Analysis: Part 1a

January 18, 2021

## 1 Hypotheses

(H1a): More permissive peer drinking norms are associated with an increase in alcohol misuse among young adults transitioning from college to work

(H4) The effect of drinking norms on alcohol misuse intensifies over time: It is stronger during the late onboarding phase than the early onboarding phase.

(H5): During the early onboarding phase, the effect of peer drinking norms on employee alcohol misuse is moderated by psychological distress such that its effect on alcohol misuse is attenuated as a function of psychological distress.

#### 2 Drinking Norms Variables

- Perceived injunctive work place drinking norms: mean of wnw111 and wnw114
- Perceived descriptive work place drinking norms: mean of wnw116 and wnw117

wnw111	wnw114	wnw116	wnw117
Please indicate the	Please indicate the	In the past month, how	In the past month, how
degree to which these	degree to which these	many of your closest	many of your closest
others, not you,	others, not you,	friends and colleagues	friends and colleagues
disapprove/approve of	disapprove/approve of	at work: Consumed 1-2	at work: Consumed at
the various patterns of	the various patterns of	servings of alcohol	least one serving of
alcohol consumption	alcohol consumption	within an hour before	alcohol during the work
described. What is the	described. What is the	starting work?	day?
extent you believe:	extent you believe:		
Your closest friends at	Your closest friends and		
work would	colleagues at work		
approve/disapprove	would		
were you to have $1-2$	approve/disapprove		
servings of alcohol	were you to have $1-2$		
within an hour of	servings of alcohol at		
coming to work?	work?		
1: Disapprove very	1: Disapprove very	1: None; 5: All	1: None; 5: All
much; 5: Approve	much; 5: Approve		
very much	very much		

# 3 Outcome: RAPI

## 3.1 Injunctive Drinking Norms

Table 2: Outcome: Rutgers Alcohol Problem Index;  $\mathcal{N}=914$ 

Parameter	Estimates	SE	p-value
(Intercept)	0.893	0.123	0.000
sex	-0.234	0.101	0.021
race	-0.168	0.108	0.120
age	0.071	0.055	0.201
baseline rutgers	0.280	0.044	0.000
baseline social desirability	-0.051	0.064	0.425
baseline impulsivity	0.129	0.052	0.014
lifestress	0.163	0.051	0.001
injunctive workplace norms	0.161	0.043	0.000

Table 3: Outcome: Rutgers Alcohol Problem Index; N=914

Parameter	Estimates	SE	p-value
(Intercept)	0.813	0.125	0.000
sex	-0.231	0.102	0.024
race	-0.166	0.108	0.127
age	0.073	0.055	0.181
baseline rutgers	0.279	0.045	0.000
baseline social desirability	-0.052	0.065	0.425
baseline impulsivity	0.129	0.053	0.014
lifestress	0.165	0.050	0.001
$_{ m time}$	0.150	0.060	0.012
injunctive workplace norms	0.170	0.049	0.000
time x injunctive workplace norms	-0.016	0.066	0.803

Table 4: Outcome: Rutgers Alcohol Problem Index; N=913

Parameter	Estimates	SE	p-value
(Intercept)	0.802	0.114	0.000
sex	-0.316	0.098	0.001
race	-0.119	0.100	0.234
age	0.080	0.052	0.127
baseline rutgers	0.288	0.038	0.000
baseline social desirability	-0.034	0.062	0.578
baseline impulsivity	0.063	0.054	0.239
lifestress	0.102	0.049	0.039
$_{ m time}$	0.141	0.057	0.013
injunctive workplace norms	0.103	0.045	0.021
DASS	0.199	0.049	0.000
injunctive workplace norms x DASS	0.084	0.035	0.015
time x injunctive workplace norms	0.041	0.062	0.507
$time \times DASS$	0.087	0.066	0.183
time x injunctive workplace norms x DASS	-0.077	0.050	0.121

Table 5: Outcome: Rutgers Alcohol Problem Index; N=913

parameter	est	SE	Z	pval	LB95	UB95
At early onboarding phase: effect of norms at low DASS	0.0188	0.0648	0.2894	0.7723	-0.1083	0.1458
At early onboarding phase: effect of norms at moderate DASS	0.1030	0.0446	2.3109	0.0208	0.0156	0.1904
At early onboarding phase: effect of norms at high DASS	0.1873	0.0466	4.0198	0.0001	0.0960	0.2786

