

Predictors of Intergenerational Learning in Kindergarten

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An exploratory study is part of a project of a quantitative nature conducted in 2021 on a sample of 105 preschool teachers of preschool institutions in the Banja Luka region, Bosnia and Herzegovina. Its goal was to examine whether elementary knowledge and sociodemographic variables of preschool teachers (work experience and year of completion of formal education) play a role in the prediction of intergenerational learning in a kindergarten context. The theoretical framework of the study is the concept of both intergenerational learning and professional development. Using multiple regression analysis, preschool teachers' elementary knowledge was singled out as a predictor of intergenerational learning in kindergarten. The predominance of elementary knowledge about intergenerational learning for its implementation in relation to other variables that do not carry individual action, confirms the importance of a constructivist approach in pedagogical work and indicates that the active construction of individual knowledge through various types of education is crucial. The findings of the study indicate the need for more emphasis on the design and implementation of education on intergenerational learning through formal, non-formal education and informal learning in order to acquaint preschool teachers with

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this concept and ways of its implementation in everyday life and work through various programs and projects.

Key words: elementary knowledge, intergenerational learning, preschool teacher, professional cooperation, the inclusion of older adults in educational work.

Introduction

The modern way of life, progress of science and improved living conditions ensure a longer life expectancy, but also greater loneliness of people. There is a danger that older people since they do not have social power, will be marginalized, segregated and alienated. The tendency of the distance between the young and the older reduces social cohesion. There is a need to adapt to new ways of life while avoiding dehumanization.¹ The whole society should act on the creation of new humanity through the restoration of basic human values, inclusion² and the creation of conditions for the formation of values towards others, tacit and experiential knowledge.³ If we respect the humanistic approach to education (and not just look at it from the point of view of profit), we can see the possibility of inclusion of older people in the community through intergenerational cooperation, learning and education, and creating productive dialogue and exchange. Contemporary researches indicate that intergenerational cooperation and learning have a positive effect not only on the older adults but on all actors involved.

The results of various studies² indicate that intergenerational cooperation contributes to community cohesiveness, quality of socio-emotional climate, community social capital, and knowledge transfer.³ In doing so, it is necessary to take into account the complexity of intergenerational relations. Namely, intergenerational conflicts are present in intergenerational groups and it is important that they are adequately resolved.⁴

¹ Amir MUZUR et al., Epharmology: a Plea for a New Science and a New Education Paradigm, *Nova prisutnost*, 18 (2020) 1, 39-45, 42. <https://hrcak.srce.hr/clanak/342856>.

² Giovanna del GOBBO, Glenda GALEOTTI, Gilda ESPOSITO, Intergenerational Education for Social Inclusion and Solidarity: The Case Study of the EU Funded Project »Connecting Generations«, In: Łukasz TOMCZYK, Andrzej KLIMCZUK (Eds.), *Selected Contemporary Challenges of Ageing Policy*, Kraków, Uniwersytet Pedagogiczny w Krakowie, 2017, 149-188, 151-152. DOI 10.24917/9788380840911; Kerstin KUYKEN, Mehran EBRAHIMI, Anne-Laure SAIVES, Towards a taxonomy of intergenerational knowledge transfer practices: Insights from an international comparison (Germany – Quebec), *The Learning Organization*, 25 (2018) 2, 81-91. <https://doi.org/10.1108/TLO-02-2017-0023>; Therese SPRINKLE, Michael ULICK, Three generational issues in organizational learning: Knowledge management, perspectives on training and »low-stakes development«, *The Learning Organization*, 25 (2018) 2, 102-112, 103. <https://doi.org/10.1108/TLO-02-2017-0021>.

³ Sprinkle, *Three generational issues...*, 104, 106.

⁴ Leigh P. TOST, Morela HERNANDEZ, Kimberlay WADE-BENZONI, Pushing Boundaries: Review and Extension of the Psychological Dynamics of Intergenerational Conflict in

The importance of intergenerational learning for the development of motivation⁵ and self-esteem, happiness, mental health, reduction of loneliness⁶ and ageism⁷, preservation of traditional knowledge⁸ is noticed.

