Oregon Community-Based Care Administrative Turnover Study

# Marching orders

* \*\* double check (I)ntent (T)o (Q)uit
* EFA/CFA for subscales -> .4 arty cutoff (verify author factors) (give alphas for author’s subscales as well as our bespoke subscales)
* \*\* write up results
* Run subscale composite models independently
* Two by table quit/no quit for demo/fac (chisq/t)
* (present exponentiated models, you slacker!)

# Verify subscales

## Job Satisfaction - Job Diagnostic Survey (Q19)

Q19:

Satisfaction with security: q19\_1, q19\_11

Satisfaction with compensation: q19\_2, q19\_9

Growth satisfaction items: q19\_3, q19\_6, q19\_10, q19\_13

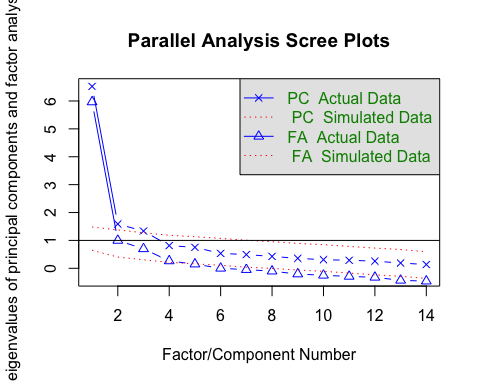
“Social” satisfaction: q19\_4, q19\_7, q19\_12

“Supervisory” satisfaction: q19\_5, q19\_8, q19\_14

### CFA of authors’ subscales

lavaan 0.6-12 ended normally after 57 iterations  
  
 Estimator ML  
 Optimization method NLMINB  
 Number of model parameters 38  
  
 Number of observations 193  
  
Model Test User Model:  
   
 Test statistic 217.241  
 Degrees of freedom 67  
 P-value (Chi-square) 0.000  
  
Model Test Baseline Model:  
  
 Test statistic 1645.245  
 Degrees of freedom 91  
 P-value 0.000  
  
User Model versus Baseline Model:  
  
 Comparative Fit Index (CFI) 0.903  
 Tucker-Lewis Index (TLI) 0.869  
  
Loglikelihood and Information Criteria:  
  
 Loglikelihood user model (H0) -2946.371  
 Loglikelihood unrestricted model (H1) -2837.751  
   
 Akaike (AIC) 5968.743  
 Bayesian (BIC) 6092.725  
 Sample-size adjusted Bayesian (BIC) 5972.350  
  
Root Mean Square Error of Approximation:  
  
 RMSEA 0.108  
 90 Percent confidence interval - lower 0.092  
 90 Percent confidence interval - upper 0.124  
 P-value RMSEA <= 0.05 0.000  
  
Standardized Root Mean Square Residual:  
  
 SRMR 0.077  
  
Parameter Estimates:  
  
 Standard errors Standard  
 Information Expected  
 Information saturated (h1) model Structured  
  
Latent Variables:  
 Estimate Std.Err z-value P(>|z|)  
 s1 =~   
 q19\_1 1.000   
 q19\_11 1.107 0.082 13.448 0.000  
 s2 =~   
 q19\_2 1.000   
 q19\_9 1.223 0.143 8.558 0.000  
 s3 =~   
 q19\_3 1.000   
 q19\_6 1.023 0.114 9.005 0.000  
 q19\_10 0.959 0.119 8.024 0.000  
 q19\_13 0.962 0.135 7.147 0.000  
 s4 =~   
 q19\_4 1.000   
 q19\_7 1.120 0.107 10.453 0.000  
 q19\_12 0.894 0.090 9.907 0.000  
 s5 =~   
 q19\_5 1.000   
 q19\_8 1.041 0.066 15.794 0.000  
 q19\_14 0.756 0.058 13.083 0.000  
  
Covariances:  
 Estimate Std.Err z-value P(>|z|)  
 s1 ~~   
 s2 0.377 0.072 5.217 0.000  
 s3 0.358 0.058 6.172 0.000  
 s4 0.239 0.043 5.615 0.000  
 s5 0.480 0.083 5.783 0.000  
 s2 ~~   
 s3 0.301 0.062 4.865 0.000  
 s4 0.181 0.045 4.008 0.000  
 s5 0.407 0.093 4.362 0.000  
 s3 ~~   
 s4 0.299 0.047 6.363 0.000  
 s5 0.401 0.073 5.460 0.000  
 s4 ~~   
 s5 0.293 0.058 5.026 0.000  
  
