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The differential impact of relational health on alcohol consumption and consequences in first year college women

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Abstract

The Relational Health Indices (RHI) is a relatively new measure that assesses the strength of relationships. It has been found that relational health has a protective factor for women, such that it enhances positive experiences and limits negative ones. The current study is the first to use the RHI to examine the effect of relational health on alcohol consumption and alcohol consequences. First year college women were given questionnaires assessing relational health, drinking motives, and alcohol use in their first few months at a mid-sized, private university. Due to the social nature of college settings, it was predicted that relational health would moderate the relationship between motives and alcohol consumption. Further, due to the protective factor of relational health, it was predicted that relational health would attenuate the relationship between drinking and negative consequences. These hypotheses were supported. Relational health, moderated the relationship between both social and coping drinking motives and drinking, such that women with strong relational health towards their peers and community who also had high social and coping motives, drank more than those with weaker relationships. Paradoxically, relational health also moderated the relationship between drinking and consequences such that heavy drinking women with strong relational health experienced fewer negative consequences than women with weaker relational health. Results indicate that although relational health is associated with an increase in alcohol consumption, it may also serve as a protective factor for alcohol-related negative consequences. Future research and interventions may seek to de-link the relational health-drinking connection in the college student environment.

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Keywords

Alcohol Use; Alcohol Consequences; Relational Health; Drinking Motives; College Students; Women

Alcohol use and abuse among college students is a major public health concern that not only affects individuals and communities, but can also predict future addictive behavioral patterns (Ham & Hope, 2003). Approximately 1,700 college students die each year from alcohol-related incidents, while more than 599,000 students are unintentionally injured while intoxicated (Hingson, Heeren, Winter, & Wechsler, 2005). Problematic drinking often plays a role in hazardous driving, unsafe sexual behavior, falling behind in school, and a host of other risky behaviors (Park & Grant, 2005; Wolff & Wolff, 2002). Women may be especially at risk for alcohol-related consequences due to the inherent physiological differences in both the effects and metabolizing of alcohol compared to men (Perkins, 2000). Further, the college environment has been found to have a strong adverse effect on females, more so than males, in terms of their drinking behavior (Dawson, Grant, Stinson, & Chou, 2004). Compared to men, women are affected by their relationships, are more likely to respond to distress by drinking, and thereby experience more internal negative effects (Ham & Hope, 2003; Park & Grant, 2005).

Despite these negative consequences, alcohol consumption in college women has been increasing. Wechsler and Isaac (1992) found that rates of heavy episodic drinking (consuming four or more drinks in a row) on five or more days in the past month doubled in college women from 1977 to 1992. Subsequent studies have revealed further increases in young women's rates of risky drinking. Wechsler et al. (2002) reported an increase of 125 percent in heavy episodic drinking rates at all-female colleges from 1993 to 2001. In England, Dantzer and colleagues (2006) found a 32 percent increase in heavy episodic drinking rates in female students aged 16 to 24. Additionally, rates of frequent heavy episodic drinking (more than two times in the past two weeks) among women at U.S. colleges and universities have increased over the past several years (Wechsler et al., 2002).

Although rates of drinking among college women are increasing, women may differ from men in the specific reasons why they drink. For example, research has shown that young women may choose to drink out of a desire for intimate relationships (Gleason, 1994a; Vince-Whitman & Cretella, 1999). According to this research, young women, as opposed to young men, believe that alcohol promotes the initiation of new relationships and creates intimacy in the relationships they already have. Further, Gleason (1994b) suggests that interventions need to focus on women's relational strengths. Relational theory suggests that a woman's sense of self is formulated around the capacity to build and maintain relationships. Alcohol may be viewed as a vehicle for building relationships and thus has a paradoxical effect—despite the risk of negative consequences, alcohol may be used by female students to meet new friends, try out new identities, and feel more comfortable in social situations. Thus, it is possible that college women who feel more strongly connected to their peers and community may drink more than those who are less connected. Alternatively, it is possible that women drink more to feel more connected to their community and peers. As a result, low levels of relational health may be related to increased alcohol use. Therefore, if this need is satisfied and women are more connected to their community and peers, women may not need to drink to feel connected. Research is needed to determine how relational health impacts drinking.

