
Gratitude Questionnaire-6 (GQ-6)

Proprietà psicometriche della versione italiana

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Sommario

Lo scopo del presente lavoro è quello di verificare le proprietà psicometriche della versione italiana del *Gratitude Questionnaire-6* (GQ-6). 321 partecipanti sono stati coinvolti nello studio. Sono state esaminate le proprietà psicometriche del questionario in termini di dimensionalità, attendibilità e validità concorrente. L'Analisi Fattoriale Confermativa mostra una struttura unidimensionale. Il questionario mostra anche una buona attendibilità e validità concorrente. I risultati sottolineano che la versione italiana del *Gratitude Questionnaire-6* (GQ-6) è uno strumento valido e attendibile per rilevare la gratitudine anche nel contesto italiano.

Parole chiave

Gratitudine, Proprietà psicometriche, *Gratitude Questionnaire-6* (GQ-6), Contesto Italiano.

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Gratitude Questionnaire-6 (GQ-6)

Psychometric properties of the Italian version

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Abstract

The present study aims to verify the psychometric properties of the Italian version of the Gratitude Questionnaire-6 (GQ-6). Three hundred and twenty-one participants were involved in the study. The psychometric properties of the questionnaire in terms of dimensionality, reliability and concurrent validity were examined. Confirmatory Factor Analysis showed a unidimensional structure. The questionnaire also showed good reliability and concurrent validity. The results underlined that the Italian version of the Gratitude Questionnaire-6 (GQ-6) is a valid and reliable instrument to detect gratitude also in the Italian context.

Keywords

Gratitude, Psychometric properties, Gratitude Questionnaire-6 (GQ-6), Italian context.

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The term «gratitude» has its origin in the Latin term *gratia* and refers to thankfulness and grace (Emmons & Shelton, 2002). This thankfulness could be directed both to human beings and other entities such as nature or divinities (Weiner, 1986). Gratitude has been recognized as an attribution process in two phases (Weiner, 1986): one is the recognition of the achievement of a positive result and the relative sense of well-being connected to it; the other is the attribution of this positive result to others. Gratitude includes individual positive experience in relation to a gift received from a person or entity (Ortony et al., 1988). Lazarus (1991) emphasized the value of empathy for gratitude, permitting us to appreciate what others have done for people.

In the evolution of the construct of gratitude, the first traditional definition considers it as unidimensional. Gratitude was seen as an individual disposition, as «a generalized tendency to recognize and respond with grateful emotion to the roles of other people's benevolence in the positive experiences and outcomes that one obtains» (McCullough et al., 2002, p. 112). Subsequently, multidimensional definitions of the construct emerged. Watkins et al. (2003) identified three dimensions of gratitude: sense of abundance, simple appreciation and appreciation of others. Adler and Fagley (2005) showed eight dimensions of gratitude: interpersonal, personal assets, present moment, rituals of gratitude, astonishment, social comparisons, appreciation of life in general, and expression of gratitude.

Gratitude is a construct studied in particular in the framework of positive psychology (Seligman & Csikszentmihalyi, 2000), considering its positive relationships with well-being (McCullough et al., 2002; Emmons & McCullough, 2003; Portocarrero et al., 2020) and including both affective and cognitive aspects (Froh et al., 2009; Watkins et al., 2003). Furthermore, gratitude has showed positive relationships with hope and optimism (McCullough et al., 2002; Singh, 2022) and inverse relationships with depression (Hao et al., 2022), anxiety and envy (McCullough et al., 2002). Gratitude has been shown as a fundamental resource for strengthening individual well-being (McCullough et al., 2002; Emmons & McCullough, 2003; Portocarrero et al., 2020), since it is increasable through specific training (Lyubomirsky et al., 2011; Rash et al., 2011), according to strengths-based prevention perspectives (Di Fabio & Saklofske, 2021) and a primary prevention perspective (Di Fabio & Kenny, 2016; Di Fabio et al., 2017a; Kenny & Hage, 2009; Hage et al., 2007).

In a healthy organizational framework (Di Fabio, 2017a; Di Fabio, Cheung, & Peiró, 2020), gratitude represents a promising resource in the organizational field. Gratitude is a worthy construct as it promotes positive relationships, prosocial behaviour and well-being at work, reducing negative emotions in the workplace and increasing the well-being of workers and organizations (Baker, 2011; Emmons, 2003; Fehr et al., 2017; Grant & Gino, 2010). Gratitude also emerges as a variable

of interest in relation to efficiency, success and productivity in organizations (Emmons, 2003; Fehr et al., 2017; Grant & Wrzesniewski, 2010). Gratitude is therefore recognized as a significant resource for both individuals and organizations (Di Fabio et al., 2017b).

Focusing on the measurement of gratitude, in literature there are various questionnaires to detect gratitude according to the evolution of the construct through the years (Di Fabio et al., 2017b). According to the traditional one-dimensionality of construct, the first questionnaire developed to measure gratitude was the Gratitude Questionnaire-6 (GQ-6; McCullough et al., 2002). This instrument, comprising six items, considers gratitude as a generalized tendency to recognize and respond with grateful emotion to other people's benevolence. The original version of the GQ-6 (McCullough et al., 2002) showed good psychometric properties in terms of its one-dimensionality, confirmed through Confirmatory Factor Analysis, reliability, and concurrent validity with relationships with affective and cognitive aspects of hedonic well-being.

As it could be useful to use also this traditional and brief instrument, the aim of the present study is to analyse the psychometric properties of the GQ-6 in the Italian context.

Method

Participants

Three hundred and twenty-one participants from the region of Tuscany were involved in the study. There were 61.27% females and 38.73 males; mean age 37.15 ($DS = 8.42$).

