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## Daily Use of Protective Behavioral Strategies and Alcohol-Related Outcomes Among College Students

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### Abstract

The purpose of the present study was to examine associations between use of protective behavioral strategies (PBS) and alcohol-related outcomes (alcohol consumption, negative alcohol consequences, and positive alcohol consequences) using a daily diary approach. This approach is less affected by retrospective memory biases than typical self-reports of alcohol-related variables and allows the examination of both between-subject and within-person effects. Using hierarchical linear modeling of data from 40 subjects who completed daily dairies for up to 15 days, we found significant within-person variation in PBS use over time and each type of PBS had unique relationships with alcohol-related outcomes. For example, within-person variation in Serious Harm Reduction, one form of PBS, predicted increased daily alcohol use, negative consequences, and positive consequences. Our findings suggest the importance of intensive longitudinal methods to examine both between-subject and within-subject effects of PBS use and alcohol-related outcomes.

### Keywords

Protective behavioral strategies; alcohol use; positive consequences; negative consequences; daily diary; multilevel modeling; college students

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Protective behavioral strategies (PBS) are cognitive behavioral strategies used to limit alcohol use and/or reduce negative alcohol-related consequences (Martens et al., 2005). Based on between-subject designs, use of PBS has been linked to consuming less alcohol and reporting fewer alcohol consequences (Borden et al., 2011; Martens et al., 2011). Considerable research has shown that PBS is a proximal behavioral mediator of putative antecedents to problematic alcohol use including age of first alcohol use (Palmer, Corbin, & Crouce, 2010), drinking motives (Martens, Ferrier, & Cimini, 2007), conscientiousness (Martens et al., 2009), and depressive symptoms (Martens et al., 2008). Further, at least two randomized controlled trials of alcohol interventions have shown PBS use to mediate intervention effects (Barnett et al., 2007; Larimer et al., 2007). Thus, PBS use appears to protect individuals from the negative effects of alcohol use and appears amenable to change.

In a recent comparison of three published PBS measures, the Protective Behavioral Strategies Survey (PBSS; Martens et al., 2005) was shown to have the strongest factor structure and best concurrent validity with alcohol problems (Pearson, Kite, & Henson, 2012). The PBSS contains three factors: Limiting/Stopping Drinking (e.g., setting limits to one's drinking), Manner of Drinking (e.g., avoiding shots), and Serious Harm Reduction (e.g., using a designated driver). Between-subjects designs have shown each of these subscales is negatively related to various alcohol-related outcomes (Martens et al., 2005; Martens, Pederson et al., 2007; Pearson et al., 2012).

Although research has shown that PBS use is associated with less alcohol use/problems, this association is based entirely on retrospective reports. Retrospective reports are subject to memory biases with time windows as short as one week (Gmel & Daepfen, 2007). The manner in which within-person variability in PBS use is associated with alcohol outcomes is less understood. Given these limitations, the present study utilizes a daily diary approach to assess PBS use and alcohol use/problems. This method allows behavior to be recorded near the time that it occurs and may be less subject to retrospective memory biases (Shiffman, 2009). Moreover, daily diary reports can be examined in a multilevel modeling approach which allows variability in behavior to be decomposed into interindividual variability (i.e., between-subject differences) and intraindividual variability (i.e., within-person changes over time). In a recent study, Lewis et al. (2012) used seven-day retrospective daily reports to examine the associations between PBS use and alcohol use/problems during college students' 21<sup>st</sup> birthday week. Both between-subject and within-subject effects were found for PBS use on alcohol-related outcomes. Specifically, 1) average (i.e., between-subject) and daily (i.e., within-subject) Manner of Drinking PBS were related to less alcohol use and fewer negative alcohol consequences; 2) average Limiting/Stopping Drinking PBS was associated with fewer negative alcohol consequences, whereas the daily variation was related to more alcohol use/problems; and 3) average and daily Serious Harm Reduction PBS was associated with more alcohol use, with the daily assessment also relating to more alcohol problems.

The present study examined relationships between daily use of PBS and alcohol-related outcomes. We know of only one study (Lewis et al., 2012) that has examined both intraindividual and interindividual variation in PBS use. Although several studies have examined the effects of PBS use on alcohol use/problems, to date, no published study has examined whether use of PBS predicts positive consequences from drinking (e.g., reducing tension; Corbin, Morean, & Benedict, 2008). Thus, we examined the predictive effects of both intraindividual and interindividual variability in PBS use on alcohol use, negative alcohol consequences, and positive alcohol consequences. We expected to find a negative relationship between daily PBS use and alcohol use/negative alcohol consequences, but a positive relationship between daily PBS use and positive alcohol consequences.

