



**PSYCHOMETRIC PROPERTIES OF THE ROMANIAN VERSION OF
THE INVENTORY OF DIMENSIONS OF EMERGING ADULTHOOD
(IDEA) - A PILOT STUDY**

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Abstract

The present study investigates the psychometric properties of the Romanian version of the Inventory of Dimensions of Emerging Adulthood (IDEA). The instrument was administered to a sample of Romanian university students (N = 423, age M = 23.4 years, SD = 3.3, 53% female). Confirmatory factor analysis indicated good model fit (CFI = .94, RMSEA = .052 [.047, .057], SRMR = .058). Internal consistency assessed through the omega coefficient showed good values for all subscales ($\omega = .73 - .88$) and excellent values for the total scale ($\omega = .91$). Mean scores revealed high values for Identity Exploration (M = 3.24) and Experimentation (M = 3.18), as well as a distinctive balance between Self-Focus (M = 3.15) and Other-Focus (M = 3.09), reflecting Romanian cultural specificity in the transition to adulthood. Comparative results with other international studies support both the universality of the emerging adulthood construct and its cultural particularities. The study provides evidence for IDEA's validity and utility in the Romanian context, contributing to the cross-cultural understanding of this developmental stage.

Keywords: emerging adulthood, IDEA, psychometric properties, validation, Romania

1. INTRODUCTION

In developed societies, the period between 18 and 29 years often represents a stage of continuous transformation, where young people do not yet make definitive long-term decisions, this phenomenon being accentuated by contemporary socio-economic changes (Côté, 2014). Arnett (2000) introduced the concept of "emerging adult" as a new developmental stage, characterized by the transition from adolescence to adulthood, during which both social moratorium and identity formation take place. To operationalize this construct, Reifman et al. (2007) developed the Inventory of the Dimensions of Emerging Adulthood (IDEA). The identified dimensions were as follows:

1. Identity Exploration, characterized by a. perceiving the current period as a time of self-discovery, b. defining oneself and developing independence, c. searching for life's meaning and crystallizing personal values.

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2. Experimentation/Possibilities manifested through a. perceiving life as full of opportunities, b. a period of exploration and experimentation, and c. making temporary decisions and openness to new experiences.
3. Negativity/Instability characterized by a. perceiving the period as marked by confusion and uncertainty, b. presence of stress and social pressure, and c. feelings of worry and unpredictability.
4. Self-Focus, meaning a. a period of personal freedom and independence, b. development of individual responsibility, and c. cultivation of self-sufficiency.
5. Feeling "In-Between", meaning a. perception of not being fully mature yet, b. uncertainty about reaching maturity and positioning between adolescence and full adulthood.
6. Other-Focus (supplementary scale), which a. evaluates orientation towards others, b. allows studying the relationship with the self-focus scale, and typically shows a negative correlation with self-focus, although this has been disproven in certain studies, including the present one, highlighting cultural differences.

The concept of 'emerging adulthood' has gained global recognition, being studied in various cultural contexts. IDEA has been adapted and validated in numerous countries: The Netherlands (Hill et al., 2015), Greece (Leontopoulou et al., 2016), Bulgaria (Papazova, 2016), Romania (Negru, 2012), Brazil (Dutra-Thome & Koller, 2017), Spain (Sánchez-Queija et al., 2020), Belgium (Mattys et al., 2020), Poland (Zagorska et al., 2023).

However, the experiences of emerging adults in Central and Eastern Europe remain insufficiently explored, and recent research suggests significant differences in the manifestation of emerging adulthood across various European regions (Nelson et al., 2020). The present study aims to present a pilot study for adapting the Inventory (IDEA-RO) to the Romanian population in the post-pandemic period, as the previous Romanian adaptation was conducted 13 years ago. This new adaptation is justified by the significant social and cultural changes that have affected youth development in the last decade (Arnett et al., 2020), as well as the pandemic's impact on the psychosocial development processes of emerging adults (Schwartz et al., 2022).

2. OBJECTIVE AND HYPOTHESES

2.1. OBJECTIVE

This study aims to examine the psychometric properties of the Romanian version of the Inventory of the Dimensions of Emerging Adulthood (IDEA) and to investigate the manifestation of emerging adulthood characteristics within the Romanian socio-cultural context.

The specific objectives were to:

1. Translate and culturally adapt the Inventory of the Dimensions of Emerging Adulthood (IDEA) for use with Romanian populations.

2. Evaluate the factorial structure of the Romanian version of IDEA.
3. Assess the psychometric properties of the instrument, including internal consistency and construct validity.

2.2. HYPOTHESES

Based on previous cross-cultural validations of IDEA, we hypothesized that:

H1: The Romanian version of IDEA would replicate the original six-factor structure identified by Reifman et al. (2007), demonstrating factorial validity consistent with the theoretical framework of emerging adulthood.

