



Couple Resilience Inventory (CRI): Adaptation and Validation in an Italian Sample

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Abstract

Couple resilience is an emerging dyadic construct of growing interest in the scientific literature. Resilience acts as a protective factor against mental illness and psychiatric disorders. The *Couple Resilience Inventory* is one of the most frequently used scales to assess it. Our purpose was to develop an Italian adaptation and validation of the CRI in the general population, examining its psychometric properties: factor structure, reliability, convergent validity and divergent validity. Participants were 360 individuals (83.9% women) from 19 to 74 years old ($M=34.96$; $SD=12.87$). Results from confirmatory factor analysis support the bi-factorial structure of the original validation study: positive couple resilience (PCR) and negative couple resilience (NCR). The model tested proved acceptable goodness-of-fit indices ($\chi^2(76)=346.624$, $p<.001$, SRMR=0.052, GFI=0.979, CFI=0.909, NNFI=0.891, RMSEA=0.082, PNFI=0.740). Reliability analysis demonstrated high internal consistency for both PCR ($\alpha=.92$; $\omega=.92$) and NCR ($\alpha=.85$; $\omega=.87$) CRI factors. Excellent item-factor correlations were obtained. Evidence of convergent and divergent validity was provided via a hierarchical regression model that showed significant associations between couple resilience and dyadic coping factors. These findings provide evidence regarding the psychometric properties of the Italian version of the CRI.

Keywords Couple resilience · Relational resilience · Mental health · Dyadic coping · Validation

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Introduction

Couple relationship quality has shown to be a crucial determinant of people's well-being [31]. Individuals with a high-quality couple relationship experience greater psychological and physical health [56], to the point that the relationship quality has an equivalent (or even greater) impact on mortality rates than traditional health risk variables [23].

Maintaining a satisfactory couple relationship over time, however, is a major challenge for most couples [40]. Although moments of happiness outnumber the ones of hardship [27], most couples face significant difficulties navigating their daily lives, and moments of stress are common. Major and minor stressors take their toll and, if chronic, undermine relationship functioning [48].

In this regard, challenges for Italian couples, despite sharing commonalities with most Western countries, also show some specific characteristics. These specificities are linked to distinctive social and cultural values, particularly the central role of family ties, which continue to shape couple formation and relationship dynamics [2]. As in the rest of Europe, divorce rates in Italy have increased since divorce was legalized in 1970, with relational difficulties among the main reasons for union dissolution [10]. Nonetheless, divorces in Italy have always been and still are lower than the European average [22]. At the same time, skepticism toward marriage and financial difficulties have contributed to a steady decline in marriages over time, with Italy reaching the lowest marriage rate in the European Union in 2019 [21, 58]. This decline has been accompanied by a marked increase in non-marital cohabitation, which has tripled over the past 20 years [36]. Despite the growing emphasis on partner-centered relationships, Italian families continue to maintain strong social and family ties that support couples and shape their daily lives [5]. Overall, Italian couples face multiple stressors but also show notable resilience, making the study of couple resilience particularly relevant for both scientific and social purposes [20].

Couple resilience (CR), or relational resilience, is the process through which partners engage in supportive relational behaviors to help each other navigate adversity, maintain well-being, and strengthen their relationship, particularly in the context of significant or highly challenging life events [47, 53]. By fostering adaptive interactions, couples can overcome relational turbulence—defined as periods in which partners experience heightened emotional, cognitive, and communicative reactivity due to relational uncertainty and changes in relationship stability—and enhance partner facilitation, or supportive behaviors that promote relational functioning [37]. Also, resilience has been proved as a protective factor against mental health problems [16, 55] and several psychiatric disorders, including anxiety, depression, and perceived stress [4], perinatal depression [39], schizophrenia spectrum disorders, bipolar disorder (I or II), major depressive disorder [44] and posttraumatic stress disorder (PTSD; [13]). CR can be measured through the *Couple Resilience Inventory* (CRI; [53]) as referring to the interaction's partners engaged in when they faced the greatest challenge ever experienced by the couple, thereby representing partners' ability to use team work when most needed. Sanford et al. [53] also showed that higher levels of CR were associated with greater marital satisfaction, which in turn contributed to overall partners' well-being [30].

Several constructs in the close relationship literature are conceptually related to the CR, such as relationship satisfaction, dyadic coping, and dyadic adjustment. Even though CR is clearly linked to relationship satisfaction, it likely encompasses more than just satisfaction.

