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Original scientific paper  
UDC: 379.8  
<http://doi.org/10.5937/IstrPed2602118L>

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## PSYCHOMETRIC EVALUATION OF THE LEISURE MEANINGS INVENTORY IN A SAMPLE OF PEDAGOGY STUDENTS

**Abstract:** The aim of this research was to test the factor structure and reliability of the Leisure Meanings Inventory in a sample of pedagogy students. Besides the psychometric evaluation of the instrument, the paper also includes a description of respondents' answers, as well as the analysis of differences in the perception of the leisure meanings depending on the year of study. Theoretical framework of the research was based on Watkins' model of leisure meanings whose validity was tested in a specific academic context. The sample comprised 249 pedagogy students from the Faculty of Philosophy in Novi Sad. Principal component analysis with Promax rotation was used for factor extraction, while the number of factors was determined by Horn's parallel analysis. The reliability was assessed by using Cronbach's  $\alpha$  and McDonald's  $\omega$  coefficients. The results confirmed the four-factor structure of the original instrument (escaping pressure, achieving fulfillment, passing time and exercising choice) which explains 45.7% of the overall variance. Most of the subscales achieved satisfactory reliability, with observed psychometric challenges in the dimension of exercising choice. Descriptive findings indicated that the students of pedagogy predominantly perceive their leisure as a space of their personal choice and autonomy, while spending time in passive activities is less pronounced. On the other hand, it was determined that the first- and second-year students more often highlight the dimension of passing time compared to their senior colleagues, which indicates developmental shifts in the perception of the meaning of leisure while being a student. The obtained results provide empirical support to the measuring adequacy of the instrument, underlying its potential for future research of the leisure phenomenon as well as for improvement of the upbringing and educational practice in the academic context.

**Keywords:** factor structure, reliability, leisure, pedagogy students, leisure meanings.

### Introduction

In scientific circles there is an opinion that leisure is defined by four key attributes: freedom of choice, perceived competence, intrinsic motivation and positive effect (Edington et al., 2004). However, the tendencies to unite these elements in the frameworks of universal, multidimensional conceptions of leisure open numerous theoretical questions. Critics of such approach highlight several key deficiencies of the mentioned model. Firstly, the concept of perceived competence as a distinctive characteristic of leisure seems problematic, since in practice people often remain in an activity even when the feeling of competence is completely absent (Goodbey, 2008). Since the motives for engaging in an activity are diverse, the feeling of being good at something is not necessarily decisive. The essence of intrinsic motivation lies precisely in the enjoyment in the very process of an activity and not necessarily in the confirmation of one's own competence (Nikolić Maksić, 2015). Secondly, a question arises as to the justification of isolating the

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positive affect as a separate factor, since the intrinsic motivation, by its nature, already implies and encompasses the experience of enjoyment. The absence of one inevitably entails the absence of the other. In addition, the way an individual establishes control over his/her experience, interpreted as affect by the authors, is not specific to leisure only, but to other domains of life as well (Nikolić Maksić, 2015). Finally, the most significant issue of the conception is its reductionism. Although it takes into account many dimensions, it still remains closed in the circle of subjective factors. Such a perspective neglects the fact that giving the meaning to leisure is externally conditioned and varies in relation to social and historical frameworks (Rojek, 2010). Since there is no universal model of human perception of freedom, the parameters of leisure remain elusive if observed outside a broader social context (Nikolić Maksić, 2015).

For this reason, the researchers (Iso-Ahola & Baumeister, 2023; Nikolić Maksić, 2015; Rojek, 2010; Watkins, 2010) highlight the necessity to acknowledge the diversity in meanings which individuals or groups attribute to leisure. As Freysinger (1987) described it, leisure can mean the same thing to different people, different things to different people, and different things to the same person depending on the context. Such variability of meanings calls for instruments that may comprise the complex and often contradictory nature of this phenomenon within specific sociocultural frameworks.

In such methodological context, the Leisure Meanings Inventory developed by Shulz and Watkins (2007) stands out as particularly relevant with its primary intention to operationalize the plurality of subjective meanings attributed to leisure by individuals. Nevertheless, the application of such instrument in different contexts requires its empirical revalidation. Future pedagogists represent a particularly significant target group for this type of analysis. As professionals whose vocation is intrinsically related to upbringing and educational practice and the guidance of young people, the perception of leisure among future pedagogists transcends the boundaries of subjective experience and becomes an integral part of their professional identity.