H2: The instrument would exhibit satisfactory psychometric properties, specifically maintaining internal consistency reliability coefficients (McDonald's ω) above .70 across all subscales.

3. METHOD

3.1. PARTICIPANTS

The sample consisted of 423 participants (53% female) randomly recruited from the Romanian population, ranging in age from 18 to 29 years ($M = 23.4$, $SD = 3.3$).

The adaptation process followed standard cross-cultural adaptation guidelines (Beaton et al., 2000), including forward translations by professional translators and back-translations, culminating in the finalization of the Romanian item set.

All procedures were conducted in accordance with ethical research standards (APA, 2017). Participants provided informed consent and participated voluntarily without monetary incentives.

The sample size ($N = 423$) met the requirements for factor analysis, satisfying the recommended minimum ratio of 10 participants per item for the 31-item instrument (Hair et al., 2019).

3.2. MEASURE

The Inventory of the Dimensions of Emerging Adulthood (IDEA; Reifman et al., 2007) is a 31-item self-report measure that assesses five core dimensions of emerging adulthood:

1. Identity Exploration (7 items; sample item: "time of finding out who you are")
2. Experimentation/Possibilities (5 items; sample item: "time of open choices")
3. Negativity/Instability (7 items; sample item: "time of many worries")
4. Self-Focus (6 items; sample item: "time of self-responsibility")
5. Feeling In-Between (3 items; sample item: "time of doubt whether you have reached full adulthood")

Additionally, the inventory includes a supplementary Other-Focus scale (3 items; sample item: "time of responsibility for others").

Participants rate each item on a 4-point Likert-type scale (1 = strongly disagree to 4 = strongly agree), indicating the extent to which they perceive their current life period as characterized by these dimensions.

3.3. DATA ANALYSIS

The analytical strategy proceeded in sequential stages:

1. Initial Model Testing

- Confirmatory Factor Analysis (CFA) was conducted on the full sample (N = 423)
- Analysis performed using AMOS 26.0 software
- Purpose: Evaluate the fit of IDEA's original factor structure in the Romanian cultural context

2. Sample Splitting

- Random bifurcation of the dataset using R 4.1.2
- Split resulted in two subsamples:
 - Subsample 1, n = 212
 - Subsample 2, n = 211
- This split-sample approach follows established guidelines for psychometric validation studies (Brown, 2015; DeVellis, 2017)

This systematic approach allows for robust cross-validation of the instrument's psychometric properties across independent samples.

4. RESULTS

4.1. DESCRIPTIVE STATISTICS AND INTERCORRELATIONS

Preliminary analyses were conducted to examine descriptive statistics (means and standard deviations), inter-correlations, and internal consistency reliability of IDEA-ROM subscales. Internal consistency was assessed using McDonald's omega coefficient (ω ; McDonald, 1978), which was chosen over traditional Cronbach's alpha due to its fewer assumptions and more accurate reliability estimation. The results are presented in Table 1.

Table 1. Means, standard deviations, partial correlations and reliability coefficients for all IDEA-Romanian version scales

Factor	F1	F2	F3	F4	F5	F6
F1 Identity Exploration	1					
F2 Experimentation/Possibilities	0.45**	1				
F3 Negativity/Instability	0.32**	0.28**	1			
F4 Other-Focus	0.25**	0.22*	0.18*	1		
F5 Self-Focus	0.38**	0.42**	0.24**	0.3**	1	
F6 Feeling "In-Between"	0.35**	0.33**	0.29**	0.2*	0.27**	1
ω	0.88	0.84	0.81	0.76	0.79	0.73

Mean	3.24	3.18	2.76	3.09	3.15	2.89
SD	0.62	0.58	0.71	0.54	0.56	0.68

Note. N = 423. M = Mean; SD = Standard Deviation; ω = McDonald's omega coefficient.

*p < .05. **p < .01

The analysis of inter-factor correlations revealed associations of varying intensity, supporting both the interconnectedness and distinctiveness of the identified dimensions. The strongest correlational pattern was observed between Identity Exploration and Experimentation/Possibilities ($r = .45$), followed by the relationship between Experimentation and Self-Focus ($r = .42$). These associations suggest that the process of identity exploration during emerging adulthood is intrinsically linked to experimenting with different possibilities and focusing on personal development.

Moderate correlations were found between Identity Exploration and Self-Focus ($r = .38$), and between Identity Exploration and Feeling In-Between ($r = .35$). Additionally, Experimentation/Possibilities showed a moderate correlation with Feeling In-Between ($r = .33$), while Identity Exploration demonstrated a similar association with Negativity/Instability ($r = .32$).

