European Proceedings of Educational Sciences EpES

www.europeanproceedings.com

e-ISSN: 2672-815X

DOI: 10.15405/epes.23045.63

EDU WORLD 2022

Edu World International Conference Education Facing Contemporary World Issues

BASIC PSYCHOLOGICAL NEEDS AND WELL-BEING OF STUDENTS IN THE POST-PANDEMIC

Muntean Loredana (a), Bochis Laura Nicoleta (b)* *Corresponding Author

(a) University of Oradea, Oradea, Romania (b) University of Oradea, Oradea, Romania, totlaura@yahoo.com

Abstract

The purpose of the study is to identify the level of well-being of students and their basic psychological needs, with the return to the onsite teaching system in the university, after the COVID-19 pandemic. We also want to analyse the association relationship between students' well-being and their basic psychological needs. The study was attended by a number of 112 students at the Pedagogy of primary and preschool education enrolled in the second year, in the forms of full-time and part-time education. The working tools were taken from previous studies carried out on the Romanian population to evaluate students' structure of psychological needs, their self-perceived state of physical health and their level of well-being. The results obtained show the existence of a state of well-being and health above the average level. At the same time, the highest average, with a high level, was obtained at the subscale of the students' need for affiliation, with the return to onsite teaching-learning activities. The conclusions of the correlational study support the results obtained in previous studies, regarding the role of basic psychological needs in maintaining well-being, but emphasize that after online learning activities, the need for affiliation and competence (not autonomy) is associated with well-being, with a moderate effect size.

2672-815X © 2023 Published by European Publisher.

Keywords: Need for affiliation, need for competence, need for autonomy, students, well-being

1. Introduction

The rapid and widespread shift to online education during the COVID-19 pandemic has disrupted students' intercollegial relationships and learning routine, led to less familiar training methods and generated technological obstacles in online learning (Huang & Zhang, 2021). Beyond the difficulties given by the access and use of technology to adapt students to online education, the research also revealed that its sudden implementation had major consequences on the subjective well-being of students (Hung et al., 2020; Lyons et al., 2020). Although researchers' interest in the well-being of individuals has increased significantly during the pandemic, this research aims that, starting from the theory of Deci and Ryan (1985) and Ryan and Deci (2000, 2001) to identify the level of well-being of students and the relationship of association with basic psychological needs. Such studies are necessary as researchers also point out that student well-being and learning can still be influenced by future uncertainties and modified teaching or training programs in the pandemic and post-pandemic (Aftab et al., 2021).

Well-being has been defined differently in several areas, therefore, many definitions, indicators and measurements have been implemented in a variable way (Pollard & Lee, 2003). Despite the lack of a more precise definition, the term is often used in the academic literature, often in a way reflecting the definition of the World Health Organization (2012) as a state of complete physical, mental and social well-being, and not just the absence of disease or infirmity. Sometimes it is specifically related to mental/mental health, although its general use is in the sense of a broader concept (WHO, 2012).

In the theory of self-determination, Ryan, and Deci (2001) define well-being as a complex process that refers to the optimal experience and functioning of the person. The mentioned authors point out that well-being derives from two general perspectives, approached in psychology: the hedonic approach and the eudaimonic approach. Thus, hedonic plating targets the level of happiness and defines well-being in terms of obtaining pleasure and avoiding pain. The eudaimonic approach focuses on meaning and self-realization and defines well-being according to the degree to which a person fully functions (Ryan & Deci, 2001). Taking into account the hedonic perspective, more authors (Diener et al., 1985; Lyubomirsky, Sheldon et al., 2005) consider that people experience a high level of subjective well-being when they feel more pleasant and have fewer unpleasant emotions and when they are satisfied with their lives. The results reached by researchers in Romania illustrate the fact that, overall, young Romanians consider themselves happy (Bernath Vincze, 2016), but it was highlighted that the levels of subjective happiness and life satisfaction in adolescents in Romania were lower compared to the European averages (Vincze et al., 2015). Studies conducted at the international level, emphasize that students with a higher degree of well-being will be more cooperative, self-confident, creative, tolerant and selfless (Cohen & Pressman, 2006; Lyubomirsky, King et al., 2005).

