
Flourishing in Studies Scale (FSS): Proprietà psicometriche negli studenti universitari

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Sommario

L'obiettivo di questo studio è stato esaminare le proprietà psicometriche della *Flourishing in Studies Scale* (FSS) nel contesto universitario italiano. Un totale di 308 studenti universitari italiani ha completato la FSS, la *Study Satisfaction Scale* (SSS) e il *Work and Meaning Inventory for University Students* (WAMI-U). È stata condotta un'Analisi Fattoriale Confermativa (AFC) per valutare la struttura fattoriale della FSS. La consistenza interna è stata valutata utilizzando l'alfa di Cronbach e la validità concorrente è stata indagata attraverso correlazioni tra la FSS e sia la SSS sia lo WAMI-U. I risultati della CFA hanno supportato una struttura unidimensionale della FSS, con indici di adattamento accettabili (CFI = .97; TLI = .96; RMSEA = .08; SRMR = .04). La FSS ha dimostrato un'ottima consistenza interna ($\alpha = .87$). La validità concorrente è stata confermata da correlazioni positive e significative tra la FSS e la SSS ($r = .38, p < .01$) e tra la FSS e la WAMI-U ($r = .56, p < .01$). Questi risultati suggeriscono che la FSS è uno strumento affidabile per misurare il flourishing in relazione allo studio in studenti universitari italiani, indicando promettenti applicazioni nella ricerca e negli interventi.

Parole chiave

Flourishing, *Flourishing in Studies Scale*, Studenti universitari, Benessere eudaimonico.

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Flourishing in Studies Scale (FSS): Psychometric Properties in University Students

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Abstract

The aim of this study was to examine the psychometric properties of the *Flourishing in Studies Scale (FSS)* in the Italian university context. A total of 308 Italian university students completed the FSS, the *Study Satisfaction Scale (SSS)*, and the *Work and Meaning Inventory for University Students (WAMI-U)*. A confirmatory factor analysis (CFA) was conducted to evaluate the factor structure of the FSS. Internal consistency was assessed using Cronbach's alpha, and concurrent validity was investigated through correlations among FSS and both the SSS and WAMI-U. The CFA results supported a unidimensional structure of the FSS, with acceptable fit indices (CFI = .97; TLI = .96; RMSEA = .08; SRMR = .04). The FSS demonstrated excellent internal consistency ($\alpha = .87$). Concurrent validity was confirmed by positive and significant correlations between the FSS and the SSS ($r = .38, p < .01$) and between the FSS and the WAMI-U ($r = .56, p < .01$). These findings suggest that the FSS is a reliable instrument for measuring flourishing in studies among Italian university students.

Keywords

Flourishing, *Flourishing in Studies Scale*, University students, Eudaimonic well-being.

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Introduction

University students often face challenges that negatively impact their well-being, including stress and feelings of isolation (Fink, 2014; Smith & McLellan, 2023; Suyo-Vega et al., 2022). Scholars agree on the necessity of identifying risk factors and implementing preventive actions to mitigate poor mental health outcomes within this population (Sheldon et al., 2021). In the study of well-being, the concept of flourishing has garnered increasing attention (Hone et al., 2014; Iasiello et al., 2022; Rule et al., 2024), with significant focus in educational settings as well (Kristjánsson, 2016; Martela, 2024). Research on well-being highlights two primary approaches: hedonic well-being and eudaimonic well-being. Hedonic well-being centres on pleasure attainment and pain avoidance (Kahneman et al., 1999), while eudaimonic well-being emphasizes self-realization, purpose, and meaning in life (Ryan & Deci, 2001). Flourishing falls into the eudaimonic category and encompasses a positive outlook on oneself, one's life, and the future, along with a sense of ability to enhance personal well-being and contribute to the well-being of others (Diener et al., 2010; Huppert & So, 2013).

Previous studies have shown that flourishing was linked to higher levels of overall well-being and prosocial behaviours, such as engaging in volunteer activities (Nelson et al., 2016; Santini et al., 2019). Among university students, greater flourishing correlates with reduced psychological distress, enhanced self-control, a wider range of emotion regulation strategies, and improved academic success (Basson & Rothmann, 2018; Howell, 2009; Peter et al., 2011). The *Flourishing Scale* developed by Diener et al. (2010) is one of the most widely applied tools for measuring individuals' flourishing, including aspects like relationships, purpose, and personal growth (Rule et al., 2024). Following Diener et al. (2010), Di Fabio (2022) introduced a more focused analysis by examining the psychometric properties of a flourishing scale specifically addressed to the work context. Considering the growing interest in flourishing among university students (e.g., Mostert et al., 2023), the present study aims to examine the psychometric properties of the Flourishing Scale in relation to the specific study context, introducing the *Flourishing in Studies Scale (FSS)*. The objective of this research is to evaluate the reliability and validity of the FSS among Italian university students, thereby advancing the availability of an assessment tool specifically developed for measuring flourishing in studies.

