

Test H2 and H3 with RAPI as the outcome

February 15, 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† | 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 |
| 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† | 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 |
| 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† | 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 |
| 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† | 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 |
| 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 Quantitative 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 |