Starting from the theoretical dilemmas related to the structure of the leisure construct, the objective of this paper is the psychometric evaluation of the Leisure Meanings Inventory in a sample of pedagogy students, while reviewing its factor structures and reliabilities. Through the validation of this instrument, the idea was to provide a reliable foundation for further research about how the future pedagogists, as practitioners of upbringing and educational practice, define and conceptualize the space of freedom in both personal and professional contexts.

### **The Meaning of Leisure: A Theoretical Framework**

In modern literature leisure is more often conceptualized as a dynamic and multidimensional construct whose meaning depends on subjective interpretations and contextual conditions (Watkins & Bond, 2007). Accordingly, understanding of leisure requires an approach that transcends quantitative indicators of available time and is oriented toward subjective interpretations and lived experience (Iso-Ahola & Baumeister, 2023; Watkins, 2002). In this theoretical framework, a model developed by Watkins (2002, 2008, 2010) is given particular prominence. The model is based on phenomenographic approach that starts from the assumption that people may experience the same phenomenon in qualitatively different ways. Based on the empirical findings, four dominant patterns of leisure meanings were identified: passing time, exercising choice, escaping pressure and achieving fulfillment (Watkins, 2002). Leisure as passing time is characterized by an instrumental attitude toward time, where leisure is experienced as the remaining time-frame intended for filling and reducing boredom (Watkins, 2002, 2008). The pattern of leisure as exercising a choice, emphasizes autonomy and personal control over using the time, where the choice represents the central component of subjective experience (Watkins, 2010). Within the pattern of leisure as escaping pressure, the emphasis is on the regulation of stress and psychological restoration. Leisure is experienced as a means of distancing from everyday demands

and restoration of personal resources (Watkins, 2002, 2008). The pattern of leisure as achieving fulfillment is related to a high involvement, positive emotions and integration of leisure into a broader value system (Watkins, 2008, 2010).

These patterns do not represent isolated categories but are organized along a continuum of meanings of leisure, moving from simple toward complex forms of experiences (Watkins, 2010). Passing time represents the starting and simplest pattern because it is based on an instrumental attitude toward time and low subjective involvement. In contrast, achieving fulfillment represents the most complex pattern since it includes high emotional engagement, feeling of sense and integration of leisure into a broader value system. Between these two poles lie patterns of exercising choice and escaping pressure that indicate gradual transition to deeper and more meaningful experience of leisure.

Longitudinal findings of Watkins and Bond (2007) confirm the existence of developmental dynamics in the meaning of leisure. While following the students over a period of eight years, the authors determined that the meaning of leisure gradually moved from simpler to more complex patterns. These changes are particularly visible in the context of education, indicating that the educational process may contribute to the transformation of ways in which individuals experience their leisure. Systematic learning and education enable development of deeper and higher-quality attitude toward leisure (Watkins, 2010). From a pedagogical standpoint, this finding is particularly significant because it confirms that it is possible to develop competencies for the meaningful use of leisure. For future pedagogists this means that the understanding of the meanings of leisure transcends the personal level and becomes the integral part of their professional role.

The Leisure Meanings Inventory is developed based on such conceptual framework, enabling empirical establishing of a dominant pattern of experiencing leisure among respondents (Schulz & Watkins, 2007; Watkins, 2010). Its application in our research enables review of theoretical assumptions about the structure of leisure meanings as well as the perception of potential differences in patterns of experiencing leisure in relation to the level of academic experience among respondents.

### **Review of Relevant Research**

For a long time, empirical research on leisure has been primarily focused on analysis of the structure of activities and external patterns of behavior (Neulinger, 1974). Only after the more intensive development of psychological approaches, the focus of the scientific community shifted toward systematic examination of subjective meaning of this phenomenon (Iso-Ahola, 1980). In that context, special attention was drawn by the instruments that operationalize leisure through motivation, inner experiences and perception of personal control. Among the most significant are the Leisure Motivation Scale (LMS) (Beard & Ragheb, 1983), Leisure Satisfaction Scale (LSS) (Beard & Ragheb, 1980) and Perceived Freedom in Leisure Scale (PFL) (Witt & Ellis, 1985). Although these instruments have significantly contributed to the understanding of the motivational and affective aspects of leisure, their limitations reflect in the focus on individual dimensions of experience. On the contrary, a need has emerged for instruments that comprise broader, integrated pattern of meanings the leisure holds for an individual as a whole.