Intergenerational learning and education are becoming more and more present in various educational fields, e.g. in environmental education,⁹ health education, kinesiology,¹⁰ community education,¹¹ lifelong learning¹² and, also, in the institutionalized educational system, at universities, schools and kindergartens (early childhood education ECE).¹³ Conceptually, the literature presents several definitions of intergenerational learning and programs. Intergenerational learning is seen as the transfer and construction of knowledge, skills, competencies, attitudes, norms and values between generations.¹⁴ Inter-

Organizational Context, *Research in Personnel and Human Resources Management*, 27 (2008) 93-147. [https://www.emerald.com/insight/content/doi/10.1016/S0742-7301\(08\)27003-9/full/html](https://www.emerald.com/insight/content/doi/10.1016/S0742-7301(08)27003-9/full/html).

- ⁵ Rebecca BROWER et al., We Can Do This Thing Together: Intergenerational Learning and Academic Motivation among Community College Students, *Community College Journal of Research and Practice*, (2021) Online first, 11; <https://doi.org/10.1080/10668926.2021.1910594>.
- ⁶ Maria R. BARBOSA, Anabela CAMPINHO, Graça SILVA, »Give and Receive«: The Impact of an Intergenerational Program on Institutionalized Children and Older Adults, *Journal of Intergenerational Relationships*, 19 (2021) 3, 283-304, 299. <https://doi.org/10.1080/15350770.2020.1742844>.
- ⁷ Ann BAILEY YOELIN, Intergenerational Service-Learning within an Aging Course and Its Impact on Undergraduate Students' Attitudes about Aging, *Journal of Intergenerational Relationships*, (2021) Online first, 11. <https://doi.org/10.1080/15350770.2021.1881019>; Barbosa, *Give and Receive...*, 284.
- ⁸ Batchuluun YEMBUU, Intergenerational learning of traditional knowledge through informal education: the Mongolian context, *International Journal of Lifelong Education*, 40 (2021) 4, 339-358, 354. <https://doi.org/10.1080/02601370.2021.1967488>.
- ⁹ Sara Wiliams, Lindsey J. McEWEN, Nevil QUINN, As the climate changes: Intergenerational action-based learning in relation to flood education, *The Journal of Environmental Education*, 48 (2017) 3, 154-171. <https://doi.org/10.1080/00958964.2016.1256261>; Melanie ZURBA et al., Intergenerational Dialogue, Collaboration, Learning, and Decision-Making in Global Environmental Governance, *Sustainability*, 12 (2020) 498, 2-19, 3. DOI: 10.3390/su12020498.
- ¹⁰ Melissa POWERS, Michelle GRAY, Kayla GARVER, Attitudes Toward Older Adults: Results from a Fitness-Based Intergenerational Learning Experience, *Journal of Intergenerational Relationships*, 11 (2013) 1, 50-61. <https://doi.org/10.1080/15350770.2013.755067>.
- ¹¹ Tim JONES, Ben SPENCER, City Cycling Spaces for Welcoming and Engaging All Ages, In: Matthew KAPLAN, et al. (Eds.), *Intergenerational Contact Zones: Place-based Strategies for Promoting Social Inclusion and Belonging*, New York, Routledge, 2020, 60-68.
- ¹² Rober McNULTY, Culture as Animator of Intergenerational Gathering Places, In: Matthew KAPLAN et al. (Eds.), *Intergenerational Contact Zones: Place-based Strategies for Promoting Social Inclusion and Belonging*, New York, Routledge, 2020, 18, 27.
- ¹³ Jennifer McALISTER, Esther BRINER, Stefania MAGGI, Intergenerational Programs in Early Childhood Education: An Innovative Approach that Highlights Inclusion and Engagement with Older Adults, *Journal of Intergenerational Relationships*, 17 (2019) 4, 505-522, 506, 509. <https://doi.org/10.1080/15350770.2019.1618777>.
- ¹⁴ Brower, *Do This Thing Together...*, 1.

generational learning is a bidirectional process with different foci of mutual knowledge exchange.¹⁵

Also, there is a tendency of intergenerational learning in organizations to include older people in work organizations, and various strategies are found for the transfer and nurturing of knowledge in organizations to avoid a »knowledge crash«. Communities of practice are most often mentioned. If intergenerational learning is represented in an organization, it has a favourable effect on the entire organization.¹⁶

Intergenerational programs in kindergartens (early childhood education – ECE) are a relatively new practice that is expanding rapidly and point to new opportunities for ECE in the environment.¹⁷ The study of intergenerational programs in kindergartens observed that they have a positive impact on both children and older adults. The action research was conducted to contribute through their models to the development of age-friendly communities. Such programs connect kindergartens, universities, and nursing homes, as described in their study by Feyh et al.,¹⁸ while Gallagher and Fitzpatrick¹⁹ indicate that intergenerational programs in kindergartens support active and relational learning across the life course.

