

The Predictability of Adlerian Lifestyle Themes Compared to Demographic Variables Associated with College Student Drinking

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Abstract

Responding to calls in the literature for more theory-driven research, this study examined the predictability of Adlerian lifestyle themes compared to other variables found to be associated with college alcohol consumption. Two hundred and seventy-three undergraduate students completed the BASIS-A Inventory (Curlette, Wheeler, & Kern, 1997) and items from the *Alcohol and Other Drug Survey* (Thombs, 1999). Results from stepwise multiple regression analyses indicated that Adlerian lifestyle combinations accounted for more variance in alcohol related behaviors than other variables commonly found to be predictive of alcohol consumption (i.e., grade of first drinking experience, gender, fraternity/sorority membership, and religious participation). In general, combined Adlerian lifestyle themes accounted for more variability in frequency of binge drinking and frequency of alcohol consumption than the additional variables. Implications for Adlerian counselors are discussed.

Heavy drinking among college students is considered by far the most serious public health problem currently facing colleges and universities in the United States (Wechsler, Dowdall, Maenner, Gledhill-Hoyt, & Lee, 1998). Excessive alcohol consumption can lead to serious, acute problems that can manifest as chronic problems later in life. It is perhaps the consequences of drinking that concern college health officials the most. Alcohol abuse and the consequences related to drinking escalated in the 1997–1998 academic year, leading to an increase in such serious problems as death by overdose, arrests, violence, and campus riots (Syre, Pesa, & Cockley, 1999). Despite many campus programs and interventions across the country, the proportion of students who use alcohol, the levels with which they use it, and the number of negative consequences experienced all remain high (Prendergast, 1994).

There is a significant body of literature examining alcohol consumption and associated consequences among college students. Research ranges from large national surveys (Douglas et al., 1997; O'Malley & Johnston, 2002; Wechsler, Lee, Kuo, & Lee, 2000) to single state campus investigations (Haberman, 1994; Miller, Toscova, Miller, & Sanchez, 2000; Robinson, Gloria, Roth, & Schuetter, 1993). In general, many of these studies have

advanced our knowledge by (a) raising awareness of the seriousness of problem drinking on college campuses; (b) giving estimates of prevalence, patterns, and consequences of drinking behavior among college students; and (c) identifying correlates of drinking behavior, which range from demographic variables (e.g., one's gender, race, place of residence, and type of school attended) to cognitive, behavioral, and personality characteristics of those who consume alcohol and those who do not.

Calls in the literature, however, have recently suggested that more theory-driven research on college alcohol consumption is needed, research that could offer a more comprehensive picture of drinking problems among college students. As Durkin, Wolfe, and Clark (1999) noted, "regardless of which theory is used, it is imperative that theory-driven research is conducted on this topic [college alcohol consumption]" (p. 461).

Adlerian personality theory has not been adequately examined empirically as a potential explanatory system for college alcohol consumption. Building on a paucity of studies addressing this issue, Lewis (2002) found that certain Adlerian lifestyle themes were predictive, albeit modestly, of alcohol related behaviors in a sample of college students from the midwestern United States. However, research has not examined if Adlerian personality theory is any more predictive than other variables known to be associated with college drinking. In this investigation, we sought to determine the relative contribution of Adlerian lifestyle themes, compared to demographic variables commonly associated with college drinking (grade of first drinking experience, fraternity/sorority membership, religious participation, and gender), to the prediction of alcohol-related behaviors among college students. As such, the following research question was addressed: Do Adlerian lifestyle themes account for more variance in alcohol related behaviors than other variables previously found to be related to drinking? Given the importance of lifestyle as a theoretical construct and perhaps the most important clinical application principle developed by Adler (Kern, Wheeler, & Curlette, 1997), we hypothesized that lifestyle themes would account for more variance in alcohol-related behaviors than variables unrelated to theory. Such information could assist Adlerian counselors as to the relative importance of lifestyle investigation as a focus when working with college students who manifest drinking problems.

Theoretical Background

The Individual Psychology of Alfred Adler affirms that all behavior is purposive and goal-directed (Mosak & Maniacci, 2000). Human beings strive toward goals they perceive as necessary to find their place in the world. Furthermore, Adlerian theory assumes that a basic dynamic force fuels all

human activity (Ansbacher & Ansbacher, 1956). This force involves a striving from a perceived minus situation toward a perceived plus situation, or from a feeling of inferiority to a feeling of superiority, and is always oriented toward goals created by the individual. Based on this idea, Adlerian theory has been suggested as a model for understanding personality, as well as maladjustment (Keene & Wheeler, 1994). Maladjustment occurs when one's personal goals are inconsistent with social interest (Adler as cited in Ansbacher & Ansbacher, 1956); that is, when people strive for personal superiority without regard for the welfare of others (Keene & Wheeler, 1994).