## Method

Forty-four subjects were recruited from an online Psychology Department participant pool to take part in a study "investigating college student drinking." Subjects were invited to participate if they endorsed at least one alcohol-related problem in the past 90 days on the Brief Young Adult Alcohol Consequences Questionnaire (B-YAACQ; Kahler et al., 2005). Subjects were asked to complete a daily survey for 15 days in exchange for research participation credit that could be used to fulfill an introductory psychology course requirement or extra credit for other courses<sup>1</sup>. Subjects were given \$10 if they completed the survey for all 15 days without backlogging any assessments. After reading a notification statement ensuring the anonymity of their data, subjects consented to participation. Subjects

were emailed daily with a link to the online survey using an anonymous emailing system (see Table 1 for demographics).

Alcohol use was assessed with a single item (“How many standard drinks did you consume in the past 24 hours?”) which followed standard drinks information (e.g., “1 standard drink is equivalent to 12 oz beer OR 5 oz wine OR 1.5 oz shot of liquor straight or in a mixed drink”). PBS were measured with a checklist version (1=yes, 0=no) of the 15-item PBSS (Martens et al., 2005), which assesses three types of strategies: *Limiting/Stopping Drinking* (sum of 7 items; “Determine not to exceed a set number of drinks”), *Manner of Drinking* (sum of 5 items; “Avoid mixing different types of alcohol”), and *Serious Harm Reduction* (sum of 3 items; “Use a designated driver”). Subjects were asked, “Please check a box if you did ENGAGE in the following behaviors when using alcohol or ‘partying’ in that PAST 24 HOURS.” One originally reverse-coded item (“drink shots of liquor”) was reworded so that it was scored in the same direction as other items (“avoided drinking shots of liquor”). Using the same instructions described above for the PBSS, subjects completed a checklist form of the 14-item Positive Drinking Consequences Questionnaire (PDCQ; Corbin, Morean, & Benedict, 2008; e.g., “I approached a person that I probably wouldn’t have spoken to otherwise,” “I stood up for a friend or confronted someone who was in the wrong”). Alcohol-related problems “in the PAST 24 hours” were then assessed using a checklist form of the 48-item Young Adult Alcohol Consequences Questionnaire (YAACQ; Read et al., 2006).

## Results

With 44 subjects reporting their behavior for up to 15 days, respondents could have submitted a total of 660 daily surveys ( $44 \times 15 = 660$ ). We received 621 daily reports (94.1%). Thus, subjects reported behavior for an average of 14.11 days ( $SD = 2.66$ ; range = 2 to 18 days)<sup>2</sup>. Given our focus, we included only drinking days in our analyses, consisting of 164 daily reports from 40 subjects (1 person was dropped due to unknown gender). Thus, subjects recorded an average of 3.73 drinking days ( $SD = 2.76$ ; range = 1 to 12) across the 15-day assessment period. They consumed 3.45 drinks on average per drinking episode ( $SD = 2.56$ ), experienced 2.59 positive consequences ( $SD = 2.36$ ) and 2.55 negative consequences ( $SD = 3.21$ ). See Table 2 for descriptives and correlations among Level 2 study variables (i.e., between-subjects correlations).

All multilevel analyses were conducted in HLM 6.06 (1994–2009). All of our variables were count variables, thus, we conducted our main analyses using a Poisson distribution, allowing for overdispersion; we interpreted unit-specific results using robust standard errors. We conducted a series of normal random effects ANOVAs with each main study variable as the outcome variable to examine the amount of intraindividual versus interindividual variability in each of our variables. There was significant intraindividual variability in all study variables ranging from 29.8% to 50.6% of the total variance (see Table 3).

Across all HLM models (see Table 4), we group-mean centered continuous level 1 predictors and grand-mean centered level 2 predictors so that our level 1 effects are

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<sup>1</sup>The main purpose of the original study was to examine the efficacy of an online alcohol intervention. Control subjects completed the same 5–10 minute survey for 15 days. Prior to completing the daily survey, experimental subjects completed a 20–30 minute alcohol assessment/decisional balance exercise on the 8<sup>th</sup> day of participation designed to allow subjects to realize the benefits of using PBS. There were no significant intervention effects, but we controlled for condition in all analyses.