One measure used to determine the strength of women's relationships is the Relational Health Indices (RHI; Liang et al., 2002). The RHI measures the importance of community, peer, and mentor relationships for individuals, and has been used to examine the association between

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women's relational health and perceived stress, coping responses, athletic satisfaction, racial differences and depressive symptoms, career success, workplace relationships, disordered eating attitudes, and religiosity/spirituality (Arce, 2005; Goldman, 2001; Hatcher, 2001; Jenkins, 2006; Peikert, 2003). Overall, it seems that a strong connection to peers, communities, and mentors has a protective factor for women, enhancing good experiences and limiting negative ones.

Since women may be more likely to drink for relational reasons, the RHI may prove useful in enriching our understanding of the role of relational quality in alcohol use (Frey, Beesley, & Newman, 2005; Liang et al., 2002). It has not, however, been applied to the study of women's consumption levels yet. The RHI may be helpful in understanding how women form their drinking behavior by examining how their social relationships are related to alcohol consumption. Communal and peer relationships are essential to an individual's social and psychological functioning, as well as their feeling of belonging (Liang et al.). The exuberant and social side of college life is associated with drinking (Reifman & Watson, 2003) and if this association can be related to the relational connectedness of women, effects on women's drinking behavior may be found. Women's individual and social relationships, as determined by the RHI, may affect their drinking behavior.

One way relational health may impact drinking may be by moderating previously established links between drinking motives and alcohol use. Cooper (1994) identified four drinking motives that influence drinking behavior: mood enhancement, tension reduction (or coping), social motives, and conformity motives. There is already a well-established link between drinking motives and drinking (Baer, 2002; Goodwin, 1990; Haden & Edmundson, 1991; Ham & Hope, 2003; Klein, 1992; Wood, Nagoshi, & Dennis, 1992). Cronin (1997) found that social drinking motives were the best predictor of the frequency of binge drinking, the number of days alcohol was consumed, and average drinks per occasion. A study on the characteristics of heavy drinkers in Europe showed that motives for heavy drinking episodes included both social camaraderie and tension reduction, although which factor is strongest may vary according to the type of drinker (Kuntsche, Rehm, & Gmel, 2004). Because of the relational nature of alcohol motives and because motives tap into many social and relational aspects that may interact with one's relationships, relational health may potentially interact with drinking motives. Students may use alcohol as a way to connect with others and therefore relational health may interact with motives to enhance and promote alcohol use. Those who have greater connections to community and peers and who also have high motives for drinking may drink more than those not as connected or who don't have strong motives for drinking. For college females, the relationship with their peers and sense of community (i.e., the campus, their sorority) are important aspects of their psychological well-being. Thus, the strength of relationship toward one's peers and toward the community may interact with motives for drinking to promote high levels of alcohol consumption. As increased alcohol use is related to increased alcohol-related consequences (Hingson, Heeren, Winter, & Wechsler, 2005), relational health may also be related to negative consequences from drinking. Several studies among college students have found that social motivations predict frequent, but non-problematic drinking (Goodwin, 1990; Haden and Edmundson, 1991; Klein, 1992; Wood, Nagoshi, & Dennis, 1992; Cronin, 1997). No studies to date have examined the role relational health plays in alcohol use, let alone in alcohol-related negative consequences. However, relational health has been found to be a protective factor in a number of other studies on depression, disordered eating, and stress and coping (Arce, 2005; Goldman, 2001; Jenkins, 2006), and thus possibly may be a protective factor in relation to alcohol-related negative consequences. Connection with one's peer group and community may attenuate the relationship between alcohol use and alcohol-related negative consequences by providing support, care, and assistance in risky situations.

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The current study is the first ever to look at the role of relational health in alcohol consumption and subsequent alcohol-related consequences. Using a sample of first year college women and given the importance of peer relationships and connection to their surrounding community, we hypothesized that there will be a significant positive relationship between peer and community relational health and alcohol use. Further, since social motives play a significant role in college drinking, it is hypothesized that relational health will interact with social reasons for drinking and impact alcohol consumption. Specifically, we expect college women with high social motives and strong relational health to drink more than those with weak relational health. The relationship between relational heath and other motives on drinking will also be explored. With respect to consequences, the growing literature on relational health as a protective factor across a number of non-alcohol related behaviors led us to hypothesize that relational health will attenuate the relationship between drinking and consequences, thereby serving as a protective factor. That is, we expect heavier drinking women with strong relational health to experience significantly fewer consequences than women with weak relational health.