Personal lifestyles—or characteristic ways of perceiving self, others, and the world—largely determine how people strive toward life goals (Mosak & Maniaci, 2000). In Adlerian terms, useful lifestyle patterns are those that involve movement toward others and endorse the common good. Conversely, useless lifestyles involve movement away from others in the pursuit of selfish interests (Manaster & Corsini, 1982).

According to Ansbacher and Ansbacher (1956), Adler variously equated lifestyle with terms such as self, ego, individuality, the whole attitude toward life, and, most notably, personality. It refers to a series of conclusions that individuals create about themselves, others, and the world (Manaster & Corsini, 1982). Believing in the unity of the individual, Adler (as cited in Ansbacher & Ansbacher, 1956) stated that the lifestyle was self-consistent, meaning that individuals express their thinking, feeling, and acting in consistent ways according to their life goals.

Adlerians believe that the lifestyle is unique for each individual; however, lifestyles often cluster around various behavioral tendencies or patterns. That is, whereas each individual has his or her own idiosyncratic way of being in the world, there are commonalities among human beings. In Adlerian vernacular, such commonalities are called typological systems or themes, which facilitate the prediction of behavior (Mosak & Maniaci, 2000).

The lifestyle themes examined in this investigation were strongly influenced by the work of Harold Mosak (1971). In his original typology, Mosak proposed 14 lifestyle themes and corresponding behaviors. Typical themes included the "getter," the "pleaser," the "driver," and the "controller." Recent research, however, has suggested that there may be fewer themes than Mosak had originally proposed. Specifically, Kern et al. (1997) proposed five Adlerian lifestyle themes: Belonging/Social Interest, Going Along, Taking Charge, Wanting Recognition, and Being Cautious. These themes are reflected in the Basic Adlerian Scales for Interpersonal Success—Adult Form (BASIS-A Inventory), a relatively new scale designed to measure Adlerian lifestyle themes.

According to Kern et al. (1997), individuals who manifest *Belonging/Social Interest* probably enjoyed playing in groups with other children while growing up. Their family life was most likely pleasant, comfortable, and a place where they felt a strong sense of belonging. They are described as

individuals who are supportive and respectful of others in social situations. Furthermore, they are believed to have a strong capacity to empathize with others and enjoy being in their company.

Going Along describes persons who prefer the role of follower rather than leader, especially in the work environment. These individuals are believed to be rule-driven, conservative and become uncomfortable around those who want to "shake up" the status quo. They often seek to avoid conflict in intimate relationships and are inclined to be overly concerned about hurting the feelings of others. In extreme cases, these individuals may compromise their own happiness and well-being in the service of their partner's needs (Kern et al., 1997).

The *Taking Charge* theme is closely aligned with Adler's (as cited by Ansbacher & Ansbacher, 1956) "ruling" type, or someone who likes to dominate and be in control (Wheeler & Acheson, 1993). Taking charge individuals could be described as strong and forceful, always striving to have the "last word." They have a propensity to draw attention to themselves and are often described as outgoing, persuasive, and the "life of the party." In their desire to gain attention, however, they may be poor listeners, and, if taken to extreme, can be domineering, self-centered, and easily angered (Kern et al., 1997).

Wanting Recognition describes those who are comfortable in environments where they receive praise and attention for their successes. They are people who are willing to praise others because they know how important praise is to them. Situations in which they are not recognized as important or successful become uncomfortable. If recognition does not occur, these individuals may become discouraged and impatient because their motivation in life comes from the accolades of others (Kern et al., 1997).

Individuals who manifest *Being Cautious* are believed to manifest one of two different styles (Kern et al., 1997). The first involves an overly sensitive approach to the world, characterized by a cautious and mistrusting attitude toward self, others, and the environment. The second style represents an impulsive pattern of behavior, characterized by reckless decision-making, high-risk behavior, and unpredictable reactions to emotional situations. According to Kern et al., individuals who experience extremely stressful and burdensome childhoods are more likely to manifest the impulsive style.