Variances:  
 Estimate Std.Err z-value P(>|z|)  
 .q19\_1 0.235 0.039 6.068 0.000  
 .q19\_11 0.148 0.040 3.668 0.000  
 .q19\_2 0.584 0.091 6.396 0.000  
 .q19\_9 0.164 0.105 1.559 0.119  
 .q19\_3 0.526 0.057 9.300 0.000  
 .q19\_6 0.248 0.030 8.281 0.000  
 .q19\_10 0.401 0.044 9.155 0.000  
 .q19\_13 0.637 0.067 9.450 0.000  
 .q19\_4 0.238 0.029 8.166 0.000  
 .q19\_7 0.194 0.027 7.196 0.000  
 .q19\_12 0.165 0.021 7.895 0.000  
 .q19\_5 0.237 0.059 4.023 0.000  
 .q19\_8 0.476 0.077 6.223 0.000  
 .q19\_14 0.542 0.065 8.385 0.000  
 s1 0.579 0.085 6.808 0.000  
 s2 0.719 0.137 5.234 0.000  
 s3 0.342 0.073 4.707 0.000  
 s4 0.274 0.049 5.603 0.000  
 s5 1.329 0.167 7.980 0.000

### EFA of our data



Parallel analysis suggests that the number of factors = 3 and the number of components = 3

Call:  
factanal(x = select(data, starts\_with("q19")), factors = 3, rotation = "promax")  
  
Uniquenesses:  
 q19\_1 q19\_2 q19\_3 q19\_4 q19\_5 q19\_6 q19\_7 q19\_8 q19\_9 q19\_10 q19\_11   
 0.331 0.739 0.519 0.474 0.062 0.241 0.364 0.291 0.614 0.534 0.204   
q19\_12 q19\_13 q19\_14   
 0.363 0.645 0.390   
  
Loadings:  
 Factor1 Factor2 Factor3  
q19\_1 0.878   
q19\_2 0.551   
q19\_3 0.567   
q19\_4 0.577 0.122   
q19\_5 -0.105 1.069   
q19\_6 0.926 -0.108   
q19\_7 -0.110 0.844   
q19\_8 0.895   
q19\_9 0.655   
q19\_10 0.444 0.188 0.128   
q19\_11 1.027 -0.140   
q19\_12 -0.127 0.916   
q19\_13 0.237 0.444   
q19\_14 0.223 0.571   
  
 Factor1 Factor2 Factor3  
SS loadings 3.235 3.017 2.365  
Proportion Var 0.231 0.216 0.169  
Cumulative Var 0.231 0.447 0.616  
  
Factor Correlations:  
 Factor1 Factor2 Factor3  
Factor1 1.000 0.524 -0.661  
Factor2 0.524 1.000 -0.699  
Factor3 -0.661 -0.699 1.000  
  
Test of the hypothesis that 3 factors are sufficient.  
The chi square statistic is 175.88 on 52 degrees of freedom.  
The p-value is 2.32e-15

## Organizational commitment, perceived organizational support, perceived job security, and intent to quit (Q20)

Q20:

OC-Affective: q20\_1, q20\_3, q20\_6

POS-S: q20\_2, q20\_4, q20\_8

Perceived Job Security: q20\_5, q20\_10

OC-Normative: q20\_7, q20\_9

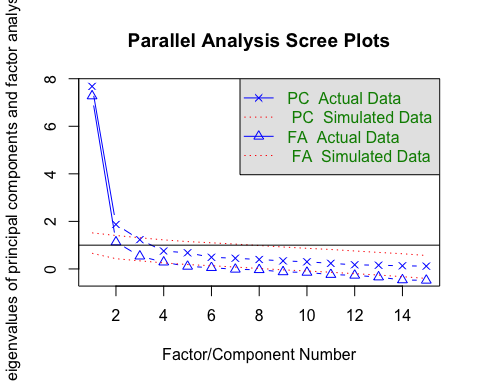
Intent to Quit: q20\_11, q20\_14, q20\_15