Methods

Participants and Procedures

Three hundred and eight ($N = 308$) university students from central Italy participated in the study, with an average age of 21.84 years ($SD = 3.11$). Of the

participants, 55.00% were female ($n = 169$) and 45.00% were male ($n = 139$). Participation was entirely voluntary, and informed consent was obtained in line with Italian privacy regulations (Legislative Decree DL 196/2003) as well as the European Union General Data Protection Regulation (GDPR 2016/679). To mitigate any potential order effects, the administration sequence of the questionnaires was randomized.

Measures

The *Flourishing in Studies Scale* (FSS) has been developed by Di Fabio and Svicher following the original version of the *Flourishing Scale* by Diener et al. (2010) and the Italian version (Di Fabio, 2016), modifying it to fit the study context. It is a self-report measure composed of 8 items with responses recorded on a 7-point Likert scale, ranging from 1 («Strongly disagree») to 7 («Strongly agree»). Examples of items are: «Through my studies, I actively contribute to the happiness and well-being of others»; and «I am optimistic about my future studies».

The *Study Satisfaction Scale* (SSS) developed by Di Fabio and Svicher (2024) is a self-report instrument developed faithfully following the Job Satisfaction Scale (Judge et al., 1998) and the Italian version (Di Fabio, 2018), adapting the scale to the study context. This scale comprises five items, each rated on a 7-point Likert scale ranging from 1 («Strongly disagree») to 7 («Strongly agree»). The SSS has demonstrated good internal consistency, with a Cronbach's alpha of .83 in the study by Di Fabio and Svicher (2024) and a Cronbach's alpha of .84 in the present study. Examples of items are: «Most days I am enthusiastic about my studies»; and «I find real enjoyment in my studies».

The *Work and Meaning Inventory for University Students* (WAMI-U) (Di Fabio & Kenny, 2020) is a scale developed by closely following the *Work and Meaning Inventory* (WAMI) (Steger et al., 2012) and the Italian version (Di Fabio, 2018), modifying it to assess meaning making through study at university. The scale consists of ten items where respondents indicate their agreement level on a seven-point scale from «Strongly disagree» to «Strongly agree». The WAMI-U assesses three factors: Positive Meaning, Meaning Making Through Study, and Greater Good Motivations, allowing also for a total score calculation. The total scale reliability is supported by a Cronbach's alpha of .81 in the study of Di Fabio and Kenny (2020) and a Cronbach's alpha of .85 in the present study. Examples of items are: «I have a good sense of what makes my study meaningful»; and «I view my study as contributing to my personal growth».

Data Analysis

Confirmatory factor analysis (CFA) was performed using the *Lavaan* package in RStudio (version 0.6-15) to evaluate the unidimensional structure of the FSS. Model fit was assessed using the comparative fit index (CFI), Tucker-Lewis index (TLI), root mean square error of approximation (RMSEA), and standard-

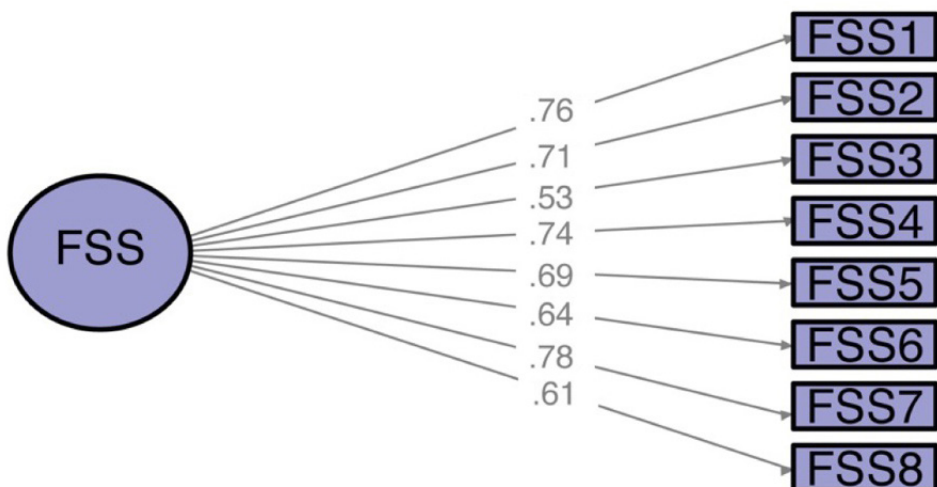
ized root mean square residual (SRMSR). A model fit was considered good with CFI and TLI values above .90 and RMSEA values below .08, in line with Hu and Bentler's (1999) guidelines. The internal consistency of the scale was examined using Cronbach's alpha, with a threshold of .70 indicating acceptable reliability. Concurrent validity was assessed by calculating Pearson's correlations between the FSS and SSS as well as FSS and WAMI-U.