Research on Adlerian Lifestyle Themes and Alcohol Consumption

Boynton (1989) was one of the first investigators to examine lifestyle themes among substance abusers. Specifically, Boynton compared the

Lifestyle Personality Inventory profiles of cocaine and heroin addicts with the profiles of nonaddicted individuals (i.e., college students and nonaddicted individuals). Boynton's findings indicated that the addicted individuals scored significantly higher on lifestyle themes that emphasized immediate gratification and satisfying personal need for significance. They also were inclined to use exploitive, antisocial behaviors to a greater degree, and they scored significantly lower on the social interest theme.

Keene and Wheeler (1994) evaluated the relationships between Adlerian themes and substance use among beginning college students. Subjects were classified as "high risk" (i.e., use of marijuana, cocaine, or hallucinogens) or "low risk" (i.e., alcohol use only). Those who manifested a passive-aggressive theme were more likely to use high-risk substances. No correlation emerged for this theme and alcohol consumption. Furthermore, themes involving the tendency to hurt others or seek revenge correlated positively with high-risk drug use as well as alcohol use. The social interest theme, to the surprise of the researchers, did not correlate with either high-risk drug use or alcohol use.

Lewis (2002) expanded on research by Keene and Wheeler (1994) by using a larger sample of college students and administering a current, well-researched scale to assess Adlerian lifestyle themes (the BASIS-A Inventory). Findings suggested that Belonging/Social Interest, Going Along, and Taking Charge were significant predictors of several alcohol-related behaviors (e.g., frequency of binge drinking, frequency of alcohol consumption, quantity of alcohol consumption, and total consequences of alcohol consumption) across the overall sample.

Although few studies are involved, the evidence suggests that Adlerian lifestyle themes may, in and of themselves, adequately predict drinking behavior among college students. What is not known is whether their predictive ability is superior to other variables commonly associated with college alcohol consumption.

Common Variables Associated with Drinking Behavior

Although college alcohol consumption has many correlates, research suggests that four variables, in particular, are commonly associated with alcohol consumption: grade of first drinking experience, fraternity/sorority membership, religious participation, and gender. A brief description of each variable is provided below.

Grade of first drinking experience. Research demonstrates that the earlier a person begins consumption of alcohol, the more he or she consumes in college. Gonzalez (1989), for example, found that subjects whose first

experience with alcohol was in middle school reported significantly more involvement with alcohol in college than those whose first alcohol experience was in college. Korcuska (2000) found, among other variables, that age of first drinking experience was negatively associated with alcohol problems, time spent partying, and drinking intensity (i.e., quantity of alcohol consumption and frequency of alcohol consumption) among a sample of college men. Lewis (2002) discovered that binge drinkers (i.e., men who had five or more drinks in a row or women who had four or more drinks in a row during the previous two weeks) began alcohol consumption significantly earlier than abstainers and non-binge-drinkers. These findings suggest that the earlier one consumes alcohol, the more likely he or she is to engage in more intense drinking behavior and experience more problems related to drinking.

Fraternity/sorority membership. According to Thombs (1999), Greek-letter social organizations are at the center of the "alcohol abuse subculture" on university campuses. A well-established finding is that members of fraternities and sororities consume considerably more alcohol than other students (Cashin, Presley, & Meilman, 1998). Related to this is the tendency on many campuses for social fraternities or sororities to resemble "alcohol dispensing outlets" (Thombs) or "functional saloons" (Wechsler et al., 2000). The use of such terms seems consistent with current practices, often organized by fraternity/sorority members, such as binge drinking, "keg standing," and drinking game participation (Thombs).

Building on the well-established link between fraternity/sorority membership and alcohol consumption, Sher, Bartholow, and Nanda (2001), in a five-year longitudinal study, found that throughout the college years, fraternity/sorority students consistently drank more heavily than other students. Larimer, Anderson, Baer, and Marlatt (2000) found that students' residence in fraternities, as compared with living in residence halls, was related to frequent alcohol consumption and greater negative consequences. Clearly, considerable evidence supports the strong link between membership in Greek-letter social organizations and alcohol consumption.

Religious participation. Participation in a religious organization and a strong sense of spirituality have been found to be associated with lower alcohol consumption levels. Stewart (2001), for example, explored the relationship between spirituality and religious beliefs and decisions to use substances among 337 university students. Findings suggested that religious beliefs and spirituality played a significant role in one's decision not to engage in risky drinking behavior. In an innovative study exploring reasons for not engaging in alcohol consumption, Slicker (1997) found that light-drinking students endorsed religious-moral reasons significantly more often than moderate- or heavy-drinking students. Endorsement of

religious beliefs appears to be a buffer against deleterious drinking patterns, at least among college students.

