

The Ego Resiliency Scale Revised

A Crosscultural Study in Italy, Spain, and the United States

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Abstract. The present study examined the crosscultural generalizability of the latent structure of the ER89-R, a brief self-report scale that measures ego-resiliency with subjective self-ratings. First, we investigated the measurement invariance of the scale across three Western cultures, namely, Italy ($n = 1,020$), Spain ($n = 452$), and the United States ($n = 808$). Next, we examined the correlations of the ER89-R scale with several measures of adjustment and maladjustment. Multigroup confirmatory factor analysis provided evidence of partial configural, metric, and scalar invariance across Italy, Spain, and the United States. Overall, the correlation patterns were stable across countries and sex, with some exceptions. As expected, higher levels of ego-resiliency were strongly and consistently associated with the positive poles of the Big Five. Moreover, ego-resiliency showed a positive correlation with psychological well-being in each country, and negative relations with depression in Spain and Italy, but not in the United States. In light of these results, the potential usefulness and applicability of the ER89-R scale are advanced and discussed.

Keywords: ego-resiliency, measurement invariance, latent structure, resilience

Block and Block's (1980) personality model posits ego-resiliency as a central personality construct for understanding motivation, emotion, and behavior. On the broadest level, this construct refers to the individual's capacity for flexible and resourceful adaptation to external and internal stressors (Klohn, 1996). Resilient individuals (i.e., individuals high in ego-resiliency) show better adjustment and higher personal attainments at all stages of life (Arend, Gove, & Sroufe, 1979; Block & Block, 1980; Fredrickson, Tugade, Waugh, & Larkin, 2003; Klohn, Vandewater, & Young, 1996). In reviewing the literature on ego-resiliency, Block and Kremen (1996) suggested the resemblance of the modern usage of the term resilience to the theoretically based construct of ego-resiliency (see also Luthar, Cicchetti, & Becker, 2000). Differently from other conceptualizations of individual resilience that emphasize the availability of environmental resources or the individual's ability to cope with external stressors (Wagnild & Young, 1993), Block and Kremen (1996) identified ego-resiliency as *trait* resilience, that is, the individual ability to dynamically and appropriately self-regulate, allowing highly resilient people to adapt more quickly to changing circumstances. As argued by Waugh, Fredrickson, and Taylor (2008), while most individuals exhibit resilient behavior at one time or another, treating resilience as a trait accounts for

significant individual differences in the capacity to adapt in the face of trauma and stress. Within this framework, ego-resiliency is expected to reflect individual differences that may be present as early as birth.

In past research, the procedures of Q-sorting¹ were the elective procedures for the assessment of ego-resiliency. More recently, Block and Kremen (1996) introduced a brief self-report scale (the ER89) that allows for the measurement of ego-resiliency by subjective self-ratings. The psychometric properties of the ER89 scale have been the subject of several investigations. A first series of studies tested the psychometrics properties of the ER89 using exploratory factor analysis and investigated correlations of the individual's mean score on the instrument with several relevant psychological constructs. For example, Letzring, Block, and Funder (2005) supported the unidimensionality, internal consistency, and construct validity of the scale. Mean scores on the ER89 scale were moderately correlated with judgments of personality made by clinicians and acquaintances in a way that is consistent with the theoretical conceptualization of ego-resiliency and with self-reports of subjective well-being, ego-undercontrol, the Big Five personality traits (especially with Extraversion and Openness), and several scales of the Minnesota Multiphasic Personal-

¹ The process of Q-sorting consists of a rank-ordering procedure in which items are placed into a forced-choice distribution such that certain numbers of items are given each rank. With this procedure, the items are each compared to each other to provide a description of the target person. This tends to be a time-consuming method of personality assessment.

ity Inventory (MMPI; Letzring et al., 2005). Within Italian samples, the studies of Caprara, Steca, and De Leo, (2003) and Fonzi and Menesini (2005) have further corroborated the unidimensionality, reliability, and construct validity of the scale, which revealed a significant correlation with internalizing and externalizing problems, interpersonal and emotional self-efficacy beliefs, and Extraversion and Openness traits.