Conversely, the weakest correlations were observed between Negativity/Instability and Other-Focus ($r = .18$), between Other-Focus and Feeling In-Between ($r = .20$), and between Experimentation and Other-Focus ($r = .22$). The low magnitude of these correlations suggests that orientation towards others represents a relatively independent dimension within emerging adulthood.

The identified correlational pattern supports the discriminant validity of the six factors, indicating that they capture distinct, albeit interrelated, aspects of subjective experience during emerging adulthood. The moderate to low correlations (ranging from .18 to .45) confirm that, while conceptual overlaps exist between certain dimensions, each factor contributes unique information to understanding this developmental stage.

A notable finding of our study is the positive correlation between Self-Focus and Other-Focus ($r = .30$), a pattern that contrasts with previous findings in Western literature, where these dimensions tend to be weakly correlated or even negatively associated. This particularity can be understood through the lens of Romanian cultural specificity, where individual development is not perceived as antagonistic to family and community responsibilities.

Within the context of Romanian traditional values, personal maturation and development of autonomy are intrinsically linked to the capacity to assume responsibilities towards others, especially family. Unlike Western societies that predominantly emphasize individualism and independence, Romanian culture incorporates a more nuanced view of personal development, where self-realization organically includes the relational dimension.

This positive correlation suggests that Romanian young people do not perceive focus on personal development and assuming responsibilities towards others as mutually exclusive objectives, but rather as complementary aspects of maturation. The result reflects what we might call an "interdependent

individualism" - a specific cultural pattern where personal autonomy develops in tandem with and through significant social connections.

Moreover, this finding highlights the importance of cultural contextualization in studying emerging adulthood. Theoretical models developed predominantly in Western contexts require adaptation and nuancing when applied to societies with more pronounced traditional values. In Romania's case, the harmonious coexistence between self-focus and other-focus can be interpreted as an indicator of how traditional values facilitate a more coherent integration between individual development and social responsibility during the transition to adulthood.

4.2. EXAMINATION OF FACTORIAL STRUCTURE

To evaluate the factorial structure of IDEA in the Romanian context, we conducted a confirmatory factor analysis (CFA) on the entire sample (N = 423). Results indicated an acceptable fit of the original six-factor model: $\chi^2(419) = 892.34$, $p < .001$; $\chi^2/df = 2.13$; CFI = .92; TLI = .91; RMSEA = .058, 90% CI [.056, .068]; SRMR = .062.

Table 2. Rotated Factor Loadings Obtained Through Exploratory Factor Analyses (n = 423)

Item (Romania/English)	F1	F2	F3	F4	F5	F 6
1. un timp al multiplelor posibilități/ a time of many possibilities		0.64				
2. un timp de explorare/ a time of exploration		0.72				
3. un timp al confuziilor/ a time of confusion			0.64			
4. un timp de experimentare/a time of experimentation		0.77				
5. un timp al libertății personale/ a time of personal freedom					0.64	
6. un timp al sentimentelor restricționate/ a time of feeling restricted			0.27			
7. un timp al responsabilității de sine/ a time of responsibility for oneself					0.72	
8. un timp stresant/ a stressful time			0.62			
9. un timp al instabilității/ a time of instability			0.72			
10. un timp al optimismului/ a time of optimism					0.48	
11. un timp de mare presiune/ a time of high pressure			0.76			
12. un timp în care aflați cine sunteți/ a time of finding out who you are	0.67					
13. un timp de stabilizare/ a time of settling down				0.82		

14. un timp al responsabilității față de alții/a time of responsibility for others		0.42
15. un timp al independenței/ a time of independence		0.52
16. un timp deschis pentru alegeri/ a time of open choices	0.68	
17. un timp impredictibil/ an unpredictable time		0.51
18. un timp al angajamentelor față de ceilalți/ a time of commitments to others		0.65
19. un timp de auto-suficiență/ a time of self-sufficiency		0.38
20. un timp al îngrijorărilor multiple/ a time of many worries		0.48
21. un timp potrivit pentru a încerca lucruri noi/ a time for trying new things	0.72	
22. un timp potrivit pentru concentrarea pe sine/ a time for focusing on yourself		0.65
23. un timp al separării de părinți/ a time of separation from parents	0.68	
24. un timp al definirii de sine/ a time of self-definition	0.82	
25. un timp al planificării pentru viitor/a time of planning for the future	0.92	
26. un timp al căutării unui sentiment al sensului/a time of seeking a sense of meaning	0.54	
27. un timp al deciziilor în privința valorilor, credințelor, convingerilor/ a time of deciding on one's values, beliefs, and convictions	0.88	
28. un timp pentru a învăța să gândești pentru sine/ a time to learn to think for yourself	0.86	
29. un timp în care aveți senzația că în unele privințe sunteți o persoană adultă, iar în alte privințe nu/a time when you feel adult in some ways but not others		0.73
30. timpul potrivit pentru a deveni treptat adult/a time of gradually becoming an adult		0.68
31. un timp al îndoielilor dacă ați ajuns sau nu la maturitatea		0.82

completă/a time of uncertainty about
having reached full maturity

F1-Identity Exploration, F2-Experimentation/Possibilities, F3-Negativity/Instability, F4-Other-Focus, F5-Self-Focus, F6-Feeling "In-Between".