Method

Participants

Two hundred fourteen freshmen female students participated in a local IRB-approved study. All participants were part of a larger intervention study at a mid-sized private Western university where freshmen female students were invited to participate in the study within the first month of entering college. Participants had a mean age of 18.01 (*SD* = 0.366) years and consisted of 113 Caucasians (52.8%), 38 Hispanics (17.8%), 24 “Mixed ethnicity” (11.2%), 16 Asian Americans/Pacific Islanders (7.5%), 13 Black/African Americans (6.1%), 1 American Indian/Alaskan Native (.5%), and 9 identified as “Other” or “Declined to State” (4.2%). Thirty five percent of the participants did not drink over the course of the assessment period (from pre-college to the first month of college; *n* = 75). All participants received a stipend of $40 for their participation in the study regardless of drinker status. This study was conducted as part of a larger intervention in which participants came to a group session to learn about and discuss alcohol consumption at the college level. All data collected is baseline data collected from an initial questionnaire sent prior to group attendance and an assessment of drinking completed within the first 20 minutes of the group session.

Design and Procedure

Participants completed a brief online questionnaire assessing demographic variables, relational health, drinking motives, alcohol consumption, and alcohol-related negative consequences. Alcohol consumption data was collected in the first twenty minutes of the group session. Demographic questions included age and ethnicity. Alcohol consumption was measured using the self-report Time-Line Follow Back (TLFB; Sobell & Sobell, 1992), a self-assesment of drinking behavior spanning the three months prior to data collection. The TLFB has been found to be a reliable and valid measure of drinking behavior when delivered in a group setting (LaBrie, Pedersen, & Earleywine, 2005; Pedersen & LaBrie, 2006).

The 37-item Relational Health Indices (RHI; Liang et al., 2002) assessed women's peer, community, and mentor relationships. Each subscale of the RHI contains between 11 and 14 items (11 for RHI-Mentor; 12 for RHI-Peer; 14 for RHI-Community) and is given a composite score that is calculated by finding the mean of all items. The higher the score received on each subscale, the more connected one feels to his/her mentor, peer, or community. Participants were shown three different sections of questions, each one prompted by the phrase “Please indicate the answer that best describes your relationship with: a close friend, your most important mentor, or your relationship or involvement with the university community.” Definitions of peer, mentor, and community were left open to interpretations after these intial

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instructions. Examples of items include: "I have a greater sense of self-worth through my relationship with my friend," "My mentor tries hard to understand my feelings and goals (academic, personal, or whatever is relevant)," and "There are parts of myself I feel I must hide from this community" (Liang et al., 2002). Overall, the RHI showed adequate reliability in the sample (α = .91). Each subscale also showed adequate reliability in the sample (RHI-Mentor α = .95; RHI-Peer α = .80; RHI-Community α = .91).

The Drinking Motives Questionnaire (DMQ; Cooper, 1994) assesses four subscales of drinking motives, each containing 5 items: Enhancement, Social, Coping, and Conformity. The greater the score on each subscale, the more that particular subscale will correlate with drinking levels and alcohol consumption. Items in the questionnaire were prompted by the question "Thinking of the times you drank in the PAST MONTH, how often would you say that you drank for each of the following reasons?" and included responses such as "To forget your worries," "To fit in with a group you like," "Because it is fun," and "To celebrate special occassions with friends" (Cooper, 1994). Overall, the DMQ showed adequate reliability in the sample (α = .95). Each subscale also showed adequate reliability in the sample (DMQ-Enhancement α = .93; DMQ-Social α = .94; DMQ-Coping α = .86; DMQ-Conformity α = .87). The 23-Item Rutgers Alcohol Problem Index (RAPI; White & Labouvie, 1989) measures the frequency of alcohol-related negative consequences, such as missing a class or fighting with friends. Scoring is based on the number of times participants indicated having experienced each item (Never, 1-2 times, 3-5 times, 6-10 times, or more than 10 times). The RAPI showed adequate reliability in the sample (α = .85).

Results

Sixty-five percent of women drank during the month prior to completing the questionnaire (*n* = 139). All participants averaged 2.27 (*SD* = 1.97) drinks per occasion for a monthly consumption level of 12.14 (*SD* = 18.50) drinks per month. Among drinkers only, the average was 3.37 (*SD* = 1.48) drinks per occasion and 18.69 (*SD* = 20.12) drinks per month. Further, with respect to alcohol consequences, the mean RAPI score among first year female drinkers was 3.51 (*SD* = 4.12).