Gender. Although not all studies report alcohol consumption differences between college men and women, the majority of investigations have demonstrated that college men tend to drink, to engage in binge drinking, and to experience negative consequences associated with drinking more often than college women (Engs, Diebold, & Hanson, 1996; Kozicki, 1982; Lewis, 2002; Schall, Kemeny, & Maltzman, 1992; Wechsler et al., 2000; Wechsler & Rohman, 1981; Wright, 1983). Consistently, gender is found to be a strong predictor of alcohol consumption patterns, with maleness being associated with greater alcohol involvement. For example, Lewis (2002) found that men engaged in more frequent alcohol consumption, drank more alcohol per occasion, and experienced more negative consequences than women. The robustness of this finding makes gender a formidable predictor variable related to excessive alcohol consumption and related behaviors.

The inclusion of these four variables in the current study is based on previous research that has found grade of first drinking experience, fraternity/sorority membership, religious participation, and gender to be associated with drinking behaviors. The primary goal of this study was to examine the relative predictability of Adlerian lifestyle themes compared to these other variables.

Method

Procedures and Participants. The first author (Lewis) approached undergraduate classes and informal student gatherings for potential participants. All participants were given packets of information containing an informed consent form, a demographics sheet, and the BASIS-A Inventory. Participants were told that the investigation was anonymous, that participation was voluntary, and that they could withdraw from the study at any time, without repercussion. The researcher orally provided a brief description of the study. Participants were informed that the contents of the packet would take approximately 15 to 20 minutes to complete and were encouraged to complete all items. A brief description of how to complete the BASIS-A Inventory was provided because of its more complex nature. The Human Subjects Review Board at Kent State University approved this project.

Participants were 273 undergraduate men and women (ages 18 to 24; $M = 20.6$, $SD = 1.4$) enrolled in two universities in the midwestern United States. The majority of participants were women (63%). Racial/ethnic representation was predominantly Caucasian (91%), followed by African

American (5%), Asian (1.5%), "Other" (2%), Spanish/Hispanic/Latino (0.7%), and Pacific Islander (0.3%). Participants were in varying stages of their college studies: 15% were freshmen, 23% were sophomores, 30% were juniors, and 30% were seniors.

Instrumentation. Derived from Adlerian theory, the BASIS-A Inventory (Curllette, Wheeler, & Kern, 1997) is a 65-item inventory that assesses five lifestyle themes, each representing a factor or subscale: Belonging/Social Interest (BSI; 9 items), Going Along (GA; 9 items), Taking Charge (TC; 8 items), Wanting Recognition (WR; 11 items), and Being Cautious (BC; 8 items). All items are in the form of statements that follow the sentence stem: "When I was a child, I . . ." (e.g., "bossed the other children" [item 8] and "fit in well with a group" [item 16]). Response selection ranges from 1 (*strongly disagree*) to 5 (*strongly agree*) with the mid-point (i.e., 3) representing *indifferent*. Seventeen items are negatively phrased statements and thus reverse-scored. The BASIS-A Inventory generates five factor scores relating to the five lifestyle themes; there is no overall lifestyle score. The higher the score on a particular lifestyle theme, the more the participant is believed to manifest characteristics related to that theme.

In general, the construct, convergent, and discriminant validities of the BASIS-A Inventory have been supported (Curllette et al., 1997). The BASIS-A Inventory also appears to be a stable instrument, with scales demonstrating good test-retest reliabilities. In studies assessing the internal consistency of the BASIS-A Inventory, alpha values ranged from .82 to .87, indicating acceptable structural coherence and a moderate to high degree of accuracy among the items comprising each lifestyle theme.

Five alcohol-related items were used from the Alcohol and Other Drug Survey (Thombs, 1999), an instrument designed to assess college student attitudes and behaviors regarding alcohol consumption and other drug use. Items used included quantity of consumption (1 question), frequency of consumption (1 question), frequency of binge drinking (2 questions, one for men, one for women), and alcohol-related consequences (1 question). Instructions define a "drink" as one 12-oz. bottle or can of beer, one 4-oz. glass of wine, one 12-oz. bottle or can of wine cooler, or one shot of liquor, either straight or in a mixed drink. To assess quantity of alcohol consumption for self, the researcher selected the item, "How many drinks do you usually have on a typical occasion?" Scores for this question ranged from 1 (*I do not drink alcohol*) to 9 (*12 drinks or more*). Frequency of consumption for self was assessed by the question, "On average, how often do you drink?" Scores for this question also ranged from 1 (*Never*) to 9 (*7 times a week*).