A second series of recent studies used confirmatory factor analysis to investigate the psychometric properties of the ER89. Results from this line of research demonstrated that a two-factor solution offered the best fit to the empirical data and was stable across different samples of individuals (Alessandri, Vecchio, Steca, Caprara, & Caprara, 2008; Fonzi & Menesini, 2005; Vecchione, Alessandri, Barbaranelli, & Gerbino, 2010). However, the inadequate psychometric properties of four items of the original instrument (items 3, 4, 6, and 13) led Alessandri et al. (2008) to introduce a revised version of the scale, the ER89-R, consisting of only 10 items. There is evidence that the factor structure of the ER89-R entails a higher-order model in which a second-order factor, representing ego-resiliency, affects two first-order components labeled *Optimal Regulation* (OR) and *Openness to Life Experience* (OL), which in turn affect individual's responses to the scale items. These dimensions closely resemble the components previously identified by other authors (e.g., Block, 1978; Klohnen, 1996; Shields & Cicchetti, 1997) through the use of different measures of ego-resiliency (for a more thorough description, see Alessandri et al., 2008; Vecchione et al., 2010). The two factors resulted in similar dimensions to those previously found in exploratory factor analyses of the Q-sort items tapping ego-resiliency (Klohnen, 1996; Shields & Cicchetti, 1997). This structure proved to be invariant and stable over a 6-year period from late adolescence to young adulthood (Vecchione et al., 2010).

Building on the prior validation of the ER89-R scale, the present study was designed to examine the generalizability of the multidimensional latent structure underlying the items of the scale resulting from CFA studies, in three Western cultures (i.e., Italy, Spain, and the United States). Based on previous empirical findings (Alessandri et al., 2007; Vecchione et al., 2010), the current study adopted the distinction between the two first-order factors of ego-resiliency. Nevertheless, following previous studies (Letzring et al., 2005; Vecchione et al., 2010), we focused our analysis of validity on ER at the broader level of analysis, with the aim of further corroborating the predictive value of the broad trait of resilience, which is supported by a large body of research in the Q-sort tradition (see Vecchione et al., 2010 for a review). While previous findings supported the stability of the factor structure of the ER89-R scale across time, this is the first attempt to formally compare the structure of the instrument across large samples of people from several countries that widely differ in terms of cultural models of self (i.e., different ideals of self-realization), language, historical roots, and ways of life. We investigated

whether the ER89-R would reveal a similar correlation pattern with external variables across countries. In particular, relying on previous investigations (see Alessandri et al., 2008; Letzring et al., 2005), we hypothesized (1) a positive correlation of the ER89-R with the positive pole of all the Big Five traits (and in particular with Extraversion, Openness, and Emotional stability), (2) a positive correlation with positive affect and psychological well-being, and (3) a negative correlation with depressive affect.

Method

Participants

The Italian participants were 464 males and 556 females, ranging in age from 19 to 46 years ($M = 24.63$ years, $SD = 2.01$ years). The Spanish participants were 189 males and 263 females, ranging in age from 18 to 58 years ($M = 25.91$ years, $SD = 6.04$ years). The participants from United States were 300 males and 508 females, and 12 of unknown gender, ranging in age from 17 to 54 ($M = 22.54$; $SD = 5.58$).

