
Flourishing in Studies Scale (FSS): proprietà psicometriche

Annamaria Di Fabio¹ e Andrea Svicher²

Sommario

Questo studio mirava a indagare le proprietà psicometriche della *Flourishing in Studies Scale (FSS)* nel contesto universitario. A 211 studenti sono state somministrate la FSS, insieme alla *Study Satisfaction Scale (SSS)* e alla *Satisfaction with Life Scale (SWLS)*. L'analisi fattoriale confermativa ha supportato una struttura unidimensionale della FSS, con indici di adattamento adeguati (CFI = .965, TLI = .951, RMSEA = .073). La consistenza interna (Cronbach's $\alpha = .87$) è risultata soddisfacente, mentre le correlazioni di Pearson hanno confermato la validità concorrente sia con la soddisfazione negli studi ($r = .39, p < .01$) sia con la soddisfazione di vita ($r = .37, p < .01$). Questi risultati evidenziano che le buone proprietà psicometriche della scala ne indicano l'utilità come strumento prezioso per ricercatori e professionisti per misurare il flourishing nello studio in ambito accademico.

Parole chiave

Flourishing, *Flourishing in Studies Scale (FSS)*, Benessere eudaimonico, Studenti universitari.

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Flourishing in Studies Scale (FSS): Psychometric Properties

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Abstract

This study aimed to investigate the psychometric properties of the *Flourishing in Studies Scale (FSS)* in the university context. Two hundred and eleven university students were administered the FSS, together with the *Study Satisfaction Scale (SSS)* and the *Satisfaction with Life Scale (SWLS)*. Confirmatory factor analysis supported a unidimensional structure of the FSS, with adequate fit indices (CFI = .965, TLI = .951, RMSEA = .073). Internal consistency (Cronbach's $\alpha = .87$) was satisfactory, while Pearson's correlations confirmed concurrent validity with both study satisfaction ($r = .39, p < .01$) and life satisfaction ($r = .37, p < .01$). These findings highlight the good psychometric properties of the scale, identifying it as a valuable tool for researchers and practitioners to measure flourishing in the academic setting.

Keywords

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

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Introduction

University life can present various hurdles, such as high stress and potential isolation (Fink, 2014; Smith & McLellan, 2023; Suyo-Vega et al., 2022), which can negatively affect mental health. Researchers emphasize the value of identifying potential risk factors and employing interventions to protect student well-being (Sheldon et al., 2021). In the broad field of well-being research, there has been growing attention on flourishing (Hone et al., 2014; Iasiello et al., 2022; Rule et al., 2024), including focused interest in educational environments (Kristjánsson, 2016; Martela, 2024).

Two primary approaches often frame well-being studies: the hedonic perspective, emphasizing pleasure and avoiding discomfort (Kahneman et al., 1999), and the eudaimonic perspective, highlighting purpose and self-realization (Ryan & Deci, 2001). Flourishing, situated within the eudaimonic framework, involves a broad sense of personal efficacy, optimism, and the ability to foster not only one's own well-being but also that of others (Diener et al., 2010).

In addition, evidence suggests that flourishing in academic contexts is tied to successful adjustment and personal growth (Hood & Henry, 2020; Shankland & Rosset, 2017). Several investigations link higher levels of flourishing with greater global well-being, stronger prosocial tendencies (Nelson et al., 2016; Santini et al., 2019), and, in the case of university students, reduced psychological issues, improved self-management of emotions, and enhanced academic performance (Basson & Rothmann, 2018; Howell, 2009; Peter et al., 2011).

A commonly utilized measure is Diener et al.'s (2010) *Flourishing Scale*, which captures aspects like meaningful relationships and personal growth (Rule et al., 2024). In line with that concept, Di Fabio (2022) adapted a scale for flourishing in work contexts. Given the heightened interest in flourishing among college students (e.g., Mostert et al., 2023), this paper focuses on evaluating the psychometric properties of a scale adapted from the original version of the *Flourishing Scale* by Diener et al. (2010) to the study context, the *Flourishing in Studies Scale* (FSS).

Method

Participants and Procedure

Two hundred and eleven university students from Central Italy (53.08% female and 46.92% male), averaging 22.57 years of age ($SD = 2.96$), took part under voluntary conditions. Informed consent was obtained in accordance with

Italian privacy norms (Legislative Decree 196/2003) and European data protection regulations (EU 2016/679).

All instruments were administered in English, and all participants had a B2 certification in English. To limit potential bias stemming from presentation order, the measures were administered in a randomized sequence.

Measures

The *Flourishing in Studies Scale (FSS)* was adapted from Diener et al.'s (2010) *Flourishing Scale* to the study context. It consists of eight statements, each rated on a 7-point Likert continuum (1 = *Strongly disagree*, 7 = *Strongly agree*). Illustrative items are: «My studies bring purpose and meaning to my life», «In my studies I find supporting and rewarding social relationships» (Appendix).

The *Study Satisfaction Scale (SSS)* by Di Fabio and Svicher (2024) is a five-item unidimensional measure adapted from the *Job Satisfaction Scale* (Judge et al., 1998) to the study context, likewise employing a 7-point Likert format. Cronbach's alpha is .86 for the original version and .88 in the present study. Representative items: «I feel fairly well satisfied with my present studies»; «I find real enjoyment in my studies».