The theory of self-determination (Ryan & Deci, 2001) examined the conceptual connection between the subjective state of well-being and the 3 innate psychological needs: autonomy, competence and affiliation. Theory supports the idea that if the three needs are met, the individual will experience a state subjective well. According to Ryan and Deci (2000), a fundamental need implies a state of tension that if satisfied leads to health and well-being, and if not, to mental illness and discomfort. Other theories detailing the needs of individuals (e.g., Murray, 1938) usually focus on inter-individual differences in the size of needs, which drives behaviour, until they are satisfied. Instead, the theory of self-determination

considers that the degree to which needs are met is the most important motivational mechanism and argues that all people benefit from experiencing the satisfaction of inherent needs for autonomy, affiliation and competence since this energizes behaviour and well-being. The fulfilment of the three needs within the educational act, and not only, is the foundation of psychological health, growth, optimal functioning and self-actualization (Deci & Ryan, 2000; Ryan & Deci, 2001). Also, all three needs must be satisfied in order for the state of well-being to manifest itself fully, therefore, according to the theory of self-determination:

- the need for autonomy is met when individuals feel that they are the ones who decide their actions and feel psychologically free. Such feelings can be achieved when individuals choose their own behaviour on their own. The need for autonomy can, however, also be satisfied when they wilfully follow the instructions of others, for example, if they are in full agreement with
- the need for belonging or kinship is met when individuals feel connected to others, when they feel loved and cared for, when they can love and care for other;
- iii. individuals feel competent when they master their environment and produce the desired results.

Summarizing the results of several studies that support the theory of self-determination, Van den Broeck (2012) points out that meeting these basic needs co-arises with optimal functioning, in terms of the following: well-being (e.g. greater satisfaction and involvement in the workplace and less exhaustion), positive attitude (e.g. greater commitment to the organization and preparedness for change) and adaptive behaviour (e.g. high performance and less organizational deviance). In educational practice, research highlights the fact that students who have teachers who support competence, autonomy and relationships show greater educational commitment, are involved in academic activities, have optimal social and emotional competences (Cheon et al., 2012). However, an environment that allows only the satisfaction of the need for competence, but not those of autonomy and relationship, will not lead to a high level of well-being (Drugas, 2009). Sometimes, however, life events unfold in such a way that they lead to an imbalance in their satisfaction. Although the theory holds that there is a relationship between the level of satisfaction of needs and well-being, the studies that have investigated this problem are few, however, and the sizes of the effects are modest (Sheldon & Niemiec, 2006). In this context, the study answers two questions:

- i. What is the level of well-being and to what extent are the basic psychological needs of the students satisfied, in post-pandemic, immediately after returning to the onsite training system?
- Is there an association relationship between the level of well-being of the students and the level of fulfillment of the three basic psychological needs?

Purpose of the Study

The study aims to identify the level of well-being, the structure of the students' basic psychological needs and the association relationship between them, once they return to the onsite training system.

3. The hypothesis of the Study

There is a relationship of direct association between the level of well-being and the three types of basic psychological needs: autonomy, affiliation, competence.

4. Research Methods and Instruments

The inventory of self-perceived well-being of students in the university was developed starting from an instrument designed by Adams et al. (1997) to identify the well-being felt at the individual level in several areas of life. The inventory includes 36 statements to which the subject responds on a Likert scale in 6 graduations (from "strong agreement" to "strongly against"), indicating the level of agreement with each statement. For this study was used the version adapted and validated on the population in Romania, by Roşeanu and Răşcanu (2008). According to the authors, the subscales of the working tool are positive attitude toward oneself, environment and life (14 items), negative attitude toward oneself, environment and life (13 items); self-perceived physical health (7 items). Only the results obtained in the third subscale were used in this study. Examples of items for subscale Physical Health: My body seems to withstand physical ailments very well; Compared to other colleagues I know; my physical health was excellent. The internal consistency of items α Cronbach has values ranging from .75 to .84 on the instrument's subscales (Roşeanu & Răşcanu, 2008). In our study, the coefficient α Cronbach obtained for the subscale of the self-perceived state of physical health was .85.