Given the positive effects, but also insufficient research and familiarity with the concept and programs of intergenerational learning in kindergartens, we wanted to explore all the factors that affect intergenerational learning in kindergarten. Given the need of today to overcome the alienation of the elderly, and noticing the positive effects but also insufficient research and familiarity with the concept and programs of intergenerational learning in kindergartens, we approached broader research (project). In this study, which is part of the project, the intention was to explore all the factors that affect intergenerational learning in kindergarten. The study is of the exploratory type, and we have not found research on this topic in the available literature.

¹⁵ Fabiola H. GERPORTT, Nale LEHMANN-WILLENBROCK, Sven C. VOELPEL, A Phase Model of Intergenerational Learning in Organizations, *Academy of Management Learning & Education*, 16 (2017) 2, 193-2016, 193-197. <https://doi.org/10.5465/amle.2015.0185>.

¹⁶ Nataša RUPČIĆ, Intergenerational learning and knowledge transfer – challenges and opportunities, *The Learning Organization*, 25 (2018) 2, 135-142, 138. <https://doi.org/10.1108/TLO-11-2017-0117>.

¹⁷ Xanthe GOLENKO et al., Uniting generations: a research protocol examining the impact of an intergenerational learning program on participants and organisations, *Australasian Journal on Aging*, 39 (2020), e425-e435. <https://doi.org/10.1111/ajag.12761>.

¹⁸ Lauren FEYH, Jill CLUTTER, Jessica KROK-SCHOEN, Get WISE (Wellness through Intergenerational Social Engagement): An Intergenerational Summer Program for Children and Long-term Care Residents, *Journal of Intergenerational Relationships*, (2021) Online first, 1-4. <https://doi.org/10.1080/15350770.2021.1879706>.

¹⁹ Carmel GALLAGHER, Anne FITZPATRICK, It's a Win-Win Situation – Intergenerational Learning in Preschool and Elder Care Settings: An Irish Perspective, *Journal of Intergenerational Relationships*, 16 (2018) 1-2, 26-44, 31, 34. <https://doi.org/10.1080/15350770.2018.1404403>.

1. Methodology

In this paper, the aim was to examine whether the elementary knowledge about intergenerational learning and sociodemographic variables of preschool teachers (work experience and year of completion of formal education) play a role in the prediction of intergenerational learning in the kindergarten context. In this regard, the starting research hypothesis in this paper is: It is expected that the variables: the elementary knowledge of preschool teachers about intergenerational learning and sociodemographic variables of preschool teachers predict intergenerational learning in the kindergarten context.

The research was conducted in April 2021 on a sample of preschool teachers employed in kindergartens in the Banja Luka region. The sampling was convenient. The structure of the sample concerning key sociodemographic variables is shown in Table 1.

Table 1 *Sample structure concerning sociodemographic variables*

Sample characteristics		
Age	Span	24-65
	Mode	48
	Mean	42.81
	SD	11.75
Work service	Span	1-41
	Mode	1
	Mean	14.16
	SD	11.28
Education level (%)	a higher school/college	2.78
	bachelor study	91.67
	Master study	5.56

The age of the preschool teachers in the sample ranges from 24 to 65 years ($M = 42.81$, $SD = 11.75$). The surveyed preschool teachers have been working in preschool institutions for 14.16 years on average ($SD = 11.27$). Regarding the work experience of preschool teachers, and taking into account the variable intergenerational learning, it is important to note the fact that the value of mode is 1 year of work experience (20 respondents or 18.5%). The survey was conducted voluntarily and anonymously in preschool institutions where preschool teachers and employees are employed. The preschool teachers participated in the research voluntarily and anonymously, in accordance with ethical considerations.

The techniques used to collect relevant research data were surveys and scaling, in accordance with independently constructed research instruments created by the operationalization of theoretical constructs on intergenerational

learning.²⁰ In addition to the usual sociodemographic characteristics determined by survey-type questions, an independently constructed five-point Likert-type assessment scale was used in this study to measure two key variables. Considering that the variable intergenerational learning, according to our insights, has not been examined so far on the sample of preschool teachers, we consider it necessary to point out the basic metric properties of the created instruments.

