# Test H2 and H3 with RAPI as the outcome

January 26, 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: RAPI; N = 913; QIC = -1517.92

Parameter	Estimates	SE	p-value
(Intercept)	0.74***	0.12	0.00
sex	-0.26**	0.10	0.01
race	-0.12	0.10	0.27
age	$0.09\dagger$	0.05	0.07
baseline rutgers	0.29***	0.04	0.00
baseline social desirability	-0.04	0.06	0.48
baseline impulsivity	0.08	0.06	0.16
lifestress	0.11*	0.05	0.03
injunctive workplace norms	0.14***	0.04	0.00
qualitative role overload	0.12**	0.05	0.01
quantitative role overload	0.07	0.06	0.22
DASS	0.21***	0.05	0.00
$_{ m time}$	0.15*	0.06	0.02
qualitative role overload $x$ time	-0.16*	0.07	0.02
quantitative role overload $x$ time	0.05	0.07	0.49
DASS x time	0.06	0.06	0.26

# Descriptive Norms

Table 2: Outcome: RAPI; N = 913; QIC = -1618.69

Parameter	Estimates	SE	p-value
(Intercept)	0.74***	0.11	0.00
sex	-0.25**	0.10	0.01
race	-0.12	0.10	0.25
age	$0.08\dagger$	0.05	0.10
baseline rutgers	0.29***	0.04	0.00
baseline social desirability	-0.05	0.06	0.39
baseline impulsivity	0.06	0.05	0.24
lifestress	0.1*	0.05	0.04
descriptive workplace norms	0.17***	0.05	0.00
qualitative role overload	0.11*	0.05	0.02
quantitative role overload	0.07	0.06	0.24
DASS	0.24***	0.05	0.00
$_{ m time}$	0.14*	0.06	0.03
qualitative role overload $x$ time	-0.16*	0.07	0.03
quantitative role overload $x$ time	0.04	0.07	0.54
DASS x time	0.04	0.06	0.50

# Model 6

Table 3: Outcome: DASS; N = 951; QIC = 1912.06

Parameter	Estimates	SE	p-value
(Intercept)	-0.11*	0.06	0.05
sex	0.24***	0.05	0.00
race	-0.07	0.05	0.19
age	-0.01	0.03	0.71
baseline rutgers	0.01	0.02	0.69
baseline social desirability	-0.06*	0.03	0.02
baseline impulsivity	0.26***	0.03	0.00
lifestress	0.2***	0.02	0.00
qualitative role overload	0.08**	0.03	0.01
quantitative role overload	0.09***	0.03	0.00
time	0.01	0.03	0.64
qualitative role overload $x$ time	0.03	0.04	0.38
quantitative role overload x time	0.00	0.03	1.00

# Model 7

## Injunctive Norms

Table 4: Outcome: RAPI; N=913; QIC = -1528.97

Parameter	Estimates	SE	p-value
(Intercept)	0.81***	0.12	0.00
sex	-0.26**	0.10	0.01
race	-0.12	0.10	0.26
age	$0.1\dagger$	0.05	0.06
baseline rutgers	0.28***	0.04	0.00
baseline social desirability	-0.04	0.06	0.50
baseline impulsivity	0.08	0.06	0.18
lifestress	0.11*	0.05	0.02
injunctive workplace norms	0.14***	0.04	0.00
qualitative role overload	0.11*	0.05	0.04
quantitative role overload	0.07	0.06	0.24
DASS	0.32***	0.06	0.00
$_{ m time}$	0.1	0.09	0.25
I(DASS * DASS)	-0.08**	0.03	0.01
I(time * DASS * DASS)	0.06	0.06	0.29
qualitative role overload $x$ time	-0.15*	0.07	0.03
quantitative role overload x time	0.05	0.07	0.47
DASS x time	-0.01	0.09	0.90

# Descriptive Norms

Table 5: Outcome: RAPI; N = 913; QIC = -1627.05

Parameter	Estimates	SE	p-value
(Intercept)	0.79***	0.12	0.00
sex	-0.24**	0.10	0.01
race	-0.12	0.10	0.25
age	$0.08\dagger$	0.05	0.09
baseline rutgers	0.29***	0.04	0.00
baseline social desirability	-0.05	0.06	0.42
baseline impulsivity	0.06	0.05	0.25
lifestress	0.1*	0.05	0.03
descriptive workplace norms	0.17***	0.05	0.00
qualitative role overload	0.1*	0.05	0.05
quantitative role overload	0.06	0.06	0.26
DASS	0.33***	0.06	0.00
$_{ m time}$	0.1	0.08	0.24
I(DASS * DASS)	-0.07*	0.03	0.02
I(time * DASS * DASS)	0.05	0.05	0.36
qualitative role overload $x$ time	-0.15*	0.07	0.04
quantitative role overload $x$ time	0.04	0.07	0.52
DASS x time	-0.02	0.08	0.81

## 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	0.015	0.002	0.031
Late Onboarding Phase	0.029	0.011	0.052

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	0.017	0.005	0.032
Late Onboarding Phase	0.023	0.008	0.042

### 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	0.017	0.003	0.035
Late Onboarding Phase	0.029	0.011	0.051

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	0.019	0.006	0.036
Late Onboarding Phase	0.023	0.008	0.042

## 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	0.030	0.005	0.060
Early Onboarding Phase, Moderate DASS	0.023	0.004	0.046
Early Onboarding Phase, High DASS	0.017	0.003	0.034
Late Onboarding Phase, Low DASS	0.035	0.009	0.070
Late Onboarding Phase, Moderate DASS	0.032	0.012	0.059
Late Onboarding Phase, High DASS	0.030	0.012	0.052

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	0.034	0.010	0.065
Early Onboarding Phase, Moderate DASS	0.027	0.008	0.049
Early Onboarding Phase, High DASS	0.019	0.006	0.036
Late Onboarding Phase, Low DASS	0.027	0.007	0.056
Late Onboarding Phase, Moderate DASS	0.026	0.008	0.047
Late Onboarding Phase, High DASS	0.024	0.008	0.043

#### 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	0.030	0.005	0.061
Early Onboarding Phase, Moderate DASS	0.024	0.004	0.048
Early Onboarding Phase, High DASS	0.018	0.003	0.037
Late Onboarding Phase, Low DASS	0.036	0.010	0.071
Late Onboarding Phase, Moderate DASS	0.033	0.012	0.060
Late Onboarding Phase, High DASS	0.030	0.011	0.052

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	0.034	0.010	0.065
Early Onboarding Phase, Moderate DASS	0.028	0.009	0.051
Early Onboarding Phase, High DASS	0.021	0.006	0.039
Late Onboarding Phase, Low DASS	0.028	0.007	0.056
Late Onboarding Phase, Moderate DASS	0.026	0.009	0.048
Late Onboarding Phase, High DASS	0.023	0.008	0.043