# Analysis: Part 2b (HED)

June 07, 2021

### 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 5b and Model 6b)

(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 7b and Model 6b)

### Model 5b

#### **Injunctive Norms**

Table 1: Outcome: RAPI; N = 1143

Parameter	Estimates	SE	p-value
(Intercept)	0.375	0.086	0.000
sex	-0.130	0.070	0.063
race	0.281	0.080	0.000
age	0.007	0.039	0.856
baseline HED	0.413	0.030	0.000
baseline social desirability	-0.026	0.038	0.498
baseline impulsivity	0.049	0.036	0.170
lifestress	0.080	0.028	0.005
injunctive workplace norms	0.040	0.031	0.194
qualitative role overload	0.146	0.036	0.000
quantitative role overload	0.106	0.027	0.000
DASS	0.000	0.034	0.996
$_{ m time}$	0.041	0.039	0.294
qualitative role overload $x$ time	-0.151	0.044	0.001
quantitative role overload $x$ time	0.021	0.033	0.530
DASS x time	0.016	0.037	0.660

## Descriptive Norms

Table 2: Outcome: RAPI; N = 1143

Parameter	Estimates	SE	p-value
(Intercept)	0.378	0.085	0.000
sex	-0.128	0.070	0.065
race	0.276	0.080	0.001
age	0.006	0.039	0.874
baseline HED	0.414	0.030	0.000
baseline social desirability	-0.026	0.038	0.483
baseline impulsivity	0.046	0.036	0.196
lifestress	0.078	0.028	0.006
descriptive workplace norms	0.040	0.027	0.130
qualitative role overload	0.144	0.037	0.000
quantitative role overload	0.106	0.028	0.000
DASS	0.003	0.034	0.936
$_{ m time}$	0.038	0.038	0.329
qualitative role overload $x$ time	-0.149	0.044	0.001
quantitative role overload x time	0.020	0.033	0.536
DASS x time	0.014	0.036	0.697

# Model 6b

Table 3: Outcome: DASS; N = 1144

Parameter	Estimates	SE	p-value
(Intercept)	-0.074	0.052	0.155
sex	0.188	0.046	0.000
race	-0.052	0.052	0.319
age	0.008	0.024	0.750
baseline HED	-0.062	0.021	0.003
baseline social desirability	-0.080	0.023	0.001
baseline impulsivity	0.278	0.026	0.000
lifestress	0.192	0.021	0.000
qualitative role overload	0.086	0.026	0.001
quantitative role overload	0.083	0.026	0.002
$_{ m time}$	0.008	0.027	0.766
qualitative role overload $x$ time	0.030	0.032	0.340
quantitative role overload x time	0.012	0.031	0.697

# Model 7b

# Injunctive Norms

Table 4: Outcome: RAPI; N = 1143

Parameter	Estimates	SE	p-value
(Intercept)	0.455	0.091	0.000
sex	-0.136	0.070	0.051
race	0.272	0.080	0.001
age	0.012	0.038	0.757
baseline HED	0.415	0.030	0.000
baseline social desirability	-0.022	0.038	0.557
baseline impulsivity	0.042	0.035	0.232
lifestress	0.083	0.028	0.004
injunctive workplace norms	0.040	0.031	0.192
qualitative role overload	0.141	0.038	0.000
quantitative role overload	0.106	0.027	0.000
DASS	0.065	0.042	0.123
$_{ m time}$	0.018	0.052	0.728
I(DASS * DASS)	-0.074	0.028	0.008
I(time * DASS * DASS)	0.019	0.036	0.604
qualitative role overload x time	-0.148	0.044	0.001
quantitative role overload x time	0.021	0.033	0.521
DASS x time	-0.001	0.045	0.975

## Descriptive Norms

Table 5: Outcome: RAPI; N = 1143

Parameter	Estimates	SE	p-value
(Intercept)	0.457	0.089	0.000
sex	-0.135	0.069	0.051
race	0.268	0.079	0.001
age	0.011	0.038	0.779
baseline HED	0.415	0.030	0.000
baseline social desirability	-0.023	0.037	0.540
baseline impulsivity	0.040	0.036	0.259
lifestress	0.080	0.028	0.005
descriptive workplace norms	0.038	0.027	0.149
qualitative role overload	0.139	0.038	0.000
quantitative role overload	0.105	0.027	0.000
DASS	0.066	0.042	0.115
$_{ m time}$	0.016	0.052	0.751
I(DASS * DASS)	-0.072	0.027	0.009
I(time * DASS * DASS)	0.017	0.036	0.628
qualitative role overload x time	-0.146	0.044	0.001
quantitative role overload x time	0.021	0.033	0.524
DASS x time	-0.002	0.044	0.959

## Estimate Mediated Effect using Model 5b and Model 6b

### 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	-0.0058	0.0062
Late Onboarding Phase	0.002	-0.0070	0.0111

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

	Bootstrap Mean	Bootstrap 95%-CI LB	Bootstrap 95%-CI UB
Early Onboarding Phase	0.0000	-0.0060	0.0060
Late Onboarding Phase	0.0015	-0.0058	0.0089

### 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	0.0003	-0.0055	0.0066
Late Onboarding Phase	0.0021	-0.0067	0.0113

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

	Bootstrap Mean	Bootstrap 95%-CI LB	Bootstrap 95%-CI UB
Early Onboarding Phase	0.0002	-0.0055	0.0063
Late Onboarding Phase	0.0016	-0.0056	0.0089

### Estimate Mediated Effect using Model 7b and Model 6b

#### 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	0.0122	0.0019	0.0266
Early Onboarding Phase, Moderate DASS	0.0056	-0.0010	0.0151
Early Onboarding Phase, High DASS	-0.0010	-0.0086	0.0061
Late Onboarding Phase, Low DASS	0.0140	-0.0005	0.0313
Late Onboarding Phase, Moderate DASS	0.0075	-0.0028	0.0190
Late Onboarding Phase, High DASS	0.0010	-0.0089	0.0106

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	0.0118	0.0020	0.0259
Early Onboarding Phase, Moderate DASS	0.0054	-0.0009	0.0146
Early Onboarding Phase, High DASS	-0.0010	-0.0083	0.0059
Late Onboarding Phase, Low DASS	0.0113	-0.0004	0.0260
Late Onboarding Phase, Moderate DASS	0.0060	-0.0023	0.0157
Late Onboarding Phase, High DASS	0.0007	-0.0075	0.0086

#### 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	0.0121	0.0017	0.0266
Early Onboarding Phase, Moderate DASS	0.0057	-0.0009	0.0153
Early Onboarding Phase, High DASS	-0.0007	-0.0081	0.0064
Late Onboarding Phase, Low DASS	0.0140	-0.0004	0.0311
Late Onboarding Phase, Moderate DASS	0.0075	-0.0025	0.0191
Late Onboarding Phase, High DASS	0.0010	-0.0088	0.0107

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	0.0117	0.0018	0.0260
Early Onboarding Phase, Moderate DASS	0.0055	-0.0008	0.0147
Early Onboarding Phase, High DASS	-0.0007	-0.0080	0.0061
Late Onboarding Phase, Low DASS	0.0113	-0.0003	0.0259
Late Onboarding Phase, Moderate DASS	0.0060	-0.0022	0.0156
Late Onboarding Phase, High DASS	0.0008	-0.0072	0.0087

Table 14: Outcome: HED

QIC
577.7264
572.9351
2297.0787
548.1126
544.2370