Relationship satisfaction primarily reflects a global evaluative judgment of the relationship's quality [11, 25], whereas CR involves active and dynamic interactional processes through which partners encourage each other to stay positive or assist each other using their unique skills and qualities in the face of adversity [24]. These interactions could be independent of their overall relationship satisfaction and, in fact, CR was found to account for unique variations in well-being, even when controlling for relationship satisfaction [53].

Another related construct to CR is dyadic coping (DC), as it plays a significant role in couples' coping with adversities in a resilient way [20, 51]. In this sense, from its classical and systemic-transactional conceptualization, DC comprises efforts by one partner in a relationship to alleviate the stress experienced by the other partner, as well as collaborative efforts to manage stress that arises within the relationship itself [9]. DC involves both partners actively participating in managing stress by offering and receiving support from one another, as well as engaging in collaborative problem-solving and mutual emotional regulation [60]. DC was developed in the context of minor stressors, such as daily hassles [19] and then investigated also in the context of major life events, such as illness [49]. Thus, while CR represents partners' process to adapt, recover and grow, overcoming what they perceive as the greatest challenge in their shared history, DC refers to the ongoing, broader process of coping together with both major and minor stressors. As for empirical support, several studies reported positive associations between common and supportive DC and CR [4, 17, 51, 62], whereas other research indicates nonsignificant associations between DC and CR [3, 42]. Therefore, while resilience can be expected to correlate with DC, these correlations are likely to be low to moderate.

Dyadic adjustment (DA) is another construct closely related to CR. DA was defined as the process that unifies the couple and determines the overall quality and stability of the relationship through different factors, including dyadic consensus (or agreement on important issues in the functioning of the couple), dyadic cohesion, dyadic satisfaction, interpersonal tensions, and problematic differences within the couple [57]. While DA reflects a relatively stable outcome or state of relationship functioning, CR refers to processes that may contribute to maintaining or restoring adjustment under conditions of adversity. Current studies have proved CR as a protective factor for DA in the context of cancer [14] and for depressive symptoms associated with infertility [6].

According to this conceptual disquisition, CR, DC and DA appear as distinct yet interrelated constructs. Supporting this view, a recent actor-partner mediational study showed that CR exerts an indirect effect on DA through DC processes [61].

In light of the above, because no valid and reliable measure of CR currently exists in Italy, the main goal of this study was to adapt and validate the Italian version of the CRI, examining its psychometric properties as well as its convergent and divergent validity.

Method

Participants

The sample was composed of 360 participants from the general population, between 19 and 74 years old ($M=34.96$; $SD=12.87$). Most of the participants were women (83.9%), heterosexual (93.3%) and without children (65.8%). All participants were from Italy, most

from the Lombardy region (72.8%). Regarding the educational level, most had secondary level studies (62.8%). In terms of professional status, most were employed (62.0%). The income level was unevenly distributed, but nearly half (46.6%) reported having a low income (€ < 10,000–20,000). Of those participants in a current relationship, nearly all reported having a closed/monogamous relationship (99.4%), with more than half living together (60.0%). Inclusion criteria were the following: 18 years or older, Italian nationality and residence.

Measures

Couple Resilience

The *Couple Resilience Inventory* was administered to assess CR (CRI; [53]). The CRI comprises 14 items rated on a 6-point Likert scale (1 = *Definitely did NOT happen*, 2 = *Probably did NOT happen*, 3 = *Might have happened*, 4 = *Certainly happened but I cannot recall specific examples*, 5 = *Certainly happened and I can think of one example*, 6 = *Certainly happened and I can think of two or more examples*). The perception of the couple's resilience is individually assessed. The original CRI has a bi-factorial structure: F1. Positive CR (PCR, items 1–9; $M=3.97$; $SD=1.16$) and F2. Negative CR (NCR, items 10–14; $M=2.14$; $SD=1.19$). The internal consistency of CRI is excellent according to cutoff criteria [26], for both PCR ($\alpha=.89$) and NCR ($\alpha=.93$) factors.

Dyadic Coping

The *Dyadic Coping Inventory* (DCI; [8]) was used to assess the individuals' perception on their own and their partner's DC processes. For this study, the Italian adaptation and validation of the DCI [18, 41] was used. The DCI is composed of 37 items rated on a five-point Likert scale (1 = *Very rarely*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, 5 = *Very often*). Items tap self-perceptions of own DC responses, perceptions of the partner's DC responses, and shared DC efforts enacted by the couple as a whole. According to the CFA performed in the present sample and in line with previous studies [18], the Italian version of DCI has a 6-factor internal structure: F1. Stress communication, F2. Emotion-Focused Supportive DC, F3. Problem-Focused Supportive DC, F4. Delegated DC, F5. Negative DC and F6. Common DC. The goodness-of-fit indices tested (RMSEA, SRMR, GFI and CFI) resulted excellent. As DC is the process through which partners cope together, as a couple, with daily stressful events [18], the DCI was considered as gold standard to analyse the convergent and divergent validity with the CRI factors.