Striving to overcome the mentioned limitations, Watkins (2002, 2008, 2010) develops a phenomenographic approach that enables identification of qualitatively different ways in which people experience leisure. The Leisure Meanings Inventory was designed based on this theoretical framework (Schulz & Watkins, 2007). Empirical studies conducted during the course of its construction and its later applications showed satisfying metric characteristics and stable four-factor structure (Schulz & Watkins, 2007). The findings confirm that the respondents do not

experience their leisure as a homogeneous construct, but through various patterns that differ by degree of reflexivity, emotional involvement and perceived autonomy (Watkins, 2010).

Further research in this field indicated that the meanings of leisure are often closely connected with a series of psychological and developmental variables. It was determined that more complex patterns of experiencing leisure positively correlate with the subjective well-being and feeling of self-efficiency (Newman et al., 2014). Research studies (Campbell et al., 2025; Iso-Ahola & Baumeister, 2023) also show that leisure represents an important source of experiencing the meaning in life, especially when it is based on an autonomous choice of activities, a sense of competence and personal involvement. These findings are consistent with the self-determination theory that emphasizes the central role of autonomy and inner motivation in shaping the high-quality subjective experience (Ryan & Deci, 2017), which confirms that leisure does not only represent the absence of obligations but a significant resource for the affirmation of personal potentials.

In the context of the student population, research results indicate that this group predominantly perceives leisure through the lens of freedom of choice and subjective sense of autonomy (Nikolić Maksić, 2009). However, the fact that the results are not always consistent and they significantly vary depending on demographic characteristics and specificities of studying (Gurbuz & Henderson, 2013; Page et al., 2022), emphasizes the need to conduct empirical tests within specific populations. In our country, the question of leisure meanings was considered by Nikolić Maksić (2015) on a population of adult participants in education programs. The obtained findings indicate that the respondents predominantly experience leisure as a space of freedom of choice and inner satisfaction which is consistent with the international research that emphasizes central role of the autonomy in the experience of leisure (Ryan & Deci, 2017). Although the results confirm the theoretical relevance of the concept in our sociocultural context, the used instrument was not a subject to a psychometric evaluation but was used for descriptive and interpretative purposes.

Similar limitation can also be noticed in international literature that relates to the Leisure Meanings Inventory. Although the instrument is theoretically grounded and widely used (Page et al., 2022), available papers mostly rely on its original conceptual structure. This methodological shortcoming gains additional importance in light of research findings indicating that the dimensionality and meaning of instruments change when transferred from one sociocultural context to another (Walker et al., 2007). Therefore, translating instruments without verifying their latent structure in specific populations may lead to inaccurate conclusions.

There is a particularly limited number of studies that systematically examine the differences in leisure meanings in relation to participants' educational experience. Although Watkins' and Bond's (2007) longitudinal findings indicate that the education process may contribute to developmental shifts toward more complex and more reflexive patterns of leisure experience, such effects have not been considered in details in the population of future education and upbringing professionals. In that sense, the pedagogy students are a particularly relevant research group. As future practitioners in the field of upbringing and education and upbringing, they shall professionally participate in planning and implementation of educational programs that include leisure. Understanding of the way they experience this phenomenon represents the important foundation for professional development and curricular planning.

On the basis of the above said, one may conclude that, despite the theoretical grounding and wide application of the Leisure Meanings Inventory, there is still a shortage of empirical evidence of its factorial structure and psychometric characteristics. In addition, there is a shortage of data about the specificities of leisure meanings in pedagogy students. The aforementioned research gaps are the starting point and justification of the research presented in this paper.

## Research Methodology

### Research Aim

The main aim of the research is the psychometric evaluation of the Leisure Meanings Inventory in a sample of pedagogy students which implies examination of its factor structure and psychometric characteristics. By analyzing the principal components with Promax rotation, the theoretical assumption of the existence of four latent dimensions of this construct in our educational context is put to the test.

Besides the psychometric evaluation of the instrument, the research also encompasses a descriptive analysis of dominant patterns of the leisure experience in future pedagogists. Starting from the assumption that the education process and academic experience may contribute to changes in the perception of leisure, differences in the meaning of this phenomenon are also analyzed in relation to the year of study.

### Research Sample

The research included 249 pedagogy students from the Faculty of Philosophy, University of Novi Sad, with an average age of 21 (SD = 1.96). The sample was predominantly female (93.2%), which reflects the general gender structure of students in this study program. Through a suitable selection of respondents, the students of bachelor and master studies were included. First-year students make up the largest share (26.1%), then third-year (21.3%), second-year (19.7%) and fourth-year students (19.3%), while master-level students represent 12.4% of the sample.