The WHO questionnaire of the 5 criteria for assessing well-being was conducted by the World Health Organization (WHO), version 1998, consisted of five items. The answers to the items of the questionnaire will be indicated by ticking the variant that is closest to how the respondents have felt in the last two weeks and are offered on a Likert scale in five steps, from 1-never to 5—all the time. Examples of items: I felt cheerful and well-disposed; I felt calm and relaxed.

The questionnaire on the structure of needs was adapted and validated on the population in Romania by Drugaş (2009). The questionnaire contains 16 items, grouped into three subscales that assess the level of satisfaction of the three basic psychological needs, described in the terror of self-determination:

- i. The need for affiliation. Examples of items: I try to have good relationships with people I know; When I go through emotionally intense moments, I feel the need to talk to someone.
- ii. The need for competence. Examples of items: The more difficult the obstacle, the more it causes me to overcome it; I prefer tasks that involve competition with others.
- iii. The need of autonomy. Example of items: It is important for me to be able to do what I want; I feel better when I can set my priorities in the activities I perform.

The participants provided the answer by selecting a variant offered on a Likert gradation in 5 steps from 1 – totally against to 5 – perfectly agreed. The internal consistency of items α Cronbach has values ranging from .56 to .79 on the instrument subscales (Drugaş, 2009). In our study, the coefficients α Cronbach obtained were .75, at the subscale need for affiliation; .74, at the subscale need for competence and .60 at the subscale need for autonomy.

5. Participants

The study was attended by 112 students from the second year, from the Faculty of Socio-Human Sciences in Oradea, from the study program Pedagogy of primary and preschool education, from the forms of full-time and part-time education. Most of them are female (98.3%), aged 19 to 54 years (the average age is about 24 years). Of these, 45.9% are from rural areas and 54.1% from urban areas.

6. Findings

In this section, we present the results obtained on the working tools used in the research, with the help of descriptive statistics. The data processing was carried out using the SPSS for Windows statistical package, version 20.00. When checking the distribution of data using the Kolmogorov-Smirnov sample, indicators were obtained that reveal a symmetrical distribution of the data to all three working instruments used, therefore, the Pearson parametric correlation sample was used in the testing of the working hypothesis.

6.1. Ascertaining study on the level of well-being, the self-perceived state of physical health and the structuring of the basic psychological needs

In the realization of this study, we will present descriptive statistics obtained at the overall score of well-being, of the self-perceived state of health and on the subscales of the questionnaire on the structuring of the basic psychological needs of the students. The results are shown in the table 1.

Table 1. The level of well-being, physical health, and basic psychological needs. Descriptive statistical indices

	N	Min	Max	Mean	Std. Dev.
Well-being	112	.00	5.00	3.421	1.0843
Self-perceived state of physical health	110	2.43	6.00	4.402	.8332
The need for affiliation	109	2.33	5.00	4.156	.6609
The need for competence	110	2.00	5.00	3.645	.7232
The need for autonomy	109	2.00	5.00	3.708	.6209

From the analysis of the data provided in Table 1, it is found that the results of the descriptive study indicate an above-average level of well-being, health, and basic psychological needs. The higher average was obtained at the need for affiliation (m=4,156, s.d=.66), which indicates that when returning to the onsite training system, after the pandemic, students feel this need the most. The items of the questionnaire on the structure of psychological needs at which high averages were obtained are It is important for me to be able to do what I want (indicates the need for autonomy; m=4.381, s.d=.8011); The fidelity of friendship is an important value for me (indicates the need for affiliation; m=4.363, s.d=.8750). It try to have good relationships with the people I know (indicates the need for affiliation; m=4.363, s.d=.8750). The lowest averages were obtained at the items: For me, it is better to work alone

than in a team (indicates the need for autonomy; m=2.972, s.d=1.2150); I prefer tasks that involve competition with others (indicates the need for competence; m=2.857, s.d=1.1691).