OC-Continuance: q20\_12, q20\_13

### CFA of authors’ subscales

lavaan 0.6-12 did NOT end normally after 496 iterations  
\*\* WARNING \*\* Estimates below are most likely unreliable  
  
 Estimator ML  
 Optimization method NLMINB  
 Number of model parameters 45  
  
 Number of observations 193  
  
  
Parameter Estimates:  
  
 Standard errors Standard  
 Information Expected  
 Information saturated (h1) model Structured  
  
Latent Variables:  
 Estimate Std.Err z-value P(>|z|)  
 s1 =~   
 q20\_1 1.000   
 q20\_3 1.105 NA   
 q20\_6 0.853 NA   
 s2 =~   
 q20\_2 1.000   
 q20\_4 0.821 NA   
 q20\_8 1.015 NA   
 s3 =~   
 q20\_5 1.000   
 q20\_10 0.939 NA   
 s4 =~   
 q20\_7 1.000   
 q20\_9 1.551 NA   
 s5 =~   
 q20\_11 1.000   
 q20\_14 1.395 NA   
 q20\_15 1.410 NA   
 s6 =~   
 q20\_12 1.000   
 q20\_13 0.000 NA   
  
Covariances:  
 Estimate Std.Err z-value P(>|z|)  
 s1 ~~   
 s2 0.627 NA   
 s3 0.508 NA   
 s4 0.362 NA   
 s5 0.377 NA   
 s6 0.170 NA   
 s2 ~~   
 s3 0.543 NA   
 s4 0.392 NA   
 s5 0.402 NA   
 s6 0.167 NA   
 s3 ~~   
 s4 0.309 NA   
 s5 0.340 NA   
 s6 0.203 NA   
 s4 ~~   
 s5 0.218 NA   
 s6 0.179 NA   
 s5 ~~   
 s6 0.154 NA   
  
Variances:  
 Estimate Std.Err z-value P(>|z|)  
 .q20\_1 0.154 NA   
 .q20\_3 0.137 NA   
 .q20\_6 0.318 NA   
 .q20\_2 0.207 NA   
 .q20\_4 0.274 NA   
 .q20\_8 0.230 NA   
 .q20\_5 0.140 NA   
 .q20\_10 0.200 NA   
 .q20\_7 0.625 NA   
 .q20\_9 0.394 NA   
 .q20\_11 0.559 NA   
 .q20\_14 0.198 NA   
 .q20\_15 0.330 NA   
 .q20\_12 -9439.859 NA   
 .q20\_13 1.360 NA   
 s1 0.579 NA   
 s2 0.675 NA   
 s3 0.684 NA   
 s4 0.232 NA   
 s5 0.671 NA   
 s6 9440.976 NA

### EFA of our data



Parallel analysis suggests that the number of factors = 3 and the number of components = 2

Call:  
factanal(x = rename(as.tibble(reverse.code(keys = c(1, 1, 1, 1, 1, 1, 1, 1, 1, 1, -1, 1, 1, -1, -1), items = select(data, starts\_with("q20")))), q20\_11 = `q20\_11-`, q20\_14 = `q20\_14-`, q20\_15 = `q20\_15-`), factors = 3, rotation = "promax")  
  
Uniquenesses:  
 q20\_1 q20\_2 q20\_3 q20\_4 q20\_5 q20\_6 q20\_7 q20\_8 q20\_9 q20\_10 q20\_11   
 0.205 0.225 0.149 0.363 0.441 0.391 0.590 0.247 0.407 0.473 0.389   
q20\_12 q20\_13 q20\_14 q20\_15   
 0.480 0.660 0.190 0.119   
  
Loadings:  
 Factor1 Factor2 Factor3  
q20\_1 0.879   
q20\_2 0.971 -0.109 -0.104   
q20\_3 0.997 -0.115   
q20\_4 0.836 -0.114   
q20\_5 0.753   
q20\_6 0.634 0.111 0.192   
q20\_7 0.199 0.274 0.425   
q20\_8 0.833   
q20\_9 0.781   
q20\_10 0.650 0.118   
q20\_11 0.148 0.660 -0.220   
q20\_12 0.745   
q20\_13 -0.277 0.495   
q20\_14 0.888   
q20\_15 -0.164 1.032 0.126   
  