Measures

Gratitude Questionnaire-6 (GQ-6). The Italian version (by Di Fabio) of the GQ-6 (McCullough et al., 2002) comprises six items with answers from 1 = *Strongly disagree* to 7 = *Strongly agree*. Examples of items are: «I am grateful to a wide variety of people» and «I have so much in life to be thankful for». The items of the original version of the GQ-6 have been translated using the back translation method. The psychometric properties of the Italian version of the GQ-6 will be analysed in the present study.

Positive and Negative Affect Schedule (PANAS). The Positive and Negative Affect Schedule (PANAS, Watson et al., 1988; Italian version Terracciano, McCrae, & Costa, 2003) comprises 20 adjectives, of which 10 refer to Positive Affect (PA; example of items: enthusiastic, interested, determined) and 10 to Negative Affect

(NA; example of items: afraid, upset, distressed). The participant indicates how they generally feel from 1 = *Very slightly or not at all* to 5 = *Extremely*. Cronbach's alpha coefficients of the Italian version of the PANAS were: .72 for Positive Affect and .83 for Negative Affect.

Satisfaction With Life Scale (SWLS). The Satisfaction With Life Scale (SWLS, Diener et al., 1985; Italian version by Di Fabio and Gori, 2020) comprises five items with answers from 1 = *Strongly disagree* to 7 = *Strongly agree*. Examples of items are: «I am satisfied with my life», «The conditions of my life are excellent». Cronbach's alpha coefficient of the Italian version of the SWLS was .88.

Procedure

Administration of the questionnaires was realized in groups by specialized personnel in compliance with privacy laws and informed consent. The possible effects of the order of presentation were controlled, counterbalancing this order.

Data Analysis

Confirmatory Factor Analysis (CFA) using AMOS was used to verify the unidimensional structure of the GQ-6. Different fit indices were considered: the χ^2/df , considering values between 1 and 3 as indicators of a good fit; the Comparative Fit Index (CFI, Bentler, 1990) and the Non-Normed Fit Index (NNFI, Tucker & Lewis, 1973), considering values above .90 as indicators of a good fit; the Root Mean Square Error of Approximation (RMSEA) and the Standardized Root Mean Squared Residual (SRMR) (Browne & Cudeck, 1993), considering values below .08 as indicators of a good fit. Cronbach's alpha and the correct item-total correlations were used to verify the reliability of the GQ-6.

According to the original version of the GQ-6 (McCullough et al., 2002), the concurrent validity of the questionnaire was analysed, considering the r Pearson correlations of the GQ-6 with PANAS and SWLS. Statistically significant ($p < 0.05$) correlations were considered indicators of concurrent validity, with the following ranges: <0.30 weak correlations; $0.30-0.50$ moderate correlations; >0.50 strong correlations (Cohen, 1992).

Results

The unidimensional structure of the GQ-6 was confirmed through CFA. In Table 1 TLI, CFI, RMSEA and SRMR are reported, showing the adequacy of the model.

Table 1

Goodness of Fit Indices (N = 321).

<i>Gratitude Questionnaire-6 (GQ-6)</i>	χ^2/gdl	TLI	CFI	RMSEA	SRMR
	1.23	.95	.94	.06	.05

Cronbach's alpha coefficient and corrected item-total correlations were calculated. Cronbach's alpha was .84. The correct item-total correlations, all positive and significant, ranged from .77 to .59.

The correlations of the GQ-6 with PANAS and SWLS are presented in Table 2. All the correlations were statistically significant, underlining the good concurrent validity of the questionnaire.

Table 2

Correlations of the GQ-6 with PANAS and SWLA.

	GQ-6
PANAS PA	.35**
PANAS NA	-.32**
SWLS	.49**

Note. N = 321. ** $p < .01$.

Discussion

The present study aimed to analyse the psychometric properties of the Italian version by Di Fabio of the GQ-6 (McCullough et al., 2002), in order to have a traditional and brief instrument to detect gratitude also in the Italian context.

The unidimensional structure of the GQ-6 was confirmed through the CFA in line with the results obtained with the original version of the questionnaire (McCullough et al., 2002). Furthermore, the reliability of the GQ-6 is good both regarding Cronbach's alpha and correct item-total correlations. The concurrent validity of the GQ-6 is also good in terms of positive correlations with positive affect and life satisfaction and of an inverse correlation with negative affect. These results are in line with the findings obtained with the original version (McCullough et al., 2002) and in line with literature that showed relationships of gratitude with both affective and cognitive aspects of well-being (Froh et al., 2009; Portocarrero et al., 2020; Watkins et al., 2003).

The present research emphasized that the GQ-6 is a valid and reliable questionnaire to detect gratitude also in the Italian context, but we must highlight

the limit regarding the participants in this study, who are not representative of all Italian realities. Future research should thus consider groups of participants from other geographical areas too. In future studies, it could also be interesting to examine the GQ-6 in relation to measures of eudaimonic well-being, as for example meaning in life (Morgan & Farsides, 2009) and flourishing (Diener et al., 2010).

Despite these limitations, the GQ-6 has adequate psychometric properties to evaluate gratitude as a one-dimensional construct also in the Italian context. This could open promising future perspectives of research and intervention in both strength-based prevention perspectives (Di Fabio & Saklofske, 2021) and primary prevention (Di Fabio & Kenny, 2016; Di Fabio, Kenny, & Claudius, 2017; Hage et al., 2007), also in specific contexts, like the work context, for healthy organizations (Di Fabio, 2017a, 2017b; Di Fabio et al., 2020; Peiró et al., 2020) and the well-being of workers (Robertson & Cooper, 2010; Johnson et al., 2018).

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