

White Paper

Effectiveness of Abbreviated BASICS on Mandated Alcohol Referrals:

A Feasibility Study

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Abstract

This study analyzes the feasibility and effectiveness of reducing high-risk drinking by mandated alcohol policy violators using an abbreviated form of Brief Alcohol Screening and Intervention for College Students (BASICS) called Mini-BASICS. Mini-BASICS includes completing an online assessment of alcohol and drug use, attending a 30-minute personalized feedback session (PFS), and completing online follow-up surveys. During 2012, 337 undergraduates participated. Analyzed data indicated a 53% reduction in total drinks during their heaviest drinking episode for up to 12 months post intervention.

Keywords: undergraduates, college students, alcohol, BASICS, mandated, intervention

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Description of Referral and Intervention

High-risk drinking continues to be a significant public health problem on college campuses with 40% of college students engaging in high-risk drinking (U.S. Department of Health and Human Services, 2007). The National Institute of Health (NIH, 2011) defined binge drinking for women as four or more servings and for men as five or more servings of alcohol in one day. The National Institute on Alcohol Abuse and Alcoholism (NIAAA, 2013) estimated that college students (age 18–24) annually experience numerous negative consequences secondary to high-risk drinking: 1,825 deaths, 599,000 injuries, 696,000 assaults, and 97,000 alcohol-related sexual assaults (Hingson, Zha, & Weitzman, 2009).

With over 40 randomized controlled trials validating its effectiveness (Cronce & Larimer, 2011; Kilmer, 2013; Larimer & Cronce, 2002; 2007; Turrise et al., 2009), the Brief Alcohol Screening and Intervention for College Students (Dimeff, Baer, Kivlahan, & Marlatt, 1999), commonly known as BASICS is a NIAAA Tier 1 evidence-based intervention for problem student drinkers (Dejong, Larimer, Wood, & Hartman, 2009). The BASICS uses a combination of education, normative data, clinically validated tools, and motivational interviewing techniques to facilitate the reduction of high-risk drinking. On many college campuses, students are invited to participate in BASICS when they have had an alcohol incident involving the college judicial system, medical services, or law enforcement (Difulvio, Linowski, Mazziotti, & Puleo, 2012). The intervention consists of an online assessment followed by a personalized feedback session (PFS), which includes brief motivational interviewing techniques. Using a non-judgmental approach and motivational skills, the BASICS provider assists the student to challenge drinking

expectations, provides normative feedback, and helps to identify barriers to change. Typically, BASICS sessions are comprised of one or more 60-minute interviews (Carey, Carey, Maisto, & Henson, 2006). Mini-BASICS can be accomplished using less than half the time and/or resources than traditional BASICS (Bowden, 2016). Review of the literature shows evidence that even a ten-minute intervention can affect short-term alcohol use outcomes (Kulesza, Apperson, Larimer, & Copeland, 2010). The purpose of this feasibility study was to investigate the effectiveness of Mini-BASICS, an abbreviated 30-minute PFS with students who experienced an alcohol policy violation incident. The long-term success of the abbreviated intervention in reducing alcohol consumption was explored by examining data collected for up to 12 months after the alcohol incident.

Methods

Implementation Protocol

Students were sent an email invitation to complete the online assessment within one business day of experiencing an alcohol event. Events involved encounters with campus security authorities, medical personnel, and/or law enforcement for alcohol intoxication. Upon completing the 20-minute online assessment, students scheduled a PFS with a licensed clinician. Mini-BASICS sessions typically lasted less than 30 minutes and occurred within two weeks of the alcohol incident. The PFS involved reviewing the personalized feedback report generated by the online assessment and was divided into three progressive segments: introduction, information exchange, and summation. During the introduction, the BASICS harm reduction approach is affirmed, and the reason for participation is clarified. Information exchange involves illuminating discrepancies and increasing the student's understanding of the effects of alcohol. Summation encourages and solidifies the student's quantitative use goals. In the spirit of motivational

interviewing (Miller & Rollnick, 2013), the provider maintains a non-biased, student-centered approach throughout the session.

