Analysis: Part 2b (RAPI)

June 17, 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 5a and Model 6a)

(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 7a and Model 6a)

Model 5a

Injunctive Norms

Table 1: Outcome: RAPI; N = 913; QIC = -1517.92

Parameter	Estimates	SE	p-value
(Intercept)	0.743	0.118	0.000
sex	-0.264	0.100	0.008
race	-0.115	0.105	0.270
age	0.094	0.052	0.071
baseline rutgers	0.285	0.039	0.000
baseline social desirability	-0.043	0.061	0.478
baseline impulsivity	0.082	0.059	0.159
lifestress	0.107	0.048	0.027
injunctive workplace norms	0.138	0.039	0.000
qualitative role overload	0.122	0.050	0.015
quantitative role overload	0.073	0.059	0.219
DASS	0.214	0.045	0.000
$_{ m time}$	0.153	0.064	0.016
qualitative role overload x time	-0.165	0.069	0.017
quantitative role overload x time	0.045	0.066	0.490
DASS x time	0.065	0.058	0.264

Descriptive Norms

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

Parameter	Estimates	SE	p-value
(Intercept)	0.736	0.113	0.000
sex	-0.249	0.096	0.010
race	-0.119	0.104	0.255
age	0.079	0.049	0.105
baseline rutgers	0.288	0.040	0.000
baseline social desirability	-0.050	0.059	0.391
baseline impulsivity	0.062	0.052	0.237
lifestress	0.098	0.048	0.043
descriptive workplace norms	0.172	0.047	0.000
qualitative role overload	0.111	0.050	0.025
quantitative role overload	0.067	0.057	0.238
DASS	0.240	0.048	0.000
$_{ m time}$	0.142	0.064	0.026
qualitative role overload x time	-0.155	0.070	0.027
quantitative role overload x time	0.042	0.068	0.536
DASS x time	0.040	0.059	0.499

Model 6a

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

Parameter	Estimates	SE	p-value
(Intercept)	-0.110	0.055	0.048
sex	0.241	0.051	0.000
race	-0.072	0.055	0.189
age	-0.010	0.026	0.709
baseline rutgers	0.010	0.025	0.687
baseline social desirability	-0.060	0.025	0.016
baseline impulsivity	0.257	0.029	0.000
lifestress	0.196	0.023	0.000
qualitative role overload	0.076	0.030	0.011
quantitative role overload	0.086	0.029	0.003
time	0.014	0.030	0.640
qualitative role overload x time	0.031	0.035	0.375
quantitative role overload x time	0.000	0.032	0.995

Model 7a

Injunctive Norms

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

Parameter	Estimates	SE	p-value
(Intercept)	0.808	0.122	0.000
sex	-0.255	0.100	0.011
race	-0.117	0.105	0.263
age	0.097	0.051	0.059
baseline rutgers	0.284	0.040	0.000
baseline social desirability	-0.041	0.062	0.504
baseline impulsivity	0.080	0.059	0.175
lifestress	0.112	0.048	0.021
injunctive workplace norms	0.137	0.040	0.001
qualitative role overload	0.105	0.050	0.036
quantitative role overload	0.069	0.059	0.244
DASS	0.318	0.061	0.000
$_{ m time}$	0.100	0.087	0.251
I(DASS * DASS)	-0.082	0.030	0.007
I(time * DASS * DASS)	0.062	0.059	0.291
qualitative role overload x time	-0.151	0.068	0.027
quantitative role overload x time	0.048	0.067	0.468
DASS x time	-0.011	0.085	0.899

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

Parameter	Estimates	SE	p-value
(Intercept)	0.793	0.116	0.000
sex	-0.241	0.097	0.013
race	-0.121	0.104	0.248
age	0.082	0.049	0.090
baseline rutgers	0.286	0.041	0.000
baseline social desirability	-0.048	0.059	0.418
baseline impulsivity	0.060	0.053	0.252
lifestress	0.102	0.048	0.035
descriptive workplace norms	0.170	0.047	0.000
qualitative role overload	0.098	0.050	0.048
quantitative role overload	0.065	0.057	0.257
DASS	0.332	0.063	0.000
$_{ m time}$	0.099	0.085	0.240
I(DASS * DASS)	-0.073	0.030	0.016
I(time * DASS * DASS)	0.050	0.055	0.363
qualitative role overload x time	-0.145	0.070	0.037
quantitative role overload x time	0.045	0.069	0.520
DASS x time	-0.021	0.085	0.806

Estimate Mediated Effect using Model 5a and Model 6a

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	0.0153	0.0024	0.0311
Late Onboarding Phase	0.0291	0.0112	0.0515

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	0.0174	0.0050	0.0324
Late Onboarding Phase	0.0231	0.0075	0.0424