Procedure

In Italy, the participants were recruited from approximately 300 psychology majors as part of a course assignment in psychological statistics at the University of Rome. The instruments were administered using a face-to-face questionnaire. Each student, acting as a research assistant, was briefed on the general aims of the research, instructed in how to administer the questionnaire, and asked to collect data from two people, equally distributed by gender and age. Students received course credits for their participation. In Spain, the participants were recruited as part of a project on well-being from approximately 100 psychology majors, using the same procedure as the Italian study. In the United States, the participants were college students who participated in one of three studies. The first study was conducted at the University of California, Riverside. Participants were part of a larger investigation of the accuracy of personality judgment (see Letzring, Wells, & Funder, 2006). They completed several pencil-and-paper self-report measures in three different take-home packets, and received \$10/h for participating in the study. The second and third studies were conducted at Idaho State University, Pocatella, ID, USA. Participants in the second study were part of an investigation of the usefulness of information about thoughts and feelings vs. behaviors for making accurate judgments of personality (see Letzring & Cotroneo, 2009). Participants in the third study were part of an investigation of online dating and personality, and completed self-report measures online. Participants of both the second and third studies earned course credit in exchange for participation.

Measures

Ego-Resiliency

The ER89-R (Alessandri et al., 2008; Vecchione et al., 2010) is a brief inventory consisting of 10 items (see Appendix). Participants were asked to indicate the degree to which they agreed with each statement on a scale ranging from 1 (*does not apply at all*) to 7 (*applies very strongly*). In the Italian sample, the adapted version of the ER89-R was used (Alessandri et al., 2008; Vecchione et al., 2010). In the absence of a well-established Spanish translation of the ER89-R, the items were translated by Spanish native speakers who were fluent in both Spanish and Italian. In the United States, the original 14-item English version of the scale was used (Letzring et al., 2005). α s were, .79 (Italy), .81 (Spain), and .73 (United States).

Personality Traits

In Italy and Spain, personality traits were measured through a short version of the Big Five Questionnaire (BFQ; Caprara, Barbaranelli, & Borgogni, 1996), which contains 60 items that form five domain scales: Energy/Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Openness. The Cronbach's α coefficients ranged from .82 (Energy/Extraversion) to .91 (Emotional Stability) in Italy, and from .84 (Openness) to .95 (Emotional Stability) in Spain. Data on the Big Five were obtained for the United States from Sample 2 and Sample 3 using the NEO-Personality Inventory-Revised. Cronbach's α coefficients ranged from .87 (Openness) to .96 (Neuroticism). The BFQ and the NEO-PI come from the same research tradition and from the same theoretical model (i.e., the Big Five model, see John & Srivastava, 1999). Moreover, item content largely overlapped (Caprara, Barbaranelli, Borgogni, & Peugini, 1993). Empirical studies have attested to high correlations between the analogous scales in the BFQ and the NEO-PI, in both the Italian and American samples, supporting the convergent validity of these measures of the Big Five (Barbaranelli, Caprara, & Maslach, 1997; Caprara et al., 1993). In particular, the uncorrected correlations between analogous scales were .71 for energy, .66 for Agreeableness, .63 for Conscientiousness, .80 for Emotional Stability, and .65 for Openness. Although different, these instruments are comparable.

Depression

In Italy and Spain, the participants rated their levels of depressive symptoms on the CESD-D, a 20-item measure developed by Radloff (1977). α s were .91 in Italy and .92 in Spain. In the United States, depression was assessed only in the first sample, using the 21-item Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). Cronbach's α was .89. Empirical studies have attest-

ed to a high degree of convergent validity between the CESD and the BDI. For example, Roberts, Lewinsohn, and Seeley (1991) found a correlation of .71 between total scores on these scales, whereas Santor, Zuroff, Cervantes, and Palacios (1995) found correlations of .86 and .87. Nevertheless, most of items from the CESD were originally taken from the BDI (Weissman, Schollomskas, Pottenger, Prusoff, & Locke, 1977). These elements make these instruments distinct, but comparable.

Psychological Well-Being

In Italy and Spain, well-being was assessed using the 5-item Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). α coefficients were .91 in Italy and .90 for Spain. Data on the SWLS were available only for the second and third U.S. samples. Cronbach's α was .86.