 Factor1 Factor2 Factor3  
SS loadings 6.211 2.488 1.140  
Proportion Var 0.414 0.166 0.076  
Cumulative Var 0.414 0.580 0.656  
  
Factor Correlations:  
 Factor1 Factor2 Factor3  
Factor1 1.000 0.62468 0.28859  
Factor2 0.625 1.00000 -0.00858  
Factor3 0.289 -0.00858 1.00000  
  
Test of the hypothesis that 3 factors are sufficient.  
The chi square statistic is 212.82 on 63 degrees of freedom.  
The p-value is 3.87e-18

## Job Stress Scale (Q26)

Q26:

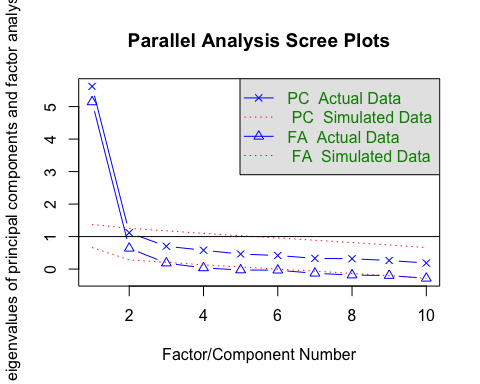
Time Stress: q26\_1, q26\_2, q26\_3, q26\_4, q26\_5

Anxiety: q26\_6, q26\_7, q26\_8, q26\_9, q26\_10

### CFA of authors’ subscales

lavaan 0.6-12 ended normally after 26 iterations  
  
 Estimator ML  
 Optimization method NLMINB  
 Number of model parameters 21  
  
 Number of observations 193  
  
Model Test User Model:  
   
 Test statistic 138.055  
 Degrees of freedom 34  
 P-value (Chi-square) 0.000  
  
Model Test Baseline Model:  
  
 Test statistic 1152.651  
 Degrees of freedom 45  
 P-value 0.000  
  
User Model versus Baseline Model:  
  
 Comparative Fit Index (CFI) 0.906  
 Tucker-Lewis Index (TLI) 0.876  
  
Loglikelihood and Information Criteria:  
  
 Loglikelihood user model (H0) -2469.782  
 Loglikelihood unrestricted model (H1) -2400.754  
   
 Akaike (AIC) 4981.564  
 Bayesian (BIC) 5050.080  
 Sample-size adjusted Bayesian (BIC) 4983.558  
  
Root Mean Square Error of Approximation:  
  
 RMSEA 0.126  
 90 Percent confidence interval - lower 0.104  
 90 Percent confidence interval - upper 0.148  
 P-value RMSEA <= 0.05 0.000  
  
Standardized Root Mean Square Residual:  
  
 SRMR 0.072  
  
Parameter Estimates:  
  
 Standard errors Standard  
 Information Expected  
 Information saturated (h1) model Structured  
  
Latent Variables:  
 Estimate Std.Err z-value P(>|z|)  
 s1 =~   
 q26\_1 1.000   
 q26\_2 1.016 0.074 13.818 0.000  
 q26\_3 0.949 0.074 12.783 0.000  
 q26\_4 0.821 0.080 10.220 0.000  
 q26\_5 1.012 0.086 11.771 0.000  
 s2 =~   
 q26\_6 1.000   
 q26\_7 1.196 0.113 10.553 0.000  
 q26\_8 0.853 0.106 8.016 0.000  
 q26\_9 1.077 0.105 10.223 0.000  
 q26\_10 1.059 0.113 9.377 0.000  
  
Covariances:  
 Estimate Std.Err z-value P(>|z|)  
 s1 ~~   
 s2 0.566 0.086 6.555 0.000  
  
