# Analysis: Part 2a (HED)

June 17, 2021

## Hypotheses

(H1c): The effect of role overload on alcohol misuse is mediated by psychological distress (see Model 3b and Model 4b)

### Model 3b

#### Injunctive Norms

Table 1: Outcome: RAPI; N = 1143; QIC = 594.94

| Parameter   | Estimates                         | SE                               | p-value                          |
|---|-----------------------------------|----------------------------------|----------------------------------|
| (Intercept)   | 0.396                             | 0.082                            | 0.000                            |
| sex   | -0.129                            | 0.070                            | 0.064                            |
| race  | 0.282                             | 0.080                            | 0.000                            |
| age   | 0.006                             | 0.039                            | 0.879                            |
| baseline HED  | 0.413                             | 0.030                            | 0.000                            |
| baseline social desirability baseline impulsivity lifestress                    | -0.027<br>0.048<br>0.079<br>0.037 | 0.039<br>0.035<br>0.029<br>0.031 | 0.484<br>0.178<br>0.007<br>0.233 |
| injunctive workplace norms<br>qualitative role overload                         | 0.037 $0.070$                     | 0.031                            | 0.233 $0.024$                    |
| $\begin{array}{c} \text{quantitative role overload} \\ \text{DASS} \end{array}$ | $0.116 \\ 0.004$                  | $0.025 \\ 0.030$                 | $0.000 \\ 0.880$                 |

### Descriptive Norms

Table 2: Outcome: RAPI; N=1143; QIC = 589.26

| Parameter                    | Estimates | SE    | p-value |
|------------------------------|-----------|-------|---------|
| (Intercept)                  | 0.397     | 0.081 | 0.000   |
| sex                          | -0.127    | 0.069 | 0.067   |
| race                         | 0.278     | 0.079 | 0.000   |
| age                          | 0.005     | 0.039 | 0.895   |
| baseline HED                 | 0.414     | 0.030 | 0.000   |
| baseline social desirability | -0.027    | 0.038 | 0.471   |
| baseline impulsivity         | 0.045     | 0.036 | 0.204   |
| lifestress                   | 0.076     | 0.029 | 0.009   |
| descriptive workplace norms  | 0.041     | 0.027 | 0.121   |
| qualitative role overload    | 0.069     | 0.031 | 0.028   |
| quantitative role overload   | 0.115     | 0.025 | 0.000   |
| DASS                         | 0.006     | 0.029 | 0.836   |

## Model 4b

Table 3: Outcome: DASS; N = 1144; QIC = 2296.45

| Estimates | SE  | p-value   |
|-----------|---|---|
| -0.070    | 0.050   | 0.162   |
| 0.189     | 0.046   | 0.000   |
| -0.052    | 0.052   | 0.318   |
| 0.008     | 0.024   | 0.746   |
| -0.063    | 0.021   | 0.003   |
| -0.080    | 0.023   | 0.001   |
| 0.279     | 0.026   | 0.000   |
| 0.193     | 0.021   | 0.000   |
| 0.101     | 0.021   | 0.000   |
| 0.089     | 0.020   | 0.000   |
|           | -0.070<br>0.189<br>-0.052<br>0.008<br>-0.063<br>-0.080<br>0.279<br>0.193<br>0.101 | -0.070 0.050<br>0.189 0.046<br>-0.052 0.052<br>0.008 0.024<br>-0.063 0.021<br>-0.080 0.023<br>0.279 0.026<br>0.193 0.021<br>0.101 0.021 |

#### Estimate Mediated Effect using Model 3b and Model 4b

#### Injunctive Norms

Table 4: DASS-mediated effect of Qualitative Role Overload; Norms Covariate: Injunctive Norms

|                 | Bootstrap Mean | Bootstrap 95%-CI LB | Bootstrap 95%-CI UB |
|-----------------|----------------|---------------------|---------------------|
| Marginal Result | 5e-04          | -0.0055             | 0.0068              |

Table 5: DASS-mediated effect of Quantitative Role Overload; Norms Covariate: Injunctive Norms

| -               | Bootstrap Mean | Bootstrap 95%-CI LB | Bootstrap 95%-CI UB |
|-----------------|----------------|---------------------|---------------------|
| Marginal Result | 4e-04          | -0.005              | 0.0058              |

#### Descriptive Norms

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

|                 | Bootstrap Mean | Bootstrap 95%-CI LB | Bootstrap 95%-CI UB |
|-----------------|----------------|---------------------|---------------------|
| Marginal Result | 7e-04          | -0.0053             | 0.0069              |

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

|                 | Bootstrap Mean | Bootstrap 95%-CI LB | Bootstrap 95%-CI UB |
|-----------------|----------------|---------------------|---------------------|
| Marginal Result | 5e-04          | -0.0047             | 0.0059              |