Procedure

All measures were self-reported, and data was collected using the SurveyMonkey online platform, following a cross-sectional survey design [29]. First, permission was obtained from the original authors of the test for translation and adaptation into Italian. Thus, in a first phase, the CRI was adapted into Italian using the back-translation method following the guidelines for adapting and translating psychological tests [35]. Thus, two independent translators were involved. First, one native Italian translator translated the original CRI into

Italian language. Second, the Italian version was translated back into English by two different translators, after which the research team compared the original and back-translated English versions to ensure semantic and conceptual equivalence. In this sense, item 11 (“A partner was abusive”) was slightly adapted to Italian (“Uno dei due partner è stato violento o ha maltrattato l'altro”), in order to avoid the strong and potentially ambiguous negative connotation associated with the term *abusive* in Italian. This adaptation aimed to preserve conceptual equivalence by explicitly referring to harmful behaviors within the couple relationship, while ensuring clarity and comprehensibility for Italian respondents. Therefore, the sense, format, grammar, and cultural appropriateness of each item were reviewed. Subsequently, the adapted and translated CRI was piloted with a controlled sample ($n=47$), in order to analyze the items' parameters (difficulty, variance and discrimination). The results obtained in the pilot test showed that all items had good parameters. Thus, the mean and variance were adequate and the items were significantly correlated with their respective factors, showing a good discrimination. In the second phase, both measures (CRI and DCI) were administered to the overall sample, following the inclusion criteria mentioned above and through a non-probabilistic snowball sampling method [28]. To ensure the internal validity of the administration, no participants who took part in the pilot test in the first phase participated in the overall data collection.

Data Analysis

Data analyses were conducted using IBM SPSS Statistics v. 29 [33] and IBM SPSS AMOS v. 29 [34]. On the one hand, SPSS Statistics was employed to check for normality of data distribution, analyzing descriptive statistics and performing confirmatory factor analysis (CFA). The CFA was carried out to test the two-dimensional model proposed by the authors of the original scale. According to the original CRI validation, given that the two factors were allowed to correlate with each other [53], CFA was performed using the oblimin oblique rotation through Kaiser normalization, maximum likelihood and robust estimation methods. Also, convergent and divergent validity was examined through Spearman's correlation and hierarchical regression analysis, testing the relationship between CRI and DCI factors. Mainly, common DC was used to assess the convergent validity with PCR and divergent validity with NCR. In contrast, negative DC was used to analyze convergent validity for NCR and divergent validity for PCR. However, other positive factors of DC (stress communication, emotion-focused supportive, problem-focused supportive and delegated styles) were also included in the convergent validity analysis. With regard to reliability, Cronbach's alpha and McDonald's omega tests were carried out to analyze the internal consistency of the CRI factors. Also, means comparisons (Mann-Whitney's U test) were calculated in order to determine possible differences between sexes and sentimental situations in both scales. Rank biserial correlation [15] were analysed to determine the effect size of the between-groups differences: $r_b \approx .1$ (small); $r_b \approx .3$ (medium); $r_b \approx .5$ (large).

On the other hand, IBM SPSS AMOS was used to determine the goodness of fit of the obtained model. First, regarding absolute fit indices, the following indices and cutoff values were considered [32]: the standardized root mean square residual (SRMR; good if $\leq .08$) and the Jöreskog-Sörbom goodness of fit index (GFI; adequate if $\geq .95$). Second, for comparative and relative fit indices, the Bentler comparative fit index (CFI; adequate if $\geq .90$) and the Bentler-Bonett non-normed fit index (NNFI; adequate for values close to .95) were used.

Third, to assess model parsimony, the root mean square error of approximation (RMSEA; adequate if $\leq .10$; [43]) and the parsimonious normed fit index (PNFI; adequate if $\geq .50$; [46]) were examined. Additionally, Hu and Bentler [32] indicated that the combination of a CFI cutoff value of $\geq .90$ and an SRMR cutoff value of $\leq .08$ is highly sensitive in detecting model fit, with acceptable rejection rates ranging from 0% to 4.2%.

Ethical Approval

This research obtained the ethical approval from the Ramon Llull University Ethical Committee (*Code 2122013D, 31 May 2022*). All participants given the informed consent.