Variances:  
 Estimate Std.Err z-value P(>|z|)  
 .q26\_1 0.399 0.052 7.626 0.000  
 .q26\_2 0.335 0.047 7.122 0.000  
 .q26\_3 0.419 0.053 7.946 0.000  
 .q26\_4 0.668 0.075 8.953 0.000  
 .q26\_5 0.649 0.077 8.453 0.000  
 .q26\_6 0.569 0.068 8.308 0.000  
 .q26\_7 0.474 0.066 7.209 0.000  
 .q26\_8 0.771 0.086 9.019 0.000  
 .q26\_9 0.465 0.061 7.661 0.000  
 .q26\_10 0.676 0.081 8.396 0.000  
 s1 0.856 0.126 6.819 0.000  
 s2 0.636 0.114 5.574 0.000

### EFA of our data



Parallel analysis suggests that the number of factors = 2 and the number of components = 1

Call:  
factanal(x = select(data, starts\_with("q26")), factors = 2, rotation = "promax")  
  
Uniquenesses:  
 q26\_1 q26\_2 q26\_3 q26\_4 q26\_5 q26\_6 q26\_7 q26\_8 q26\_9 q26\_10   
 0.213 0.196 0.379 0.415 0.424 0.460 0.366 0.610 0.382 0.521   
  
Loadings:  
 Factor1 Factor2  
q26\_1 0.952   
q26\_2 0.912   
q26\_3 0.168 0.660   
q26\_4 0.704   
q26\_5 0.463 0.357   
q26\_6 0.805 -0.105   
q26\_7 0.836   
q26\_8 0.558   
q26\_9 0.841   
q26\_10 0.683   
  
 Factor1 Factor2  
SS loadings 3.580 2.337  
Proportion Var 0.358 0.234  
Cumulative Var 0.358 0.592  
  
Factor Correlations:  
 Factor1 Factor2  
Factor1 1.000 -0.706  
Factor2 -0.706 1.000  
  
Test of the hypothesis that 2 factors are sufficient.  
The chi square statistic is 58.89 on 26 degrees of freedom.  
The p-value is 0.000236

# Calculate subscale alphas

### Q19 (author):

Satisfaction with security: q19\_1, q19\_11

. alpha q19\_1 q19\_11, std item  
  
Test scale = mean(standardized items)  
  
Average interitem correlation: 0.7669  
Number of items in the scale: 2  
Scale reliability coefficient: 0.8681

Satisfaction with compensation: q19\_2, q19\_9

. alpha q19\_2 q19\_9, std item  
  
Test scale = mean(standardized items)  
  
Average interitem correlation: 0.6920  
Number of items in the scale: 2  
Scale reliability coefficient: 0.8179

Growth satisfaction items: q19\_3, q19\_6, q19\_10, q19\_13

. alpha q19\_3 q19\_6 q19\_10 q19\_13, std item  
  
Test scale = mean(standardized items)  
  
 Average  
 Item-test Item-rest interitem  
Item | Obs Sign correlation correlation correlation alpha  
-------------+-----------------------------------------------------------------  
q19\_3 | 193 + 0.7852 0.5951 0.4281 0.6919  
q19\_6 | 193 + 0.7697 0.5702 0.4440 0.7055  
q19\_10 | 193 + 0.7529 0.5436 0.4611 0.7197  
q19\_13 | 193 + 0.7546 0.5464 0.4593 0.7182  
-------------+-----------------------------------------------------------------  
Test scale | 0.4481 0.7646  
-------------------------------------------------------------------------------

“Social” satisfaction: q19\_4, q19\_7, q19\_12

. alpha q19\_4 q19\_7 q19\_12, std item  
  
Test scale = mean(standardized items)  
  
 Average  
 Item-test Item-rest interitem  
Item | Obs Sign correlation correlation correlation alpha  
-------------+-----------------------------------------------------------------  
q19\_4 | 193 + 0.8363 0.6288 0.6109 0.7585  
q19\_7 | 193 + 0.8610 0.6772 0.5481 0.7081  
q19\_12 | 193 + 0.8482 0.6518 0.5806 0.7347  
-------------+-----------------------------------------------------------------  
Test scale | 0.5799 0.8055  
-------------------------------------------------------------------------------

“Supervisory” satisfaction: q19\_5, q19\_8, q19\_14

. alpha q19\_5 q19\_8 q19\_14, std item  
  
Test scale = mean(standardized items)  
  