Since the research was conducted on an institution of higher education, the obtained findings in the first place reflect characteristics of the population within this institutional context. Accordingly, generalization of the results to the broader population of pedagogy students requires caution and additional research on more heterogeneous samples.

The research was conducted in accordance with the basic ethical principles of scientific work. The participation of the respondents was voluntary and anonymous, with explicit option to withdraw at any stage. The collected data does not include sensitive personal information, and the research procedure itself entailed no risk to participants' psychological well-being.

### Research Instrument

For the purpose of this research, the Leisure Meanings Inventory was used, developed by Schulz and Watkins (2007) on the basis of earlier phenomenographic research (Watkins, 2002). The instrument was developed with an aim to operationalize qualitatively different ways in which individuals experience leisure, conceptualized within the theoretical model as a continuum of developmentally related meanings. The original version of the instrument encompasses four theoretically postulated dimensions: passing time, exercising choice, escaping pressure and achieving fulfillment.

The instrument was designed as a Likert-type scale, where respondents rate their agreement with individual statements on a five-point scale (from 1 – strongly disagree to 5 – strongly agree). In this research, the version of Leisure Meanings Inventory previously used in empirical research of author Nikolić Maksić (2015) was applied without any additional interventions whether in content or structure of the instrument. This way, terminological and contextual harmony with local research framework was ensured, while preserving the original theoretical conception of the inventory (Schulz & Watkins, 2007).

Concerning its metric characteristics, the authors of the Leisure Meanings Inventory report satisfactory internal consistency of the instrument (Schulz & Watkins, 2007). Cronbach's  $\alpha$  for the entire instrument is 0.81, which is considered a high level of reliability in social sciences. The analysis of individual subscales yielded coefficients ranging from 0.66 to 0.74 (passing time  $\alpha = 0.74$ ; exercising choice  $\alpha = 0.66$ ; escaping pressure  $\alpha = 0.74$  and achieving fulfillment  $\alpha = 0.69$ ). Although the values of some subscales are slightly lower, in the context of exploratory research they are considered adequate (Schulz & Watkins, 2007). This was additionally supported by the standpoint that moderate coefficients could be expected in instruments that comprise a wide range of dimensions within one construct (Kline, 2000; Nunnally, 1978). Moreover, it has been noted that excessively high reliability may undermine validity, as it often reflects measurement of trivial or too narrowly defined variables (Cattell, 1973). This suggests that the structure of the Leisure Meanings Inventory provides an adequate foundation for further psychometric analysis.

## Research Results

### Factor Structure of the Leisure Meanings Inventory

The factor structure of the Leisure Meanings Inventory was examined by applying the analysis of the principal components with Promax rotation, given the expected interrelation among the latent dimensions. The analysis was conducted in JASP software (version 0.19.1.0). The adequacy of the data for the application of the factor analysis was evaluated by using the Kaiser-Meyer-Olkin's (KMO) index and the Bartlett's test of sphericity. The value of KMO index was 0.733 which indicated a satisfactory adequacy of the sample for conducting the factor analysis. The Bartlett's test of sphericity was statistically significant ( $\chi^2_{(276)} = 1690.22$ ;  $p < 0.001$ ), confirming that the correlation matrix deviates significantly from the identity matrix and that the application of the factor analysis is methodologically justified.

The number of components kept for further analysis was determined based on the Horn's parallel analysis (1965) that proved to be more reliable in some previous research in relation to the traditional criteria for factor extraction (Subotić, 2013). This procedure is based on the assumption that it is justified to retain only those components whose characteristic roots are greater than the corresponding values obtained from randomly generated data with the same structural features. This way, the variability arising from the specificity of the sample is taken into consideration. Therefore, a parallel analysis is considered methodologically advanced alternative to the Gutman-Kaiser's criterion because it allows elimination of components whose explained variance does not exceed the one that could be expected in the case of random data (Subotić, 2013).

The results of the parallel analysis indicated the retention of four components which together explain 45.7% of the total variance of the questionnaire. The first component explains 18.1% of variance, second 11.3%, third 8.6% and fourth 7.6%. All communalities were above the threshold of 0.30 (Table 1), indicating an adequate representation of the items in the factor structure. Such percentage of explained variance is considered acceptable in research on multidimensional constructs.