Because of sex differences in the metabolism of alcohol and body mass (Wechsler et al., 2000), two questions (one for men and one for women)

were posed to examine frequency of binge drinking. For men, frequency of binge drinking was assessed by the question, "Think back over the last two weeks. How many times have you had FIVE or more drinks in a row?" For women, frequency of binge drinking was assessed by the question, "Think back over the last two weeks. How many times have you had FOUR or more drinks in a row?" Scores on these questions ranged from 1 (*None*) to 6 (*Ten or more times*), with higher scores reflecting greater frequency of binge drinking.

Alcohol-related consequences were assessed by the question, "Since the beginning of the school year, how many times have you experienced any of the following because of drinking alcohol?" Seven consequences were listed: (a) "Had a hangover," (b) "Missed class," (c) "Forgot what I did," (d) "Got behind in school work," (e) "Had unplanned sexual activity," (f) "Got hurt or injured," and (g) "Damaged property on campus." For each consequence, respondents had the option of selecting among four choices, reflecting how often they experienced the specific consequence. Scores for each consequence ranged from 1 (*None*) to 4 (*4 or more times*). Participants were given an overall consequence score ranging from 0 to 21, with higher scores indicating the experience of more consequences due to drinking alcohol.

Grade of first drinking experience was assessed by the question, "What grade were you in when you first started drinking alcohol on an occasional basis?" Nine responses were provided, ranging from "seventh grade" to "second year of college or later in life." The response "I do not consume alcohol" was also provided. Participants were further asked whether they belonged to a Greek-letter social organization, participated in a religious organization, or were male or female.

Analytic Strategy

The first author conducted a series of four multiple regression analyses predicting frequency of binge drinking, quantity of alcohol consumption, frequency of alcohol consumption, and total consequences of alcohol consumption for the overall sample. In these analyses, grade of first drinking experience, fraternity/sorority membership, gender, and identification with a religious organization were entered as a "block" of predictor variables. Adlerian lifestyle themes were then entered together as a second "block" of predictor variables. The goal of these procedures was to see how much variability the second block of predictor variables (lifestyle themes) could explain above and beyond the first block of predictor variables (additional variables). Stepwise multiple regressions were run on the first block of variables to determine which variables from that block contributed significantly

Table 1
 Stepwise Multiple Regression Analysis of Additional Variables and Adlerian Lifestyle Themes Predicting Frequency of Binge Drinking for the Overall Sample (N = 273)

Variables	Overall Model					
	β	<i>t</i>	<i>R</i>	<i>R</i> ²	ΔR^2	<i>F</i>
Block 1						
GFD	-.249	-4.11**	.272	.074		
GL	-.174	-2.98**	.312	.097	.023*	
Block 2						
BSI	.232	3.96**	.376	.142	.044**	
GA	-.251	-3.79**	.411	.169	.027**	
TC	-.163	-2.47**	.450	.182	.020*	
WR	.165	2.65**	.427	.203	.014*	10.13**

Note. Block 1 (Additional Variables): GFD—Grade of First Drinking experience; GL—Fraternity/sorority membership. Block 2 (Adlerian lifestyle themes): BSI—Belonging/Social Interest; GA—Going Along; WR—Wanting Recognition; TC—Taking Charge. * $p < .05$. ** $p < .01$.

to the prediction of the relevant criterion variable. The same stepwise procedures were run on the second block of predictor variables to determine which variables from this block contributed significantly to the prediction of the criterion variable, after accounting for variables in the first block.

Although stepwise procedures in multiple regression have been criticized on a number of points (Cohen & Cohen, 1983; Myers & Well, 1995), the exploratory nature of the current study, as well as the relatively high sample size, lessened the impact of these drawbacks (Cohen & Cohen). Furthermore, Cohen and Cohen pointed out that when the sequence of selecting variables in a block is stepwise estimation, the type of analysis is actually hierarchical *between* the blocks of independent variables and only incidentally stepwise (within blocks of independent variables).