<sup>2</sup>Nearly half (47.7%) of subjects backlogged at least one assessment (i.e., completed more than one assessment when they missed the previous day’s assessment;  $M = 1.61$ ,  $SD = 2.34$ ), resulting in 11.4% of our total assessments being backlogged. However, it is important to note that subjects were reporting memorable behaviors from at most a few days before, therefore, a decision was made to include backlogged data.

independent of our level 2 effects (Raudenbush & Bryk, 2002). Across all models, we controlled for gender (0=women, 1=men) and intervention condition (0=control, 1=intervention). These covariates were not significantly related to any of the outcomes. In model 1, we examined the predictive effects of daily use of three types of PBS on number of standard drinks consumed per drinking day (level 1); further, we examined the effects of average use of PBS on average number of drinks consumed on drinking days (level 2). In models 2 and 3, we examined the predictive effects of daily use of all three types of PBS and number of drinks on daily negative and positive alcohol-related consequences, respectively (level 1); further, these models examined the effects of average use of PBS and average number of drinks consumed on drinking days on average negative and positive alcohol consequences (level 2). Thus, we examined the effects of PBS on both negative and positive consequences while controlling for the effects of alcohol use.

Results are shown in Table 4. Model 1 (predicting alcohol consumption) showed that average use of Limiting/Stopping Drinking and Manner of Drinking PBS was negatively related to average number of drinks on drinking days, whereas use of Serious Harm Reduction PBS was positively related to average alcohol use. Daily use of Manner of Drinking PBS was negatively associated with number of drinks per day, and use of daily Serious Harm Reduction PBS was positively related to daily alcohol use. That is, across a 15-day period, on days when subjects used more Manner of Drinking strategies, they drank less but when they increased their use of Serious Harm Reduction PBS, they reported more alcohol use. In model 2 (predicting negative consequences), average number of drinks predicted the average number of negative consequences. On days when subjects used more Serious Harm Reduction PBS, they reported more negative consequences. In model 3 (predicting positive consequences), average use of Serious Harm Reduction PBS was positively associated with average positive consequences; Manner of Drinking PBS was negatively associated with average positive consequences. Within-person results indicated that increases of daily use of Limiting/Stopping Drinking and Serious Harm Reduction PBS was positively related to number of positive consequences.

## Discussion

The purpose of the present study was to examine between- and within-person effects of PBS on alcohol use/problems and positive alcohol consequences. The present study had three main contributions: 1) replication of previous between-subject findings, 2) extension of between-subject findings by identifying similar within-person effects, and 3) demonstration of a unique pattern of results regarding PBS use and alcohol-related outcomes that have yet to be seen in the PBS literature.

First, similar to previous research (Martens et al., 2005; Pearson et al., 2012), between-person findings showed that participants who used PBS strategies that involve setting limits on one's drinking (i.e., Limiting/Stopping Drinking) and avoiding behaviors associated with heavy drinking (i.e., Manner of Drinking) reported fewer drinks on drinking days. Thus, our data obtained via a daily diary approach yielded some comparable findings to that based on retrospective reports. An advantage of the daily diary approach, however, is that reports are less affected by retrospective memory bias. In contrast to what was expected, however, neither use of Limiting/Stopping Drinking or Manner of Drinking PBS was associated with negative or positive alcohol consequences. Using more strategies to reduce serious harm (i.e., Serious Harm Reduction) predicted higher positive alcohol consequences.

Second, we extended previous research by demonstrating specific protective within-person effects such that as compared to their typical use, on drinking days when individuals increased their use of Manner of Drinking PBS, they reported reduced alcohol consumption.

Relative to their average use, on days when individuals reduced their use of Limiting/Stopping Drinking PBS, they reported more positive alcohol consequences. Thus, use of PBS may have both between-person and within-person protective effects. Notably, these strategies were unrelated to alcohol problems.

