

Competencies and Intergenerational Learning of Preschool Teachers

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POVZETEK – Članek je del širšega raziskovanja, ki je bilo realizirano leta 2021 v Bosni in Hercegovini. Cilj kvantitativnega raziskovanja je bil proučiti odnos med percepcijo vzgojiteljev o lastnih profesionalnih kompetencah in njihovo percepcijo medgeneracijskega učenja v vrtcu. Rezultati kažejo tendenco, da vzgojitelji z daljšo delovno dobo ocenjujejo sami sebe kot bolj kompetentne. Ugotovljena je visoka povezanost ravni zastopanosti profesionalnih kompetenc in medgeneracijskega učenja v vrtcu. Prvi model večkratne regresijske analize izpostavlja inkluzijo starejših v vzgojno-izobraževalno delo kot prediktor profesionalnih kompetenc vzgojiteljev. Drugi model pa kaže na kombinirano predikcijo inkluzije starejših in let delovne dobe vzgojiteljev na razvoj kompetenc vzgojiteljev. Ugotovitve raziskave kažejo, da ima vključevanje starejših v vzgojno-izobraževalno delo pozitiven vpliv na razvoj kompetenc vzgojiteljev.

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ABSTRACT – The paper is part of a larger study conducted in 2021 in Bosnia and Herzegovina. The aim of the quantitative study was to examine the relationship between the assessments of preschool teachers about their own professional competencies and their assessments of intergenerational learning in preschool. The results indicate a tendency for more mature preschool teachers with several years of work experience to assess themselves as more competent. There is a high correlation between the level of representation of professional competencies of preschool teachers and intergenerational learning in kindergarten. The first model of multiple regression analysis singles out the inclusion of the elderly in educational work as a predictor of professional competencies of preschool teachers. The second model indicates a combined prediction of inclusion of the elderly in educational work and years of work experience of preschool teachers in developing preschool teachers' competencies. The findings of the study reveal a favourable impact of the inclusion of the elderly in educational work on the development of preschool teachers' competencies.

1 Introduction

In the field of preschool education, many innovative practices have been developed (Šindić, Pribišev Beleslin and Ratković, 2019; Korošec and Batistič Zorec, 2021) and new professional competencies are needed.

The professional competencies of preschool teachers are defined differently through different social and scientific approaches. Berenthien et al. (2020) emphasize the importance of undergraduate education for preschool teachers in the development of their competencies, as well as for other professions (Blažič, 2021); it is perceived as a part of social capital (Bogdan Zupančič and Krajncan, 2019). Selvi (2010) points to the contri-

bution of educational policies to the professional development of competencies, while Gasper (2015), in addition to academic knowledge, emphasizes personal (psychological) characteristics as predispositions for the development of preschool teachers' competencies. Mohamed, Valcke and Ve Wever (2017) pay special attention to the impact of the sharing of knowledge and experience on the competencies of preschool teachers. The results of some studies on educational practice indicate the importance not only of undergraduate education but also of lifelong learning (Retar and Lepičnik Vodopivec, 2017), and the importance of the experience of preschool teachers for developing their professional competencies (Barenthien et al., 2020; Sucuoglu et al., 2014; Šindić and Pribišeč Beleslin, 2018). The international framework of preschool teachers' competencies includes knowledge; pedagogical and organizational skills; ability to build partnerships with parents, experts and the environment; professional development and professional ethics (Mohamed, Valcke and Ve Wever, 2017).

Although insufficiently researched, the concept of intergenerational learning is increasingly relevant due to the ageing of European society and the modern lifestyle (Ličen, 2021), the modern knowledge about the intergenerational transfer and development of knowledge, and for improving socio-emotional competencies and self-regulation in the workplace (Rupčić, 2018). There is a beneficial intergenerational impact in the wider community (Del Gobbo, Galeotti and Esposito, 2017; Kuyken, Ebrahimi and Saives, 2018; Sprinkle and Urick, 2018). Relatively new practices are intergenerational programmes in kindergartens. Individual studies (Boivin, 2021; Golenko et al., 2020; McAllister, Briner and Maggi, 2019; Mosor et al., 2019; Oropilla and Ødegaard, 2021) and targeted literature reviews (Bagnasco et al., 2020) indicate the beneficial effects of these programmes for all participants. Gallagher and Fitzpatrick (2018) note their importance for encouraging active and relational learning; Oropilla and Ødegaard (2021) for promoting social sustainability; and Feyh, Clutter and Krok-Schoen (2021) highlight the effects of knowledge transfer and cooperation by connecting different institutions through intergenerational cooperation. This implies that participants should have developed competencies for intergenerational learning.