Table 2
 Stepwise Multiple Regression Analysis of Additional Variables and Adlerian Lifestyle Themes Predicting Quantity of Alcohol Consumption for the Overall Sample (N = 273)

<i>Overall Model</i>						
<i>Variables</i>	β	<i>t</i>	<i>R</i>	<i>R</i> ²	ΔR^2	<i>F</i>
Block 1						
GFD	-.227	-3.76**	.276	.076		
Gender	-.141	-2.36**	.318	.101	.025*	
Block 2						
BSI	.217	3.63**	.374	.140	.038**	
GA	-.147	-2.40*	.400	.160	.020*	11.46**

Note. Block 1 (Additional Variables): GFD—Grade of First Drinking experience; Gender. Block 2 (Adlerian lifestyle themes): BSI—Belonging/Social Interest; GA—Going Along. Square root transformations were performed on Being Cautious. * $p < .05$. ** $p < .01$.

Results

Table 1 displays the results of the multiple regression analysis of the additional variables and Adlerian lifestyle themes predicting frequency of binge drinking. Belonging/Social Interest (BSI), Going Along (GA), Wanting Recognition (WR), and Taking Charge (TC) were all significant predictors, and the combination of these themes accounted for 10.5% of the variance in frequency of binge drinking above what was accounted for by two of the additional variables, grade of first drinking experience and fraternity/sorority membership. These additional predictors—grade of first drinking experience and fraternity/sorority membership—accounted for a slightly lower percentage (9.7%) of the variance in frequency of binge drinking. Comparing beta weights, grade of first drinking experience surfaced as the strongest individual predictor in the overall regression model.

Examination of Table 1 suggests that it is possible to determine associations between lifestyle profiles of college students and frequency of binge

Table 3
 Stepwise Multiple Regression Analysis of Additional Variables and Adlerian Lifestyle Themes Predicting Frequency of Alcohol Consumption for the Overall Sample (N = 273)

Variables	Overall Model					
	β	<i>t</i>	<i>R</i>	<i>R</i> ²	ΔR^2	<i>F</i>
Block 1						
GFD	-.195	-3.23**	.239	.057		
GL	-.159	-2.67**	.276	.076	.019*	
Block 2						
BSI	.255	4.25**	.358	.128	.052**	
GA	-.181	-2.97**	.399	.159	.031**	11.34**

Note. Block 1 (Additional Variables): GFD—Grade of First Drinking experience; GL—Fraternity/sorority membership. Block 2 (Adlerian lifestyle themes): BSI—Belonging/Social Interest; GA—Going Along. * $p < .05$. ** $p < .01$.

drinking. For example, students who are outgoing (BSI; positive association with frequency of binge drinking [FBD]), rebellious (GA; negative association with FBD), followers (TC; negative association with FBD), and pursuers of attention (WR; positive association with FBD) tend to engage in binge drinking more often, and, combined, these lifestyle themes explained frequency of binge drinking better than grade of first drinking experience and fraternity/sorority membership.

Table 2 reveals that BSI and GA were the only significant lifestyle theme predictors of quantity of alcohol consumption, accounting for 5.8% of the variance in quantity of alcohol consumption above what was explained by the variables, grade of first drinking experience and gender. These additional variables accounted for more variance (10.1%) in quantity of alcohol consumption than Adlerian lifestyle themes. Grade of first drinking experience emerged as the best individual predictor in this regression model. This model suggests that the lifestyle profile of students who are outgoing (BSI; positive association with quantity of alcohol consumption

[QAC]) and rebellious (GA; negative association with QAC) is secondary to grade of first drinking experience and gender in predicting how much students drink on a typical occasion.

Table 3 demonstrates that BSI and GA were again the only significant Adlerian lifestyle theme predictors for frequency of alcohol consumption, and they accounted for 8.3% of the variance in this criterion variable above that accounted for by grade of first drinking experience and fraternity/sorority membership. A lower percentage (7.6%) of variance was accounted for by these additional variables. Grade of first drinking experience was again the strongest individual predictor variable in this regression model.

An examination of Table 3 suggests that lifestyle themes were stronger predictors of frequency of alcohol consumption. For example, students who are outgoing (BSI; positive association with frequency of alcohol consumption [FAC]) and rebellious (GA; negative association with FAC) tend to drink more frequently, and the combination of these lifestyle themes was superior to grade of first drinking experience and fraternity/sorority membership in predicting this criterion variable.