The first refers to *the assessment of elementary knowledge about intergenerational learning*, and the second refers to *the assessment of the representation of intergenerational learning in the kindergarten context*. The information scale contained six items that measure different aspects of education on the topic of intergenerational learning. After checking the metric characteristics, one item was excluded, so on five items (Table 2) the Alpha Cronbach coefficient of the internal consistency of the information scale was determined, which is $\alpha = 0.843$. The corrected item-total correlations range between 0.569 and 0.727. Confirmatory factor analysis confirmed the validity of the scale, identifying one factor that explains 62% of the variance of the investigated phenomenon (KMO = 0.808; Bartlett's Test of Sphericity = 208.946; $p < 0.001$; $\lambda = 3.100$). Factor saturations are high and range between 0.728 and 0.842.

Table 2 *Metric features of the elementary knowledge scale on intergenerational learning*

	Items	Corrected IT Correlation	Communalities	Factor saturations
1.	I know the concept of intergenerational learning.	0.727	0.709	0.842
2.	I am familiar with this concept at the undergraduate level (formal education).	0.672	0.649	0.806
3.	I was informed about this concept at professional seminars and projects (non-formal education).	0.707	0.689	0.830
4.	I am familiar with this concept through work in kindergarten and/or studying professional literature and/or through the media (informal learning).	0.569	0.523	0.723
5.	I follow intergenerational learning programs in which preschool institutions are involved, independently studying the literature and/or through the media (informal learning).	0.589	0.529	0.728

²⁰ Gallagher, *It's a Win-Win Situation...*, 27-31; Matthew KAPLAN, Leng Leng THANG, Mariano SÁNCHEZ, Jaco HOFFMAN, *Intergenerational Contact Zones: Place-based Strategies for Promoting Social Inclusion and Belonging*, New York, Routledge, 2020, 1-15; Nives LIČEN, *Učenje kroz sretanje generacija*, Banja Luka, Filozofski fakultet, 7-42; Mariano SÁNCHEZ, Matthew KAPLAN, *Intergenerational learning in Higher Education: Making the Case for Multigenerational Classrooms*, *Educational Gerontology*, 40 (2014) 473-485. doi.org/10.1080/03601277.2013.844039.

Elementary knowledge about intergenerational learning is a predictor variable in this paper. In addition to elementary knowledge, the sociodemographic variables of preschool teachers (year of birth, length of service and year of completion of formal education) are included as predictors in the regression analysis.

The second, much more extensive, scale contained, initially, 42 items, of which, after checking the metric properties, 13 items were excluded, so ultimately this scale is made of 29 items. The main components analysis method identified three factors of intergenerational learning: *Professional cooperation and personal growth* (28.261% of the variance; $\alpha = 0.924$), *Inclusion of the older adults in educational work and humanities education* (15.769% of the variance; $\alpha = 0.910$) and *Prejudices and stereotypes* (12.376% of the variance; $\alpha = 0.830$) (see further²¹). Preschool teachers' assessment of intergenerational learning is a criterion variable in research.

2. Results and discussion

In order to answer the posed problem and the hypothesis set in research, it was applied the multiple regression analysis, a standard form of this statistical procedure that involves the simultaneous inclusion of predictors in the analysis. The statistical check-up of assumptions for the application of multiple regression analysis was carried out. One of the elementary conditions refers to the sample size. According to Tabachnick and Fidell,²² a sample size of $104 + m$ (m = number of predictors) is required for the applied variant of regression analysis. 105 preschool teachers participated in this research, which indicates that this condition is on the verge of fulfilment. Furthermore, no collinearity was found between predictor variables (correlation coefficients below 0.20). However, since the problem of singularity due to the correlation of 0.90 between age and length of service was noticed, it was decided to exclude age from the regression model. Complementary indicators of Tolerance and VIF, also confirmed that there is no collinearity between the predictors. For example, the lowest Tolerance value was 0.606 (the lower limit is 0.10) and the highest VIF value was 1.634 (the upper limit is 10). The normality and independence of standardized residuals, as well as atypical points within the criterion variables, were checked by chart analysis, with no significant deviations noticed. However, the problem of atypical points was additionally verified using Mahalanobis

²¹ Aleksandra ŠINDIĆ, Dragan PARTALO, Nives LIČEN, Preschool teachers' perspective on factors of intergenerational learning important for professional development, *Metodički ogledi*, 29 (2022) 1, 125-142; <https://hrcak.srce.hr/clanak/404850>.