**Table 1.** Results of Parallel Analysis and Percentage of Variance Explained by the Factors

Factor	Eigenvalue	Proportion of Variance	Cumulative	Parallel Analysis Value	Decision
1.	4.355	0.181	0.181	1.591	Accept
2.	2.724	0.113	0.295	1.513	Accept
3.	2.059	0.086	0.381	1.434	Accept
4.	1.821	0.076	0.457	1.372	Accept
6.	1.206			1.306	Reject

The extracted dimensions of Leisure Meanings Inventory are largely consistent with the factor structure of the original instrument, with certain overlaps that are expected in the process of empirical validation of instruments (Table 2). The first factor, that could be interpreted as *escaping pressure*, encompasses five items that belong to the dimension of the same name in the original instrument, as well as three items from the factor of passing time (items 15, 16 and 17). These items conceptually fit into the experience of leisure as a space for distancing from obligations and everyday demands, and their retention within this factor is theoretically justified. The second factor, that relates to *achieving fulfillment*, greatly corresponds to the original structure and encompasses all items that belong to the dimension of the same name from the original instrument. In addition, items 3 and 24 that belonged to other dimensions in the original instrument, in this research show more pronounced loads on the factor of achieving fulfillment, indicating their functional connection with subjective experience of personal achievement and satisfaction in leisure. The third factor may be interpreted as *passing time*, and encompasses three items from the dimension of the same name in the original instrument. The fourth factor, that could be designated as *expressing choice*, largely corresponds to the original dimension and encompasses five of its items.

**Table 2. Pattern Matrix**

	RC1	RC2	RC3	RC4
[23] For me leisure is often a spur of the moment thing because all the other obligations in my life have been fulfilled.	0.782			
[21] Leisure for me is a break, a change from life's usual routine.	0.738			
[20] Leisure is the time when I get to disengage from normal routine.	0.731			
[22] Leisure allows me to escape the pressure of my daily routine.	0.681			
[17] Leisure is the time left over, when everything else in my life is completed.	0.647			
[16] Leisure just occurs in my spare time.	0.559			
[19] Leisure occurs when I am able to take time out and get away from everyday life.	0.484			
[15] Leisure serves just to fill the extra time in my life.	0.431		0.322	
[10] Leisure allows me to feel connected to something outside myself.		0.691		
[7] Sometimes I get so engrossed that I forget about time and forget about myself.		0.626		
[8] Sometimes during my leisure, I get so absorbed that I don't feel the time passing.		0.587		
[9] Leisure occurs in all aspects of my life and can occur any time in my day.		0.555		
[11] I often find leisure is a time to reflect on life and discover a lot about myself.		0.528		
[3] Sometimes I get so relaxed during my leisure it is almost spiritual and that is satisfying.		0.495		
[24] Leisure provides me a chance to rejuvenate.		0.384		
[12] I find my leisure experiences begin spontaneously.		0.261		
[18] Leisure is doing nothing.			0.824	
[14] Most of my leisure usually involves lazing around and doing passive things.			0.815	
[13] To me leisure is all about doing inactive things.			0.711	
[4] Leisure to me is having my time free of responsibilities, to do what I want to do and not the things I am obliged to do.			0.346	0.819
[5] Leisure is the time when I can be in control and do not have to meet the expectations of others.				0.730
[2] Leisure is a way of clearing my mind and I don't have to think about anything.				0.610
[6] To me leisure stops being leisure when it needs to meet the expectations of others.				0.571
[1] To me leisure stops being leisure when other people put pressure on me to perform.				0.412

The analysis of factor loadings shows that most items clearly exhibit dominant loadings in one component, with minimal secondary loadings, which contributes to the stability and interpretability of the obtained structure. A small number of items with cross-loadings were noticed, and they occur between the first and third, as well as between the third and fourth components. Such overlaps may be considered conceptually justifiable, since in the subjective experiencing of leisure, the passing time is often intertwined with escaping pressure, as well as with the perception of autonomy and personal control. In both cases, items were retained within the factor where they achieve greater loadings, which is a standard practice in factor analysis.

The intercorrelations among the components are mostly low to moderate, indicating their conceptual relatedness while preserving their distinctiveness. The first component is weakly correlated with the second ( $r = 0.15$ ) and third ( $r = 0.16$ ), while showing moderate positive relatedness with the fourth component ( $r = 0.31$ ). Relatedness of the second and third components is negligible ( $r = -0.01$ ), while the correlation between the third and fourth components is low and negative ( $r = -0.14$ ). Such pattern of relatedness additionally confirms the multidimensional structure of the instrument and relative independence of extracted dimensions.