The college contracted with an external vendor (BluSky, 2016) to administer the online assessment and manage follow-up communication with students. Invitations to complete assessments occurred automatically at 3-, 6-, and 12-month intervals after the initial online assessment was completed. The program evaluation was exempt from the Committee for the Protection of Human Subjects.

Participants

Students from one small New England college participated in the program. All students (337) who were identified as having an alcohol policy violation incident that occurred during the calendar year of 2012 were mandated to participate in Mini-BASICS. Following the protocol above, 311 (92%) of the 337 students who experienced an incident completed the baseline assessment and a 30-minute PFS with the BASICS provider. At 3 months, 60% (186) of the original cohort completed the online follow-up assessment. Engagement of the cohort decreased to 47% (147) at 6 months and to 36% (113) at 12 months. No incentives or mandates were provided to participants to complete follow-up online assessments.

Data Collection and Analysis

Students' responses to the online assessment at baseline, 3, 6, and 12 months were used to investigate the effectiveness of the Mini-BASICS program. Online assessment data were downloaded from the BluSky website by staff of the Office of Institutional Research at the college. Demographic variables were obtained from institutional data and were combined with the assessment information. For each series, data included the assessment at baseline, 3, 6, and 12 months, if available.

Demographic Data

Demographic data included gender, race/ethnicity, class year, and varsity athlete status. Class year was included as a demographic measure because it represents another form of group identity and serves as a proxy for age and ability to legally acquire alcohol.

Alcohol Consumption Variables

Data from the online assessment included student responses to questions about alcohol consumption and the harmful consequences of alcohol use. Most of the variables addressed the quantity and frequency of alcohol consumption. Standard drinks and timeframes for consumption were clearly defined in the survey instrument. A standard drink was defined within the online assessment as: 12 ounces of beer, 5 ounces of wine, or 1.5 ounces of eighty-proof spirits. The Alcohol Use Disorders Identification Test (AUDIT) is a simple method of screening for excessive drinking and was included in the online assessment (Allen, Reinert, & Volk, 2001).

The AUDIT scores range from 0 to 40, with scores of 8 or more indicating risky alcohol use. The Consequences Risk Score (Read, Kahler, Strong, & Colder, 2006) is the sum of affirmative responses to 24 harmful consequences that might have occurred as a result of drinking during the last year (Table 1).

Statistical Analyses

Data were analyzed using SAS 9.3. Repeated-measures analysis of variance (ANOVA) followed by post-hoc contrasts were used to determine whether there were significant reductions in alcohol consumption between the baseline, 3-month, 6-month, and 12-month timeframes. Cohen's *d* (2013) for repeated measures provides an indicator of the size of the difference.

Results

Participant Demographics

Over half of the participants (54%) were Caucasian, 32% were students of color, and 6% were international students. There were more men than women (61% vs. 39%). More students were second-year students (Class of 2015, 42%) than other class-year students. Thirty-five percent of the respondents were varsity athletes. The racial/ethnic composition of the participants generally remained static across data collection time points. At 12 months, international students dropped from the cohort at greater rates than other groups. Male attrition from the cohort at 12 months was greater than female attrition. Fourth-year and fifth-year students also exited at greater rates, while second-year and third-year students remained in the cohort in larger numbers. In general, athletes stayed in the cohort throughout the study. Since most of the eligible¹ students were members of a Greek organization (~80%), this variable was not included in the table and analyses (Table 2).

Effects of Mini-BASICS at 3 Months

At 3 months post intervention, 186 (60%) students had completed the assessment. With the exception of the heaviest wine-drinking episodes and the Consequence Risk Score, all other repeated-measure ANOVA tests (baseline vs. 3 months) showed significant differences. Reductions were found in reports of the amount of alcohol consumed and the number of days/hours that students consumed alcohol (Table 3). Many effect sizes (Morris & DeShon, 2002) were medium to large ($d \geq 0.5$). At their heaviest drinking episodes, students reported consuming more shots and beer than other types of alcohol. On average, at their heaviest drinking episodes, students drank 3.52 shots at baseline and 1.15 shots at 3 months ($t = 7.86$,

¹ Students are not eligible for Greek membership until their second year.