Results

The confirmatory factor analysis (CFA) testing the one-factor model demonstrated an acceptable fit: $\chi^2(20) = 78.24, p < .001$; CFI = .97; TLI = .96; RMSEA = .08 [90% CI: .06–.10]; SRMR = .04. The standardized factor loadings for the eight items ranged from .53 (Item 3) to .78 (Item 7), indicating that all items significantly contributed to the latent construct (Figure 1). Internal consistency was good, with a Cronbach's alpha of .87, confirming the reliability of the scale. The *Flourishing in Studies Scale (FSS)* showed statistically significant positive correlations with the *Study Satisfaction Scale (SSS)* ($r = .38, p < .01$) and the *Work and Meaning Inventory for University Students (WAMI-U)* ($r = .56, p < .01$) (Table 1). These results suggest that higher levels of flourishing in studies are associated with greater study satisfaction and a higher meaning making through study.

Figure 1

Confirmatory Factor Analysis. Path diagram of the Flourishing in Studies Scale (FSS) ($N = 308$)



Note: FSS = Flourishing in Studies Scale.

Table 1Pearson's correlations of the FSS with the SSS and the WAMI-U ($N = 308$)

	SSS	WAMI-U
FSS	.38**	.56**

Note: FSS = Flourishing in Studies Scale; SSS = Study Satisfaction Scale; WAMI-U = Work and Meaning Inventory for university students. * $p < .05$. ** $p < .01$.

Discussion

The current study investigated the psychometric properties of the Flourishing in Studies Scale (FSS) among Italian university students. The results illustrate a unidimensional factor structure with adequate reliability and evidence of concurrent validity with the *Study Satisfaction Scale* (SSS) and the *Work and Meaning Inventory for University Students* (WAMI-U).

The unidimensional structure of the FSS aligns with the original conceptualization of flourishing by Diener et al. (2010), which views flourishing as a single construct encompassing specific aspects. The good internal consistency observed for the FSS suggests that it is a reliable instrument for assessing flourishing in the study context.

The positive relationships between the FSS and both the SSS and WAMI-U suggest adequate concurrent validity, indicating that higher levels of flourishing are associated with greater study satisfaction and a stronger meaning making through study. This finding is consistent with previous literature highlighting the relationship between flourishing in university students and positive outcomes (Howell, 2009; Peter et al., 2011).

Building upon the path initiated by Di Fabio (2022) in the study of flourishing at work, this study advances that perspective by introducing a scale adapted specifically to the study context. By providing a tailored instrument that captures the aspects of flourishing through study, this research allows for promising advances in the specific field of flourishing in studies (e.g., Kristjánsson, 2016; Martela, 2024). Therefore, the FSS fills a gap in the literature by offering a tool that can assess flourishing in relation to the specific context of the study. In brief, the Flourishing in Studies Scale (FSS) demonstrates good psychometric properties, indicating that it is a reliable and valid instrument for assessing flourishing in studies in the Italian context.

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APPENDIX

Items in Italian of the *Flourishing in Studies Scale (FSS)*

1. I miei studi apportano scopo e significato alla mia vita
2. Nei miei studi trovo relazioni sociali supportive e gratificanti
3. Mi impegno e sono interessato/a alle mie attività quotidiane di studio
4. Attraverso i miei studi, contribuisco attivamente alla felicità e al benessere degli altri
5. Sono competente e capace nelle attività di studio che sono importanti per me
6. Sono una brava persona e vivo una bella vita nei miei studi
7. Sono ottimista riguardo ai miei studi futuri
8. Le persone mi rispettano come studente/studioso