Standardized factor loadings ranged from .42 to .83, with most items showing values above the .50 threshold. The Identity Exploration and Experimentation/Possibilities dimensions demonstrated the most robust factor loadings (.58-.83 and .55-.79, respectively), while the Feeling In-Between dimension showed more modest loadings (.42-.68). Inter-factor correlations ranged between .24 and .68, with the strongest association observed between Identity Exploration and Experimentation/Possibilities ($r=.68$), and the weakest between Negativity/Instability and Other-Focus ($r=.24$).

Modification indices suggested the presence of covariances between error terms of items belonging to the same factor, particularly for the Negativity/Instability and Feeling In-Between dimensions. Construct reliability, assessed through composite reliability coefficients (CR = .72-.86) and average variance extracted (AVE = .48-.64), indicated satisfactory values.

Based on these results, we proceeded with model respecification through: (a) including covariances between error terms of items with similar content within the same factor, (b) reevaluating items with factor loadings below .50, and (c) examining a possible restructuring of the Feeling In-Between dimension. The respecified model demonstrated improved fit indices: $\chi^2(412) = 821.56$, $p < .001$; $\chi^2/df = 1.99$; CFI = .94; TLI = .93; RMSEA = .052, 90% CI [.047, .057]; SRMR = .058.

The results suggest that IDEA's original factorial structure is partially replicable in the Romanian context, requiring minor adjustments for model optimization. There is a notable need for potential reconceptualization of the Feeling In-Between dimension for the Romanian cultural context, although adequate differentiation exists between measured constructs, despite moderate correlations between dimensions.

5. CONCLUSIONS

The results of this study provide support for the validity of the Romanian version of IDEA and highlight both universal similarities and specific cultural particularities in the emerging adult experience in Romania.

The six-dimension factorial structure was confirmed, consistent with previous studies from various cultural contexts (Arnett, 2014; Reifman et al., 2007). The obtained fit indices (CFI = .92, TLI = .91, RMSEA = .058) are comparable to those reported in Spanish (Arias & Hernández, 2007) and Italian (Crocetti et al., 2015) adaptations, suggesting the cross-cultural robustness of the construct.

The internal consistency of subscales ($\omega = .73-.88$) aligns with values reported in other European countries, such as Germany (Seiffge-Krenke, 2016) and Turkey (Atak & Çok, 2008). The high reliability of the total scale ($\omega = .91$) indicates even

slight superiority compared to previous versions, supporting the quality of the Romanian adaptation.

Regarding mean scores, both universal patterns and specific cultural nuances are observed. Identity exploration shows high values ($M = 3.24$) similar to those in the USA (Arnett & Padilla-Walker, 2015) and Italy (Crocetti et al., 2015), confirming that this defining characteristic of emerging adulthood transcends cultural contexts. Similarly, scores on the Experimentation/possibilities dimension ($M = 3.18$) are slightly lower than in Nordic countries or the USA (Nelson et al., 2007), possibly reflecting differences in available socio-economic opportunities.

A distinctive aspect of the Romanian context is the balance between Self-focus ($M = 3.15$) and Other-focus ($M = 3.09$) dimensions, which differs from the more individualistic pattern observed in Western countries (Arnett, 2016). This particularity can be interpreted in the context of Romania's post-communist transition, where modern individualistic values coexist with traditional collectivistic orientations.

The pattern of results supports the conceptualization of emerging adulthood as a distinct developmental stage while adapting to local cultural specifics. Positive correlations between dimensions suggest that experiences characteristic of this period is interconnected in a way that reflects both the universality of the construct and Romanian socio-cultural particularities.

These findings have important implications for understanding development during emerging adulthood in the Romanian context and provide an empirical basis for developing culturally sensitive interventions. The comparative results support IDEA's utility as a cross-cultural research instrument, allowing systematic exploration of cultural variations in the emerging adult experience.

From a methodological perspective, the psychometric robustness of the Romanian adaptation facilitates both future research and practical applications in counselling and program development for this age group. Additionally, the identified particularities emphasize the importance of considering cultural context in interpreting and applying the emerging adult construct.

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