$p < .0001$). While the average consumption of beer was similar to consumption of shots at baseline ($\bar{x} = 3.81$), the decrease at 3 months was less prominent with an average of 2.48 beers ($t = 4.53, p < .0001$).

At baseline, students reported consuming eight to nine drinks per week and about 36 drinks a month. After Mini-BASICS, consumption dropped to an average of five drinks per week and 20 per month. Students reported drinking an average of six hours a week and approximately seven days a month at baseline. Post Mini-BASICS, the average reported hours of drinking dropped to four hours per week and less than six days per month. Heaviest drinking episodes lasted an average of four hours at baseline and dropped to less than three hours post Mini-BASICS intervention.

There was not a statistically significant reduction in the Consequences Risk Score. This measure is less sensitive to the effect of the intervention than the other measures used in this study because it is based on a broader timeframe (previous year), and the response options are on a binary response scale.

During the first 3 months of the program, 60% of the cohort persisted. Using alcohol consumption data from the baseline survey, we compared the survey completers and non-completers. There were no statistically significant differences on these measures for students who persisted in the cohort and those who did not.

Effect of Mini-BASICS at 6 Months

Six months after the Mini-BASICS intervention, 47% ($n = 147$) of the original cohort completed the assessment. All repeated-measure ANOVA tests (baseline vs. 3 months vs. 6 months) were significant except for the heaviest wine-drinking episodes. We continued to find significant reductions in the reported amount of alcohol consumed, the number of days that

students drank, and the number of hours spent drinking (Table 4). Students reported a reduction in consumption of shots from an average of 3.66 at baseline to an average of 1.05 at 3 months and 0.87 at 6 months. The total number of drinks consumed on the heaviest drinking occasion in the past 30 days dropped from an average of 7.69 at baseline to 3.54 at 3 months, and then increased slightly to 3.56 at 6 months. The reductions in the average hours spent drinking and the number of drinking days per month were statistically significant ($p < .01$).

Students also reported a reduction in alcohol-related consequences from 5.22 at baseline to 4.42 at 6 months (Table 4). Post-hoc tests showed that many of the effect sizes at 6 months were medium to large ($d \geq 0.50$). For most of the measures, the differences between the 3-month and 6-month time periods were not significant with the exception of the Consequences Risk Score ($p < .01$).

Using data from the baseline assessment, the program completers and non-completers at 6 months were compared. There were no significant differences in the baseline quantity and frequency of alcohol use between the students who completed an assessment at 6 months compared to those that did not.

Effect of Mini-BASICS at 12 Months

At 12 months post intervention, 36% of the original cohort completed the online assessment. Again, all repeated-measure ANOVA tests (baseline vs. 3 months vs. 6 months vs. 12 months) were significant except for the heaviest wine-drinking episodes. The results suggest that for this group of students, Mini-BASICS is a highly effective intervention for reducing the frequency and quantity of alcohol consumption. Compared to the baseline, reports of the amount of alcohol consumed, the number of drinking days, and the number of drinking hours were lower at all time points. Post-hoc tests showed that over 60% of the effect sizes were medium to large

($d > 0.5$) at 12 months. Students reported a 53% reduction (8.10 to 3.81) in the total number of drinks on their heaviest drinking episode and a 38% reduction (7.96 to 4.97) in the average number of drinks consumed per week.

For several of the metrics, we saw increases in alcohol consumption beginning at 6 months, although most of these increases did not reach statistical significance. The exception was drinking days per month, which dropped at 3 months and then increased significantly to almost 6 days per month at 6 months ($p < .05$) and at 12 months ($p < .05$). The AUDIT score continued to decrease significantly over time (Table 5).

Program completers and non-completers at 12 months were compared using alcohol consumption data from the baseline assessment. Most measures were not significant. However, the completers were more likely than non-completers to report greater consumption of shots and more consequences of their drinking at the baseline (Table 6).