### 3.2 Descriptive Drinking Norms

Table 6: Outcome: Rutgers Alcohol Problem Index;  $\mathcal{N}=914$ 

Parameter	Estimates	SE	p-value
(Intercept)	0.877	0.117	0.000
sex	-0.211	0.099	0.033
race	-0.172	0.111	0.120
age	0.061	0.053	0.249
baseline rutgers	0.280	0.047	0.000
baseline social desirability	-0.059	0.062	0.341
baseline impulsivity	0.119	0.049	0.015
lifestress	0.156	0.052	0.003
descriptive workplace norms	0.190	0.050	0.000

Table 7: Outcome: Rutgers Alcohol Problem Index;  $\mathcal{N}=914$ 

Parameter	Estimates	SE	p-value
(Intercept)	0.810	0.120	0.000
sex	-0.212	0.099	0.032
race	-0.170	0.111	0.126
age	0.061	0.050	0.222
baseline rutgers	0.279	0.047	0.000
baseline social desirability	-0.060	0.062	0.334
baseline impulsivity	0.119	0.049	0.015
lifestress	0.157	0.052	0.003
$\operatorname{time}$	0.130	0.059	0.027
descriptive workplace norms	0.193	0.053	0.000
time x descriptive workplace norms	-0.010	0.076	0.895

Table 8: Outcome: Rutgers Alcohol Problem Index; N = 913  $\,$ 

Parameter	Estimates	SE	p-value
(Intercept)	0.796	0.109	0.000
sex	-0.287	0.089	0.001
race	-0.140	0.102	0.169
age	0.058	0.048	0.232
baseline rutgers	0.299	0.038	0.000
baseline social desirability	-0.041	0.059	0.491
baseline impulsivity	0.052	0.050	0.299
lifestress	0.091	0.047	0.052
$\operatorname{time}$	0.126	0.057	0.028
descriptive workplace norms	0.151	0.046	0.001
DASS	0.235	0.051	0.000
descriptive workplace norms x DASS	0.057	0.040	0.158
time x descriptive workplace norms	0.000	0.070	0.995
$time \times DASS$	0.008	0.059	0.889
time x descriptive workplace norms x DASS	0.028	0.072	0.694

Table 9: Outcome: Rutgers Alcohol Problem Index; N=913

parameter	est	SE	Z	pval	LB95	UB95
At early onboarding phase: effect of norms at low DASS	0.0940	0.0649	1.4480	0.1476	-0.0332	0.2213
At early onboarding phase: effect of norms at moderate DASS	0.1506	0.0457	3.2959	0.0010	0.0611	0.2402
At early onboarding phase: effect of norms at high DASS	0.2072	0.0563	3.6807	0.0002	0.0969	0.3176

## 4 Outcome: HED

## 4.1 Injunctive Drinking Norms

Table 10: Outcome: No. of Days in the Past Month with Heavy Episodic Drinking; N=1143

Parameter	Estimates	SE	p-value
(Intercept)	0.442	0.082	0.000
sex	-0.169	0.069	0.014
race	0.275	0.080	0.001
age	0.009	0.038	0.818
baseline HED	0.408	0.030	0.000
baseline social desirability	-0.031	0.038	0.415
baseline impulsivity	0.038	0.035	0.267
lifestress	0.078	0.028	0.005
injunctive workplace norms	0.047	0.032	0.135

Table 11: Outcome: No. of Days in the Past Month with Heavy Episodic Drinking; N=1143

Parameter	Estimates	SE	p-value
(Intercept)	0.428	0.086	0.000
sex	-0.170	0.069	0.014
race	0.277	0.080	0.001
age	0.006	0.038	0.879
baseline HED	0.409	0.030	0.000
baseline social desirability	-0.031	0.038	0.418
baseline impulsivity	0.039	0.035	0.260
lifestress	0.076	0.028	0.006
$_{ m time}$	0.025	0.038	0.523
injunctive workplace norms	0.018	0.031	0.565
time x injunctive workplace norms	0.060	0.043	0.162