When further analyzing the data in which we wanted to highlight the level of well-being and the structuring of the students' needs, depending on the form of education they attend, we found that the level of well-being is slightly higher in the students from the form of part-time education (m=3.537, s.d=1.0310) than those in full-time education (m=3.368, s.d=1.1102). However, the averages obtained in the subscales of the questionnaire on the structure of needs illustrate that the need for affiliation is the highest, both in students with frequent education (m=4.131; s.d=.6410) and at reduced frequency (m=4.210; s.d=.7098). The need for autonomy is slightly higher in full-time education students (m=3.733; s.d=.5921), compared to that obtained by students in part-time education (m=3.652; s.d=.6863). Similar results were obtained at the need of competence, the average being slightly higher in full-time education students (m=3.690; s.d=.6922) compared to those at part-time (m=3.548; s.d=.7871).

6.2. Correlational study on the association relationship between the level of well-being, selfperceived state of physical health and the structuring of basic psychological needs

To test the specific hypothesis of the study, according to which there is a direct association relationship between the level of well-being, the self-perceived state of physical health and the structuring of the basic psychological needs, we present the results obtained at the Pearson correlation in Table 2.

Table 2. The association relationship between the level of well-being, the self-perceived state of physical health and the structuring of basic psychological needs

Variables		Well-being	Self-perceived state of physical health	
The need for affiliation	Pearson Correlation	.303**	.430**	
	Sig. (2-tailed)	.001	.000	
	N	109	108	
The need for competence	Pearson Correlation	.232*	.344**	
	Sig. (2-tailed)	.015	.000	
	N	110	109	
The need for autonomy	Pearson Correlation	.080	.220*	
	Sig. (2-tailed)	.407	.022	
	N	109	108	

The data presented in the correlation matrix indicate a direct association relationship between the variables under study. Statistically significant results, with moderate effect size (Cohen, 1988) were obtained at the correlations between: the level of well-being and the need for affiliation (r=.303, p<.01), the level of well-being and the need for competence (r=.232, p<.05); the self-perceived state of physical health and the need for affiliation (r=.430, p<.001); self-perceived state of physical health and the need for competence (r=.344, p<.001). Also, a statistically significant association relationship was obtained

eISSN: 2672-815X

between the self-perceived state of physical health and the need for autonomy, but the effect size is below the moderate one (r=.220, p<.05)..

7. Conclusions

The research carried out contributes to the consolidation of a long series of studies in education sciences and education psychology, highlighting the level of well-being of students, the level of satisfaction with basic psychological needs and the relationship between these two variables. The studies carried out in the field that revealed the association relationship between the level of well-being and the basic psychological needs has were initiated by the authors of the theory of self-determination Deci and Ryan (1985, 2000), a theory from which we also started in the realization of this study.

Our results illustrate an above-average level of well-being and physical health of the students included in the study. Moreover, the studies carried out in Romania reached similar conclusions (see Bernath Vincze, 2016; Bochiş et al., 2022; Vincze et al., 2015). Simultaneously, the level of satisfaction with basic psychological needs, as classified in the theory of self-determination, is high in the students studied. It is worth noting that the need for affiliation is the most satisfied, with the return to the onsite teaching-learning system, after the pandemic period, even to the part-time learning study program.

The way in which basic psychological needs can be met or met in the school environment, has been approached by a number of authors. For example, Drugas (2009) emphasizes that in the school environment, the need for affiliation can be met by at least two types of relationships: horizontal (colleagues) and vertical (teachers). The studies carried out in the field of Education Sciences, emphasize the fact that the need for networking is often satisfied in the classroom, if the student feels that he is pleasant, respected and valued by the teacher (Dumulescu & Necula, 2019). To satisfy the need for competence, teachers must consider innovative learning, which according to Sârb et al. (2018), involves thinking and transferring information, using knowledge in different, atypical situations, which favors the transdisciplinary and interdisciplinary organization of learning contents. The innovation in school also involves redefining the entire design of the teaching, learning and evaluation process (Blândul, 2015). Additionally, an extremely important element in this process is the provision of competence-oriented feedback, by expressing confidence in the students' abilities to succeed (Dumulescu, & Necula, 2019). However, supporting and developing students' autonomy involves facilitating and encouraging them to identify and fulfill their personal and learning goals. Thus, the effective teacher achieves this by providing opportunities for choice, explaining the reasoning behind the learning tasks, empathy and respect for the ideas of pupils and students (Dumulescu & Necula, 2019).