Intergenerational learning is a current concept in educational work. Given the insufficient research on intergenerational learning in kindergarten and the importance of educators' professional competencies for many activities in kindergarten, this exploratory study aimed to research the reflection of preschool teachers on their own professional competencies and the implementation of intergenerational learning in kindergarten, and to examine their interdependence and influence. Unfortunately, we have not been able to find studies on this topic in the available literature, which further indicates the need to research this phenomenon.

2 Method

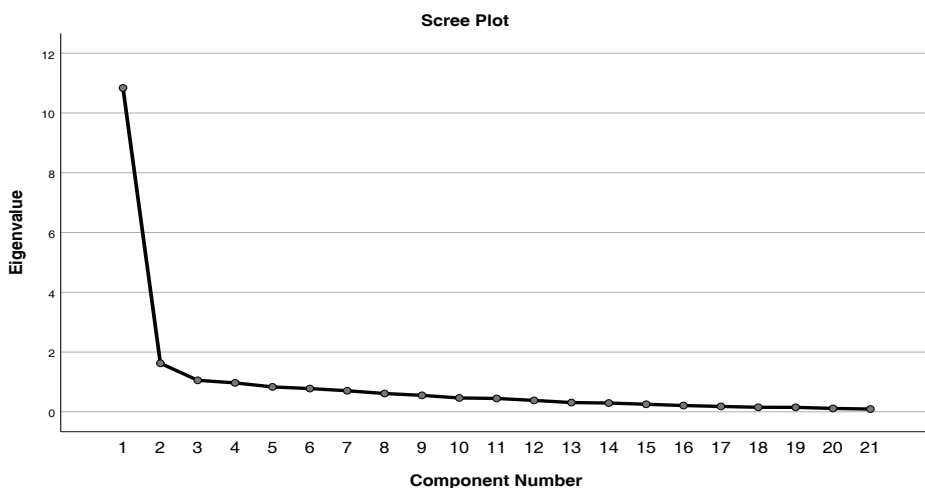
The aim of this research is to examine the relationship between the assessments of preschool teachers about their own professional competencies with their assessments of intergenerational learning in the preschool institution. Accordingly, two instruments were applied: a five-point Likert-type scale with 21 statements related to different aspects of

preschool teachers' professional competencies, and a five-level Likert-type scale with 29 statements about intergenerational learning in the context of the preschool institution.

The scale of professional competencies of preschool teachers is an independent instrument created for this study by operationalizing indicators derived from modern theoretical considerations and research of specific competencies of preschool teachers (Erčulj et al., 2008; Gasper, 2015; Mohamed, Valcke and Ve Wever, 2017; Selvi, 2010). Respondents were instructed to self-assess their degree of mastery of competencies (from "very little" to "complete"). The scale was subjected to the Principal Component Analysis (PCA) which resulted in a one-factor solution that explains 51.64% of the total variance. The extraction of one factor was confirmed by Catell's scree test (see Graph 1), but also by the Kaiser-Guttman criterion. According to the latter, three eigenvalues, higher than one, were identified, the first of which is dominant and amounts to $\lambda_1 = 10.84$, while the remaining two are considerably lower ($\lambda_2 = 1.62$, $\lambda_3 = 1.05$). Moreover, the parallel analysis, based on the set parameters (number of items – 21; number of respondents – 105; number of replications – 100), indicates a one-factor solution.

Graph 1

Number of factors according to Catell's criterion (scree plot)



The conditions for conducting this analysis were examined beforehand and the following was determined: the sampling adequacy measured by the Kaiser-Meyer-Olkin test is 0.889, which indicates a high level of fulfilment of this condition (Hair et al., 2014). The Bartlett's test of sphericity is statistically significant ($\chi^2 = 1681.145$; $df = 210$; $p < 0.001$) which indicates that the hypothesis of no correlation between the included variables should be rejected. The established indicators indicate the factorability of the intercorrelation matrix. Table 1 shows the values of factor saturations.