Results

Modelling Strategies

Multigroup confirmatory factor analysis (MGCFAs) was used to assess measurement invariance of the ER89-R scale across cultures. As a first step, we tested the factor structure of the scale within each country separately. This model, depicted in Figure 1, consisted of a second-order factor of ego-resiliency explaining the covariation among

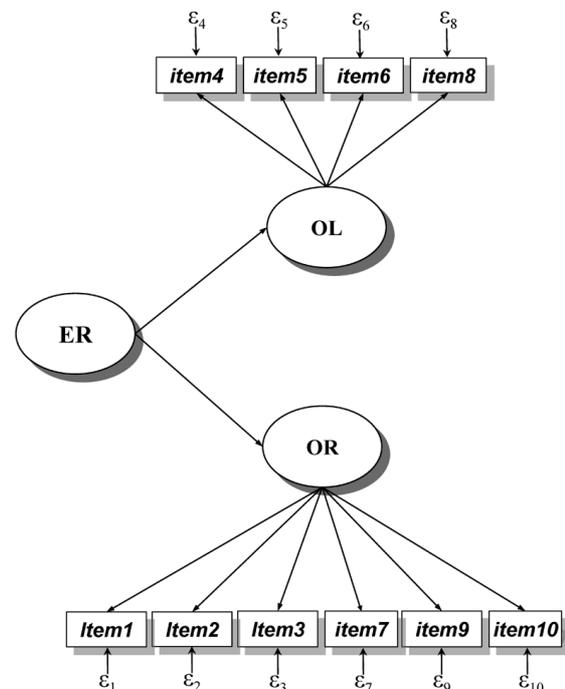


Figure 1. Diagrammatical representation of the structural model of the ER89-R scale. ER = Ego Resiliency; OL = Openness to Life experiences; OR = Optimal Regulation.

Table 1. Tests of measurement invariance of the ER89-R scale across countries

	χ^2	<i>df</i>	CFI	SRMR	RMSEA	Model comparison	$\Delta\chi^2$	Δdf	<i>p</i>	ΔCFI
United States (<i>n</i> = 794)	77.19	34	.926	.038	.040 (.028, .052)	–	–	–	–	–
Spain (<i>n</i> = 452)	127.66	34	.929	.040	.053 (.043, .062)	–	–	–	–	–
Italy (<i>n</i> = 1020)	81.06	34	.915	.043	.055 (.040, .071)	–	–	–	–	–
Model 1. Configural invariance	286.89	102	.920	.041	.028 (.025, .032)	–	–	–	–	–
Model 2. Factor loadings of measured variables invariant	346.16	118	.902	.054	.029 (.026, .033)	2 vs. 1	59.27	16	< .001	.18
Model 3. Factor loadings of measured variables partially invariant	313.00	115	.915	.047	.028 (.024, .031)	3 vs. 1	26.11	13	.02	.05
Model 4. Factor loadings of first-order factors invariant	319.55	117	.913	.049	.028 (.024, .031)	4 vs. 3	6.55	2	.04	.02
Model 5. Intercepts of measured variables invariant	525.30	130	.894	.054	.037 (.034, .040)	5 vs. 4	205.74	13	< .001	.19
Model 6. Intercepts of measured variables partially invariant	336.64	125	.911	.049	.028 (.024, .031)	6 vs. 4	17.09	8	.03	.02
Model 7. Intercepts of first-order factors invariant	341.39	127	.910	.050	.028 (.024, .031)	7 vs. 6	4.75	2	.03	.01

Notes. χ^2 = χ^2 goodness of fit; *df* = degrees of freedom; CFI = comparative fit index; SRMR = standardized root mean square residuals; RMSEA = root mean square error of approximation; CI = 95% confidence interval.

two first-order factors, which represent the two facets of ER: *Optimal Regulation* (OR) and *Openness to Life Experience* (OL). To identify a scale for the first-order factors, we fixed the factor loading of the first item for each factor to one (Steenkamp & Baumgartner, 1998). In order for the second part of the model to be overidentified, the factor loadings and error variances of the first-order factors were constrained to be equal. Hence, we assumed that the two first-order factors had identical true scores and equal reliability.