²² Barbara G. TABACHNICK, Linda S. FIDELL, *Using Multivariate Statistics*, London, Pearson, 2007, 123.

distances, which in our models with three predictors should not exceed the value of 16.27.²³ Therefore, one subject was excluded from the analysis in whom the value of the Mahalanobis distance in one regression model is 20.04, and in the other model is 24.67.

As it was pointed out in the methodological part, in this paper the criterion variables are three aspects of intergenerational learning in kindergarten: *Professional cooperation and personal growth*, *Inclusion of the older adults in educational work and humanities education* and *prejudices and stereotypes*. However, since no statistically significant regression model has been established for the criterion variable *Prejudices and stereotypes*, it will not be presented in this paper. Another important note is related to predictor variables. Namely, in addition to the predictors explained in the methodology, some others were included in the analyzes, for which were assumed that they could be related to the criterion variables. However, predictors such as the length of service of preschool teachers with which the surveyed preschool teachers work in the team daily, the difference in age and the difference in length of service between preschool teachers and their team members, as well as other variables, did not contribute to regression models. For this reason, only those predictors that did not impair the significance of regression models were included in the regression analysis.

Table 3 Regression model for the criterion variable *Professional cooperation and personal development*

Criterion variable	Predictors	β	t	p	Regression model
Professional cooperation and personal development	Elementary knowledge	0.365	3.525	0.001	R = 0.392
	Work service	0.188	1.491	0.140	R ² = 0.152
	Year of faculty graduation	0.192	1.153	0.130	R ² _{cor} = 0.122 F = 4.841 p = 0.004

Table 3 shows the findings of the regression model for the criterion variable *Professional Cooperation and Personal Growth*. The data indicate that the regression model is statistically significant ($F = 4.841$; $p < 0.004$), and that it can explain about 12% of the variance ($R^2_{\text{cor}} = 0.122$) of the criterion variable. The values of standardized beta coefficients indicate that the greatest, and at the same time statistically significant, contribution to the explanation of Professional Cooperation and Personal Growth in the context of intergenerational learning of educators has the predictor of elementary knowledge ($\beta = 0.365$; $p < 0.001$).

²³ Tabachnick, *Using Multivariate...*, 111, 949.

Thus, the findings indicate that the higher level of elementary knowledge of preschool teachers about intergenerational learning contributes to the realization of their professional cooperation and personal development, while this cannot be said for years of service and years of graduation, as well as for age, age differences (generation) and differences in years of service between teachers in the group. Numerous authors have noticed differences between generations.²⁴ Pedagogues usually point out that persons who started school in an educational organization or have finished school or studies in the same year connect similar education and experience of educational models and processes,²⁵ and they differ in that. In our research, these differences did not have significance for professional cooperation and personal development. According to generational researchers,²⁶ it is crucial to strive to connect some generations, offer them equal access to resources in the fields of education, and so on. Education on intergenerational cooperation and learning to a certain extent determines how many generations will be integrated into society and education and how much they will cooperate with each other, which is evident from the results obtained. Namely, the results of the research indicate that a higher level of elementary knowledge acquired through different types of education, regardless of the age of the participants, was crucial for intergenerational professional cooperation and personal development. Years of work service and differences in age and experience among colleagues bring with them the opportunity for a rich pedagogical and intergenerational experience. The study, which included teachers from Finland and Belgium, indicated a positive attitude towards peer learning among teachers of different ages.²⁷ However, the results of our research indicate that the years of work service and differences in age and experience among colleagues are not sufficient themselves and a prerequisite for professional cooperation and personal development. The predominance of the level of elementary knowledge about intergenerational learning in relation to socio-demographic variables that do not carry individual action, confirms the importance of a constructivist approach in pedagogical work and indicates that the active construction of an individual is crucial,²⁸ that transforms further

²⁴ Sprinkle, *Three generational...*, 103-104.

²⁵ Alberto FORNASARI, *Incontri intergenerazionali. Riflessioni sul tema e dati empirici*, Pisa, Edizioni ETS, 2018, 123.