 Average  
 Item-test Item-rest interitem  
Item | Obs Sign correlation correlation correlation alpha  
-------------+-----------------------------------------------------------------  
q19\_5 | 193 + 0.9298 0.8354 0.6303 0.7732  
q19\_8 | 193 + 0.9051 0.7825 0.6971 0.8215  
q19\_14 | 193 + 0.8627 0.6974 0.8114 0.8959  
-------------+-----------------------------------------------------------------  
Test scale | 0.7129 0.8817  
-------------------------------------------------------------------------------

### Q19 (ours):

Factor1: q19\_1, q19\_2, q19\_3, q19\_9, q19\_10, q19\_11

. alpha q19\_1 q19\_2 q19\_3 q19\_9 q19\_10 q19\_11, std item  
  
Test scale = mean(standardized items)  
  
 Average  
 Item-test Item-rest interitem  
Item | Obs Sign correlation correlation correlation alpha  
-------------+-----------------------------------------------------------------  
q19\_1 | 193 + 0.7829 0.6724 0.4961 0.8312  
q19\_2 | 193 + 0.7107 0.5740 0.5293 0.8490  
q19\_3 | 193 + 0.7594 0.6400 0.5069 0.8371  
q19\_9 | 193 + 0.7756 0.6623 0.4995 0.8331  
q19\_10 | 193 + 0.7434 0.6180 0.5143 0.8411  
q19\_11 | 193 + 0.8234 0.7299 0.4775 0.8204  
-------------+-----------------------------------------------------------------  
Test scale | 0.5039 0.8591  
-------------------------------------------------------------------------------

Factor2: q19\_4, q19\_6, q19\_7, q19\_12, q19\_13

. alpha q19\_4 q19\_6 q19\_7 q19\_12 q19\_13, std item  
  
Test scale = mean(standardized items)  
  
 Average  
 Item-test Item-rest interitem  
Item | Obs Sign correlation correlation correlation alpha  
-------------+-----------------------------------------------------------------  
q19\_4 | 193 + 0.7876 0.6575 0.5590 0.8352  
q19\_6 | 193 + 0.8644 0.7739 0.5078 0.8049  
q19\_7 | 193 + 0.8168 0.7009 0.5395 0.8241  
q19\_12 | 193 + 0.8373 0.7319 0.5258 0.8160  
q19\_13 | 193 + 0.6953 0.5267 0.6205 0.8674  
-------------+-----------------------------------------------------------------  
Test scale | 0.5505 0.8596  
-------------------------------------------------------------------------------

Factor3: q19\_5, q19\_8, q19\_14

. alpha q19\_5 q19\_8 q19\_14, std item  
  
Test scale = mean(standardized items)  
  
 Average  
 Item-test Item-rest interitem  
Item | Obs Sign correlation correlation correlation alpha  
-------------+-----------------------------------------------------------------  
q19\_5 | 193 + 0.9298 0.8354 0.6303 0.7732  
q19\_8 | 193 + 0.9051 0.7825 0.6971 0.8215  
q19\_14 | 193 + 0.8627 0.6974 0.8114 0.8959  
-------------+-----------------------------------------------------------------  
Test scale | 0.7129 0.8817  
-------------------------------------------------------------------------------

### Q20 (author):

OC-Affective: q20\_1, q20\_3, q20\_6

. alpha q20\_1 q20\_3 q20\_6, std item  
  
Test scale = mean(standardized items)  
  
 Average  
 Item-test Item-rest interitem  
Item | Obs Sign correlation correlation correlation alpha  
-------------+-----------------------------------------------------------------  
q20\_1 | 193 + 0.9250 0.8258 0.6711 0.8032  
q20\_3 | 193 + 0.9161 0.8069 0.6952 0.8202  
q20\_6 | 193 + 0.8721 0.7172 0.8146 0.8978  
-------------+-----------------------------------------------------------------  
Test scale | 0.7270 0.8887  
-------------------------------------------------------------------------------

POS-S: q20\_2, q20\_4, q20\_8

. alpha q20\_2 q20\_4 q20\_8, std item  
  
Test scale = mean(standardized items)  
  