Third, although considerable research has shown that greater PBS use is associated with less alcohol use/problems (Martens et al., 2005; Pearson et al., 2012), our results demonstrate that when individuals increased their use of Serious Harm Reduction PBS (e.g., knowing where your drink is at all times, going home with a friend) than average, they reported more alcohol use/problems and positive consequences. Our results with respect to alcohol use/problems parallel those of Lewis et al. (2012) who also found some positive associations between daily PBS use (Limiting/Stopping Drinking and Serious Harm Reduction) and alcohol use/problems. When one decides to use more Serious Harm Reduction PBS than normal (e.g., planning a designated driver), it may be an indicator that they are intending to drink more than usual, which necessitates the use of such strategies. Because individuals appear to adjust their use of these strategies to accommodate for heavy drinking episodes, future research should examine these associations while controlling for drinking intentions. From an intervention perspective, it is important to ensure that students do not see using certain PBS like planning a designated driver as affording them the opportunity to engage in dangerous levels of drinking.

Our findings regarding the positive associations between use of PBS and positive alcohol consequences provide very preliminary support that using PBS may not only decrease undesirable consequences from drinking, but also increase desirable consequences. Although harm-reduction interventions are generally focused on reducing negative consequences from drinking, college students generally drink to experience positive consequences (i.e., feeling at ease at parties, reducing tension; Corbin et al., 2008). Thus, from an intervention perspective, PBS-focused interventions may be helpful to a broader range of individuals if they emphasize the use of PBS for both reducing the negative consequences of alcohol use and increasing the positive benefits of such use.

The present study has several notable limitations. First, the modest sample size limited the power to detect between-subjects effects ( $df = 33$ ) and to a lesser extent within-subjects effects ( $df = 153$ ). The modest sample size also precluded the examination of level 1 within-person mediation and moderation. Previous research has found PBS use to significantly mediate several predictive effects of putative antecedents to alcohol use/problems (e.g., drinking motives → PBS use → alcohol outcomes; Martens et al., 2007), thus it is important that future investigations examine these within-subject mediated effects. Some research has also shown PBS use to moderate the effects of alcohol use (Benton et al., 2004; Borden et al., 2011) on alcohol problems. Clearly, future research using EMA methods should examine these interaction effects.

Second, the present study used a convenience sample of college students from a psychology department participant pool from a single university, resulting in a sample with substantially different demographics than the college student population as a whole. Seventy percent of the sample were women, 92.5% were non-Greek affiliated, and most were living off-campus. These differences significantly limit the potential generalizability of our results. Although gender did not predict any of the alcohol-related outcomes in the present study, the evidence regarding whether PBS use is more protective for men or women is inconclusive. Benton et al. (2004) found that PBS use reduced the association between alcohol use and alcohol problems for both men and women, but the relationship was stronger for men. In contrast, Lewis et al. (2010) found that PBS use was negatively associated with sex-related negative alcohol consequences for women, but not for men. Thus, it is not clear how our

sample's characteristics (particularly the oversampling of women) may have attenuated or strengthened the associations between PBS use and alcohol-related outcomes.

Third, although our use of a daily diary approach is less likely to be affected by retrospective memory biases than global retrospective reports, ecological momentary assessment (EMA; Shiffman, 2009), in which drinking reports are collected *in situ* while drinking or immediately after drinking using portable electronic devices, may provide an even better technique. Not only can EMA methods further minimize retrospective memory biases, but by sending reminder prompts to participants (e.g., a chirp on a device), they relieve the participant of the prospective memory burden of remembering to log on to a computer to complete daily surveys.

By employing a daily diary design, results of the present study add to the literature demonstrating the importance of considering within-subject variability in both antecedents and consequences of alcohol use. Specifically, the present study found that use of each type of PBS was associated with at least one desirable outcome at the within-subject level (less alcohol use or more positive consequences), but that use of Serious Harm Reduction PBS was also associated with increased alcohol use/problems. Given the preliminary nature of the present study, it is important to continue to examine both within-subject and between-subject relationships between PBS use and alcohol-related outcomes using intensive longitudinal methods.

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**Table 1**

## Demographic Information

	Frequency	Percentage
Gender		
Men	12	30.0%
Women	<b>28</b>	70.0%
Class Status		
Freshman	7	17.5%
Sophomore	7	17.5%
Junior	<b>13</b>	32.5%
Senior	11	27.5%
Graduate	1	2.5%
Missing	1	2.5%
Racial/ethnic group		
African American/Black	6	15.0%
Caucasian/White	<b>31</b>	77.5%
Latino/a	1	2.5%
Other	2	5.0%
Age		
18	3	7.5%
19	<b>9</b>	22.5%
20	7	17.5%
21	1	2.5%
22	4	10.0%
23	2	5.0%
24	3	7.5%
25	1	2.5%
>25	10	25.0%
Living Status		
On-campus dormitory	14	35.0%
Off-campus	<b>22</b>	55.0%
With family	4	10.0%
Greek status		
Not a member	<b>37</b>	92.5%
Member	3	7.5%

*Note.* The baseline data of one participant could not be recovered so the demographics reflect the remaining 40 subjects. The modes are in bold type face for emphasis.