²⁶ Ann-Kristin BOSTRÖM, Intergenerational Learning and Social Capital, In: Bernhard SCHMIDT-HERTHA et al. (Eds.), *Learning across Generations in Europe*, Rotterdam, Sense, 2014, 191-202, 193. https://doi.org/10.1007/978-94-6209-902-9_16.

²⁷ Kendra GEERAERTS, Paivi TYNJÄLÄ, Hannu HEIKKINEN, Inter-generational learning of teachers: what and how do teachers learn from older and younger colleagues, *European Journal of Teacher Education*, 41 (2018) 4, 479-495, 492-493. <https://doi.org/10.1080/02619768.2018.1448781>.

²⁸ Roya JAFARI AMINEH, Hanieh DAVATGARI, Review of Constructivism and Social Constructivism, *Journal of Social Sciences, Literature and Languages*, 1 (2015) 1, 9-16.

through socio-cultural practice,²⁹ and the preschool teacher through formal, non-formal education and informal learning is introduced to the concept of intergenerational learning which helps him to develop in practice through the meeting of generations, both professionally and personally.

Furthermore, in Table 4 we present the results of regression analysis concerning the criterion variable *Inclusion of the older adults in educational work and humanistic education*. This model is also statistically significant ($F = 3.750$; $p < 0.004$), but the percentage of explained variance of the criterion variable is slightly lower compared to the previous model (around 9%, $R^2_{cor} = 0.122$).

Table 4 Regression model for the criterion variable *Inclusion of the older adults in educational work and humanistic education*

Criterion variable	Predictors	β	t	p	Regression model
Inclusion of the older adults in educational work and humanistic education	Elementary knowledge	0.347	3.308	0.001	R = 0.349
	Work service	0.051	0.378	0.706	R ² = 0.122
	Year of faculty graduation	0.072	0.545	0.588	R ² _{cor} = 0.089 F = 3.750 p = 0.014

The findings indicate that preschool teachers' higher level of elementary knowledge about intergenerational learning contributes to more successful inclusion of older people in educational work and humanistic education, while the same cannot be said for years of work service and years of faculty graduation, as well as for age, age differences and experience between preschool teachers in the group. Therefore, the influence of elementary knowledge about the concept of intergenerational learning is again given priority over all other variables in the inclusion of older adults in educational work and the formation of an environment suitable for humanistic education. The positive impact of this innovative practice on children and the older adults indicates its importance in enriching the educational process,³⁰ so the data on the elementary knowledge of educators as a predictor for the realization of such activities is a pedagogical and andragogical finding that should not be ignored. The fact that the year of faculty graduation has a negligible impact on the implementation of this prac-

²⁹ Yrjö ENGSTRÖM, Expansive learning: towards an activity-theoretical reconceptualization, In: Knut ILLERIS (Ed.), *Contemporary Theories of Learning*, New York, Routledge, 2018, 46-65, 48-50; Barbara ROGOFF, Observing Sociocultural Activity on Three Planes: Participatory Appropriation, Guided Participation, and Apprenticeship, In: Kathy HALL et al. (Eds.), *Pedagogy and Practice*, London, Sage, 2008, 58-74, 59.

³⁰ Golenko, *Uniting generations*, e432; Nicolas BRENNECKE et. al., Wising Up: Designing a Course for the Future: A Report on a New Transdisciplinary and Intergenerational Course, *Journal of Intergenerational Relationships*, 18 (2020), 4, 465-469, 465. <https://doi.org/10.1080/15350770.2020.1782303>.

tice in kindergartens indicates the fact that this issue is still not given enough attention in studies for preschool teachers, not even recently.

Since no statistically significant regression model has been established for the third criterion variable *Prejudices and stereotypes*, we can state that the influence on their overcoming in the context of intergenerational learning should be sought in other factors that we did not investigate in this paper. The results likely point to the fact that prejudices and stereotypes in general, even about people of other generations, are formed early and embedded in the frame of reference of individuals and as such more difficult to change³¹ and have strong psychological and sociological characteristics. Researches indicate that intergenerational programs influence attitude changes toward older people³² and thus reduce prejudice and stereotypes. Therefore, it could be expected that through intergenerational programs and practice, more than through elementary knowledge and acquiring theoretical knowledge about the concept of intergenerational learning, overcoming intergenerational prejudices and stereotypes will happen. The finding indicates the complexity of the nature of intergenerational learning and the justification of a multidisciplinary research approach. Lyons et al.³³ also speak about the complexity of the problem, pointing out that intergenerational learning and cooperation require in-depth research in order to avoid a superficial and opportunistic view of this area. Based on the results shown in Table 3 and Table 4 and their interpretation, we can conclude that the research hypothesis is partially proven.

