

Introduction

- Life satisfaction can be defined as an individual's subjective cognitive evaluation that reflects the extent to which they find aspects of their life to be satisfying and fulfilling (Diener et al., 1999; Shin & Johnson, 1978).
- Satisfaction can be measured globally or divided into several domains (Alfonso et al., 1996; Diener et al., 1999), such as satisfaction with family, friendships, school experience, self, environment, and overall life (Huebner, 1997).
- Satisfaction evaluations are ongoing reflective evaluations based on the individual's comparison between their perceived life circumstances and the degree to which they meet self-imposed criteria (Pavot & Diener, 1993).
- When faced with adverse life circumstances, some adolescents may experience negative emotions which may lead them to engage in various risk-taking behaviors, such as alcohol use, in an attempt to improve their life satisfaction (Suldo & Huebner, 2004).
- Alcohol consumption is highly prevalent in late adolescence, namely during the college years (Ham & Hope, 2003). Studies show young adults aged 18-24 have the highest rates for alcohol use and problematic drinking (Kandel & Logan, 1984; U.S. DHS, 1997).
- Evidence shows that alcohol and substance use by adolescents is associated with decreased overall life satisfaction. This decrease in life satisfaction may be due to the negative consequences that are related to alcohol consumption (Murphy et al., 2005; Zullig et al., 2001).
- Social activities and leisure are important in the development of adolescents (Darling et al., 2005).
- These types of activities encourage adolescents to manage their time, control their environment, and develop their autonomy. These are ongoing evaluations that reflect the impact of changing life circumstances (Diener et al., 1999).
- Prominent tasks in adolescence include initiating and maintaining relationships, romantic and platonic, which they often seek outside the home (Engels & Bogt, 2001).
- Scoring high on social interest is correlated with significantly higher overall satisfaction and satisfaction with their friends than those who report less prosocial disposition (Gilman, 2001).
- The purpose of this study was to examine life satisfaction and involvement in both drinking and non-drinking related social activities among underage (under age 21) college students.
- It is expected that more frequent socializing will be related to higher self-reported satisfaction, especially for activities that do not tend to center around alcohol.

Method

- Participants were 302 undergraduate student volunteers ages 17-20 attending Florida International University (see Table 1). Each participant completed a questionnaire packet.

Table 1.
Summary of Sample Demographic and Study Variables.

Gender	
Male	130 (43.2%)
Female	171 (56.8%)
Ethnicity	
Hispanic/Latino	211 (70.1%)
Caucasian	41 (13.6%)
Black Islander	18 (6%)
African-American	10 (3.3%)
Asian / Pacific Islander	11 (3.7%)
Other	10 (3.3%)
Age	$M = 18.5 (.8)$
BMSLSS	$M = 8.9 (5.2)$
SAS- Participation	$M = 52.8 (15.5)$
SAS- Drinking during activity	$M = 20.6 (14.4)$

Social Activities Scale (SAS, Mendez et al., 2006)

- The SAS is a 30 item self-report questionnaire that measures activity participation with the occurrence of drinking during the activities. Respondents rated frequency of participation on a 0-4 scale (0 = *not at all/never*, 4 = *almost always/very frequently*). For activities the individual endorsed some participation, the respondents also rated frequency of drinking during the activity on a 0-4 scale (0 = *never drank*, 4 = *almost always/very frequently drank*). Five items were identified as "prosocial activities" (e.g., volunteering for an organization), five items were identified as drinking related activities (e.g., going to a club or bar), and eight items were identified as non-drinking related activities (e.g., shopping with others). For this study, three items were excluded as they focused on solitary activities (e.g., playing video games alone).

Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS, Huebner, 1997)

- Participants were given the BMSLSS, a six item self-report questionnaire to assess life satisfaction among different life domains (i.e., family, friendships, school, self, environment) with also an "overall life satisfaction" rating. Since individuals may have different evaluations for similar life events, it is necessary to assess global satisfaction in addition to satisfaction for the different life domains (Pavot & Diener, 1993). For each item, participants were asked to describe their satisfaction using a scale that ranged from -3 to 3 (-3 = *terrible*, 0 = *mixed*, 3 = *delighted*). The BMSLSS was found to be a valid and reliable measure among young adults (Zullig, Huebner, Gilman, & Murray, 2005) and high school students (Selgison, Huebner, & Valois, 2003).