Discussion

There is a sizable body of literature establishing the effectiveness of BASICS in reducing harmful alcohol consumption in college students (Fachini, Aliane, Martinez, & Furtado, 2012). This feasibility study demonstrates the effectiveness of an abbreviated version of BASICS with this population. In addition to reducing the time between the alcohol incident and engagement with a BASICS provider (typically two weeks), the content and focus of the Mini-BASICS sessions were streamlined to shorten the session length to half an hour. Decreasing staff time and increasing efficiency with this type of abbreviated/shortened version of BASICS can allow for expanded services within college counseling centers and/or departments that seek to establish an evidence-based alcohol harm reduction program (NIAAA, 2016). Examining the effect of reducing the time between the incident and intervention is an area for further study.

At 3, 6, and 12 months after the Mini-BASICS intervention, there were significant reductions in students' reports of the quantity and frequency of alcohol consumption. The reductions were noted at the 3-month mark and persisted through 12 months for some of the students. Kulesza and colleagues (2010) reported significant reductions in the number of drinks consumed and hours spent drinking each day of the week, as measured by the Daily Drinking Questionnaire (DDQ). They found that at the 1-month follow-up, the DDQ score for the group receiving a 10-minute BASICS intervention was significantly lower than that of the control group, and the effect size was similar to what we report ($d = .53$). Our results went further to demonstrate the persistence of an effect 12 months post intervention. Specifically, students reported a 53% reduction in the total number of drinks on their heaviest drinking episode and a 38% reduction in the average number of drinks consumed per week. Of note, 35% of the participants were varsity athletes, and approximately 80% were members of Greek organizations. Both of these groups are known to be at high risk for alcohol misuse, and reduction of high-risk drinking in these populations may affect behaviors in other groups (Borsari & Carey, 2001; Larimer et al., 2001).

One limitation of the study is attrition, with only 36% of the group completing the one-year assessment. Although analyses comparing completers and non-completers at 3 months and 6 months using baseline data show no significant differences between groups, a higher cohort retention rate at 12 months would lead to greater external validity and the ability to generalize our findings to a larger population. One exception to the lack of differences between program completers and non-completers at 12 months was that completers reported greater consumption of shots and more consequences of their alcohol use at the baseline. This finding is unexpected; previous work has found that more problematic drinkers tend to disengage and exit alcohol

treatment programs prematurely (Abrams, Kolligian, Mills, & DeJong, 2011). Although repeated-measures ANOVA may be a simplistic approach to modeling this complex issue, we found similar results when we controlled for gender, race/ethnicity, and class year by entering them as covariates.

Another concern is the cohort includes students from one New England college, thus external validity is limited. Finally, the analysis relies on self-reported data. Research supports reasonable reliability and validity of self-reports of alcohol consumption; however, response accuracy may be influenced by social context factors, and response bias may be associated with different patterns of drinking (Boca & Darkes, 2003).

Conclusion

This feasibility study provides significant evidence that an abbreviated form of BASICS (Mini-BASICS) successfully decreases the reported quantity and frequency of drinking. Furthermore, the results show that this intervention has lasting effects on reported alcohol consumption for up to a year.

There has been national recognition of the problem (Kilmer, Crouce, & Larimer, 2014) and calls to reduce high-risk drinking among college-age students (Hingson & White, 2014). Given the financial constraints that most institutions of higher education currently face, this shorten version of an evidence-based approach provides an effective intervention for reducing alcohol consumption in a more efficient and cost effective manner.