Results

Descriptive Analysis of Items

Descriptive analyses of the items were provided in Table 1. Similar means were obtained for all items, with the exception of item 11, which assessed violence. Consistently, in terms of skewness and kurtosis, it is worth noting that item 11 scored higher in both descriptives compared to the rest of the items in the same factor. This was due to the sample reporting high PCR, with low rates of violence.

Internal Structure

The factor structure of the original CRI [53] was tested using confirmatory factor analysis (CFA). The CFA results supported the two-factor correlated internal structure, explaining the 63.17% of variance. The standardized factor loadings ranged from .686 to .826 for the PCR factor, and ranged from .443 to .841 for the NCR factor (see Table 2). The correlation between the two factors was statistically significant and resulted inverse ($r = -.223^{***}$; $R^2 = .054$). Also, the means and standard deviations obtained for the PCR ($M = 4.97$; $SD = 1.00$) and the NCR factors ($M = 2.94$; $SD = 1.26$) were similar to those of the original validation.

Regarding the goodness of fit of the model, the obtained data indicated an adequate fit for the two-factor correlated model ($\chi^2(76) = 346.624$, $p < .001$, SRMR = 0.052, GFI = 0.979, CFI = 0.909, NNFI = 0.891, RMSEA = 0.082 [.079–.086], PNFI = 0.740). Additionally, a one-factor model was tested, yielding an inadequate fit ($\chi^2(77) = 1098.231$, $p < .001$, SRMR = 0.155, GFI = 0.952, CFI = 0.655, NNFI = 0.593, RMSEA = 0.192 [.182–.202], PNFI = 0.542) which further supported the two-factor correlated model (Fig. 1).

Internal Consistency

Table 3 presents the item-factor correlations and reliability coefficients. With regard to Cronbach's alpha and McDonald's omega reliability analyses, the internal consistency resulted excellent for PCR factor ($\alpha = .92$; $\omega = .92$) and good for NCR factor ($\alpha = .85$; $\omega = .87$) [26]. Moreover, item analyses showed that all items contributed to the internal consistency

Table 1 Descriptive statistics of CRI items

Item	<i>M</i> (<i>SD</i>)	Skewness	Kurtosis
1. Either you or your partner helped the other view the situation from a good perspective [Uno dei due partner ha aiutato l'altro a vedere la situazione in un'ottica positiva]	5.06 (1.17)	-1.28	1.31
2. Either you or your partner was attentive to the other's needs [Uno dei due partner era attento ai bisogni dell'altro]	5.18 (1.13)	-1.49	1.85
3. One partner helped the other (or both partners helped each other) by maintaining a positive attitude and being optimistic [Uno dei due partner ha aiutato mantenendo un atteggiamento positivo ed. essendo ottimista]	5.11 (1.12)	-1.27	1.16
4. One partner helped the other (or both partners helped each other) by remaining calm, stable, and strong in the face of a difficult situation [Uno dei due partner ha aiutato] rimanendo calmo, stabile e forte di fronte a una situazione difficile]	5.02 (1.15)	-1.20	1.06
5. One partner helped the other (or both partners helped each other) by using special skills or abilities for addressing the situation [Uno dei due partner ha aiutato] utilizzando particolari capacità o abilità per affrontare la situazione]	4.74 (1.25)	-0.83	0.02
6. You and your partner were clear and accurate in their communication [Entrambi abbiamo comunicato in modo chiaro e accurate].	4.74 (1.42)	-0.91	-0.27
7. You and your partner worked together like a team [Entrambi abbiamo lavorato insieme come una squadra]	4.63 (1.49)	-0.87	-0.30
8. You and your partner laughed together or enjoyed humor together [Entrambi abbiamo riso o abbiamo usato l'umorismo insieme]	5.05 (1.38)	-1.37	0.88
9. You and your partner spent time together doing things as a couple [Entrambi abbiamo trascorso del tempo insieme facendo cose in coppia]	5.21 (1.28)	-1.66	1.98
10. Either you or your partner withdrew from your communication [Uno dei due partner si è sottratto alla comunicazione]	3.83 (1.71)	-0.25	-1.22
11. Either you or your partner was abusive [Uno dei due partner è stato violento o ha maltrattato l'altro]	1.42 (1.09)	2.91	8.08
12. Either you or your partner denied, ignored, or downplayed the seriousness of a problem [Uno dei due partner ha negato, ignorato o minimizzato la gravità del problema]	3.02 (1.72)	0.38	-1.09
13. Either you or your partner was critical, or hostile, or blamed the other [Uno dei due partner era critico o ostile, o incolpava l'altro]	2.99 (1.71)	0.36	-1.13
14. Either you or your partner decided that it was best to avoid discussing a topic [Uno dei due partner ha deciso che era meglio evitare di discutere l'argomento]	3.43 (1.63)	0.02	-1.08

of both factors. Also, item-factor correlations were higher than 0.7, confirming adequate internal consistency in terms of both reliability coefficients and item-factor correlations.