The relationships among drinking motives, relational health indices, alcohol consumption, and alcohol consequences are contained in Table 1. All drinking motives subscales were significantly related to drinking. RHI-Peer and RHI-Community were related to drinking such that women with stronger peer relationships and a stronger connection to their community drank more. The RHI-Mentor subscale did not correlate with drinking motives, consumption, or consequences and was therefore not included in subsequent analyses. High scores on the RAPI were significantly correlated with both drinking motives and drinking, but were not significantly correlated to any measures of relational health.

Moderation Analyses

For moderation analyses we conducted a series of linear regressions predicting drinking and alcohol-related problems. All variables were mean-centered and interaction terms were computed from mean-centered variables. In these analyses only the RHI-Peer and RHI-Community subscales were used as only these two subscales had direct relationship with drinking. Results are contained in Tables 2 and 3.

Moderation of Alcohol Use—First, we wanted to determine if RHI moderated the relationship between drinking motives and alcohol use (self-reported quantity X frequency in the past month). As seen in Table 1, social motives and enhancement motives correlated highly ($r = .87$, $p < .01$), suggesting that, at least in the current sample of freshmen women, these motives were measuring highly similar constructs. Thus, only social, coping, and conformity

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motives were entered into analyses. In a series of separate regressions looking at each motive (Table 2), we determined if RHI-Peer or RHI-Community interacted with DMQ-Coping or DMQ-Social to predict alcohol use.

With respect to social motives, both RHI-Community and RHI-Peer moderated the relationship between social motives and drinking ($t = 2.103$, $p = .037$; $t = 2.276$, $p = .024$) such that those women with strong relationships and high social motives drank more than those with weak relationships and low social motives. Tests of simple slopes revealed that the slopes of both the high RHI-Community ($\beta = .73$, $p < .001$) and the low RHI-Community ($\beta = .53$, $p < .001$) groups, as well as the high RHI-Peer ($\beta = .72$, $p < .001$) and low RHI-Peer ($\beta = .50$, $p < .001$) groups were significantly different from zero. Further, only RHI-Community independently predicted drinking over and above social motives ($t = 2.006$, $p = .046$).

Both the RHI-Community and RHI-Peer moderated the relationship between coping motives and drinking ($t = 2.304$, $p = .043$; $t = 1.991$, $p = .048$) such that women with strong relationships and high coping motives drank more that those with weak relationships and low coping motives. Again, tests of simple slopes revealed all lines significantly different from zero (high RHI-Community ($\beta = .66$, $p < .001$) and low RHI-Community ($\beta = .43$, $p < .001$); high RHI-Peer ($\beta = .64$, $p < .001$) and low RHI-Peer ($\beta = .45$, $p < .001$). Figure 1 shows participants' alcohol consumption as a function of relational health and drinking motives.

There was no interaction between conformity motives and either RHI-Peer or RHI-Community in predicting drinking.

Moderation of Alcohol Consequences—Next, we wanted to determine the effect of relational health and drinking on alcohol-related consequences (as measured by the RAPI). Using a step-wise regressions controlling for drinks per month, we examined the effect of relational health and drinks per month on drinking consequences (Table 3). There was a significant interaction between drinks per month and both RHI-Peer and RHI-Community ($t = -3.859$, $p < .001$; $t = -3.480$, $p = .001$) such that women who are more connected to their community and drink more or who are more connected to their peers and drink more, experience fewer negative consequences than heavy drinking women with weaker relational health (see Figure 2). Tests of simple slopes showed slopes significantly different from zero for all groups (high RHI-Community ($\beta = .61$, $p < .001$) and low RHI-Community ($\beta = .92$, $p < .001$); high RHI_Peer ($\beta = .63$, $p < .001$) and low RHI-Peer ($\beta = .96$, $p < .001$)).