Table 12: Outcome: No. of Days in the Past Month with Heavy Episodic Drinking; N=913

Parameter	Estimates	SE	p-value
(Intercept)	0.796	0.109	0.000
sex	-0.287	0.089	0.001
race	-0.140	0.102	0.169
age	0.058	0.048	0.232
baseline rutgers	0.299	0.038	0.000
baseline social desirability	-0.041	0.059	0.491
baseline impulsivity	0.052	0.050	0.299
lifestress	0.091	0.047	0.052
$_{ m time}$	0.126	0.057	0.028
descriptive workplace norms	0.151	0.046	0.001
DASS	0.235	0.051	0.000
descriptive workplace norms x DASS	0.057	0.040	0.158
time x descriptive workplace norms	0.000	0.070	0.995
$time \ge DASS$	0.008	0.059	0.889
time x descriptive workplace norms x DASS	0.028	0.072	0.694

Table 13: Outcome: No. of Days in the Past Month with Heavy Episodic Drinking; N=913

parameter	est	SE	Z	pval	LB95	UB95
At early onboarding phase: effect of norms at low DASS	0.0324	0.0443	0.7312	0.4646	-0.0544	0.1192
At early onboarding phase: effect of norms at moderate DASS	0.0183	0.0311	0.5868	0.5573	-0.0428	0.0793
At early onboarding phase: effect of norms at high DASS	0.0042	0.0404	0.1032	0.9178	-0.0750	0.0833

### 4.2 Descriptive Drinking Norms

Table 14: Outcome: No. of Days in the Past Month with Heavy Episodic Drinking; N=1143

Parameter	Estimates	SE	p-value	
(Intercept)	0.442	0.082	0.000	
sex	-0.165	0.069	0.016	
race	0.270	0.080	0.001	
age	0.008	0.038	0.837	
baseline HED	0.409	0.030	0.000	
baseline social desirability	-0.031	0.038	0.411	
baseline impulsivity	0.037	0.035	0.288	
lifestress	0.075	0.028	0.007	
descriptive workplace norms	0.053	0.026	0.046	

Table 15: Outcome: No. of Days in the Past Month with Heavy Episodic Drinking; N=1143

Parameter	Estimates	SE	p-value
(Intercept)	0.429	0.085	0.000
sex	-0.165	0.069	0.017
race	0.270	0.080	0.001
age	0.007	0.038	0.862
baseline HED	0.409	0.030	0.000
baseline social desirability	-0.032	0.038	0.404
baseline impulsivity	0.037	0.035	0.285
lifestress	0.074	0.028	0.007
$_{ m time}$	0.025	0.039	0.513
descriptive workplace norms	0.043	0.029	0.129
time x descriptive workplace norms	0.019	0.046	0.682

Table 16: Outcome: No. of Days in the Past Month with Heavy Episodic Drinking; N=913

Parameter	Estimates	SE	p-value
(Intercept)	0.796	0.109	0.000
sex	-0.287	0.089	0.001
race	-0.140	0.102	0.169
age	0.058	0.048	0.232
baseline rutgers	0.299	0.038	0.000
baseline social desirability	-0.041	0.059	0.491
baseline impulsivity	0.052	0.050	0.299
lifestress	0.091	0.047	0.052
$\operatorname{time}$	0.126	0.057	0.028
descriptive workplace norms	0.151	0.046	0.001
DASS	0.235	0.051	0.000
descriptive workplace norms x DASS	0.057	0.040	0.158
time x descriptive workplace norms	0.000	0.070	0.995
time $x$ DASS	0.008	0.059	0.889
time x descriptive workplace norms x DASS	0.028	0.072	0.694

Table 17: Outcome: No. of Days in the Past Month with Heavy Episodic Drinking; N=913

parameter	est	SE	Z	pval	LB95	UB95
At early onboarding phase: effect of norms at low DASS At early onboarding phase: effect of norms at moderate DASS	-0.0014 $0.0351$		-0.0352 $1.1939$		-0.0819 -0.0225	
At early onboarding phase: effect of norms at high DASS  At early onboarding phase: effect of norms at high DASS	0.0331 $0.0716$		2.1482	0.2323 $0.0317$		0.0926 $0.1368$