Table 1*Factor saturations on the scale of competencies of preschool teachers (Component Matrix)*

<i>Items</i>	<i>Factor saturation</i>
Competence for improving the quality of work and continuous professional development.	0.812
Competence for the application of standards of professional ethics and responsibility in work with children, other preschool teachers and parents.	0.783
Competence for creating a stimulating work climate, and guiding colleagues to participate in the development of kindergartens.	0.780
Competence for the development of cooperative relations in the team with a clear definition and distribution of tasks, and focusing on the work process, which contributes to the development of the institution.	0.774
Competence for pedagogically based non-violent communication in everyday work with children and cooperation with colleagues.	0.773
Competence for reflection and critical evaluation of one's own work that results in innovation and improvement of practice.	0.767
Competence to provide conditions for different types of active learning based on play.	0.753
Competence for constructive problem solving and flexible acceptance of positive changes.	0.751
Competence for effective coping with and overcoming of "difficult" and stressful situations.	0.738
Competence for pedagogically based communication in everyday work with children and cooperation with colleagues.	0.727
Competence to apply the principles of individualization and differentiation, enabling each child to learn at their own pace.	0.722
Competence to implement strategies to support development and learning through play.	0.719
Competence for planning according to the principles of an integrated curriculum based on play and respect for children's interests, needs and development opportunities.	0.715
Competence to establish partnerships with the local community and implement various activities using local community resources.	0.705
Competence for establishing quality cooperation and partnership with the family through the inclusion of family members in the educational process and all aspects of work in kindergarten.	0.705
Competence to connect and harmonize children's learning and developmental needs with respect for learning outcomes.	0.696
Competence for the planning and implementation of professional development of other preschool teachers.	0.670
Competence for systematic observation of activities and monitoring of developmental changes in preschool children.	0.662
Competence for preparing learning activities that correspond to the achieved levels of development of preschool children.	0.625
Competence for the preparation of small projects that improve the functioning of the kindergarten.	0.589

The scale shows a high level of internal consistency given the value of the Cronbach's alpha coefficient, which is $\alpha = 0.951$. It can be seen that the factor saturations of the competencies of personal professional development, ethics, communication, self-perception and socio-emotional dimensions, i.e., the competencies primarily dependent on the personal characteristics of preschool teachers, are higher than the factor saturations of competencies of predominantly methodological and pedagogical orientation.

The scale on intergenerational learning in the context of the preschool institution is also independently constructed, and theoretically based on humanistically oriented theoretical assumptions about intergenerational learning (Gallagher and Fitzpatrick, 2018; Kaplan et al., 2020; Martins et al., 2019; Sanchez, Whitehouse and Johnston, 2018). Using the procedure of determining the metric properties, the scale was reduced from the initial 42 to 29 items. Factor analysis (extraction method – Principal Component Analysis, PCA; rotation method – Varimax) identified three interpretable factors that explain 56.406% of the total variance: *Professional cooperation and personal growth (within intergenerational cooperation in the workplace)*; *Inclusion of the elderly in educational work and humanistic education*; *Prejudices and stereotypes* (see Šindić, Partalo and Ličen, 2022). Moreover, high values of the Cronbach's alpha coefficient were found in items within the three components: $\alpha_1 = 0.924$, $\alpha_2 = 0.910$, and $\alpha_3 = 0.830$. At the level of the complete Cronbach's alpha scale, the coefficient is $\alpha = 0.902$.

The research sample was appropriate and consisted of 105 preschool teachers with the average age of $M = 42.18$ ($SD = 11.70$), and the average years of work experience in preschool institutions $M = 14.16$ years ($SD = 11.27$). The sample is homogeneous from the point of view of the education level, i.e., more than 90% of preschool teachers have completed the first cycle of studies for preschool teachers, which is common in kindergartens in BiH.

During the data collection using the method of surveys and scaling, we were guided by ethical consideration. Participation in the research was voluntary and anonymous.

3 Results and discussion

In order to determine the relationship between the assessments of preschool teachers about their own professional competencies with their assessments of intergenerational learning in the preschool institution, the procedure of multiple regression analysis was applied (*the stepwise method*). Before presenting the results of such an analysis, we examined the basic descriptive parameters of the variables of our study, as well as the correlations between them (Pearson's coefficient). Based on the analysis of the parameters shown in Table 2, it is possible to conclude that the three key variables of our research (CPT, PCPG and IEHE) have distributions that do not deviate significantly from the theoretical normal distribution, as indicated by the measures of vertical and horizontal deviation (skewness and kurtosis). Moreover, among the mentioned variables, we find correlations of lower intensity but statistically significant. In the analysis included in this table, we also entered data on two other variables of interest – year of birth and length of service. Given the very high correlation between them, and in order

to avoid the problem of singularity, we decided to include only the length of service in the regression model.