Discussion

Few studies have looked at relational health as measured by the RHI (Frey, Beesley, & Newman, 2005; Liang et al., 2002) and no studies to date have examined the role of relational health in alcohol use and alcohol-related consequences. While the link between drinking motives and consumption patterns is well established (Hingson et al., 2005), it appears that stronger relational health interacts with a college woman's reason for drinking, contributing to an increase in her drinking behaviors. Among our sample, women who reported stronger relational health and higher coping and social motives for drinking consumed more than women who reported weaker relational health. While relational health was related to an increase in drinking, it was also significantly related to a decrease in alcohol-related negative consequences. Among our sample, heavier drinkers with stronger relational health experienced fewer alcohol-related negative consequences than women with weaker relational health. Results suggest that closeness to peers and community serves as a protective factor against negative consequences. While drinking may be more likely to occur for a college woman who feels a sense of connectedness with her community, she is more likely to evade negative consequences. Results suggest a bit of a quandary when examining incoming college females

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and designing interventions to reduce drinking and negative consequences. On the one hand, a sense of connectedness may not reduce drinking, but on the other hand, this very sense of connectedness appears to protect female college students from experiencing more extreme negative consequences.

For college women specifically, relational theory suggests the importance of considering how connected female students feel to their peers and community and the impact this may have on behaviors such as drinking. The incoming female student in particular may view alcohol as the vehicle for building relationships, allowing her to meet new friends, fit in with her peers, and explore new roles and identities. As such, alcohol use may increase among college women who report feeling a sense of connectedness to their community. In fact, the results indicate that relational health correlates with drinking and even moderates the relationship between drinking motives and alcohol use.

Specifically, women with higher social motives for drinking and who are more connected to their community and peers tend to drink more than women who are not as connected, but still have high social motives for drinking. The widespread prevalence of alcohol on college campuses is usually available and consumed in social settings and may be why women who report feeling connected to their campus also report drinking more (Hartzler & Fromme, 2003; O'Hare, 1990; Schulenberg, O'Malley, Bachman, & Wadsworth, 1996; Wechsler & Isaac, 1992). Coupled with a high social motive for drinking, a college female who is more connected to her community and peers may be more exposed to and seek out more opportunities to engage in alcohol use. It is possible that college women who are closer to their peers and community in an environment (college) where alcohol is omnipresent will have more contact with alcohol. When coupled with strong social and coping motives, these women may drink more. However, college women who are more connected to their community and peer group may have greater support from friends and may therefore be protected against more negative consequences. A female who feels secure in her connections with her peer group and community might not feel the pressure to engage in risky behaviors as much as a female who may be less connected and feels the pressure to fit in. Thus, from a social perspective, college women who report a strong sense of connection may have greater opportunity to engage in alcohol use but will be less likely to experience negative consequences.

Likewise, both peer and community relational health also moderated the relationship between coping motives and drinking. Among our sample, women who reported feeling more connected to their community and peers and reported high coping motives for drinking, tended to drink more than women who were not as connected yet still reported high coping motives for drinking. Many incoming college students may feel the pressure to succeed in their new environment and as such, their peers may reinforce coping motives for drinking because they also may drink for coping reasons (Kieffer, Cronin & Gawet, 2006). Peers and communities may even inadvertently suggest that students who are experiencing personal problems (e.g., failed a test, broke up with a boyfriend, had a bad day), will feel better after drinking and that alcohol use can give temporary relief to bad situations. Thus, a student who drinks to cope with her problems and also feels a sense of connection with her peers and community may be at greater risk for drinking more than a student who also drinks to cope with her problems but is not plugged into the campus community.

In contrast to the results indicating the significant relationship between closeness to peers and community and alcohol use, relational health had no direct relationship with alcohol-related negative consequences. While the relationship between an increase in drinking and an increase in alcohol-related negative consequences is well-established (Cooper, 1994), strong relational health appears to attenuate negative consequences among female college students. Closeness to peers and community attenuated the relationship between alcohol consumption and alcohol-

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related negative consequences. Despite drinking at similar levels, women who reported stronger relationships with their peers and communities and also reported an increase in drinking had fewer drinking related consequences than women who reported weaker relationships with their peers and communities. It is possible that the support received from a connected social network for college women with strong relational health protects them from experiencing negative consequences such as getting into fights or missing class. Peers and community watch out for friends more than strangers might (Stanton-Salazar & Spina, 2005). Moreover, first year college women may feel a sense of personal responsibility to their peer group and therefore may conduct themselves in a manner that might prevent alcohol-related negative consequences. A female who does not feel close to her peer group might not necessarily care how her peers and community view her or are affected by her actions. Thus, there seems to be more negative consequences for college women who are not as close to a peer group or community, perhaps due to the fact that they do not have a support network looking out for them and also may not feel a sense of responsibility to others, leading them to engage in riskier behaviors.

