Calling and Vocational Questionnaire: proprietà psicometriche della versione italiana in studenti universitari

Annamaria Di Fabio[1] e Andrea Svicher[2]

Sommario

Il *Calling and Vocation Questionnaire* (CVQ) costituisce lo strumento di autovalutazione più utilizzato per l'assessment del Calling. Questo studio indaga le proprietà psicometriche del CVQ — versione italiana in studenti universitari. I partecipanti erano costituiti da 175 studenti universitari della regione Toscana, nel Centro Italia. Il modello two-bifactor del CVQ-versione italiana è stato valutato attraverso l'Analisi Fattoriale Confermativa (AFC). La coerenza interna è stata misurata valutando i coefficienti alfa di Cronbach. La validità concorrente è stata analizzata tramite le correlazioni di Pearson con la *Satisfaction with Life Scale*, la *Meaningful Life Measure*, e il *Work as Meaning Inventory* per studenti universitari. I risultati hanno indicato che un modello two-bifactor con sei fattori e due fattori generali (presenza CVQ e ricerca CVQ), forniva un adattamento ai dati ottimale. Lo strumento ha mostrato una buona coerenza interna e validità concorrente. I risultati hanno evidenziato che il CVQ-versione italiana ha buone proprietà psicometriche, sottolineando la sua utilità come misura affidabile del calling in studenti universitari italiani.

Parole chiave

Calling and Vocation Questionnaire, Versione italiana, Studenti universitari.

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Calling and Vocational Questionnaire: Psychometric Properties of the Italian Version in University Students

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Abstract

The *Calling and Vocation Questionnaire* (CVQ) serves as the most used self-assessment tool for evaluating calling. This study investigates the psychometric properties of the CVQ-Italian version in university students. Our participants consisted of 175 university students from the region of Tuscany in Central Italy. The two-bifactor model of the CVQ-Italian version was evaluated through confirmatory factor analysis (CFA). Internal consistency was measured by assessing Cronbach's alpha coefficients. Concurrent validity was investigated via Pearson's correlations with the Satisfaction with Life Scale, Meaningful Life Measure, and Work as Meaning Inventory for University students. Our results indicated that a two-bifactor model, with six factors and two overarching factors (CVQ-presence and CVQ-search) provided an optimal fit. The instrument demonstrated good internal consistency and concurrent validity. Our findings showed that the CVQ-Italian version has good psychometric properties, underscoring its utility as a reliable measure of calling among Italian university students.

Keywords

Calling, Calling and Vocation Questionnaire, Italian version, University students.

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Introduction

Individuals often experience distinct motivations that guide their career paths during their professional lives, and some might feel a profound sense of «calling' towards a specific occupation (Thompson & Bunderson, 2019). Calling was described by Dik and Duffy (2009) as «(1) a transcendent summons, experienced as originating beyond the self, to (2) approach a particular life role in a manner oriented toward demonstrating or deriving a sense of purpose or meaningfulness and (3) that holds other-oriented values and goals as primary sources of motivation» (p. 427).

In this perspective, it is worth mentioning that only some individuals experience a calling: some others are still in the process of seeking it, thereby reflecting a distinction between the «presence of» and the «search for» a calling (Dik & Duffy, 2009). Calling encompasses two facets: the «presence of calling,» where some individuals feel they currently possess a calling, and the «search for calling,» where some individuals, although not currently perceiving a calling, are actively in search of one. This conceptualization of calling also incorporates elements of transcendent summons from external entities, work that is imbued with purpose and meaning, and a prosocial orientation characterized by other-focused values or objectives.

In this framework, Dik et al. (2012) developed the *Calling and Vocation Questionnaire* (CVQ), evaluating both the «presence of» and «search for» three dimensions: 1) transcendent summons, 2) purposeful work, and 3) prosocial orientation. The authors highlighted two main strengths of this model. First, they offered a distinct and clear conceptualization of calling, which is pivotal for advancing research. Second, the multidimensional feature of this construct allows for the exploration of more complex research applications. In the study on the CVQ»s psychometric properties, its dimensionality was confirmed, resulting in a 24-item questionnaire divided into three four-item factors for presence of calling (Presence-Transcendent Summons, Presence-Purposeful Work, and Presence-Prosocial Orientation) and three four-item factors for search for calling (Search-Transcendent Summons, Search-Purposeful Work, and Search-Prosocial Orientation) (Dik et al., 2012).

Previous research also started to deepen the study of the intercultural exploration of the concept of calling (Thompson & Bunderson, 2019). In the Italian context, a recent study examined the CVQ-Italian version among workers (Di Fabio & Svicher, 2022), showing that the instrument had a two-bifactor structure, allowing the assessment of the presence of calling and search for calling along with their respective sub-dimensions (search for calling, purposeful work, and prosocial orientation). The CVQ has been widely accepted for its extensive application in empirical research, its psychometrically sound validity, and for laying

its background in an influential theory on calling (Duffy et al., 2018). Previous research reported positive associations between the presence of calling and various career development-related variables in university students. University students who perceived calling have been found to exhibit stronger career decidedness, choice comfort, and vocational self-clarity, being more confident in their career decisions and having a positive outlook on their future careers (Dik et al., 2008; Duffy et al., 2011; Duffy & Sedlacek, 2007; Steger et al., 2010). The presence of calling has been found to correlate positively with well-being; university students who perceive a calling generally report increased levels of life satisfaction and a heightened sense of purpose in life (Duffy & Sedlacek, 2010; Steger & Dik, 2009; Steger et al., 2010).