 Average  
 Item-test Item-rest interitem  
Item | Obs Sign correlation correlation correlation alpha  
-------------+-----------------------------------------------------------------  
q20\_2 | 193 + 0.8995 0.7708 0.7114 0.8313  
q20\_4 | 193 + 0.8829 0.7371 0.7561 0.8611  
q20\_8 | 193 + 0.9148 0.8029 0.6700 0.8024  
-------------+-----------------------------------------------------------------  
Test scale | 0.7125 0.8814  
-------------------------------------------------------------------------------

Perceived Job Security: q20\_5, q20\_10

. alpha q20\_5 q20\_10, std item  
  
Test scale = mean(standardized items)  
  
Average interitem correlation: 0.7899  
Number of items in the scale: 2  
Scale reliability coefficient: 0.8826

OC-Normative: q20\_7, q20\_9

. alpha q20\_7 q20\_9, std item  
  
Test scale = mean(standardized items)  
  
Average interitem correlation: 0.3987  
Number of items in the scale: 2  
Scale reliability coefficient: 0.5701

Intent to Quit: q20\_11, q20\_14, q20\_15

. alpha q20\_11 q20\_14 q20\_15, std item  
  
Test scale = mean(standardized items)  
  
 Average  
 Item-test Item-rest interitem  
Item | Obs Sign correlation correlation correlation alpha  
-------------+-----------------------------------------------------------------  
q20\_11 | 193 + 0.8651 0.7036 0.8359 0.9106  
q20\_14 | 193 + 0.9256 0.8272 0.6716 0.8035  
q20\_15 | 193 + 0.9238 0.8232 0.6766 0.8071  
-------------+-----------------------------------------------------------------  
Test scale | 0.7280 0.8893  
-------------------------------------------------------------------------------

OC-Continuance: q20\_12, q20\_13

. alpha q20\_12 q20\_13, std item  
  
Test scale = mean(standardized items)  
  
Average interitem correlation: 0.3997  
Number of items in the scale: 2  
Scale reliability coefficient: 0.5711

### Q20 (ours):

Factor1: q20\_1, q20\_2, q20\_3, q20\_4, q20\_5, q20\_6, q20\_8, q20\_9, q20\_10

. alpha q20\_1 q20\_2 q20\_3 q20\_4 q20\_5 q20\_6 q20\_8 q20\_9 q20\_10, std item  
  
Test scale = mean(standardized items)  
  
 Average  
 Item-test Item-rest interitem  
Item | Obs Sign correlation correlation correlation alpha  
-------------+-----------------------------------------------------------------  
q20\_1 | 193 + 0.8934 0.8611 0.6493 0.9368  
q20\_2 | 193 + 0.8576 0.8156 0.6590 0.9392  
q20\_3 | 193 + 0.9021 0.8721 0.6470 0.9362  
q20\_4 | 193 + 0.8114 0.7578 0.6714 0.9423  
q20\_5 | 193 + 0.8081 0.7536 0.6723 0.9426  
q20\_6 | 193 + 0.7890 0.7300 0.6775 0.9438  
q20\_8 | 193 + 0.8872 0.8532 0.6510 0.9372  
q20\_9 | 193 + 0.8040 0.7485 0.6734 0.9428  
q20\_10 | 193 + 0.7861 0.7264 0.6782 0.9440  
-------------+-----------------------------------------------------------------  
Test scale | 0.6643 0.9468  
-------------------------------------------------------------------------------

Factor2: q20\_11, q20\_14, q20\_15

. alpha q20\_11 q20\_14 q20\_15, std item  
  
Test scale = mean(standardized items)  
  
 Average  
 Item-test Item-rest interitem  
Item | Obs Sign correlation correlation correlation alpha  
-------------+-----------------------------------------------------------------  
q20\_11 | 193 + 0.8651 0.7036 0.8359 0.9106  
q20\_14 | 193 + 0.9256 0.8272 0.6716 0.8035  
q20\_15 | 193 + 0.9238 0.8232 0.6766 0.8071  
-------------+-----------------------------------------------------------------  
Test scale | 0.7280 0.8893  
-------------------------------------------------------------------------------

Factor3: q20\_7, q20\_12, q20\_13

. alpha q20\_7 q20\_12 q20\_13, std item  
  
Test scale = mean(standardized items)  
  