### ***Psychometric Characteristics of the Leisure Meanings Inventory***

The reliability of the Leisure Meanings Inventory was assessed using Cronbach's  $\alpha$  and McDonald's  $\omega$  coefficients. Cronbach's  $\alpha$  was applied as the traditional measure of internal consistency, while McDonald's  $\omega$  was included as a more robust reliability indicator, particularly in situations where the assumption of tau-equivalence was not completely met. Assessment of reliability was based on one-factor models for each subscale, while the values of both coefficients were interpreted in line with the usual criteria where values above 0.70 were considered indicators of satisfactory internal consistency.

The obtained results show that the first factor, that relates to the dimension of escaping pressure ( $\omega = 0.789$ ;  $\alpha = 0.794$ ), as well as the third factor, which encompasses the dimension of passing time ( $\omega = 0.768$ ;  $\alpha = 0.751$ ), achieve satisfactory level of reliability. In contrast, the second factor, achieving fulfillment, show reliability values that are just below the recommended threshold ( $\omega = 0.696$ ;  $\alpha = 0.681$ ), while the fourth factor, exercising choice, has the lowest values of internal consistency ( $\omega = 0.587$ ;  $\alpha = 0.534$ ).

It was additionally examined whether the internal consistency subscale could be improved by omitting individual items. The analysis showed that by omitting item 12, the value of the reliability coefficients of the subscale of achieving fulfillment would exceed the threshold of 0.70. Since this item simultaneously showed low factor loadings, it was omitted from all further analyses. Omitting other items would not result in any significant improvement in values  $\alpha$  or  $\omega$  on the level of remaining subscales. Accordingly, the results obtained on the fourth subscale need to be interpreted with caution, having in mind that the values of reliability indicators do not reach the recommended threshold.

### ***Perception of the Meaning of Leisure among Pedagogy Students***

In order to examine the perception of the meaning of leisure, the measures of descriptive statistics (arithmetic mean, standard deviations, minimum and maximum values) were calculated first, and then also the indicators of distribution form (skewness and kurtosis). The results indicate the differences in representation of extracted dimensions of the meanings of leisure (Table 3). The dimension for exercising choice achieves the greatest average values ( $AS = 4.30$ ;  $SD = 0.61$ ), indicating that the respondents predominantly experience their leisure as a space of personal choice and autonomy. The dimensions of fulfilment ( $AS = 3.54$ ;  $SD = 0.71$ ) and escaping pressure ( $AS = 3.27$ ;  $SD = 0.77$ ) follow, and are moderately present. The lowest average values were recorded for

the dimension of passing time (AS = 2.25; SD = 0.94), suggesting that the respondents less frequently experience their leisure as mere time-filling without a clearly defined goal.

Distribution of responses for most variables show negative asymmetry, particularly in the dimension of exercising choice, indicating higher frequency of higher ratings on the scale. Kurtosis values are mostly close to zero, indicating approximately normal distribution of responses. Nevertheless, as highlighted in the previous section, findings concerning the dimension of exercising choice should be interpreted with a certain degree of caution, bearing in mind lower values of reliability indicators of this subscale.

**Table 3.** Descriptive Statistics for the Perception of the Meaning of Leisure

	Range	AS	SD	Skewness	Kurtosis
Passing time	1 – 5	2.24	0.94	0.60	-0.18
Exercising choice	2 – 5	4.30	0.61	-1.14	1.10
Escaping pressure	1.25 – 5	3.27	0.77	-0.05	-0.38
Achieving fulfillment	1.57 – 5	3.53	0.71	-0.22	0.31

### Differences in the Perception of the Meaning of Leisure Depending on the Year of Study

In order to examine differences in the perception of the meaning of leisure depending on the year of study, a multivariate analysis of variance (MANOVA) was conducted, where dimensions of meanings of leisure (passing time, exercising choice, escaping pressure and achieving fulfillment) were used as dependent variables (Table 4). The Box's test of equality of covariance matrices was statistically significant (Box's M = 62.956,  $p = 0.020$ ), indicating a violation of the assumption of homogeneity of the covariance matrices. That is the reason why the Pillai's Trace, a more robust criterion, was used for interpretation of multivariate effects.