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	0.0170	0.0027	0.0347
Late Onboarding Phase	0.0289	0.0111	0.0508

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	0.0193	0.0057	0.0360
Late Onboarding Phase	0.0229	0.0075	0.0415

Estimate Mediated Effect using Model 7a and Model 6a

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	0.0299	0.0051	0.0602
Early Onboarding Phase, Moderate DASS	0.0233	0.0040	0.0463
Early Onboarding Phase, High DASS	0.0167	0.0029	0.0338
Late Onboarding Phase, Low DASS	0.0351	0.0086	0.0700
Late Onboarding Phase, Moderate DASS	0.0324	0.0119	0.0593
Late Onboarding Phase, High DASS	0.0297	0.0117	0.0522

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	0.0342	0.0102	0.0646
Early Onboarding Phase, Moderate DASS	0.0266	0.0083	0.0492
Early Onboarding Phase, High DASS	0.0191	0.0056	0.0356
Late Onboarding Phase, Low DASS	0.0275	0.0067	0.0556
Late Onboarding Phase, Moderate DASS	0.0255	0.0085	0.0475
Late Onboarding Phase, High DASS	0.0236	0.0079	0.0425

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	0.0300	0.0054	0.0607
Early Onboarding Phase, Moderate DASS	0.0241	0.0044	0.0479
Early Onboarding Phase, High DASS	0.0183	0.0031	0.0371
Late Onboarding Phase, Low DASS	0.0358	0.0096	0.0710
Late Onboarding Phase, Moderate DASS	0.0327	0.0119	0.0601
Late Onboarding Phase, High DASS	0.0296	0.0114	0.0518

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	0.0344	0.0103	0.0653
Early Onboarding Phase, Moderate DASS	0.0276	0.0084	0.0511
Early Onboarding Phase, High DASS	0.0209	0.0061	0.0388
Late Onboarding Phase, Low DASS	0.0280	0.0072	0.0560
Late Onboarding Phase, Moderate DASS	0.0258	0.0087	0.0479
Late Onboarding Phase, High DASS	0.0235	0.0079	0.0426

Sensitivity Analysis

Injunctive Norms

Table 14: Outcome: RAPI; N = 913; QIC = -1527.7

Parameter	Estimates	SE	p-value
(Intercept)	0.766	0.122	0.000
sex	-0.257	0.099	0.010
race	-0.112	0.104	0.281
age	0.097	0.052	0.062
baseline rutgers	0.281	0.040	0.000
baseline social desirability	-0.037	0.059	0.533
baseline impulsivity	0.081	0.060	0.173
lifestress	0.108	0.050	0.031
injunctive workplace norms	0.135	0.039	0.001
qualitative role overload	0.106	0.047	0.023
quantitative role overload	0.093	0.052	0.071
DASS	0.312	0.054	0.000
$_{ m time}$	0.178	0.064	0.005
I(DASS * DASS)	-0.049	0.029	0.094
qualitative role overload x time	-0.141	0.066	0.034

Table 15: Outcome: RAPI; N = 913; QIC = -1628.24

Parameter	Estimates	SE	p-value
(Intercept)	0.762	0.118	0.000
sex	-0.240	0.096	0.013
race	-0.119	0.104	0.253
age	0.083	0.049	0.090
baseline rutgers	0.284	0.041	0.000
baseline social desirability	-0.045	0.058	0.436
baseline impulsivity	0.061	0.053	0.250
lifestress	0.099	0.050	0.050
descriptive workplace norms	0.171	0.047	0.000
qualitative role overload	0.098	0.046	0.035
quantitative role overload	0.087	0.046	0.060
DASS	0.321	0.054	0.000
$_{ m time}$	0.159	0.064	0.012
I(DASS * DASS)	-0.046	0.028	0.103
qualitative role overload x time	-0.136	0.068	0.044

Sensitivity Analysis: Estimate Mediated Effect

Injunctive Norms

Table 16: 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	0.0268	0.0047	0.0547
Early Onboarding Phase, Moderate DASS	0.0229	0.0043	0.0448
Early Onboarding Phase, High DASS	0.0190	0.0036	0.0366
Late Onboarding Phase, Low DASS	0.0506	0.0214	0.0838
Late Onboarding Phase, Moderate DASS	0.0396	0.0168	0.0645
Late Onboarding Phase, High DASS	0.0286	0.0115	0.0483

Table 17: 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	0.0271	0.0049	0.0545
Early Onboarding Phase, Moderate DASS	0.0234	0.0044	0.0455
Early Onboarding Phase, High DASS	0.0197	0.0037	0.0378
Late Onboarding Phase, Low DASS	0.0511	0.0217	0.0843
Late Onboarding Phase, Moderate DASS	0.0404	0.0174	0.0662
Late Onboarding Phase, High DASS	0.0296	0.0119	0.0498