Convergent and Divergent Validity

Spearman's test proved significant correlations between CR factors and DCI factors. Specifically, the factor 1 (PCR) correlated significantly with positive dimensions of DC (stress communication, emotion-focused supportive DC, problem-focused supportive DC, delegated DC and common DC) and correlated inversely with negative DC factor of DCI. Consistently, the factor 2 (NCR) obtained significant correlations, as expected in the opposite directions.

Table 2 Factor loadings from the CFA of CRI scores

Item	Factor loadings		Communalities
	F1. Positive CR	F2. Negative CR	
Item 1	.785	–	.623
Item 2	.813	–	.664
Item 3	.806	–	.652
Item 4	.787	–	.620
Item 5	.715	–	.511
Item 6	.744	–	.571
Item 7	.773	–	.626
Item 8	.742	–	.551
Item 9	.682	–	.465
Item 10	–	.729	.533
Item 11	–	.450	.203
Item 12	–	.841	.708
Item 13	–	.809	.655
Item 14	–	.813	.661

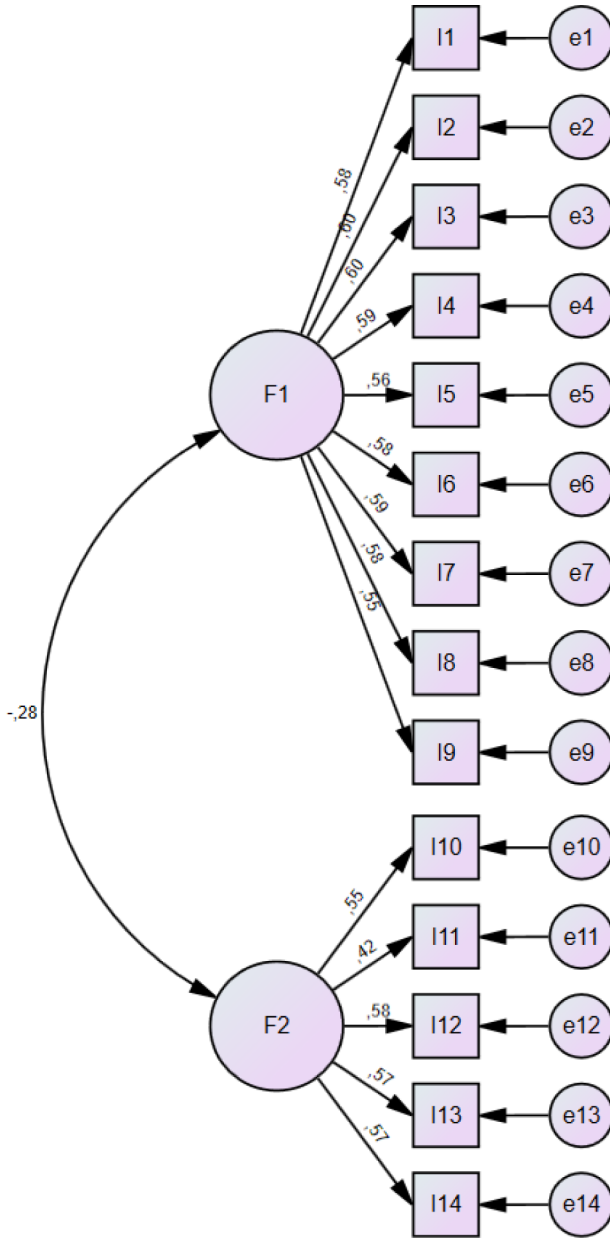
Hierarchical regression analysis was also conducted with the scores on the two CRI factors as the dependent variable and the scores on DCI factors as predictors (see Table 4). The model obtained when entering stress communication in the first step of the analysis explained 20.7% of the variance for positive resilience and 3.3% of variance for negative resilience. With emotion-focused supportive DC added to the equation, the variance explained by the model was 40.6% and 13.9%, respectively. Adding problem-focused supportive DC, the variances obtained were 42.0% and 14.0%. When delegated DC style was included in the regression model, the explained variances increased to 42.5% and 14.8%. With negative DC added to the equation, the variance explained resulted in 43.5% and 23.0%, respectively. Finally, with common DC added, the variance explained was 46.2% for PCR and 27.2% for NCR, with all six predictors being statistically significant.