Differently, the search for calling did not display associations with life satisfaction (Dik et al., 2012) and life meaning (Duffy & Dik, 2013). Therefore, research on calling seems to be of vital importance even for university students. From this perspective, the current article aims to deepen the study of the psychometric properties of the Calling and Vocation Questionnaire-Italian version (Di Fabio & Svicher, 2022) in university students.

Methods

Participants and Procedure

The study's participants comprised 175 university students (Mage = 21.79 DS = 4.45; male = 29.1% female = 70.9%) from Tuscany, Central Italy. Participation in the study was entirely voluntary. All participants were required to give written, informed consent in compliance with Italian privacy legislation (Law Decree DL196/2003) and the EU General Data Protection Regulation (EU 2016/679). To prevent any bias from the order of presentation, the administration sequence was balanced.

Instruments

The *Calling and Vocation Questionnaire* (CVQ) (Dik et al., 2012) — *Italian version* (Di Fabio & Svicher, 2022) is a self-administered instrument consisting of 24 questions measuring calling — «presence» and «search for». The scale utilizes a Likert scale (four-point) (1 = «Not at all true for me»; 4 = «Absolutely true for me»). The Italian Version of the CVQ showed a two-bifactor model, with six factors simultaneously regressed on two general factors. The first general factor is the CVQ-presence, which combines the total scores of the three presence factors (Transcendent Summons, Purposeful Work, and Prosocial Orientation). The

CVQ-search score combines the total scores of the three search factors (Transcendent Summons, Purposeful Work, and Prosocial Orientation). Cronbach's alpha was found to range from .53 to .84 (six factors) and from .78 to .90 for the two general factors (Di Fabio & Svicher, 2022).

The *Satisfaction with Life Scale* (SWLS; Diener et al., 1985) — Italian version (Di Fabio & Gori, 2016) is a single-factor, five-item self-report tool designed to evaluate a range of cognitive functions related to overall sense of well-being. It particularly emphasizes life satisfaction as a cognitive-judgmental process (Diener et al., 1985). Questions are rated using a seven-point Likert scale (from 1 to 7), with endpoints labelled «Strongly Agree» and «Strongly Disagree» (Diener et al., 1985; Di Fabio & Gori, 2016). Cronbach's alpha was found to be .85 (Di Fabio & Gori, 2016).

The Meaningful Life Measure (MLM; Morgan & Farsides, 2009) — Italian Version (Di Fabio, 2014) is a self-assessment instrument with 23 items. It employs a 7-point Likert scale, (1 = «Strongly Disagree») to (7 = «Strongly Agree»), to assess five distinct factors and an overall score concerning life meaningfulness. These dimensions include Accomplished Life (related to the realization of personal objectives), Exciting Life (representing a life seen as stimulating), Principled Life (embodying an individual philosophy for life framework), Purposeful Life (signifying specific goals and aspirations), and Value Life (encapsulating an inherent appreciation for life importance). Internal consistency was found to be .85 for the overall score and between .84-.87 for subscales (Di Fabio, 2014). In the present study, the overall score was used.

The *Work as Meaning Inventory for University students* (WAMI-U) (Di Fabio & Kenny, 2020). The WAMI-U is a self-report tool measuring meaningful study comprising 10 items adapted from the Work as Meaning Inventory (WAMI) (Steger et al., 2012) and rated using a Likert scale on seven points (1 = «strongly disagree»; 7 = «strongly agree»). WAMI-U is composed of three factors that reflect those of the WAMI: Positive meaning (example of item «I view my study as contributing to my personal growth»), Meaning-making through study («I view my study as contributing to my personal growth») and Greater good motivation («I know my study makes a positive difference in the world») (Di Fabio & Kenny, 2020). Internal consistency was .85 for the overall score and between .84-.87 for subscales (Di Fabio, 2014). Internal consistency ranged between .80 and .82 for subscales and .81 for the total score (Di Fabio & Kenny, 2020). In the current research, the overall score was used.

Data analysis

Factor structure of the Calling and Vocation Questionnaire (CVQ)-Italian version was evaluated using confirmatory factor analyses (CFA). The statistical software RStudio version 2022.07.0 for Windows was utilized. We tested the

two-bifactor model of the CVQ-Italian version in which items are simultaneously regressed on their respective six factors. Three factors (PTS, PPW, and PPO) are regressed onto a CVQ-presence factor. Three factors (STS, SPW, and SPO) are regressed onto a CVQ-search factor. The model's fit to the data was assessed using the comparative fit index (CFI) and the Tucker-Lewis Index (TLI), where indexes above .90 are indicative of an adequate fit. Moreover, the root mean square error of approximation (RMSEA) was considered, with an index below .08 suggesting a good fit (Browne & Cudeck, 1993).