Conclusion

The results of this exploratory study, based on the insights of preschool teachers, indicate that preschool teachers' elementary knowledge and familiarity with intergenerational learning predict separate factors of intergenerational learning: professional cooperation and personal development in the context of intergenerational learning, and inclusion of older people in the educational process and humanistic education. The findings indicate that the positive impact of elementary knowledge and introducing preschool teachers to the concept of intergenerational learning is transmitted to all participants in the educational process: preschool children, preschool teachers and the older adults and that they all benefit. Although the concept of intergenerational learning is more recent, and thus the probability that these contents are more included in

³¹ Ian STEWART, Vann JOINES, *Savremena transakciona analiza*, Novi Sad, Psihopolis institut, 2011, 90-92.

³² Bailey Yoelin, *Intergenerational Service...*, 2, 4, 11.

³³ Sean LYONS et al., *Generational Differences in the Workplace: There Is Complexity Beyond the Stereotypes*, *Industrial and Organizational Psychology*, 8

newer higher education curricula than before, no impact of the variable years of completion of studies on the factors of intergenerational learning in kindergarten has been observed, which indicates that modern university teaching still lacks content in this area. The predominance of familiarity and elementary knowledge about intergenerational learning for its implementation in relation to other variables that do not carry the action of the individual, confirms the importance of a constructivist approach in pedagogical work and indicates that the active construction of individual knowledge through various types of education is related to practical action.

Taking into account current knowledge and researches that indicate the need to support intergenerational learning in today's society and communities is growing³⁴ through goal-oriented socialization, the importance of pedagogical and andragogical implications of our findings is noticed, which indicate the need for a more pronounced design and implementation of education on intergenerational learning through formal, non-formal education and informal learning in order to introduce preschool teachers to this concept and ways in everyday life and work and through various programs and projects. Our findings indicate the need to modernize university study curricula for preschool teachers with topics for intergenerational learning and collaboration. Weaknesses in work are reflected in the structure of the sample, which is uneven in terms of generation and concerning years of work service. One of the important insights of our work is the complexity of the nature of intergenerational learning and it is necessary to approach it not only from the pedagogical and andragogical but also from the psychological and sociological point of view. The absence of a multidisciplinary approach is one of the lacks of this paper, and it opens new research questions where the problem of researching intergenerational prejudices and stereotypes could be approached multidisciplinary.

³⁴ Barbosa, *Give and...*, 301; Golenko, *Uniting generations...*, e434.

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Prediktori međugeneracijskog učenja u vrtiću

Sažetak

Eksplorativna studija dio je kvantitativnog projekta realiziranog 2021. godine na uzorku od 105 odgajatelja iz predškolskih ustanova s područja Banje Luke, Bosna i Hercegovina. Cilj studije je bio ispitati imaju li elementarna znanja i sociodemografske varijable odgajatelja (radno iskustvo i godina završetka formalnog obrazovanja) ulogu u predikciji međugeneracijskog učenja u vrtićkom kontekstu. Teoretski okvir studije su koncepti međugeneracijskog učenja i profesionalnog razvoja. Uz pomoć višestruke regresijske analize izdvojeno je elementarno znanje odgajatelja kao prediktor međugeneracijskog učenja u vrtiću. Predominacija upućenosti i elementarnoga znanja o međugeneracijskom učenju za njegovu provedbu u odnosu na druge varijable koje ne uključuju aktivnost pojedinca, potvrđuje važnost konstruktivističkog pristupa u pedagoškom radu i ukazuje da je ključna konstrukcija znanja pojedinca kroz različite vidove obrazovanja povezana s praktičnim djelovanjem. Nalazi studije ukazuju na potrebu povećanja osmišljavanja i provedbe obrazovanja o međugeneracijskom učenju kroz formalno, neformalno i informalno obrazovanje da bi se odgajatelji educirali o ovom konceptu i njegovom realiziranju u svakodnevnom životu i radu kroz različite programe i projekte.

Ključne riječi: elementarno znanje, uključivanje starijih osoba u odgojno-obrazovni rad, međugeneracijsko učenje, odgajatelji, profesionalna suradnja.

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