This hierarchical regression analysis showed that values on PCR were positively related to values on emotion-focused supportive and common DC styles, such that when other predictors were constant the score on PCR increased by .316 for each point increase in the emotion-focused supportive factor, by .293 for each point increase in common DC factor. The obtained outcomes also showed that PCR was negatively related to values on negative DC style, with a decrease of .162 for each point increase in the negative DC, with other predictors being constant. With regard to NCR, when other predictors were constant, an increase by .658 for each point increase in negative DC was obtained, and also a decrease by .466 for each point increase in common DC.

Therefore, for PCR, emotion-focused supportive and common DC resulted to be the strongest predictors. For NCR, negative and common DC were the most powerful predictors of negative resilience. These outcomes supported convergent and divergent validity of CRI.

Between-Group Differences by Sex and Sentimental Situation

With regard to the comparison between men and women, Mann-Whitney's U test proved a non-significant difference ($p > .05$) in CR factors. Thus, positive and negative CR resulted similar among both sexes. However, statistically significant differences were obtained in DC, concretely in stress communication ($M[SD]_{\text{Man}} = 3.24 [0.59]$, $M[SD]_{\text{Woman}} = 3.45$



Note. F1 = Positive Couple Resilience (PCR); F2 = Negative Couple Resilience (NCR)

Fig. 1 Standardized estimates of the Italian CRI items obtained in the confirmatory factor model

Table 3 Item-factor Spearman's correlations and reliability coefficients

	F1. Positive couple resilience (PCR)	F2. Negative couple resilience (NCR)
<i>Items</i>		
Item 1	.770***	
Item 2	.777***	
Item 3	.782***	
Item 4	.777***	
Item 5	.788***	
Item 6	.799***	
Item 7	.829***	
Item 8	.756***	
Item 9	.703***	
Item 10		.825***
Item 11		.457***
Item 12		.864***
Item 13		.849***
Item 14		.848***
<i>Reliability coefficients</i>		
Cronbach's α	.923	.853
McDonald's ω	.923	.873

*** $p \leq .001$ **Table 4** Hierarchical regression with positive and negative resilience factors as dependent variables and dyadic coping factors as independent variables

Variables	<i>B</i>	SE β	β	<i>t</i>	<i>p</i>	ΔR^2	<i>F</i>
<i>Positive couple resilience (PCR)</i>							
Intercept	1.846	.402		4.59	<.001		
Stress Communication	.108	.078	.070	1.37	.171	.207	93.32***
Emotion-Focused Supportive	.316	.106	.229	2.98	.003	.200	122.18***
Problem-Focused Supportive	.162	.087	.115	1.87	.063	.014	86.08***
Delegated	.044	.063	.034	.70	.484	.004	65.47***
Negative	-.162	.081	-.107	-2.01	.045	.011	54.56***
Common	.293	.070	.257	4.16	<.001	.026	50.44***
<i>Negative couple resilience (NCR)</i>							
Intercept	2.657	.589		4.51	<.001		
Stress Communication	.171	.115	.088	1.49	.138	.033	12.38***
Emotion-Focused Supportive	.103	.155	.059	.66	.509	.105	28.71***
Problem-Focused Supportive	.029	.127	.016	.23	.818	.001	19.30***
Delegated	-.104	.093	-.063	-1.12	.263	.009	15.47***
Negative	.658	.118	.343	5.58	<.001	.082	21.20***
Common	-.466	.103	-.325	-4.51	<.001	.042	22.02***

[0.66], $p=.024^*$, $r_b=-0.186$), problem-focused supportive ($M[SD]_{\text{Man}}=3.58$ [0.67], $M[SD]_{\text{Woman}}=3.77$ [0.72], $p=.031^*$, $r_b=-0.178$) and delegated ($M[SD]_{\text{Man}}=3.22$ [0.62], $M[SD]_{\text{Woman}}=3.40$ [0.78], $p=.048^*$, $r_b=-0.163$) DC styles. Women group obtained higher means in these three DC factors, with a small effect size [15].

In terms of sentimental situation, participants in a current relationship had significantly higher means ($p < .01$) in all positive CR and positive DC factors, compared to single respondents who responded retrospectively with their (ex-)partner in mind. By contrast, the group of singles obtained statistically significant lower means in negative CR and negative DC factors ($p < .001$). Rank-biserial correlation [15] indicated a medium effect size ($r_b \approx .3$) for the obtained between-group differences.

