

# Test H2 and H3 with number of past-month heavy drinking days (HED) as the outcome

February 16, 2022

## Hypotheses

(H2): The distress-mediated effect of role overload on alcohol misuse weakens over time: It is stronger during the early onboarding phase than the late onboarding phase (*see Model 5 and Model 6*)

(H3): During the early onboarding phase, the distress-mediated effect of role overload on alcohol misuse is curvilinear; it diminishes to the extent that psychological distress increases (*see Model 7 and Model 6*)

## Model 5

### Injunctive Norms

Table 1: Outcome: Number of past-month heavy drinking days (HED); N = 1143; QIC = 577.73

Parameter	Estimates	SE	p-value
(Intercept)	0.37***	0.09	0.000
sex	-0.13†	0.07	0.063
race	0.28***	0.08	0.000
age	0.01	0.04	0.856
baseline HED	0.41***	0.03	0.000
baseline social desirability	-0.03	0.04	0.498
baseline impulsivity	0.05	0.04	0.170
lifestress	0.08**	0.03	0.005
injunctive workplace norms	0.04	0.03	0.194
qualitative role overload	0.15***	0.04	0.000
quantitative role overload	0.11***	0.03	0.000
DASS	0.00	0.03	0.996
time	0.04	0.04	0.294
qualitative role overload x time	-0.15***	0.04	0.001
quantitative role overload x time	0.02	0.03	0.530
DASS x time	0.02	0.04	0.660

## Descriptive Norms

Table 2: Outcome: Number of past-month heavy drinking days (HED); N = 1143; QIC = 572.94

Parameter	Estimates	SE	p-value
(Intercept)	0.38***	0.08	0.000
sex	-0.13†	0.07	0.065
race	0.28***	0.08	0.001
age	0.01	0.04	0.874
baseline HED	0.41***	0.03	0.000
baseline social desirability	-0.03	0.04	0.483
baseline impulsivity	0.05	0.04	0.196
lifestress	0.08**	0.03	0.006
descriptive workplace norms	0.04	0.03	0.130
qualitative role overload	0.14***	0.04	0.000
quantitative role overload	0.11***	0.03	0.000
DASS	0.00	0.03	0.936
time	0.04	0.04	0.329
qualitative role overload x time	-0.15***	0.04	0.001
quantitative role overload x time	0.02	0.03	0.536
DASS x time	0.01	0.04	0.697

## Model 6

Table 3: Outcome: DASS; N = 1144; QIC = 2297.08

Parameter	Estimates	SE	p-value
(Intercept)	-0.07	0.05	0.155
sex	0.19***	0.05	0.000
race	-0.05	0.05	0.319
age	0.01	0.02	0.750
baseline HED	-0.06**	0.02	0.003
baseline social desirability	-0.08***	0.02	0.001
baseline impulsivity	0.28***	0.03	0.000
lifestress	0.19***	0.02	0.000
qualitative role overload	0.09***	0.03	0.001
quantitative role overload	0.08**	0.03	0.002
time	0.01	0.03	0.766
qualitative role overload x time	0.03	0.03	0.340
quantitative role overload x time	0.01	0.03	0.697

## Model 7

### Injunctive Norms

Table 4: Outcome: Number of past-month heavy drinking days (HED); N = 1143; QIC = 548.11

Parameter	Estimates	SE	p-value
(Intercept)	0.46***	0.09	0.000
sex	-0.14†	0.07	0.051
race	0.27***	0.08	0.001
age	0.01	0.04	0.757
baseline HED	0.41***	0.03	0.000
baseline social desirability	-0.02	0.04	0.557
baseline impulsivity	0.04	0.04	0.232
lifestress	0.08**	0.03	0.004
injunctive workplace norms	0.04	0.03	0.192
qualitative role overload	0.14***	0.04	0.000
quantitative role overload	0.11***	0.03	0.000
DASS	0.06	0.04	0.123
time	0.02	0.05	0.728
I(DASS * DASS)	-0.07**	0.03	0.008
I(time * DASS * DASS)	0.02	0.04	0.604
qualitative role overload x time	-0.15***	0.04	0.001
quantitative role overload x time	0.02	0.03	0.521
DASS x time	0.00	0.04	0.975

### Descriptive Norms

Table 5: Outcome: Number of past-month heavy drinking days (HED); N = 1143; QIC = 544.24