Table 2

## Correlations among Level 2 Study Variables

	1	2	3	4	5	M	SD
1. Limiting/Stopping Drinking PBS						2.11	1.75
2. Manner of Drinking PBS	.56 <sup>*</sup>					2.74	1.69
3. Serious Harm Reduction PBS	.49 <sup>*</sup>	.42 <sup>*</sup>				1.44	0.88
4. Number of Drinks	-.47 <sup>*</sup>	-.39 <sup>*</sup>	-.06			3.45	2.56
5. Negative Consequences	-.06	-.17	.31 <sup>a</sup>	.33 <sup>*</sup>		2.59	2.36
6. Positive Consequences	.05	-.13	.02	.29 <sup>b</sup>	.36 <sup>*</sup>	2.55	3.21

Note. PBS = Protective Behavioral Strategies; N = 41.

<sup>\*</sup>  $p < .05$ ,

<sup>a</sup>  $p = .050$ ,

<sup>b</sup>  $p = .064$

**Table 3**  
Results from Random Effects ANOVAS Showing the Decomposition of Variance into Within-person and Between-person Variability

Statistic	Definition	Protective Behavioral Strategies			Alcohol Use		Alcohol-Related Consequences	
		LSD	MoD	SHR	Drinks	Negative	Positive	
<sup>2</sup>	within-person variability	1.418	1.402	0.532	4.836	3.893	2.365	
<sup>00</sup>	between-person variability	2.377	2.319	0.519	4.886	9.169	4.279	
<i>ICC</i>	proportion of variability that is between persons	0.626	0.623	0.494	0.503	0.702	0.644	
<i>1-ICC</i>	proportion of variability that is within persons	0.374	0.377	0.506	0.497	0.298	0.356	

Note. LSD = Limiting/Stopping Drinking, MoD = Manner of Drinking, SHR = Serious Harm Reduction, *ICC* = Intra-class coefficient

**Table 4**

## Study of the hierarchical linear model

Model 1 (Alcohol Use)

Level 1:

$$\log(\text{Drinks}) = \beta_0 + \beta_1(\text{Limiting/Stopping Drinking}_{\text{within}}) + \beta_2(\text{Manner of Drinking}_{\text{within}}) + \beta_3(\text{Serious Harm Reduction}_{\text{within}})$$

Level 2:

$$\beta_0 = \gamma_{00} + \gamma_{01}(\text{Gender}) + \gamma_{02}(\text{Condition}) + \gamma_{03}(\text{Limiting/Stopping Drinking}_{\text{between}}) + \gamma_{04}(\text{Manner of Drinking}_{\text{between}}) + \gamma_{05}(\text{Serious Harm Reduction}_{\text{between}}) + r_{0i}$$

$$\beta_1 = \gamma_{10}$$

$$\beta_2 = \gamma_{20}$$

$$\beta_3 = \gamma_{30}$$

Model 2 (Negative Consequences) and Model 3 (Positive Consequences)

Level 1:

$$\log(\text{Consequences}) = \beta_0 + \beta_1(\text{Limiting/Stopping Drinking}_{\text{within}}) + \beta_2(\text{Manner of Drinking}_{\text{within}}) + \beta_3(\text{Serious Harm Reduction}_{\text{within}}) + \beta_4(\text{Alcohol Use}_{\text{within}})$$

Level 2:

$$\beta_0 = \gamma_{00} + \gamma_{01}(\text{Gender}) + \gamma_{02}(\text{Condition}) + \gamma_{03}(\text{Limiting/Stopping Drinking}_{\text{between}}) + \gamma_{04}(\text{Manner of Drinking}_{\text{between}}) + \gamma_{05}(\text{Serious Harm Reduction}_{\text{between}}) + \gamma_{06}(\text{Alcohol Use}_{\text{between}}) + r_{0i}$$

$$\beta_1 = \gamma_{10}$$

$$\beta_2 = \gamma_{20}$$

$$\beta_3 = \gamma_{30}$$

$$\beta_4 = \gamma_{40}$$

Note. Gender (0=women, 1=men), Condition (0=control, 1=intervention).