The *Satisfaction with Life Scale (SWLS)* (Diener et al., 1985) includes five items, each to be rated on a 7-point Likert continuum, designed to gauge overall life satisfaction. Cronbach's alpha is .87 for the original version and .86 in the present study. Examples include «I am satisfied with my life» and «If I could live my life over, I would change almost nothing».

Data Analysis

All analyses were performed with R Studio (version 2024.04.2), employing the *lavaan* (version 0.6-15) package to conduct a confirmatory factor analysis (CFA) that tested the hypothesized one-factor structure of the FSS. Model adequacy was judged based on a comparative fit index (CFI) and Tucker-Lewis index (TLI) $\geq .90$, with a root mean square error of approximation (RMSEA) and standardized root mean square residual (SRMR) $\leq .08$ (Hu & Bentler, 1999).

Reliability for the FSS, SSS, and SWLS was determined by Cronbach's alpha, with $\geq .70$ considered acceptable. We used the *psych* (version 2.3.6) package to compute Cronbach's alpha for the FSS items. Pearson's correlations among the FSS, SSS, and SWLS were computed to assess concurrent validity, anticipating that the measure of flourishing in academic contexts would display a positive association with study satisfaction and overall life satisfaction.

Results

A one-factor confirmatory factor analysis (CFA) conducted on the *Flourishing in Studies Scale* (FSS) demonstrated an acceptable model fit (Table 1). The standardized factor loadings for the scale ranged from .54 for item 2 to .80 for item 3, with all values being statistically significant ($p < .001$) (Table 2). The fit indices were also satisfactory, showing a comparative fit index (CFI) of .965, a Tucker-Lewis index (TLI) of .951, and a root mean square error of approximation (RMSEA) of .073. Additionally, the standardized root mean square residual (SRMR) was below the recommended cutoff of .08, further supporting the model's adequacy. The scale displayed good internal consistency, indicated by a Cronbach's alpha of .87. Correlations with study satisfaction and life satisfaction were positive and statistically significant, with correlation coefficients of $r = .39$ and $r = .37$, respectively ($p < .01$) (Table 3).

Table 1

Confirmatory Factor Analysis: Model Fit Indices for the One-Factor FSS Model ($N = 211$)

| Fit Index | Value |
|---------------|------------|
| χ^2 (df) | 42.22 (20) |
| p-value | .003 |
| CFI | .965 |
| TLI | .951 |
| RMSEA | .073 |
| SRMR | .037 |

Note. CFI = Comparative Fit Index; TLI = Tucker-Lewis Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual.

Table 2

Confirmatory Factor Analysis: Standardized Factor Loadings for the *Flourishing in Studies Scale* (FSS) ($N = 211$)

| Item | Loadings | SE | p-value |
|--------|----------|-----|---------|
| Item 1 | .74 | .08 | < .001 |
| Item 2 | .55 | .10 | < .001 |
| Item 3 | .80 | .08 | < .001 |
| Item 4 | .64 | .09 | < .001 |

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|--------|-----|-----|--------|
| Item 5 | .70 | .09 | < .001 |
| Item 6 | .73 | .08 | < .001 |
| Item 7 | .54 | .10 | < .001 |
| Item 8 | .68 | .09 | < .001 |

Table 3

Correlations between the *Flourishing in Studies Scale (FSS)* and the *Study Satisfaction Scale*, and correlations between the FSS and the *Satisfaction with Life Scale (n = 211)*

| | SSS | SWLS |
|-----|-------|-------|
| FSS | .39** | .37** |

Note. FSS = *Flourishing in Studies Scale*; SSS = *Study Satisfaction Scale*; SWLS = *Satisfaction with Life Scale*; ** $p < 0.01$.

Discussion

The current findings support a unidimensional structure of flourishing in studies as measured by the *Flourishing in Studies Scale (FSS)*. The results of the confirmatory factor analysis (CFA) revealed strong factor loadings across all items, indicating that flourishing in studies is represented by a single latent dimension, in line with previous work highlighting a comparable structure in the *Flourishing Scale* (Diener et al., 2010). The Cronbach's alpha coefficient of .87 further attests to the scale's internal consistency, suggesting that the FSS items coherently measure a shared underlying construct. These findings support the FSS as a reliable measure of flourishing in studies in the academic context.

Beyond the psychometric strength, the FSS displayed meaningful associations with both study satisfaction and overall life satisfaction. These positive correlations underscore the instrument's concurrent validity, implying that flourishing in the academic context is intertwined with students' perceptions of contentment with their studies and a broader sense of life satisfaction.

Further investigations might adopt longitudinal designs to explore how students' academic flourishing evolves over the course of their university tenure, particularly during transition points such as entering higher education or moving toward graduation. Cross-sectional and cross-cultural studies could also examine whether the FSS functions similarly across different demographic groups or educational settings. The present study indicates the psychometric robustness of the *Flourishing in Studies Scale*, which is, thus, a trustworthy instrument for research and interventions.

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APPENDIX

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

1. My studies bring purpose and meaning to my life
2. In my studies I find supporting and rewarding social relationships
3. I am interested and engaged in my studies on a daily basis
4. Through my studies, I actively contribute to the happiness and well-being of others
5. I am competent and capable in the study activities that are important to me
6. I am a good person and live a good life in my studies
7. I am optimistic about my future studies
8. People respect me as a student/scholar