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Tables

Table 1: *Variables and definitions.*

Item	Definition /Question
Heaviest drinking: BEER	Standard drink size is defined and supported with images within the narrative of the electronic survey as either 12 ounces of beer, 5 ounces of wine, or 1.5 ounces of eighty-proof spirits. Think of the time you drank the most in the past 30 days. Please fill in the number of standard drinks of each type you consumed and the number of hours you spent drinking on that occasion.
Heaviest drinking: SHOTS	
Heaviest drinking: WINE	
Heaviest drinking: HOURS	
Heaviest drinking: SUM	Sum of heaviest drinking of beer, wine, and shots
Drink count week 1: SUM	Number of drinks consumed during Week 1 (Sunday to Saturday)
Drink count week 2: SUM	Number of drinks consumed during Week 2 (Sunday to Saturday)
Drink count/month: SUM	Sum of drinks consumed in a month
Average drinks/week	Average number of drinks consumed per week
Average hours/week	Average hours per week consuming alcohol
Drinking days/month	Number of days that alcohol was consumed in a month
AUDIT 3	{During the past year} How often do you have six or more standard drinks on one occasion? <i>1=Never; 2=Less than monthly; 3=Monthly; 4=Weekly; 5=Daily or almost daily</i>
AUDIT Score	{During the past year} Alcohol Use Disorders Identification Test (AUDIT) calculated from 10 questions
Consequence Risk Score	Sum of 24 harmful consequences that might have occurred as a result of drinking during the last year

Table 2: *Demographics of participants.*

Demographics		Baseline	3 Months	6 Months	12 Months
		Number (%)	Number (%)	Number (%)	Number (%)
Race Ethnicity	International	19 (6%)	7 (4%)	7 (5%)	2 (2%)
	Minority	98 (32%)	55 (30%)	45(31%)	37 (33%)
Citizenship	Unknown	27 (9%)	18 (10%)	15 (10%)	8 (7%)
	White	167 (54%)	106 (57%)	80 (54%)	66 (58%)
Gender	Female	120 (39%)	74 (40%)	58 (39%)	51 (45%)
	Male	191 (61%)	112 (60%)	89 (61%)	62 (55%)
Class Year	5 th Year (2012)	25 (8%)	8 (4%)	4 (3%)	4 (4%)
	4 th Year (2013)	37 (12%)	24 (13%)	23 (16%)	11 (10%)
	3 rd Year (2014)	53 (17%)	30 (16%)	30 (20%)	24 (21%)
	2 nd Year (2015)	131 (42%)	81 (44%)	61 (42%)	54 (48%)
	1 st Year (2016)	56 (18%)	39 (21%)	27 (18%)	18 (16%)
	Other*	9 (3%)	4 (2%)	2 (1%)	2 (2%)
Varsity Athlete	Yes	109 (35%)	65 (35%)	46 (31%)	34 (30%)
	N	311	186	147	113

*Students are in classes not listed.

Table 3: Average scores of standard drinks at baseline and 3 months.²

Item	Average		Repeated Measure Test Results: Overall		Post-Hoc Test Difference (Baseline-3 months)	
	Baseline	3 month	F-value	ProbF	T _{dif}	d
Heaviest drinking: SHOTS	3.52	1.15	61.77	<.0001	7.86***	0.58
Heaviest drinking: WINE	0.56	0.33	2.59	0.1093	1.61	0.12
Heaviest drinking: BEERS	3.81	2.48	20.52	<.0001	4.53***	0.33
Heaviest drinking: HOURS	3.99	2.92	7.24	0.0078	2.69*	0.20
Heaviest drinking: SUM	7.88	3.96	168.19	<.0001	12.97***	0.95
Drink count week 1: SUM	8.58	5.14	50.31	<.0001	7.09***	0.52
Drink count week 2: SUM	9.17	5.10	73.37	<.0001	8.57***	0.63
Drink count per month: SUM	35.50	20.47	71.94	<.0001	8.48***	0.62
Average hours per week	5.96	4.26	31.93	<.0001	5.65***	0.41
Average drinks per week	8.88	5.13	71.03	<.0001	8.43***	0.62
Drinking days per month	7.28	5.50	34.15	<.0001	5.84***	0.43
AUDIT 3	2.45	2.13	26.08	<.0001	5.11***	0.37
AUDIT Score	7.50	6.56	17.82	<.0001	4.22***	0.31
Consequence Risk Score	5.25	5.14	0.21	0.6448	0.46	0.03
N completed baseline and 3 months	186	186				

² It is unnecessary to do a post-hoc test for two-group comparisons. We did it to be consistent with the following three-group and four-group comparisons and to show the Cohen's *d* effect size.