**Table 5**  
 Results from Multilevel Models Predicting Alcohol-related Outcomes from Protective Behavioral Strategies

MODEL 1		95% CI for IRR				
DV: Daily Alcohol Use (# of drinks)	<i>b</i>	<i>p</i>	IRR	Lower	Upper	
Intercept ( .00)	<b>.83</b>	<.001	2.28	1.79	2.92	
Limiting/Stopping Drinking PBS ( .10)	-.10	.121	.90	.80	1.03	
Manner of Drinking PBS ( .20)	<b>-.09</b>	.018	.91	.85	.98	
Serious Harm Reduction PBS ( .30)	<b>.26</b>	<.001	1.29	1.15	1.44	
DV: Average Alcohol Use		<i>b</i>	<i>p</i>	IRR	Lower	Upper
Gender	.28	.188	1.33	.87	2.05	
Intervention Condition	.34	.058	1.40	.99	2.00	
Average Limiting/Stopping Drinking PBS ( .01)	<b>-.17</b>	.004	.85	.76	.94	
Average Manner of Drinking PBS ( .02)	-.14	.019	.87	.78	.98	
Average Serious Harm Reduction PBS ( .03)	<b>.30</b>	.020	1.35	1.05	1.73	
MODEL 2		95% CI for IRR				
DV: Daily Negative Consequences	<i>b</i>	<i>p</i>	IRR	Lower	Upper	
Intercept ( .00)	.17	.541	1.18	.68	2.06	
Limiting/Stopping Drinking PBS ( .10)	.01	.916	1.01	.86	1.19	
Manner of Drinking PBS ( .20)	.06	.462	1.06	.90	1.25	
Serious Harm Reduction PBS ( .30)	<b>.31</b>	.002	1.36	1.13	1.64	
Drinking Quantity ( .40)	.04	.479	1.04	.93	1.17	
DV: Average Negative Consequences		<i>B</i>	<i>p</i>	IRR	Lower	Upper
Gender	.03	.950	1.03	.46	2.31	
Intervention Condition	.44	.267	1.55	.71	3.40	
Average Limiting/Stopping Drinking PBS ( .01)	.13	.531	1.14	.75	1.74	
Average Manner of Drinking PBS( .02)	-.24	.135	.78	.56	1.08	
Average Serious Harm Reduction PBS ( .03)	.34	.232	1.41	.80	2.48	

Average Alcohol Use ( <sub>04</sub> )	<b>.15</b>	.040	1.16	1.01	1.33
MODEL 3					
DV: Daily Positive Consequences	<i>b</i>	<i>p</i>	<i>IRR</i>	95% CI for IRR	
				Lower	Upper
Intercept ( <sub>00</sub> )	<b>.55</b>	.015	1.73	1.12	2.69
Limiting/Stopping Drinking PBS ( <sub>10</sub> )	<b>.14</b>	.019	1.15	1.02	1.29
Manner of Drinking PBS ( <sub>20</sub> )	-.07	.422	.93	.79	1.10
Serious Harm Reduction PBS ( <sub>30</sub> )	<b>.21</b>	.003	1.24	1.08	1.43
Drinking Quantity ( <sub>40</sub> )	-.02	.566	.98	.91	1.05
DV: Average Positive Consequences					
	<i>B</i>	<i>P</i>	<i>IRR</i>	Lower	Upper
Gender	-.02	.962	.98	.41	2.36
Intervention Condition	-.09	.754	.92	.52	1.62
Average Limiting/Stopping Drinking PBS( <sub>01</sub> )	.16	.228	1.18	.90	1.55
Average Manner of Drinking PBS ( <sub>02</sub> )	<b>-.46</b>	.004	.63	.47	.85
Average Serious Harm Reduction PBS ( <sub>03</sub> )	<b>.82</b>	.001	2.27	1.45	3.54
Average Alcohol Use ( <sub>04</sub> )	.06	.291	1.07	.95	1.20

Note. *N* = 40; IRR = Incidence Rate Ratio; CI = Confidence Interval. Significant effects (*p* < .05) are in bold type face for emphasis.