**Table 4.** Perception of the Meaning of Leisure and the Year of Study

	1st Year	2nd Year	3rd Year	4th Year	Master's	F	$\eta^2$
Perception of meaning	Pillai's Trace = 0.114, $F(16, 916) = 1.687$ , $p = 0.044$ , $\eta^2_p = 0.029$						
Passing time	2.52 (0.98) <sub>a</sub>	2.36 (1.02) <sub>a,b</sub>	2.16 (0.86) <sub>b</sub>	2.07 (0.86) <sub>b</sub>	1.92 (0.85) <sub>b</sub>	2.99*	0.050
Exercising choice	4.27 (0.68)	4.36 (0.49)	4.38 (0.50)	4.29 (0.65)	4.17 (0.63)	0.77	0.013
Escaping pressure	3.22 (0.64)	3.38 (0.77)	3.25 (0.76)	3.23 (0.94)	3.34 (0.78)	0.41	0.007
Achieving fulfillment	3.51 (0.66)	3.55 (0.79)	3.74 (0.68)	3.38 (0.58)	3.52 (0.72)	1.94	0.033

\*\* $p < 0.01$ ; \* $p < 0.05$

The MANOVA results revealed a statistically significant multivariate effect of the year of study on the combination of dependent variables (Pillai's Trace = 0.114,  $F(16, 916) = 1.687$ ,  $p = 0.044$ ,  $\eta^2_p = 0.029$ ), indicating that there is a difference in patterns of leisure meanings among students from different years of study at the multivariate level. At the univariate level, a statistically significant difference was found only for the dimension of passing time ( $F(4, 229) = 2.998$ ,  $p = 0.019$ ,  $\eta^2_p = 0.050$ ), while the differences were not statistically significant for dimensions of exercising choice ( $p = 0.543$ ), escaping pressure ( $p = 0.804$ ) and achieving fulfillment ( $p = 0.105$ ). Subsequent post-hoc analyses (Scheffe's test) for the dimension of passing time indicated that the first-year students statistically differ from third- and fourth-year students, as well as from master's students, where the first-year students achieve greater scores on this dimension on average. Other differences among groups were not statistically significant.

## Discussion

The research results indicate a four-factor structure of the Leisure Meanings Inventory that is largely consistent with the theoretical model of the original instrument (Schulz & Watkins, 2007). The stability of four latent dimensions – escaping pressure, achieving fulfillment, passing time and exercising choice – indicate that these concepts are relevant and recognizable in our cultural and educational context. The overall percentage of explained variance (45.7%) is considered satisfactory for multidimensional constructs that rely on self-reports and complex subjective experiences of the respondents. Although lower compared to the original study by Schulz and Watkins (2007) where it amounted to 54.2%, it still confirms the validity of application of this model in our research context.

However, the validation process also uncovered certain specificities. The first factor, interpreted as escaping pressure, besides the original items, also encompassed items 16 and 17 (which belong to the dimension of passing time). These items conceptually relate to resting and relaxing, suggesting that the pedagogy students perceive more passive forms of leisure primarily as a necessary mechanism for distancing themselves from the academic stress and recovery from everyday obligations. The fourth factor - exercising choice - requires special attention. Although it structurally corresponds the original dimension, this factor recorded the lowest reliability values ( $\omega = 0.587$ ;  $\alpha = 0.534$ ), which represents a significant methodological limitation. However, it is important to point out that similar tendencies were also recognized in the original study (Schulz & Watkins, 2007). Namely, Schulz and Watkins (2007) also obtained the lowest reliability values on their sample exactly for the factor of exercising choice ( $\alpha = 0.66$ ). Such correspondence suggests that the low internal consistency in our research may not merely reflect the sample but rather the semantic range of the concepts of “choice” and “autonomy” themselves. In the student population these concepts may be interpreted in very different ways: from the total absence of structure to the deliberate choice of developmental activities. In addition, the low reliability accompanied by high average values on this scale may indicate the presence of social desirability. In this sense, students respond to the items about autonomy in line with the projected image of the pedagogical profession which brings in additional variability to the obtained results. For that reason, findings related to this factor need to be interpreted with caution, with a recommendation to review the items in the future.

The descriptive findings reveal that the pedagogy students predominantly perceive their leisure through the lens of exercising choice ( $AS = 4.30$ ). Such an experience supports the assumptions of self-determination theory (Ryan & Deci, 2017), according to which the autonomy in activities represents the basic mechanism by which individuals achieve satisfaction and personal well-being. High values on dimensions of achieving fulfillment and escaping pressure suggest that the pedagogy students demonstrate the ability to structure their leisure time in a qualitatively meaningful way. For the future practitioners of upbringing and education, orientation toward leisure as the source of fulfilment represents a strong basis for developing professional competences. The lowest average values were recorded on the dimension for passing time ( $AS = 2.25$ ), indicating that the future pedagogists less frequently experience leisure as aimless filling of “idle time”.