Table 2

Descriptive parameters and intercorrelations between examined variables

<i>Variables</i>	<i>M</i>	<i>SD</i>	<i>Sk</i>	<i>Ku</i>	<i>CPT</i>	<i>PCPG</i>	<i>IEHE</i>	<i>PS</i>	<i>YB</i>	<i>YWE</i>
CPT	4.225	0.519	–0.663	–0.094	–	0.203*	0.297**	–0.044	–0.196*	0.228*
PCPG	4.439	0.389	–0.481	–0.493		–	0.389**	–0.359**	–0.066	–0.005
IEHE	4.047	0.690	–0.261	–0.637			–	–0.351**	0.091	–0.101
PS	2.094	0.859	0.383	–1.028				–	–0.063	0.035
YB	1978.19	11.759	–0.205	–0.914					–	–0.905**
YWE	14.16	11.278	0.704	–0.380						–

Notes: CPT – competencies of preschool teachers; PCPG – professional cooperation and personal growth; IEHE – inclusion of the elderly in educational work and humanistic education; PS – prejudices and stereotypes; YB – year of birth; YWE – years of work experience; M – arithmetic mean; SD – standard deviation; Sk – skewness; Ku – kurtosis; * – statistically significant at the level of 0.05; ** – statistically significant at the level of 0.01

It can be seen (Table 2) that the most pronounced correlation (positive Pearson's coefficient $r = 0.297$, statistically significant at the level of 0.01) is that between the variables of preschool teacher competence and the inclusion of the elderly in educational work. This indicates a tendency for elderly people to be more involved in educational work in the groups taught by preschool teachers who have assessed themselves as more competent.

The significant Pearson's coefficient value for the variables of preschool teachers' competencies and professional cooperation and personal growth (positive Pearson's coefficient $r = 0.203$, statistically significant at the level of 0.05) indicates the proportional interdependence of these variables. In other words, the greater the cooperation between colleagues of different ages in the kindergarten, the more developed are the competencies of preschool teachers.

According to the forms of distribution and arithmetic means, it is evident that the respondents highly value their competencies and intergenerational learning, which could be related to the fact that most respondents have completed the first cycle of studies for preschool teachers, i.e., higher formal education. Recent studies indicate that formal education is the most dominant factor influencing competence development (Sucuoglu et al., 2014; Barenthien et al., 2020). Significant Pearson's coefficient values for the variables of preschool teachers' competencies, and year of birth and length of service (Pearson's coefficient $r = -0.196$, $r = 0.228$ statistically significant at the level of 0.05) indicate a tendency for older preschool teachers with more work experience to assess themselves as more competent. We find the reason for this in the assumption that longer work experience (of equally educated preschool teachers) enables the acquisition of richer professional experience, as well as more opportunities for professional development through non-formal and informal education. When researching the play com-

petencies of preschool teachers and students, Šindić and Pribišev Beleslin (2018) came to the conclusion that they were more pronounced among practising preschool teachers. When researching the competencies of inclusive practice, Sucuoglu et al. (2014) noticed their connection with formal education, but also with the experience of everyday work with children.

The results of Table 1 indicate that there is no statistically significant correlation between the representation of preschool teachers' competencies and prejudices and stereotypes.

In addition to the above, other preconditions for performing multiple regression reported in the literature were examined, such as sample size, tolerance and VIF collinearity indicators, normality and independence of standardized residuals, and atypical point checks (Greene and Salkind, 2014; Tabachnick and Fidell, 2013). The regression model includes the following variables: competencies of preschool teachers (CPT) as a criterion variable; professional cooperation and personal growth or PCPG (within the intergenerational cooperation in the workplace), inclusion of the elderly in educational work and humanistic education (IEHE), and years of work experience (YWE) as predictor variables. We obtained two statistically significant models that explain the relationship between the variables included. In the first model, *the inclusion of the elderly in educational work and humanistic education* was retained as a predictor. In the second model, another predictor was added to this predictor – *years of work experience*. In both models, the predictor of *professional cooperation and personal growth* is excluded. Given the values of the *adjusted R-squared*, the first model can explain about 6%, and the second model about 12% of the variance of the criterion variable.