Cronbach's alphas were also evaluated. Values > 0.70 were considered acceptable (Nunnally & Bernstein, 1994). In accordance with Dik et al. (2012), Steger et al. (2012) and Duffy and Dik (2013), Pearson's r correlations were employed to evaluate the CVQ's concurrent validity with the SWLS, MLM, and WAMI-U. Statistically significant correlations were taken as evidence of concurrent validity. Correlations were judged as follows: < .30 weak; between .30 and .50 moderate: > .50 strong (Cohen, 1992). We employed the *Lavaan* 0.6-9 package, *SemPlot* 1.1.2, and *Psych* 2.2.5 R packages for our analyses.

Results

Table 1 illustrates the findings carried out via the CFA. The two-bifactor model of the CVQ — Italian version showed an adequate fit to the data. Table 2 presents the Cronbach's alpha values, which were determined based on the two-bifactor measurement model. Separate Cronbach's alpha values were assessed for the two composite scores (CVQ-presence and CVQ-search), as well as for each of the six factors. The Cronbach's alphas for the six factors were good, varying between .71 (for PTS) and .86 (for SPO). Both composite scores, CVQ-presence and CVQ-search, exhibited good Cronbach's alpha values. The correlations among the CVQ and SWLS, MLM, and WAMI-U are shown in Table 2. All the correlations among CVQ-presence dimension and SWLS, MLM, and WAMI-U were positive and statistically significant. All the correlations among the CVQ-search dimension and SWLS, MLM, and WAMI-U were not statistically significant (Table 3).

Table 1

Calling and Vocation Questionnaire-Italian Version. Confirmatory Factor Analysis-Goodness of Fit indices (*n* = 175)

CVQ model	χ2(df)	CFI	TLI	RMSEA [95%CI]
Two-Bifactor	439(198)	.921	.916	.069 [.053-.081]

CVQ = Calling and Vocation Questionnaire; CFI = Comparative Fit Index; TLI = Tucker-Lewis Index; RMSEA = Root Mean Square Error of Approximation.

Table 2

Italian Version of the *Calling and Vocation Questionnaire:* Cronbach's alphas for the two-bifactor measurement model (*n* = 175)

CVQ Subscale	Cronbach's a
Presence-Transcendent Summons	.71
Presence-Purposeful Work	.83
Presence-Prosocial Orientation	.76
Presence total	.82
Search-Transcendent Summons	.72
Search-Purposeful Work	.81
Search-Prosocial Orientation	.86
Search total	.84

CVQ = *Calling and Vocation Questionnaire.*

Table 3

Correlations of the CVQ with SWLS, MLM, WAMI-U (*n* = 175)

CVQ Subscale	SWLS	MLM	WAMI-U
Presence-Transcendent Summons	.25**	.31**	.42**
Presence-Purposeful Work	.26**	.33**	.44**
Presence-Prosocial Orientation	.29**	.37**	.47**
Presence total	.27**	.35**	.46**
Search-Transcendent Summons	-.02	-.03	-.08
Search-Purposeful Work	-.05	-.07	-.12
Search-Prosocial Orientation	-.01	-.09	-.11
Search total	-.04	-.06	-.11

SWLS = Satisfaction with Life Scale; MLM = Meaningful Life Measure; WAMI-U = Work as Meaning Inventory for University students.

Discussion

The present research scrutinizes, in university students, the psychometric properties of CVQ-Italian version, which is grounded in Dik and Duffy's (2009) theory of calling. Our data corroborate findings from the original English-language (Dik et al., 2012) and Italian (Di Fabio & Svicher, 2022) versions in workers, identifying a two-bifactor model (six factors simultaneously regressed on two general factors). Our analysis confirmed the presence of two overall factors, termed CVQ-Presence and CVQ-Search, aligning with the two-bifactor model of the Italian version (Di Fabio & Svicher, 2022). The CVQ-Italian version enables, also in university students, the computation of six individual factor scores and two aggregate scores (CVQ-Presence and CVQ-Search).

The reliability of these six factors was found to be good, as both CVQ-Presence and CVQ-Search scores demonstrated good reliability. The concurrent validity of the CVQ was confirmed. According to Dik et al., 2012, Duffy and Dik (2013), and Steger et al. (2012), the presence of calling showed positive correlations with Satisfaction with Life, Meaning in Life, as well as Meaning at Work, whereas search for calling did not correlate with these dimensions. The study has both limitations and strengths.

A primary constraint is related to the fact that participants are university students in Tuscany. Nonetheless, to our knowledge, this is the first study that examines the two-bifactor structure of the CVQ-Italian version among Italian university students. Future research could extend this examination to university students in different areas of Italy as well as at various educational levels, extending the current research to high-school students. In summary, the Italian version of the CVQ (Di Fabio & Svicher, 2022) exhibited good psychometric properties also in university students, confirming a reliable two-bifactor structure and highlighting that the CVQ is a viable tool for assessing calling in university students according to Dik et al.'s (2012) perspective.

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