The findings of the MANOVA analysis offer the most interesting insight into the development path of pedagogy students. The statistically significant difference was primarily determined on the dimension of passing time, where the first-year students achieve significantly more scores compared to their older colleagues (from third and fourth year and master's). This trend indicates the process of “maturing” in perceiving leisure during studies which could be related to the process of professional socialization (Weidman, 2006). While freshmen tend to perceive their leisure time primarily as passive waiting for the next obligation, students from higher years tend to attribute to it more complex meanings. Academic experience contributes to a greater awareness of the value

of time, this way shifting the focus from non-obligatory activities toward personal development. The absence of differences across other dimensions suggests that the fundamental values, such as the pursuit of fulfillment, are relatively stable constructs, while the passive attitude toward time changes, influenced by the educational process and maturing.

### Conclusion

The conducted research offered an insight into psychometric features of the Leisure Meanings Inventory in the Serbian-speaking context, thereby fulfilling a significant gap in the national pedagogical literature. The confirmation of the four-factor structure of the instrument attests to its cross-cultural stability, while at the same time also indicates specificities in the perception of leisure in future pedagogists, particularly with regards to the intertwining of passive forms of its engagement with the mechanisms for stress recovery.

The main contribution of the paper reflects in identification of developmental dynamics of leisure meanings during the studies. The finding that the perception of leisure as “idle time” significantly decreases with the years of study suggests that the higher education acts as a transformative factor, fostering more conscious and purposeful structuring of time. However, the low reliability of the factor for exercising choice, despite its high subjective significance, remains a crucial methodological issue. This finding is in line with the tendencies recognized in the original study of Schulz and Watkins (2007), suggesting that the factor of exercising choice, by its nature, bears a certain semantic range that is difficult to encompass solely by self-report. The obtained results indicate the need for theoretical reconsideration of the concept of autonomy in the pedagogical context and suggest that the future research should apply some advanced statistical tests in order to examine the validity of this dimension more thoroughly.

The research results have direct implications for improvement of the pedagogical curriculum in higher education. Given that the first-year students show the most-pronounced tendency toward passive leisure, there is a need to introduce courses that would strengthen their time-management and leisure-planning skills at the very beginning of their education. Universities should promote leisure as a sphere of professional development and reflective practice, thereby strengthening the factor of achieving fulfillment. Since these students shall mold programs for upbringing and education for children and youth, their awareness of leisure as a space of autonomy (exercising choice) has to be supported by clearer theoretical and practical guidelines throughout their studies. In conclusion, this research establishes an empirical foundation for further application of the Leisure Meanings Inventory and paves the way for longitudinal studies that would follow the stabilization of these meanings after entering the professional practice.

Although the research provides significant insights into the psychometric validity of the Leisure Meanings Inventory, it is necessary to consider a few of its limitations as well. Firstly, the research was conducted on a convenience sample of students from a single higher education institution, which limits the generalizability of the findings. Future research should encompass more heterogeneous samples from different universities in order to examine the stability of the obtained factor structure within a broader academic context. Secondly, the application of an exclusively quantitative approach based on self-report, carries the risk of socially desirable responses, particularly with abstract constructs such as “exercising choice”. Combining quantitative data with qualitative insights would allow for a deeper understanding of subjective meanings that the students attach to these categories. The third and most significant limitation relates to the psychometric stability of the dimension of exercising choice. Although the low reliability value corresponded with the findings reported by the author of the original instrument ( $\alpha = 0.66$ ), in our context ( $\omega = 0.58$ ;  $\alpha = 0.53$ ) it suggests that the items may not fully capture the specificity of this construct in Serbian language. This highlights the need for revising the items and conducting a confirmatory factor analysis on a new sample. Finally, the research draft is transversal, which

prevents drawing definite causal conclusions about the effects of studying on the changes in the perception of leisure meanings. Although the differences between years of study were established, only longitudinal research that follows the same group of students from their first year through the master's year of study may definitely confirm that those changes are the result of the educational process and professional specialization (Weidman, 2006), and not the specificities of different generations of students.


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Submitted/Received	Accepted
3 February 2026	7 May 2026