Table 3

Regression model (the stepwise method)

Model	R	R-squared	Adjusted R-squared	SE	ANOVA	
					F	P
1	0.256a	0.066	0.056	0.482	6.671	0.011
2	0.372b	0.138	0.120	0.465	7.547	0.001

Notes: (a) Predictor: inclusion of the elderly in educational work and humanistic education; (b) Predictors: inclusion of the elderly in educational work and humanistic education, years of work experience

Table 4 shows the values of non-standardized (B) and standardized (β) coefficients, as well as the level of their statistical significance. The analysis of standardized beta coefficients in both models shows that the contribution of individual predictors to the explained variability of the criterion variable is low, of a positive direction and statistically significant. Within the first model, it is evident that *the inclusion of the elderly in educational work and humanistic education* contributes to the development of the level of *professional competencies of preschool teachers* ($\beta = 0.256$). In other words, if the inclusion of the elderly in regular work with children is more prevalent in kindergarten, we could expect more prominent competencies of preschool teachers. Kaplan et al.

(2020) and Sanches, Whitehouse and Johnston (2018) note that new strategies for active ageing, including intergenerational learning, need to be developed in European countries, thus contributing to humanistic approaches in educational work. If we look at the results of regression analysis as causalities, it can be seen that the participation of the elderly in educational work could contribute to the development of professional competencies of preschool teachers. Therefore, this form of work, cooperation and learning could be beneficial for all actors involved, as many experts claim (Bagnasco et al., 2020; Boivin, 2021; Golenko et al., 2020; McAllister, Briner and Maggi, 2019; Mosor et al., 2019; Oropilla and Ødegaard, 2021).

Within the second model, the contribution of IEHE was strengthened ($\beta = 0.283$), and years of work experience were recognized as a predictor of equal intensity ($\beta = 0.271$). So, if the elderly are more involved in the regular educational work in kindergarten, and preschool teachers have more years of work experience, then the chances of preschool teachers having more prominent competencies are doubled.

Table 4

Coefficients in regression models (the stepwise method)

Model	Predictors	Unstandardized Coefficients		Standardized Coefficients	T	p
		B	SE	B		
1	IEHE	0.188	0.073	0.256	2.583	0.011
2	IEHE	0.207	0.070	0.283	2.942	0.004
	YWE	0.012	0.004	0.271	2.817	0.006

Notes: IEHE – inclusion of the elderly in educational work and humanistic education; YWE – years of work experience

Although intergenerational cooperation of colleagues in the workplace is recognized as important for professional and personal development (Šindić et al., 2022), and there is a correlation between intergenerational cooperation of preschool teachers in the workplace with their competencies, the variable *professional cooperation and personal growth (within intergenerational cooperation in the workplace)* does not predict the representation of their competencies.

4 Conclusion

The most important finding of this paper is the identification and prediction of the interdependence between the inclusion of the elderly in educational work in kindergarten and the development of educational competencies. This confirms that the programmes for including the elderly in regular educational work not only contribute to children's education and the human dimension for the elderly, but could also contribute to the development of preschool teachers' competencies.

Other findings of our paper indicate a connection between the years of work experience of preschool teachers and the competencies of preschool teachers. They also indicate the existence of a combined impact of the inclusion of the elderly in regular educational work in kindergarten and years of work experience on the development of the competencies of preschool teachers.

The limitation of this paper is the fact that we obtained the data based on the self-assessment of preschool teachers, which contributes to subjectivity. Moreover, the sample is not uniform in relation to the levels of formal education, so we could not include this variable in the regression model.

Based on the main findings of the paper and the relevant literature, we can conclude that it is justified to talk about the competencies of preschool teachers for intergenerational learning related to the lifelong-learning, ethical, socio-emotional, communication and personal characteristics of preschool teachers. As such, intergenerational learning should be recognized and prominent in modern pedagogical theory and practice.