 Average  
 Item-test Item-rest interitem  
Item | Obs Sign correlation correlation correlation alpha  
-------------+-----------------------------------------------------------------  
q20\_7 | 193 + 0.6365 0.2093 0.3997 0.5711  
q20\_12 | 193 + 0.8162 0.5124 0.0186 0.0365  
q20\_13 | 193 + 0.6686 0.2563 0.3316 0.4981  
-------------+-----------------------------------------------------------------  
Test scale | 0.2500 0.4999  
-------------------------------------------------------------------------------

### Q26 (author):

Time Stress: q26\_1, q26\_2, q26\_3, q26\_4, q26\_5

. alpha q26\_1 q26\_2 q26\_3 q26\_4 q26\_5, std item  
  
Test scale = mean(standardized items)  
  
 Average  
 Item-test Item-rest interitem  
Item | Obs Sign correlation correlation correlation alpha  
-------------+-----------------------------------------------------------------  
q26\_1 | 193 + 0.8483 0.7536 0.5969 0.8556  
q26\_2 | 193 + 0.8645 0.7784 0.5857 0.8498  
q26\_3 | 193 + 0.8452 0.7490 0.5991 0.8567  
q26\_4 | 193 + 0.7614 0.6258 0.6570 0.8846  
q26\_5 | 193 + 0.8279 0.7229 0.6110 0.8627  
-------------+-----------------------------------------------------------------  
Test scale | 0.6100 0.8866  
-------------------------------------------------------------------------------

Anxiety: q26\_6, q26\_7, q26\_8, q26\_9, q26\_10

. alpha q26\_6 q26\_7 q26\_8 q26\_9 q26\_10, std item  
  
Test scale = mean(standardized items)  
  
 Average  
 Item-test Item-rest interitem  
Item | Obs Sign correlation correlation correlation alpha  
-------------+-----------------------------------------------------------------  
q26\_6 | 193 + 0.7810 0.6451 0.5317 0.8196  
q26\_7 | 193 + 0.8422 0.7374 0.4915 0.7945  
q26\_8 | 193 + 0.7048 0.5366 0.5818 0.8477  
q26\_9 | 193 + 0.8333 0.7237 0.4973 0.7983  
q26\_10 | 193 + 0.7804 0.6443 0.5321 0.8198  
-------------+-----------------------------------------------------------------  
Test scale | 0.5269 0.8478  
-------------------------------------------------------------------------------

### Q26 (ours):

Factor1: q26\_4, q26\_5, q26\_6, q26\_7, q26\_8, q26\_9, q26\_10

. alpha q26\_4 q26\_5 q26\_6 q26\_7 q26\_8 q26\_9 q26\_10, std item  
  
Test scale = mean(standardized items)  
  
 Average  
 Item-test Item-rest interitem  
Item | Obs Sign correlation correlation correlation alpha  
-------------+-----------------------------------------------------------------  
q26\_4 | 193 + 0.8062 0.7242 0.5175 0.8655  
q26\_5 | 193 + 0.7681 0.6733 0.5312 0.8718  
q26\_6 | 193 + 0.7603 0.6630 0.5340 0.8730  
q26\_7 | 193 + 0.8203 0.7433 0.5124 0.8631  
q26\_8 | 193 + 0.7068 0.5936 0.5533 0.8814  
q26\_9 | 193 + 0.8095 0.7287 0.5163 0.8649  
q26\_10 | 193 + 0.7365 0.6320 0.5426 0.8768  
-------------+-----------------------------------------------------------------  
Test scale | 0.5296 0.8874  
-------------------------------------------------------------------------------

Factor2: q26\_1, q26\_2, q26\_3

. alpha q26\_1 q26\_2 q26\_3, std item  
  
Test scale = mean(standardized items)  
  
 Average  
 Item-test Item-rest interitem  
Item | Obs Sign correlation correlation correlation alpha  
-------------+-----------------------------------------------------------------  
q26\_1 | 193 + 0.9151 0.8045 0.6902 0.8167  
q26\_2 | 193 + 0.9190 0.8128 0.6796 0.8092  
q26\_3 | 193 + 0.8748 0.7220 0.7995 0.8886  
-------------+-----------------------------------------------------------------  
Test scale | 0.7231 0.8868  
-------------------------------------------------------------------------------