The conclusions of the correlational study support the results obtained in previous studies, regarding the role of basic psychological needs in maintaining well-being, but emphasize that after online learning activities, the need for affiliation and competence (not autonomy) is associated with well-being, with a moderate effect size. And in previous studies, the conclusions were relatively similar (see Sheldon & Niemiec, 2006). Therefore it is important to keep in mind that students, as adults, come to courses from various backgrounds and circumstances, with different learning needs, desires and preferences (Laurian-Fitzgerald et al., 2018), and their well-being may be in an associated relationship with several categories of variables, which have not been taken into account in this study. For example, during the pandemic,

teachers had to find online teaching methods and the effectiveness of online education could depend on the digital skills of teachers (Hatos et al., 2022) and students, formed rather by self-training. However, the information provided in this study provides us first with the necessary premises to raise awareness of the need for teachers to support students in learning activities in developing educational practices by fulfilling the psychological needs of affiliation and competence, which contribute to maintaining the well-being of students in the university.

References

- Adams, T., Bezner, J., & Steinhardt, M. (1997). The conceptualization and measurement of perceived wellness: Integrating balance across and within dimensions. *American Journal of health promotion*, 11(3), 208-218. https://doi.org/10.4278/0890-1171-11.3.208
- Aftab, M., Abadi, A. M., Nahar, S., Ahmed, R. A., Mahmood, S. E., Madaan, M., & Ahmad, A. (2021). COVID-19 Pandemic Affects the Medical Students' Learning Process and Assaults Their Psychological Well-Rbeing. *International Journal of Environmental Research and Public Health*. 18(11), 5792. https://doi.org/10.3390/ijerph18115792
- Bernath Vincze, A. E. (2016). Demographic correlates of subjective happiness in Romanian youth. *Romanian Journal of Experimental Applied Psychology*, 7, 196-200.
- Blândul, V. C. (2015). Inovation in education–fundamental request of knowledge society. *Procedia-Social and Behavioral Sciences*, 180, 484-488. https://doi.org/10.1016/j.sbspro.2015.02.148
- Bochiş, L. N., Barth, K. M., & Florescu, M. C. (2022). Psychological Variables Explaining the Students' Self-Perceived Well-Being in University, During the Pandemic. *Frontiers in Psychology*, *13*, 812539. https://doi.org/10.3389/fpsyg.2022.812539
- Cheon, S. H., Reeve, J., & Moon, I. S. (2012). Experimentally based, longitudinally designed, teacher-focused intervention to help physical education teachers be more autonomy supportive toward their students. *Journal of Sport and Exercise Psychology*, 34(3), 365-396. https://doi.org/10.1123/jsep.34.3.365
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences, 2nd ed. Hillsdale, NJ: Erlbaum.
- Cohen, S., & Pressman, S. D. (2006). Positive affect and health. *Current Direction in Psychological Science*, 15(3), 122–125. https://doi.org/10.1111/j.0963-7214.2006.00420.x
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human behavior*. Plenum Press.
- Deci, E. L., & Ryan, R. M. (2000). The "What" and "Why" of goals pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(40), 227-268. https://doi.org/10.1207/S15327965PLI1104_01
- Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of personality assessment, 49*(1), 71-75. https://doi.org/10.1207/s15327752jpa4901_13
- Drugaș, M. (2009). Validarea factorială a Chestionarului de Reglare în Activitatea Școlară [Factorial validation of the Regulation Questionnaire in School Activity]. Revista de psihologie școlară, 2(3), 34-46.
- Dumulescu, D., & Necula, C. V. (2019). Autonomie, competență și relaționare în învățare [Autonomy, Competence And Relationships In Learning]. *Research and Education*, *3*, 20-26
- Hatos, A., Cosma, M. L., & Clipa, O. (2022). Self-Assessed Digital Competences of Romanian Teachers During the COVID-19 Pandemic. *Frontiers in Psychology*, 13, 810359. https://doi.org/10.3389/fpsyg.2022.810359
- Huang, L., & Zhang, T. (2021). Perceived social support, psychological capital, and subjective well-being among college students in the context of online learning during the COVID-19 pandemic. *The Asia-Pacific Education Researcher*, 1-12.
- Hung, M., Licari, F. W., Hon, E. S., Lauren, E., Su, S., Birmingham, W. C., & Lipsky, M. S. (2020). In an era of uncertainty: impact of COVID-19 on dental education. *Journal of Dental Education*. 85(2), 148-156. https://doi.org/10.1002/jdd.12404