Statistical Analysis

First, we examined the factor structure of the ER89-R separately in each country (Italy, Spain, and the United States). After establishing the fit of the model within each of the three groups, we used multigroup confirmatory factor analysis (MGCFA) to examine measurement invariance (Steenkamp & Baumgartner, 1998). To this end, a sequence of nested models was tested. In the first (unconstrained) model, the factor loadings, the item intercepts, and the error variances were allowed to differ across groups (configural invariance). In the second model (first-order metric invariance), the first-order factor loadings were constrained to be equal (i.e., equal λ). In the third model (i.e., second-order metric invariance), we maintained the restrictions of Model 2 and imposed additional equality constraints on the second-order structure coefficients (equal γ). This level of invariance extends the equivalence of difference scores at the second-order level. In the fourth model, we maintained the

restrictions of Model 3 (i.e., first-order scalar invariance) and imposed additional equality constraints on the first-order intercepts (equal τ). In the fifth model (i.e., second-order scalar invariance), we maintained the restrictions of Model 4 and imposed additional equality constraints on the second-order intercepts (equal α). To test differences among these nested models, we calculated restricted χ^2 tests (χ^2) with an α level of .01, along with the ΔCFI test, with a critical level of $-.01$ (see Cheung & Rensvold, 2002).

Preliminary Analysis

As a preliminary step to the crosscultural analyses, MGCFA was used to assess measurement invariance of the ER89-R scale across sex in each country. In all countries, the equivalence of both first- and second-order factor loadings can be retained, as the equality constraints produced a nonsignificant increase of the χ^2 . The full equivalence of item intercepts, however, was not supported, as suggested by a significant χ^2 difference. This reveals that males and females have different intercepts on the ER89-R items. On the basis of modification indices, we released one (Spain), three (United States), and four (Italy) intercept constraints. After freeing these constraints, we found partial scalar invariance. Finally, intercepts of first-order factors were invariant across gender groups in all three countries.² Given that the model proved to be substantially equivalent across sex, measurement invariance across countries was examined by combining male and female groups.

² Partial invariance of item intercepts was achieved by releasing the equality constraints of items 4, 6, 9, and 10 in Italy, item 5 in Spain, and items 5, 6, and 8 in the United States. A detailed report of results is available upon request by the corresponding author.

Invariance Across Countries

As shown in Table 1, this baseline model yielded an adequate fit within each of the three countries. The configural invariance model fits the empirical data. Factor loadings of the items were all significant, ranging from .35 to .71. The first-order factors had significant loadings on the higher-order factor, which explained from 50% to 85% of the variance in the primary factors. The internal consistency of the OR and OL first-order factors was further investigated by calculating the factor scores determinacy coefficients (see Muthén & Muthén, 1998); they were higher than .70 across the three samples, ranging from .81 (United States) to .87 (Italy) for OR, and from .83 (United States) to .88 (Spain) for OL. The coefficients of the second-order factor of ER were .77 in the United States, .84 in Italy, and .86 in Spain. Table 1 presents the goodness-of-fit indices of the examined models. The model in which the factor loadings of the items were set as equal between groups (Model 2) fit the data well. However, the χ^2 difference with the unconstrained model was significant, suggesting that the loadings are not completely invariant across cultures. The Lagrange Multiplier (LM) test showed that three equality constraints contributed most to the lack of invariance. In particular, item 9 was different in Italy compared to Spain and the United States, whereas item 10 was different across all three groups. Thus, we compared Model 1 with a model that had the additional constraints of 13 item loadings (Model 3), whereas the remaining three factor loadings were free to vary. The χ^2 of these models were not significantly different, providing evidence of partial invariance of item factor loadings. Equivalence of second-order factor loadings (Model 4) can also be retained, as the χ^2 difference test was not significant. The equality constraints on item intercepts (Model 5) produced a significant increase of the