Parameter	Estimates	SE	p-value
(Intercept)	0.46***	0.09	0.000
sex	-0.13†	0.07	0.051
race	0.27***	0.08	0.001
age	0.01	0.04	0.779
baseline HED	0.42***	0.03	0.000
baseline social desirability	-0.02	0.04	0.540
baseline impulsivity	0.04	0.04	0.259
lifestress	0.08**	0.03	0.005
descriptive workplace norms	0.04	0.03	0.149
qualitative role overload	0.14***	0.04	0.000
quantitative role overload	0.11***	0.03	0.000
DASS	0.07	0.04	0.115
time	0.02	0.05	0.751
I(DASS * DASS)	-0.07**	0.03	0.009
I(time * DASS * DASS)	0.02	0.04	0.628
qualitative role overload x time	-0.15***	0.04	0.001
quantitative role overload x time	0.02	0.03	0.524
DASS x time	0.00	0.04	0.959

## Estimate Mediated Effect using Model 5 and Model 6

### Injunctive Norms

Table 6: DASS-mediated effect of Qualitative Role Overload; Norms Covariate: Injunctive Norms

	Bootstrap Mean	Bootstrap 95%-CI LB	Bootstrap 95%-CI UB
Early Onboarding Phase	0.000	-0.006	0.006
Late Onboarding Phase	0.002	-0.007	0.011

Table 7: DASS-mediated effect of Quantitative Role Overload; Norms Covariate: Injunctive Norms

	Bootstrap Mean	Bootstrap 95%-CI LB	Bootstrap 95%-CI UB
Early Onboarding Phase	0.000	-0.006	0.006
Late Onboarding Phase	0.002	-0.006	0.009

### Descriptive Norms

Table 8: DASS-mediated effect of Qualitative Role Overload; Norms Covariate: Descriptive Norms

	Bootstrap Mean	Bootstrap 95%-CI LB	Bootstrap 95%-CI UB
Early Onboarding Phase	0.000	-0.006	0.007
Late Onboarding Phase	0.002	-0.007	0.011

Table 9: DASS-mediated effect of Quantitative Role Overload; Norms Covariate: Descriptive Norms

	Bootstrap Mean	Bootstrap 95%-CI LB	Bootstrap 95%-CI UB
Early Onboarding Phase	0.000	-0.006	0.006
Late Onboarding Phase	0.002	-0.006	0.009

## Estimate Mediated Effect using Model 7 and Model 6

### Injunctive Norms

Table 10: DASS-mediated effect of Qualitative Role Overload; Norms Covariate: Injunctive Norms

	Bootstrap Mean	Bootstrap 95%-CI LB	Bootstrap 95%-CI UB
Early Onboarding Phase, Low DASS	0.012	0.002	0.027
Early Onboarding Phase, Moderate DASS	0.006	-0.001	0.015
Early Onboarding Phase, High DASS	-0.001	-0.009	0.006
Late Onboarding Phase, Low DASS	0.014	-0.001	0.031
Late Onboarding Phase, Moderate DASS	0.007	-0.003	0.019
Late Onboarding Phase, High DASS	0.001	-0.009	0.011

Table 11: DASS-mediated effect of Quantitative Role Overload; Norms Covariate: Injunctive Norms

	Bootstrap Mean	Bootstrap 95%-CI LB	Bootstrap 95%-CI UB
Early Onboarding Phase, Low DASS	0.012	0.002	0.026
Early Onboarding Phase, Moderate DASS	0.005	-0.001	0.015
Early Onboarding Phase, High DASS	-0.001	-0.008	0.006
Late Onboarding Phase, Low DASS	0.011	0.000	0.026
Late Onboarding Phase, Moderate DASS	0.006	-0.002	0.016
Late Onboarding Phase, High DASS	0.001	-0.008	0.009

### Descriptive Norms

Table 12: DASS-mediated effect of Qualitative Role Overload; Norms Covariate: Descriptive Norms

	Bootstrap Mean	Bootstrap 95%-CI LB	Bootstrap 95%-CI UB
Early Onboarding Phase, Low DASS	0.012	0.002	0.027
Early Onboarding Phase, Moderate DASS	0.006	-0.001	0.015
Early Onboarding Phase, High DASS	-0.001	-0.008	0.006
Late Onboarding Phase, Low DASS	0.014	0.000	0.031
Late Onboarding Phase, Moderate DASS	0.008	-0.003	0.019
Late Onboarding Phase, High DASS	0.001	-0.009	0.011

Table 13: DASS-mediated effect of Quantitative Role Overload; Norms Covariate: Descriptive Norms

	Bootstrap Mean	Bootstrap 95%-CI LB	Bootstrap 95%-CI UB
Early Onboarding Phase, Low DASS	0.012	0.002	0.026
Early Onboarding Phase, Moderate DASS	0.006	-0.001	0.015
Early Onboarding Phase, High DASS	-0.001	-0.008	0.006
Late Onboarding Phase, Low DASS	0.011	0.000	0.026
Late Onboarding Phase, Moderate DASS	0.006	-0.002	0.016
Late Onboarding Phase, High DASS	0.001	-0.007	0.009