- Laurian-Fitzgerald, S., Fitzgerald, C. J., Popa, C. A., & Bochis, L. (2018). The New Normal: Adult Online Learners. *In Handbook of Research on Student-Centered Strategies in Online Adult Learning Environments* (pp. 140-171). IGI Global.
- Lyons, Z., Wilcox, H., Leung, L., & Dearsley, O. (2020). COVID-19 and the mental well-being of Australian medical students: impact, concerns and coping strategies used. Australasian Psychiatry: Bulletin of Royal Australian and New Zealand College of Psychiatrists, 28(6), 649–652. https://doi.org/10.1177/1039856220947945
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, 131(6), 803–855. https://doi.org/10.1037/0033-2909.131.6.803
- Lyubomirsky, S., Sheldon, K. M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of general psychology*, 9(2), 111-131. https://doi.org/10.1037/1089-2680.9.2.111
- Murray, H. A. (1938). Explorations in personality. Oxford University Press.
- Pollard, E. L., & Lee, P. D. (2003). Child well-being: A systematic review of the literature. *Social Indicators Research*, (61), 59–78.
- Roșeanu, G., & Rășcanu, R. (2008). Investigation of the factorial structure of the perceived wellness survey. *Analele Universității din Oradea, Fascicula Psihologie, XIV*, 65-79.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist*, 55(1), 68. https://doi.org/10.1037/0003-066x.55.1.68
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual review of psychology*, 52(1), 141-166. https://doi.org/10.1146/annurev.psych.52.1.141
- Ryan, R. M., Kuhl, J., & Deci, E. L. (1997). Nature and autonomy: An organizational view of social and neurobiological aspects of self-regulation in behavior and development. *Development and psychopathology*, 9(4), 701-728. https://doi.org/10.1017/S0954579497001405
- Sârb, D. E., Talaş, A., & Pop, F. (2018). Metodologie şi instrumente pentru analiza avansată a publicațiilor din domeniul Cogniției musicale [Methodology and tools for advanced analysis of publications in the field of musical cognition]. *ICT in Muzical Field/Tehnologii Informatice si de Comunicatie in Domeniul Muzical*, 9(2).
- Sheldon, K. M., & Niemiec, C. P. (2006). It's not just the amount that counts: Balanced need satisfaction also affects well-being. *Journal of Personality and Social Psychology*, 91, 331–341 https://doi.org/10.1037/0022-3514.91.2.331
- Van den Broeck, A. (2012). Motivația în muncă: o privire de ansamblu conceptual-empirică și sugestii pentru contribuții viitoare din perspectiva teoriei auto-determinării [Motivation at work: a conceptual-empirical overview and suggestions for future contributions from the perspective of self-determination theory]. *Psihologia Resurselor Umane*, 10, 7-14.
- Vincze, A. E., Roth, M., & Haragus, P. T. (2015). Predictive factors for subjective happiness and satisfaction with life in Romanian young adults. *European Health Psychologist*, 17(S), 788.
- World Health Organization. (2012). Measurement of and target-setting for well-being: an initiative by the *WHO Regional Office for Europe*. Paper presented at the Report of the second meeting of the expert group 25-26 June 2012, Paris, France
- World Health Organization Collaborating Centre on Mental Health Services Development. (1998). Chestionarul OMS al celor 5 criterii de apreciere a starii de bine [The WHO questionnaire of the 5 criteria for assessing well-being]. https://www.psykiatri-regionh.dk/who-5/Documents/WHO5 Romanian.pdf