Results

- Pearson's correlation analyses were conducted among prosocial, non-drinking, and drinking-related activities and life satisfaction (BMSLSS) items.
- Consistent with the hypothesis, there were significant positive correlations between non-drinking related activities and all domains of the BMSLSS:
 - Family life ($r = .12, p < .005$)
 - Friendships ($r = .17, p < .001$)
 - School experience ($r = .21, p < .001$)
 - Self ($r = .20, p < .001$)
 - Environment ($r = .15, p < .005$)
 - Overall life ($r = .24, p < .001$)
- Consistent with the hypothesis, there were significant positive correlations between prosocial activities and satisfaction with:
 - School experience ($r = .22, p < .001$)
 - Self ($r = .13, p < .05$)
 - Overall life ($r = .16, p < .01$)
- Contrary to the hypothesis, there were significant positive correlations among drinking-centered activities and satisfaction with:
 - Friendships ($r = .17, p < .001$)
 - School experience ($r = .16, p < .001$)
 - Self ($r = .13, p < .005$)
 - Overall life ($r = .18, p < .001$)
- A multiple regression analysis was conducted with BMSLSS as the criterion and prosocial, non-drinking, and drinking related activities as the predictors.
- The predictors in the model accounted for a significant proportion of variance, $R^2 = .08, F(3, 271) = 7.30, p < .001$.
- Consistent with the hypothesis, frequency of participation in non-drinking related activities was a significant contributor to the model, while participation in drinking-related activities did not contribute to the model. Inspection of the beta weight indicates that more frequent participation in these activities were related to overall life satisfaction (See Table 2).
- Contrary to expectations, level of participation in prosocial activities was not related to life satisfaction while accounting for participation in drinking-related and non-drinking related activities.

Table 2.
Overall Life Satisfaction and Social Activity Participation: Multiple Regression Analysis

	B	t	P
Prosocial activities	.08	1.2	.23
Non-drinking related activities	.19	2.8	.007
Drinking related activities	.08	1.2	.24

Discussion

- The goal of this study was to examine life satisfaction and involvement in both drinking and non-drinking related activities among underage drinkers.
- Results revealed partial support for the hypotheses:
 - There were positive correlations among participation in non-drinking related activities and all domains of the BMSLSS (i.e., family, friendships, school, self, environment, and overall life satisfaction).
 - There was a positive association between participating in non-drinking related activities and overall life satisfaction, but not for drinking-related social activities within the regression analysis.
 - Contrary to expectations, level of participation in prosocial activities was not related to life satisfaction while accounting for participation in drinking-related and non-drinking related activities.
- Overall, it appears that when considering a variety of social activities, students who participated more often in non-drinking related activities reported a higher overall life satisfaction. Thus, participation in non-drinking social activities may be the most important factor in adolescents' life satisfaction, even while accounting for prosocial or drinking-centered social activity participation.
- Limitations:
 - First study to use the SAS. Future use of this scale should include an even balance between prosocial, drinking-related, and non-drinking related activities.
 - Among social drinkers, there may be an element of 'wishful thinking' as it relates to reporting drinking frequency as low drinkers tend to overestimate and high drinkers tend to underestimate their drinking habits (Townshend & Duka, 2001; Lemmens, Knibbe, & Tan, 1988).
 - Future studies should address this possibility by forming groups based on types and rate of participation.
- Based on the results of this study, there is preliminary evidence that adolescents who are spending more time in social activities where alcohol is not the primary focus are healthier in terms of well-being across many life domains. Thus, increasing participation in these activities could be a target in intervention.
- Interventions should focus on encouraging prosocial behavior because, as previous literature supports, non-binge drinkers participate more often in activities where drinking is not involved (Catalano, Kosterman, Hawkins, Newcomb, & Abbott, 1996). This shows that being actively involved in non-drinking activities can promote healthy behavior, specifically, refraining from frequent alcohol consumption. Moreover, interventions to decrease frequency of drinking should focus on social groups and peer influence instead of only individual interventions since many of these activities are associated with group participation.

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