Table 4 reveals that GA, BSI, and WR were significant predictors of total consequences of alcohol consumption. The combination of these lifestyle themes accounted for 8.5% of the variance in this criterion variable above that explained by the additional variables, grade of first drinking experience and fraternity/sorority membership. These additional predictors accounted for more variance (12.1%) than lifestyle themes. As with the other three models, grade of first drinking experience was the strongest individual predictor variable in the regression model.

This model suggests that consequences of alcohol consumption are determined more by age of first drinking experience and fraternity/sorority membership than by an individual's lifestyle profile. Nonetheless, the results suggest that students who tend to be rebellious, outgoing, and attention-seeking engage in more consequences related to drinking behavior than less outgoing and less attention-seeking individuals.

Discussion

The main purpose of this study was to compare the predictability of Adlerian lifestyle themes to other variables known to be associated with alcohol consumption among college students (i.e., grade of first drinking experience, gender, fraternity/sorority membership, and level of religious participation). Results provided partial support for our hypothesis that Adlerian lifestyle themes, in combination, would account for variation in alcohol-related behaviors above and beyond what was accounted for by

Table 4
 Stepwise Multiple Regression Analysis of Additional Variables and Adlerian Lifestyle Themes Predicting Total Consequences of Alcohol Consumption for the Overall Sample (N = 273)

Variables	Overall Model					
	β	<i>t</i>	<i>R</i>	<i>R</i> ²	ΔR^2	<i>F</i>
Block 1						
GFD	-.308	-5.12**	.325	.106		
GL	-.141	-2.43*	.348	.121	.015*	
Block 2						
GA	-.233	-3.92**	.396	.157	.036**	
BSI	.174	2.98**	.435	.189	.032**	
WR	.134	2.25*	.454	.206	.017*	12.43**

Note. Block 1 (Additional Variables): GFD—Grade of First Drinking experience; GL—Fraternity/sorority membership. Block 2 (Adlerian lifestyle themes): GA—Going Along; BSI—Belonging/Social Interest; WR—Wanting Recognition. * $p < .05$. ** $p < .01$.

other variables. In general, Adlerian lifestyle themes accounted for more variance in frequency of binge drinking and frequency of alcohol consumption than the additional variables. The amount of unique variance attributed to Adlerian lifestyle themes in all regression models ranged from 5.8% to 10.5%.

Grade of first drinking experience proved to be the best individual predictor across all alcohol-related behaviors. The variance accounted for by this variable ranged from 5% to 10%. These relationships were negative, suggesting that the earlier one engages in drinking behavior, the more likely he or she is to participate in alcohol-related behaviors in college. This finding is consistent with Gonzalez (1989). Other significant predictor variables not associated with Adlerian lifestyle themes included fraternity/sorority membership and gender.

Lifestyle themes were superior in predicting two alcohol-related behaviors: frequency of binge drinking and frequency of alcohol consumption. These findings suggest that, at least among college students, Adlerian lifestyle themes hold up well compared to other variables in explaining some drinking behaviors. Although the amount of total variation accounted for by lifestyle themes was small, researchers may wish to consider including an individual's lifestyle or personality pattern in addition to other established predictors of drinking when exploring alcohol-related behaviors.

Several reasons have been postulated as to why alcohol prevention and intervention programs on college campuses have had limited success. Most of these, however, focus on broad, campus-wide explanations. For example, Wechsler and Wuethrich (2003) proposed that denial of alcohol problems by the schools, lack of administrative support, failure to involve the local community, lack of consistent disciplinary action, and relaxing standards on Fridays are reasons colleges and universities have not been successful in curbing harmful drinking. Although these reasons are valid, there is a noticeable lack of emphasis on personality issues that can play an equally important role in drinking behavior. We surmise that many "prevention seminars" fail because there is too much focus on campus-wide, "surface" issues and too much neglect of how an individual's lifestyle contributes to problem behaviors, including excessive drinking. Indeed, making referrals to on-campus counseling services for problem drinking students should be a part of any prevention or intervention strategy. Ideally, a comprehensive campaign that addresses campus policy issues as well as characterological issues, supported by a "top down" strategy where all campus personnel from university administrators to campus counselors are involved, could go a long way in reducing problematic drinking.

Addressing personality issues would most likely occur in the confines of individual or group counseling. Theoretically, the centrality of one's lifestyle in determining behavior (Ansbacher & Ansbacher, 1956; Watts & Shulman, 2003) suggests that lifestyle investigation should be a primary focus in counseling students with drinking problems. The findings of this study support this suggestion. As such, Adler's comprehensive formulation of lifestyle would seem to be an effective avenue to explore characterological motives for excessive drinking.