Note: †*p* < .05; **p* < .01; ***p* < .001; ****p* < .0001. Cohen's *d* was calculated using a repeated-measure formula, which accounts for dependency between groups. Cohen's *d* is an effect size measure of change between BASICS surveys at baseline and 3 months.

Interpretation: Small: *d* = .20; Medium: *d* = .50; Large: *d* = .80.

Table 4: Average scores of standard drinks at baseline, 3 months, and 6 months.

Item	Average			Repeated-Measure Test Results: Overall		Post-Hoc Tests			
						Difference Baseline-3 Months)		Difference (Baseline-6 Months)	
	Baseline	3 Months	6 Months	F-value	ProbF	T _{dif}	d	T _{dif}	d
Heavies drinking: SHOTS	3.66	1.05	0.87	45.78	<.0001	7.99***	0.75	8.55***	0.80
Heaviest drinking: WINE	0.46	0.28	0.39	0.86	0.4230	1.30	0.12	0.48	0.04
Heaviest drinking: BEER	3.57	2.21	2.30	11.73	<.0001	4.33***	0.41	4.05***	0.38
Heaviest drinking: HOURS	4.04	2.80	2.75	4.29	0.0148	2.48†	0.23	2.59*	0.24
Heaviest drinking: SUM	7.69	3.54	3.56	96.54	<.0001	12.06***	1.13	12.01***	1.12
Drink count week 1: SUM	7.93	4.59	4.84	30.59	<.0001	7.03***	0.66	6.49***	0.61
Drink count week 2: SUM	8.37	4.42	4.54	39.97	<.0001	7.86***	0.74	7.62***	0.71
Drink count/month: SUM	32.59	18.02	18.77	41.83	<.0001	8.12***	0.76	7.70***	0.72
Average hours/week	5.63	3.98	4.14	13.98	<.0001	4.81***	0.45	4.31***	0.40
Average drinks/week	8.15	4.52	4.69	41.41	<.0001	8.05***	0.75	7.69***	0.72
Drinking days/month	7.05	5.15	5.82	13.35	<.0001	5.09***	0.48	3.30*	0.31

Item	Average			Repeated-Measure Test Results: Overall		Post-Hoc Tests			
						Difference (Baseline-3 Months)		Difference (Baseline-6 Months)	
	Baseline	3 Months	6 Months	F-value	ProbF	T _{dif}	d	T _{dif}	d
AUDIT 3	2.40	2.06	2.07	14.66	<.0001	4.75***	0.44	4.62***	0.43
AUDIT Score	7.44	6.59	6.37	8.13	0.0004	3.02*	0.28	3.82**	0.36
Consequence Risk Score	5.22	5.40	4.42	4.05	0.0188	-0.51	-	2.19†	0.20
N completed at baseline, 3 months, and 6 months	114	114	114						

¹ Note: † $p < .05$; * $p < .01$; ** $p < .001$; *** $p < .0001$. Cohen's d was calculated using a repeated-measure formula, which accounts for dependency between groups. Cohen's d is an effect size measure of change between BASICS surveys at baseline, 3 months, and 6 months. Interpretation: Small: $d = .20$; Medium: $d = .50$; Large: $d = .80$.

Table 5: Average scores of standard drinks at baseline, 3 months, 6 months, and 12 months.