Discussion

The aim of this study was to develop an Italian adaptation of the CRI by providing empirical evidence with regard to its psychometric properties. Thus, to the best of our knowledge, the present research is the first study to provide a reliable and valid Italian adaptation of the CRI to measure CR. The CFA results supported the two-factor correlated structure proposed by Sanford et al. [53], as the obtained model has proved good fit characteristics, high internal consistency and evidence of convergent and divergent validity. Additionally, the descriptive statistics obtained for both factors (PCR: $M = 4.97$, $SD = 1.00$; NCR: $M = 2.94$, $SD = 1.26$) were very close to the results reported in the Spanish validation of the CRI (PCR: $M = 4.92$, $SD = 1.03$; NCR: $M = 3.20$, $SD = 1.37$; [30]) but slightly different from those reported in the original study (PCR: $M = 3.97$, $SD = 1.16$; NCR: $M = 2.14$, $SD = 1.19$; [53]). The similarity between the Italian and Spanish validation studies may be explained by shared cultural characteristics, whereas the more pronounced differences compared to the English-speaking sample could be attributed to several factors, including differences in sample size and age distribution ($N = 320$, age range = 18–80, $M = 42.8$; [53]), as well as potential cultural variations in the interpretation of adversity and resilience.

This study not only confirms the results of the original validation, but also provides evidence about the relationship between the way couples cope with stressful daily events together and their CR in the face of the stressful events and adversities. In this sense, construct validity evidence was provided by positive associations between adaptive factors of DC styles (supportive, delegated and common) with PCR, as well as negative associations with negative DC.

Notably, although correlation tests proved that both supportive styles (emotion-focused and problem-focused) obtained similar correlation with PCR, hierarchical regression demonstrated a stronger linear effect of emotion-focused supportive DC than problem-focused supportive DC on PCR. Thus, these results suggest that couples who focus on problem-solving when coping with stress have less PCR than those that focus on their emotional mutual understanding. Although these findings contradict the results by Aydođan and Ozbay [3], who found no associations between DC and CR, they add to all previous studies finding significant and positive associations between common and supportive DC and CR [4, 51, 62].

NCR showed, as expected, a direct association with negative coping and an inverse association with adaptive DC styles (supportive, delegated and common styles). These findings support previous research analyzing relational resilience as a predictor of positive and negative DC [4].

Thus, common DC showed the highest correlations with both positive and negative CR factors, thereby pointing to the importance of couples shared coping efforts for favoring positive resilience and decreasing negative resilience. This conclusion is consistent with

Canzi et al. [12], who showed that high levels of common DC and low levels of negative DC improved relationship satisfaction and generativity of the couple, increasing their ability to successfully cope together with major stressors (e.g., pre-adoption evaluation). Is also consistent with Revenson et al. [50], who argued that positive DC generates a framework that promotes resilience.

With regard to the sex differences, it is interesting to note that the perception of CR has resulted similar between men and women. In addition, women perceive more stress communication [18], supportive coping and delegated coping than men [3]. However, consistently with Donato et al. [18], common DC resulted similar among both sexes, which contradicts previous findings supporting higher common DC perceived by men [3]. Thus, given this lack of consensus in previous research, more studies are needed to clarify the sex differences in both DC and CR.

Also, the differences found between people in current partnerships and people who responded thinking about their ex-partner are interesting. On the one hand, singles, as compared to participants in current relationships, score lower in positively valenced factors (i.e., positive CR and positive DC factors), thereby supporting the partner enhancement cognitive bias (i.e., the perception of the ex-partner is negatively biased, while individuals in satisfied relationships tend to assess their relationship positively; [45]). On the other hand, however, they score lower also in negatively valenced factors (i.e., negative CR and negative DC factors) thereby contradicting the above cognitive bias. We could speculate that temporal distance from the past relationship reduced memory of both positive and negative behaviors. It may also be that in these individuals, partner enhancement cognitive bias operates in conjunction with rosy retrospection [1], that is a defense mechanism operating through positive memory biases. This latter mechanism may arise especially for negative (vs. positive) past memories, as they may be more threatening for the individual's well-being and sense of self-worth. Further investigations are needed to clarify these effects, being CRI a useful tool to assess the perception of current and past relationships.

