e.g., Wechsler, Lee, Nelson, & Lee, 2001).

What Can be Done to Reduce **Heavy Drinking in Fraternities** and Sororities?

The evidence reviewed in this article points most clearly to social and environmental factors as important determinants of alcohol use among fraternity and sorority members. Other data concerning drinking behavior in the broader student population also point to socialization factors, and particularly biased beliefs about drinking norms, as responsible for much heavy drinking on campuses (e.g., Baer et al., 1991; Berkowitz & Perkins, 1986). Such findings have led many campus administrations to adopt various "social norming" approaches to reducing alcohol use among students. The premise behind these social norming campaigns is that colleges can reduce alcohol abuse on campus simply by providing students with survey data that bring their perceptions more in line with reality (see Perkins, 2002). Implementing social norming strategies often involves media campaigns with posters showing typical drinking patterns for the campus or distribution of other, similar educational materials.

Despite the popularity of these approaches, and although some successes have been reported (e.g., Haines & Spear, 1996; Johannessen, 1998), most social norming campaigns have failed to produce the desired results. A recent survey comparing drinking rates at 37 campuses that had implemented social norming interventions and 61 that had not implemented such

programs failed to find reliable differences in alcohol use (Wechsler et al., 2003). Several studies using random assignment of students to intervention and no-intervention groups also have failed to find significant effects of social norming on drinking behavior, even when these efforts have resulted in reducing the bias in normative beliefs about drinking (Carter & Kahnweiler, 2000; Peeler et al., 2000; Thombs & Hamilton, 2002; Werch et al., 2000; Steffian, 1999).

In reviewing the success of social norms intervention programs for fraternity and sorority members, Carter and Kahnweiler (2000) reported that such approaches have largely failed to reduce binge drinking among fraternity and sorority members, and that this has been true even on campuses where social norms interventions have reduced alcohol use in the larger student body. Another recent study (Trockel, Williams, & Reis, 2003) examining the influence of drinking norms on alcohol use among fraternity men suggested that members' beliefs about how much their brothers expect them to drink were more important predictors of heavy drinking than were biased beliefs concerning their brothers' drinking levels (i.e., drinking norms). Moreover, these authors argued that since fraternity men tend to engage in some of the heaviest drinking on campus, they might not overestimate their peers' alcohol use, and therefore efforts to correct or "de-bias" their beliefs might be ineffective (see also Carter & Kahnweiler, 2000).

For these reasons, norm-based interventions alone might not be the best approach for reducing alcohol abuse within the fraternity/ sorority community. However, brief individualized interventions based on motivational enhancement, harm reduction, and skills training recently have shown some promise in reducing alcohol use among members (particularly fraternity men). Such interventions are designed to enhance skills related to moderating drinking levels (including improving self-monitoring of drinking behavior and bringing a student's drinking in line with his or her goals and values), challenge positive expectations concerning the benefits of drinking, and increase recognition of personal negative consequences associated with heavy drinking toward the reduction of an individual

drinker's risk of experiencing such consequences. A number of studies designed to test these interventions have concluded that intervening early (e.g., with entering freshman new members) with an approach that combines a number of the above tactics results in significant reductions in drinking levels in the intervention groups compared to groups receiving no interventions or information/assessment only (e.g., Garvin et al., 1990; Larimer et al., 2001; Marlatt et al., 1998; for a review see Larimer & Cronce, 2002).

Another motivational approach that recently has received some attention is to provide rewards for decreased drinking levels. Such incentive-based approaches

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> also have shown some promise among members of the fraternity/sorority community. For example, Fournier and colleagues (2004) conducted a field study in which cash prizes were awarded to attendees at fraternity parties whose BAC levels were below 0.05%, and compared average BAC levels at those parties with BAC levels at no-incentive parties (also at fraternity houses). These authors reported that average BAC levels and numbers of legally intoxicated partygoers were significantly lower at the incentive parties compared to the no-incentive parties. Moreover, this difference was particularly strong among members of the fraternity/sorority community. These findings suggest that providing affiliated students with a valued outcome such as the chance to win money can be effective in reducing their drinking levels. It is important to note, however, that the effectiveness of such an approach would likely require that sustained incentive programs be put in place. Also, this approach does little to address the underlying reasons for fraternity drinking. As such, its long-term effectiveness remains an empirical question.

Another promising approach along the lines of early intervention underscores the potential importance of parental involvement. Wood and colleagues (2004) recently conducted a study examining the

influence of peer and parental variables on alcohol use and problems among a sample of entering freshman at a large public university. These authors reported that the typically strong influence of peers on students' drinking levels and drinking-related problems was significantly reduced when perceived parental involvement (e.g., nurturance, monitoring of drinking behavior) was high. These findings suggest that, at least with students in the earliest stages of their college careers, a strong parental presence can serve as a protective factor against problematic alcohol involvement. To the extent that parental consent and support (both emotional and financial) is necessary for students to remain involved in fraternities

> and sororities, when viewed alongside other recent data suggesting a role for motivational processes and incentives (e.g., Fournier et al., 2004; Larimer et al., 2001), these data suggest a potentially important avenue for reducing heavy drinking in this population.

Conclusions

Attempts to reduce drinking and drinking-related problems among members of the fraternity/sorority community face many challenges. Perhaps the most significant of these is changing the historically strong perceptions among both members and nonmembers that heavy drinking goes hand-in-hand with fraternity and sorority life. Research indicates that alcohol use is considered a positive aspect of a chapter's reputation and popularity among many fraternities (Larimer, Irvine, Kilmer, & Marlatt, 1997), and that the student leaders of fraternity and sorority organizations often play a significant role in setting heavy drinking norms for their members and in perpetuating beliefs about the benefits of alcohol for socialization purposes (Cashin et al., 1998). Fraternity and sorority advisors appear to be in a unique position to influence this perception, primarily through interventions designed to reduce members' expectations concerning one another's alcohol use and the likelihood of experiencing negative life events as the result of alcohol consumption.

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