For example, the lifestyle themes found predictive of frequency of binge drinking in the current study were Belonging/Social Interest (positive association), Going Along (negative association), Taking Charge (negative association), and Wanting Recognition (positive association; see Table 1). According to Wheeler, Curlette, and Kern (1994), this pattern suggests a lifestyle profile of individuals who tend to be sociable (BSI), somewhat rebellious and against rules and regulations (GA), followers (TC), and pur-

suers of recognition and attention (WR). Working with this formulation, Adlerian counselors could explore how this lifestyle pattern might contribute to behaviors inconsistent with social interest, such as excessive alcohol consumption. That is, counselors could encourage heavy drinking students to pursue social activities that do not involve alcohol, express negative feelings related to institutional mandates, take charge of their own behavior, and achieve recognition in ways that are not harmful to self or others. Keeping consistent with Adlerian theory, such an exploration would also address the basic mistakes and cognitive distortions that underlie this lifestyle pattern and its relation to drinking behavior.

College students who develop biased ways of perceiving self, others, and the environment may turn to excessive alcohol consumption as a way to work through interpersonal, school, or other kinds of difficulties. As an example, the negative relationships among Going Along and all alcohol-related behaviors in this study suggest that some college students might harbor negative attitudes toward authority and experience drinking behaviors as a way to put forth their newly discovered freedom. Such an explanation seems consistent with Adler (1931/1998), who theorized that those who construe a private meaning to life, as with convictions that they are superior to societal standards and rules, experience more problems related to their behavior. More specifically, Adler (as cited in Ansbacher & Ansbacher, 1956) referred to problematic behavior in adolescence as *adolescent negativism*, which occurs in response to perceived authoritative control (e.g., parents, teachers). From an Adlerian perspective, many expressions of adolescence stem from the goals of asserting independence, demonstrating equality with adults, and proving one is no longer a child. Older adolescents (i.e., college students) may hold faulty convictions that "being independent means free from control at all costs" and thus will oppose restrictions against their freedom. These convictions, as part of their lifestyle patterns, may lead to drinking behavior as a sign of rebellion against authority figures. Adlerian clinicians are encouraged to explore perceptual biases and underlying convictions, as part of an individual's lifestyle, which can lead to problematic drinking.

As Kern et al. (1997) noted,

greater understanding of lifestyle patterns provides a person with more choices on how to perceive current situations and the possibility of more cooperative behavior. With increased choices comes increased opportunity for change and increased possibility for interpersonal success. (p. 2)

Specific to college students, we would also add that with increased choices comes an increased opportunity for movement toward more responsible behavior that does not involve deleterious drinking.

Although Adler's notion of lifestyle is theoretically comprehensive, more empirical work is needed as it applies to this prevalent problem on college campuses today. Future researchers may want to explore in more depth the associations between specific lifestyle themes and college alcohol consumption patterns. Knowledge of general lifestyle patterns of heavy binge drinkers, for example, could provide clinicians a starting point when counseling such students. Future research could also determine if lifestyle patterns among students who consume alcohol are consistent across gender. The goal of these studies would be to construct intervention programs grounded in Adlerian theory and designed to help students gain insight into their drinking patterns, to increase choice, and to reduce heavy, destructive drinking.

Several limitations of the current study need mention. First, the participants in this study were a convenience sample of college students. The lack of a randomly selected sample from a broader population precludes generalizability to all college students in the United States and comparability to other alcohol studies. In addition, the measures used rely on self-report. As with any self-report instrument, particularly one measuring sensitive behaviors such as alcohol use, some participants may not have responded in a manner reflective of their behavior. However, previous research (Barbor, Stephens, & Marlatt, 1987; Calhoun et al., 2000; Embree & Whitehead, 1991; Williams, Aitken, & Malin, 1985) has demonstrated that self-report measures of alcohol consumption tend to be valid and reliable, especially when anonymity is stressed. Thirdly, this investigation was correlational in nature and designed to assess relationships among several variables. As such, one cannot assume that the findings offer evidence of causality among the variables of interest. Finally, across all regression models, demographic variables and Adlerian lifestyle themes only explained between 16% and 20% of the variability in alcohol-related behaviors. However, it is remarkable that Adlerian themes explained more variance in two alcohol-related behaviors than demographic variables. This was a rigid "test" for lifestyle themes to pass, given the strength of associations between the other variables and college drinking outlined in the literature.

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