While these findings provide insight as to why college women drink, there are some limitations that should be addressed. Although the correlations between relational health and alcohol use were fairly weak in comparison to the correlations between drinking motives and alcohol use, both the peer and community relationships were significantly related to alcohl use. As the first study to explore this relationship, further research should continue to study the relationship between relational health and drinking. All data was self-reported, which is one limitation of this study. However, self-reports of quantity and frequency consumed appear valid and reliable in other studies of college students (O' Hare, 1991). This study was also conducted at one medium-sized, private university, so results may not be typical of all college students. Future studies should examine college students from different sizes and types of universities in order to make these results more pertinent to the college population as a whole. Furthermore, the sample consisted of only college-aged first year women and data was collected only in the first few months of college. Future studies should examine if relational health continues to influence drinking behaviors as students (male and female, under- and upperclassmen) progress through their undergraduate years as well as through their first year of college. Perhaps relational health is only influential among incoming college students seeking to fit in with their peers and community during this transitional period where the influence of others may be stronger. As older students, relational health might not impact drinking decisions as strongly. Similarly, the effect of relational health on drinking may affect freshman students differently later on in the school year than it did within the first few months of attending college. Likewise, our results are only applicable to college women and can not be applied to college men, as men may differ from women when it comes to relationships with their peers and community and therefore their alcohol use may be affected differently by relational health. Women also may drink for different reasons than men (Gleason, 1994a). Future studies should examine whether relational health similarly impacts college men. Finally, while the results shed light on reasons why college women may engage in heavy drinking, the results may not be applicable to the greater population. Future research should examine the role of relational health and drinking in other populations, such as high school students, young adults, middle-aged adults, and older adults.

Despite these limitations, the results of our study are novel and contribute to a deeper understanding of why college women engage in heavy drinking behaviors. The findings show the differential impact of relational health on drinking and consequences. The same moderator, relational health, interacted with drinking motives to increase consumption, but similarly interacted with drinking to reduce consequences. To capitalize on the mitigating role of relational health on consequences, college personnel may seek to create programming that encourages deeper connection with peers and community but also provide alternative experiences for students that do not involve the use of alcohol. It is possible that relational

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health has a similar effect on other risky behaviors commonly experienced by college-aged students. The focus, therefore, should be on building strong communities and peer groups to preserve the protective factor relational health has on consequences. While building stronger connections with the campus community, the message of health, respect, and responsibility should be present to encourage students to not engage in heavier drinking behaviors but continue to look out for one another. Future research should aim to increase relational health among college women, as it has a protective factor, yet should also focus on delinking drinking motives from relational health so as to reduce the role of motives in alcohol consumption. One way this may be attempted is by to involve women in a discussion exploring whether their reasons for drinking (social and coping) are actually being met through drinking, while exploring alternative ways to better meet social needs and to cope. Thus, our research contributes to a broader understanding of why college women drink, extending the pre-established model of motives on drinking to include relational theory and the suggestion that young women's sense of self and subsequent behavior may be greatly influenced by their sense of connectedness with others.