Limitations, Future Research Lines and Strengths

This study has several limitations and strengths. Regarding limitations, it could not assess test-retest reliability, as no longitudinal data were gathered. Also, the sample size is not representative of the Italian population, as participants were predominantly from the Lombardy region. Moreover, the cross-sectional design used in this study does not allow to infer causal relationships between DC and CR. Furthermore, the higher participation of the female and current relationship population limits the statistical conclusion of the between-groups differences obtained. It is also noteworthy that the sample of this study was drawn from the general population, which may partly explain the high resilience scores obtained, as well as the skewness and kurtosis of item 11. In addition, at the item level, the semantic adaptation of item 11 may have narrowed its scope toward more explicit forms of abuse, which could have contributed to its skewed distribution and should be considered when interpreting its psychometric performance. Finally, although perceptual biases, like idealization, are present in current relationship couples [38] and represent a common risk in interpersonal dyadic assessment [52], it is important to note that asking individuals to recall events that occurred during a past relationship poses a possible bias, as they are commenting on the relationship from a different state of mind. However, our findings comparing current and past relation-

ships show that such a state of mind may be more complex than expected and deserve further investigation. Given these limitations, future studies could replicate this research using both general and clinical population samples to enable meaningful group comparisons. Additionally, including participants from a broader age range would allow for a deeper understanding of how DC and CR evolve across different stages of the life cycle. From an ecological and systemic perspective, future research could incorporate individual-level variables such as resilience, well-being, quality of life, anxiety, and depression. Moreover, dyadic variables—such as marital quality, spousal support, couple satisfaction, and intimate partner violence—could be explored as potential correlates of CR. At the family level, constructs like family functioning and family resilience may also offer valuable insights. The availability of this measure in multiple languages, such as English [53] and Spanish [30], would facilitate cross-cultural research, allowing future comparative studies of CR across different cultures and enabling the examination of factorial invariance, therefore enhancing the precision of measurement across diverse cultural contexts. This would also allow researchers to investigate cultural differences in how CR relates to partners' well-being. Finally, further studies should explore the relationship between CR and the development of specific psychiatric disorders, offering a more comprehensive view of its clinical relevance.

On the other hand, this study has several strengths. First, although non-probabilistic snowball sampling limits population generalizability, it is a widely used sampling method in validation studies [7] that may enhance response honesty, authenticity and disclosure by leveraging trust-based referral networks, thereby reducing social desirability bias [59]. Second, the translation and adaptation process has followed the guidelines of the ITC [35]. Third, sample size has allowed us to obtain an excellent sample-to-item ratio of 26:1 [54]. Fourth, our adapted instrument allows the comparability of CR between different language and country samples. Fifth, this study has several implications for clinical practice and research.

Practical Implications

This version of the CRI could be used in clinical assessment in couple therapy with Italian partners. In addition, given that DC has shown to play a key role in prevention and therapy [9], the combination of the DCI and the CRI in the anamnesis phase may allow psychotherapists to identify needs in coping styles and resilience of couples, setting therapeutic goals that could promote both phenomena. Furthermore, when integrated with measures of dyadic adjustment (DA), this multidimensional assessment can help clinicians differentiate whether relational distress is primarily related to impaired stress-coping processes (DC), limited capacity to mobilize joint resources during adversity (CR), or broader and more stable difficulties in relationship functioning (DA). Such differentiation is clinically relevant, as it allows practitioners to prioritize intervention targets—for example, enhancing supportive and common strategies when DC is compromised, strengthening collaborative meaning-making and teamwork in the presence of low CR, or focusing on communication and consensus-building in cases of low DA.

It can also help to specifically assess differences in partners' perceptions of their positive relationship capacities, for example through the actor-partner interdependence model, as has been undertaken in recent resilience studies [37]. From a therapeutic standpoint, identifying actor and partner effects across CR, DC, and DA may inform interventions

aimed at reducing maladaptive reciprocal patterns and promoting mutual responsiveness, particularly when one partner's resources compensate for or undermine the other's adjustment. In addition, the CRI can be used in a psychotherapeutic context to assess therapeutic efficacy, following a repeated measurement design. When combined with DA assessment (Dyadic Adjustment Scale, DAS; [57]), pre–post–follow-up changes in CR may help clinicians determine whether improvements in resilience processes translate into more stable gains in overall relationship quality and adjustment (including relationship satisfaction) or whether additional intervention is required to consolidate these changes into enduring relational functioning.

In summary, our study provides evidence regarding the psychometric properties of the Italian version of CRI with a sample of adults. The factor structure of the Italian CRI comprised two correlated factors: positive couple resilience and negative couple resilience, and yielded satisfactory goodness-of-fit indices and excellent reliability coefficients. We found associations between DC and CR that allows to conclusive good construct validity. To sum up, the Italian version of CRI is a brief, suitable, valid and reliable tool for couple resilience assessment.

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Data Availability The data used in the research are not available. Data cannot be publicly shared due to privacy/ethical restrictions. Participants were informed in the informed consent form that the research data provided will only be available to the research group conducting the study.

Declarations

Ethical Approval Statement This research obtained the ethical approval from the Ramon Llull University Ethical Committee (2122013D). All participants given the informed consent.

Competing Interests The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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