χ^2 and a nonnegligible change in CFI, which revealed some differences between the models (Cheung & Rensvold, 2002). Partial scalar invariance (Model 6) was obtained by freeing five intercepts that were not invariant across countries (intercepts of item 7 were not invariant across the three groups; intercepts of item 9 were not invariant across Spain and the United States; intercepts of item 2 were not invariant in Italy; intercepts of item 8 were not invariant in the United States). Finally, the intercepts of the first-order factors (Model 7) were invariant, as the χ^2 difference with model 6 was not significant. Thus, valid comparisons of higher order factor means can be conducted (Steenkamp & Baumgartner, 1998). When estimated, the latent means of ER-89 proved to be nonsignificantly different across countries, as revealed by the χ^2 difference test: $\Delta\chi^2(2) = 1.11$, $p = .57$.

Construct Validation

Pearson correlations were calculated between the individual mean score on the ER89-R and measures of the Big Five, depression, and psychological well-being. Overall, the correlation patterns were stable across country and sex, with some exceptions (see Table 2). As expected, higher levels of ego-resiliency were strongly associated with the positive poles of the Big Five traits across all examined countries, especially with Extraversion, Openness, and Emotional Stability. Moreover, ego-resiliency showed a positive correlation with psychological well-being in every country: The size of the coefficient was moderately high in Italy and Spain, and low in the United States. Finally, ego-resiliency was negatively correlated with depression in Italy and Spain, but not in the United States.

Table 2. Construct validity of the ER89-R individual total score in Spain, Italy, and the United States

	EN	CS	AG	ES	OP	DEP	PWB
<i>Spain</i>							
Total sample	.44**	.34**	.24**	.37**	.30**	-.24**	.41**
Males	.42**	.30**	.28**	.35**	.25**	-.25**	.46**
Females	.46**	.37**	.19**	.38**	.36**	-.23**	.40**
<i>Italy</i>							
Total sample	.36**	.27**	.20**	.37**	.43**	-.30**	.31**
Males	.26**	.34**	.22**	.45**	.38**	-.34**	.24**
Females	.41**	.22**	.20**	.33**	.45**	-.28**	.35**
<i>U.S.</i>							
Total sample	.41**	.30**	.31**	.38**	.42**	-.10	.10**
Males	.45**	.21**	.33**	.32**	.36**	.14	.13*
Females	.47**	.33**	.31**	.42**	.417**	-.2*	.10*

Notes. EN = Energy/Extraversion; CS = Conscientiousness; AG = Agreeableness; ES = Emotional Stability; OP = Openness; DEP = Depression; PWB = Psychological Well-Being. NEO-FFI Neuroticism has been reversed and labeled Emotional stability in the United States. In the US sample, the Big Five and Satisfaction with Life were assessed in Sample 2 ($N = 233$) and Sample 3 ($N = 362$), whereas Depression was assessed in Sample 1 ($N = 225$). * $p < .05$, ** $p < .01$.

Discussion

Researchers have acknowledged the importance of ego-resiliency for individual positive social functioning. However, relatively little work has focused on the development of short and reliable self-report instruments for assessing this trait (apart from the work of Klohnen, 1996). In this study, we extended the analysis of the psychometric properties of the ER89-R scale in a crosscultural perspective. Findings provided evidence of configural, metric, and scalar invariance across Italy, Spain, and the United States. Although the measurement invariance was far from perfect, the results indicate a good degree of partial scalar invariance, since most of the first- and second-order loadings and intercepts were not different across countries. This result was not unexpected; as Horn (1991) argued, full measurement invariance can be considered an ideal condition that is not expected to be fully realized. Mean level differences across countries were absent, further corroborating the robustness of the instrument and the generalizability of the construct.