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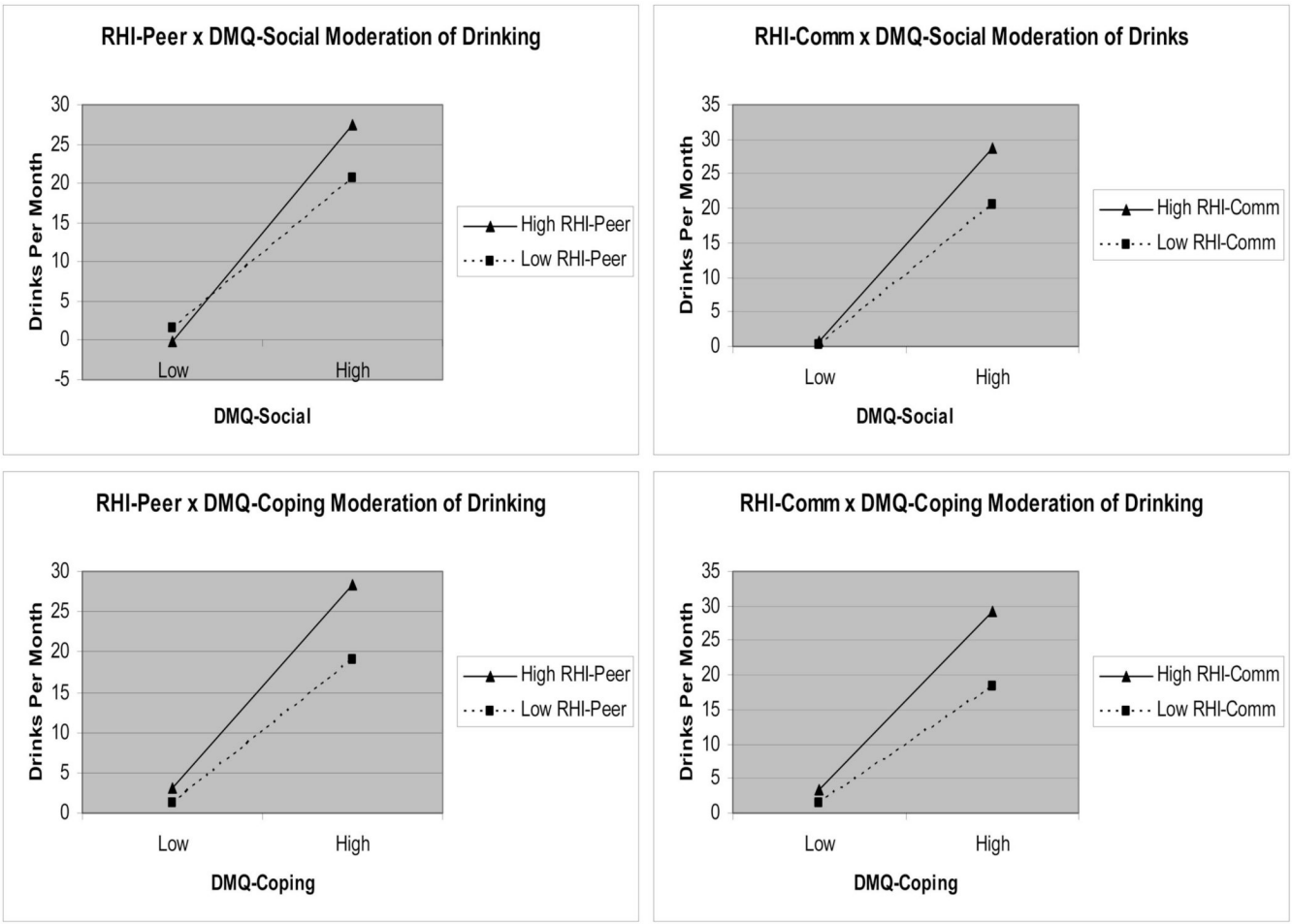

Figure 1. Women's Alcohol Consumption as a Function of Relational Health and Drinking Motives