Item	Average				Repeated-Measure Test Results: Overall		Post-Hoc Tests					
							Difference (Baseline-3 Months)		Difference (Baseline – 6 Months)		Difference (Baseline-12 Months)	
	Baseline	3 Months	6 Months	12 Months	F-value	ProbF	T _{dif}	d	T _{dif}	d	T _{dif}	d
Heaviest drinking:	4.07	0.91	0.83	0.81	33.99	<.0001	8.09***	0.93	8.30***	0.96	8.33***	0.96
Heaviest drinking:	0.54	0.23	0.49	0.59	1.61	0.1879	1.74	0.20	0.26	0.03	-0.26	-
Heaviest drinking:	3.49	2.25	2.21	2.41	5.75	0.0008	3.46**	0.40	3.57**	0.41	3.03*	0.35
Heaviest drinking:	4.43	2.65	2.74	2.76	3.25	0.0227	2.64*	0.30	2.51†	0.29	2.48†	0.29
Heaviest drinking:	8.10	3.39	3.53	3.81	66.62	<.0001	11.99***	1.38	11.62***	1.34	10.92***	1.26
Drink count week 1:	7.87	4.25	4.71	5.09	15.93	<.0001	6.26***	0.72	5.48***	0.63	4.81***	0.56
Drink count week 2:	8.05	4.12	4.67	4.84	17.84	<.0001	6.59***	0.76	5.68***	0.66	5.39***	0.62
Drink count/month:	31.85	16.75	18.75	19.8	20.12	<.0001	7.02***	0.81	6.09***	0.70	5.57***	0.64
Average hours/week	5.50	3.63	4.27	4.57	5.67	0.0009	4.05***	0.47	2.67*	0.31	2.00†	0.23
Average drinks/week	7.96	4.19	4.69	4.97	20.13	<.0001	7.02***	0.81	6.09***	0.70	5.57***	0.64

Item	Average				Repeated-Measure Test Results: Overall		Post-Hoc Tests					
							Difference (Baseline-3 Months)		Difference (Baseline – 6 Months)		Difference (Baseline-12 Months)	
	Baseline	3 Months	6 Months	12 Months	F-value	ProbF	T _{dif}	d	T _{dif}	d	T _{dif}	d
Drinking days/month	6.83	4.64	5.71	5.71	7.80	<.0001	4.84***	0.56	2.48†	0.29	2.48†	0.29
AUDIT 3	2.39	2.00	2.04	1.95	9.05	<.0001	4.13***	0.48	3.70**	0.43	4.70***	0.54
AUDIT Score	7.47	6.59	6.39	5.37	11.11	<.0001	2.41†	0.28	2.96*	0.34	5.74***	0.66
Consequence Risk	5.45	5.61	4.17	2.93	17.27	<.0001	-0.38	-	3.01*	0.35	5.92***	0.68
N completed baseline and 3, 6, and 12 months	75	75	75	75								

Note: † $p < .05$; * $p < .01$; ** $p < .001$; *** $p < .0001$. Cohen's d was calculated using a repeated-measure formula, which accounts for dependency between groups. Cohen's d is an effect size measure of change between BASICS surveys at baseline, 3 months, 6 months, and 12 months. Interpretation: Small: $d = .20$; Medium: $d = .50$; Large: $d = .80$.

Table 6: *Completers vs. non-completers at 12 months using baseline basics assessment data.*

Items	Non-completer	Completer	ProbF	η^2
Heaviest drinking: SHOTS	3.08	3.91	0.04	0.01
Heaviest drinking: WINE	0.47	0.49	0.92	0.00
Heaviest drinking: BEER	3.98	3.56	0.38	0.00
Heaviest drinking: HOURS	3.82	4.20	0.47	0.00
Heaviest drinking: SUM	7.54	7.96	0.42	0.00
Drink count week 1: SUM	9.57	8.25	0.19	0.01
Drink count week 2: SUM	9.75	8.62	0.23	0.00
Drink count/month: SUM	38.60	33.70	0.19	0.01
Average hours/week	6.73	5.73	0.07	0.01
Average drinks/week	9.66	8.43	0.19	0.01
Drinking days/month	7.90	6.96	0.06	0.01
AUDIT 3	2.44	2.38	0.61	0.00
AUDIT Score	7.37	7.72	0.50	0.00
Consequence Risk Score	4.79	5.82	0.03	0.02
Count	198	113		

Note: Effect Size η^2 is the percentage of variance explained by completer vs. non-completer. Effect Size $\eta^2 = \text{between-groups sum of squares} / \text{total sum of squares}$. $\eta^2 = .01 \sim \text{small}$; $\eta^2 = .06 \sim \text{medium}$, $\eta^2 = .14 \sim \text{large}$.