After ascertaining the crosscultural invariance of the ER89-R scale, we focused on its construct validity. Results showed that ego-resiliency was strongly correlated with the positive poles of the Big Five, in particular with Energy, Openness, and Emotional Stability. More generally, ego-resiliency was positively associated with adjustment and negatively with maladjustment in a stable and consistent way across countries. These results are in accord with what previous investigations demonstrated (Letzring et al., 2005; Vecchione et al., 2010), which suggests that there are important connections between ego-resiliency and common definitions of psychological health. Indeed, extraversion has been interpreted as positive emotionality and neuroticism (or emotional instability) as negative emotionality (e.g., Costa & McCrae, 1980; Tellegen et al., 1988). Positive emotionality encompasses behavioral and temperamental characteristics conducive to joy, excitement, and vigor and to states of positive engagement, whereas negative emotionality is associated with anxiety, anger, and related states of negative engagement. Moreover, the positive link of ego-resiliency with psychological well-being and the negative link with depression are consistent with some of the theoretical implications Block and Block (1980) associated with ego-resiliency: resourcefulness and integrated performance under stress, adaptive flexibility, active engagement with the world, and a repertoire of problem-solving strategies within the social, personal, and cognitive domains (Block & Block, 1980).

Differently from the Spanish and the Italian sample, in the United States ego-resiliency was unrelated to depression and only weakly correlated with psychological well-being; this result might be due to the specific measures used in the US sample and is not dissimilar from what was initially found by Letzring et al. (2005). Indeed, in

the United States the individual mean score on the ER89-R scale was found to be strongly and positively related with the Big Five dimension of Emotional Instability, which has proved to subsume aspects from the depressive syndrome (John, Hampson, & Goldberg, 1991). However, as we used two different measures to assess depression (i.e., the CESD scale in Spain and Italy, and the BDI in the United States), these differences cannot be definitively attributed to one of the two above presented causes.

Taken together, the results of this study attest to the stability of the psychometric properties of the ER89-R across different cultural contexts varying in language and cultural roots. The potential usefulness and applicability of this scale are quite broad. Researchers in the area of self-regulation and related fields could benefit from this brief and reliable instrument that proved to be highly predictive of individual functioning. Given these characteristics, the ER89-R scale could be used in substitution of (or in combination with) classical Q-sort methodology for measuring ego-resiliency. We also encourage researchers to use these scales in combination with larger personality inventories (i.e., the NEO-PI) for a deeper understanding of how ego-resiliency works with others personality characteristics. Clinical applications of the ER89-R are also foreseen, and indeed encouraged, by the robustness of the factorial structure of the scale, as well as by the strong associations with positive psychological traits and well-being and the negative links with dysphoric or depressive states. Psychological resilience, as assessed by the ER89-R, represents a protective psychological factor that conveys information about the integrity of individual's psychological functioning. As such, higher values on this instrument may mitigate the severity of clinical diagnoses or, at the opposite end, reveal a more severe degree of impairment of functioning than found by standard psychometric instruments. Therefore, the individual's overall score on the ER89-R may offer a more general and comprehensive point of view on individual functioning.

We believe that future research on the ER89-R can benefit from assessing related constructs using multiple methods (i.e., clinical interviews, information processing tasks) and multiple informants (i.e., parents and peers). Moreover, findings may not generalize to young adults from other minority groups. Further investigation in different samples, varying in age and culture, are also needed. However, notwithstanding some limitations, the current study further attests to the ER89-R scale as a reliable, easily used, and brief instrument that assesses psychological resilience under a theoretically robust framework.

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Appendix

The ER89 – Revised Scale

1. I am generous with my friends. (OR)
2. I quickly get over and recover from being startled. (OR)
3. Most of the people I meet are likeable. (OR)
4. I enjoy trying new foods I have never tasted before. (OL)
5. I like to take different paths to familiar places. (OL)
6. I am more curious than most people. (OL)
7. I usually think carefully about something before acting. (OR)
8. I like to do new and different things. (OL)
9. My daily life is full of things that keep me interested. (OR)
10. I get over my anger at someone reasonably quickly. (OR)

Note. OR = Optimal Regulation. OL = Openness to Life experience.