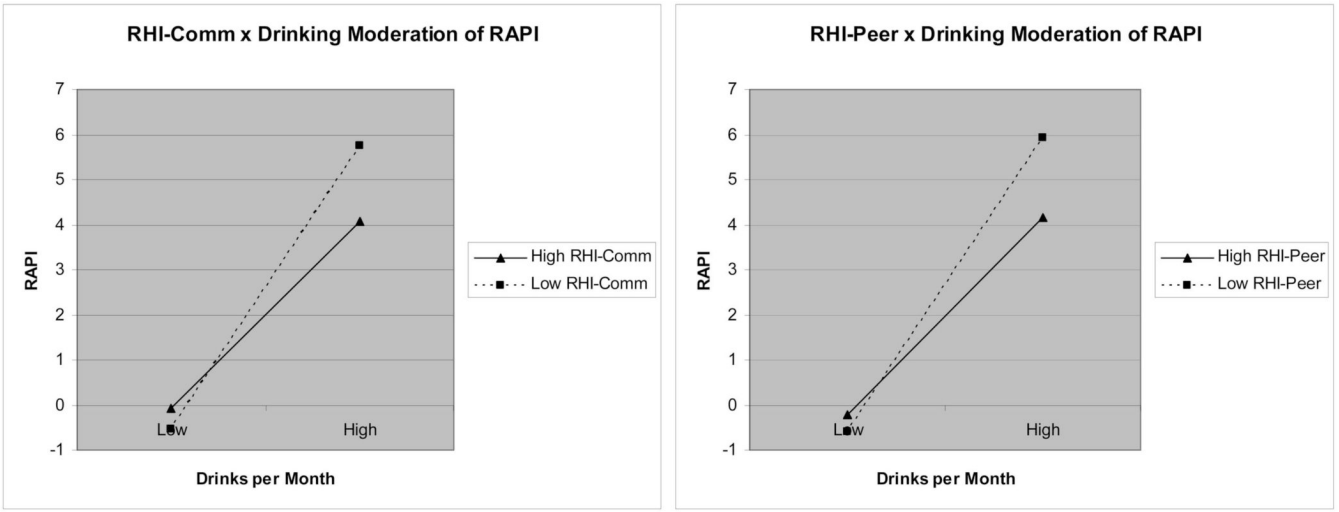

Figure 2. Women's Alcohol Consequences as a Function of Relational Health and Alcohol Consumption

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Table 1

Intercorrelations Between Drinking and Variables of Interest

	Sorority Intention	Drinks Per Month	Max Drinks	RAPI Composite	RHI-Peer	RHI-Mentor	RHI-Community	DMQ-Coping	DMQ-Conformity	DMQ-Social	DMQ-Enhancement
Sorority Intention	-										
Drinks Per Month	-.317**	-									
Max Drinks	-.306**	.679**	-								
RAPI Composite	-.200**	.701**	.542**	-							
RHI-Peer	-.071	.156*	.146*	-.007	-						
RHI-Mentor	.009	-.049	-.107	.052	.172**	-					
RHI-Community	-.071	.142*	.071	.012	.281**	.230**	-				
DMQ-Coping	-.212**	.519**	.441**	.543**	-.009	-.010	-.048	-			
DMQ-Conformity	-.144**	.331**	.266**	.343**	-.039	.058	.004	.480**	-		
DMQ-Social	-.232**	.628**	.629**	.613**	.128	-.011	.066	.626**	.460**	-	
DMQ-Enhancement	-.247**	.642**	.608**	.563**	.155*	-.028	.093	.601**	.307**	.857**	-

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

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Table 2

Interaction Effect: Predicting Alcohol Use from Relational Health and Drinking Motives

Predictor	B	SE(B)	*β*	*t*	*d*
DMQ-Social × RHI-Community					
DMQ-Social	12.07	1.02	.63	11.74***	1.624
RHI-Community	2.08	.10	.11	2.10*	.290
DMQSocXRHIComm	1.95	.93	.11	2.10*	.291
Overall R^2 = .42					
DMQ-Social × RHI-Peer					
DMQ-Social	11.66	1.04	.61	11.08***	1.529
RHI-Peer	1.22	1.00	.07	1.53	.212
DMQSocXRHIPeer	2.13	1.07	.11	2.28*	.314
Overall R^2 = .41					
DMQ-Coping × RHI Community					
DMQ-Coping	10.69	1.13	.54	9.45***	1.307
RHI-Community	3.21	1.070	.17	3.00**	.415
DMQCopingXRHIComm	2.22	1.09	.12	2.03*	.281
Overall R^2 = .32					
DMQ-Coping × RHI-Peer					
DMQ-Coping	10.69	1.13	.54	9.43***	1.301
RHI-Peer	2.78	1.08	.13	2.58**	.356
DMQCopingXRHIPeer	1.87	.94	.12	1.99*	.275
Overall R^2 = .31					

* = p < .05;

** = p < .01;

*** = p < .001

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Table 3

Interaction Effect: Predicting Drinking Consequences from Relational Health and Alcohol Use

Predictor	Est.	SE	*β*	*t*	*d*
RHI-Peer × Drinks Per Month					
RHI Peer	-.43	.18	-1.2	-2.41*	-.332
Drinks per month	2.96	.19	.80	15.41***	2.122
RHI PeerXDrinks Per Month	-.71	.18	-.20	-3.86***	-.531
Overall R^2 = .54					
RHI-Comm × Drinks Per Month					
RHI Community	-.40	.18	-.11	-2.206*	-.304
Drinks per month	2.80	.18	.75	15.165***	2.093
RHI CommXDrinks Per Month	-0.68	.20	-.17	-3.480***	-.480
Overall R^2 = .53					

* = p < .05;

** = p < .01;

*** = p < .001