

An Initial Psychometric Assessment of the Resilience Quotient™

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Abstract

The Resilience Quotient™ is a 32-item measure of 8 dimensions of individual resilience. It is designed for use in organizational change management efforts. Our study examined psychometric characteristics of the instrument and found general support for the reliability of the scale's scores and the fit of the proposed factor structure.

Overview

- Research (e.g., Reivich & Shatté, 2002) indicates that resilience is an adaptive developmental construct representing an individual's ability to persist and recover from adversity and stress.
- The concept has been recently used in organizational efforts to identify individuals who:
 - are likely to adapt well to change initiatives.
 - may need support activities (e.g., mentoring, coaching) to prepare them for change initiatives.
- One measure of the psychological construct of resilience is the Resilience Quotient™, a 32-item measure of 8 proposed dimensions of resilience.
- The RQ™ was developed by Russell Consulting, Inc. and has been used in a variety of organizational change efforts.

Overview

- To date, there has been little psychometric examination of resilience measures in general or of the RQ™ in particular.
- We sought to carry out such an examination using a large sample of data from participants who completed the RQ™ in various organizational settings.
- Our goals were to:
 - examine the reliability of the RQ™ scores.
 - examine the fit of the proposed factor structure of the RQ™ to the current data.
 - develop large sample norms to aid in the interpretation of RQ™ scores.

Method and Results

- We obtained RQ™ data from 1227 respondents across a variety of organizations.
- The data were archival in nature and were collected as part of several organizational change interventions.
- Table 1 presents descriptive statistics, correlations, and scale reliabilities (alphas) for the eight scale dimensions and the overall RQ™ score.
 - The internal consistency reliability for the RQ™ overall scale scores was quite high (.89).
 - RQ™ subscale alphas ranged from .54 (Personal Vision) to .70 (Self-Assurance) with a mean alpha of .63.
- We found strong correlations between the RQ™ subscales, ranging from .22 to .61.
- We used LISREL 8.17 to conduct a confirmatory factor analysis of the proposed factor structure using maximum likelihood estimation.
 - The overall fit of the model was excellent, $\chi^2(436) = 1583.20, p < .001$, RMSEA = .05, TLI = .95, and CFI = .96.
 - The 23 standardized factor loadings were all significant and ranged from .35 to .76 ($M = .56, SD = .10$).
 - Consistent with the strong factor intercorrelations, we found numerous items that cross loaded on multiple dimensions.

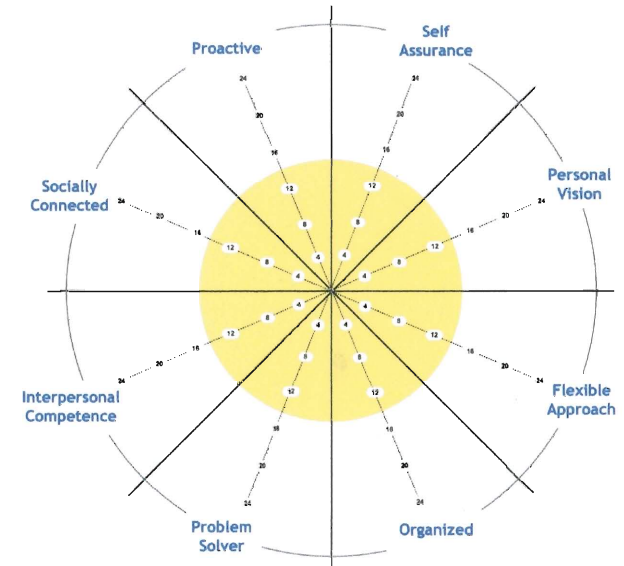


Table 1. Scale Reliabilities, Correlations, and Descriptive Statistics for RQ™ Dimensions and Overall Score

	1	2	3	4	5	6	7	8	9
1. Self-Assurance	.70								
2. Personal Vision	.48	.54							
3. Flexible Approach	.61	.45	.66						
4. Organized	.37	.34	.42	.62					
5. Problem Solver	.55	.39	.57	.56	.69				
6. Interpersonal Competence	.37	.26	.53	.28	.40	.55			
7. Socially Connected	.22	.28	.31	.22	.22	.42	.63		
8. Proactive	.61	.39	.60	.41	.52	.46	.37	.61	
9. RQ	.74	.66	.78	.67	.75	.64	.58	.77	.89
Mean	19.06	19.75	19.05	17.46	18.47	19.88	18.75	19.10	151.52
Standard Deviation	2.64	3.07	2.30	3.24	2.77	2.29	3.51	2.49	15.38

Note: Scale reliabilities (alpha) are on the diagonal; All scale intercorrelations are significant at $p < .001$

Summary and Future Directions

- As a whole the RQ™ scores displayed a high level of internal consistency.
- Internal consistency for the RQ™ subscale scores was moderate, which is not surprising given their 4-item length.
- CFA results suggested that the proposed 8-factor structure provided an excellent fit to the data.
- However, the RQ™ subscales displayed substantial intercorrelations.
- Given the moderate subscale reliabilities and strong subscale intercorrelations, we suggest using the subscale scores descriptively rather than prescriptively.
- Future research should examine the:
 - convergent/discriminant validity of the RQ as compared to Big 5 factors.
 - criterion-related validity of the instrument for predicting important organizational outcomes.