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Kompetence in medgeneracijsko učenje vzgojiteljev predšolskih otrok

Medgeneracijsko učenje je vse bolj aktualen koncept na področju vzgoje in izobraževanja, kar je posledica sprememb, povezanih z dolgoživno družbo (Ličen, 2021), inovacijami v vzgoji in izobraževanju in ugotovitvami o pozitivnih učinkih medgeneracijskega usvajanja znanja v manjših in širših skupnostih (Kuyken, Ebrahimi in Saives, 2018; Del Gobbo, Galeotti and Esposito, 2017; Sprinkle in Urick, 2018), kar spodbuja razvoj socialne trajnosti (Oropilla in Ødegaard, 2021). Sodobne empirične raziskave kažejo, da ima medgeneracijsko učenje značaj aktivnega in odnosnega učenja (Gallagher in Fitzpatrick, 2018) ter prenosa znanja prek različnih ravni sodelovanja (Feyh, Clutter and Krok-Schoen, 2021). Raziskave (Bagnasco idr., 2020; Boivin, 2021; Golenko idr., 2020; McAllister, Briner in Maggi, 2019; Mosor idr., 2019; Oropilla in Ødegaard, 2021) kažejo na ugodne rezultate medgeneracijskih programov za vse udeležene, kar implicira, da bi akterji morali imeti razvite kompetence za medgeneracijsko učenje. Vse bolj pogosto se kompetence raziskujejo kot del socialnega kapitala (Bogdan Zupančič in Krajncan, 2019). Kompetence se razvijajo z dodiplomskim izobraževanjem (Berenthien idr., 2020; Blažič, 2021), vendar na njihov razvoj vpliva mnogo dejavnikov. Tako Selvi (2010) ugotavlja, da na razvoj kompetenc vzgojiteljev vplivajo izobraževalne politike. Gasper (2015) pa izpostavi pomen osebnih (psiholoških) značilnosti vzgojiteljev za razvoj njihovih profesionalnih kompetenc. Mohamed, Valcke in Ve Wever (2017) so v raziskavah posebej pozorni na prenos in delitev znanja ter izkušenj. Rezultati drugih raziskav pa kažejo na pomen tako formalnega izobraževanja kot izkušenj vzgojiteljev (Barenthien idr., 2020; Sucuoglu idr., 2014; Šindić in Pribišev Beleslin, 2018).

V raziskavi smo želeli proučiti koncept profesionalnih kompetenc vzgojiteljev predšolskih otrok z zornega kota paradigme medgeneracijskega učenja v vrtcu. Pri opredeljevanju kompetenc vzgojiteljev smo uporabili mednarodni okvir kompetenc, ki vključu-

je znanje, pedagoške in organizacijske veščine, zmožnosti oblikovanja partnerskih odnosov s starši, strokovnjaki in okoljem, stalno strokovno usposabljanje in profesionalno etiko (Mohamed, Valcke in Ve Wever, 2017).

Delo je nastalo v okviru širše raziskave, ki je potekala leta 2021 in je vključevala vzgojitelje predšolskih otrok v Bosni in Hercegovini. Vzgojitelji so odgovarjali na vprašanja o lastnih profesionalnih kompetencah in medgeneracijskem učenju v vrtcu. Cilj kvantitativnega raziskovanja je bil proučiti odnos med percepcijo vzgojiteljev o njihovih profesionalnih kompetencah in ocenami o medgeneracijskem učenju v vrtcu. Za raziskovanje sta bila oblikovana dva posebna instrumenta. Prvi je Likertova petstopenjska lestvica profesionalnih kompetenc vzgojiteljev predšolskih otrok (Lestvica profesionalnih kompetenc vzgojiteljev predšolskih otrok). Instrument je nastal z operacionalizacijo indikatorjev, ki izhajajo iz sodobnih teoretskih in empiričnih raziskav o posebnostih kompetenc vzgojiteljev predšolskih otrok (Erčulj idr., 2008; Gasper, 2015; Mohamed idr., 2017; Selvi, 2010). Instrument vsebuje 21 enot z Likertovo petstopenjsko lestvico. Zanesljivost je visoka, Crombachov koeficient alfa je: $\alpha = 0,951$. Drugi je Likertova petstopenjska lestvica o medgeneracijskem učenju v kontekstu predšolske ustanove (Lestvica o medgeneracijskem učenju v kontekstu predšolske ustanove), ki vsebuje 29 enot. Izračunani Crombachov koeficient alfa ($\alpha = 0,902$) kaže na visoko zanesljivost instrumenta. Teoretski okvir za drugi instrument so bile humanistično orientirane predpostavke o medgeneracijskem učenju (Gallagher in Fitzpatrick, 2017; Kaplan idr., 2020; Martins idr., 2019; Sanchez idr., 2018). Za zbiranje relevantnih podatkov z navedenima instrumentoma smo uporabili metodo anketiranja in skaliranja. V priložnostni vzorec je bilo vključenih 105 vzgojiteljev predšolskih otrok. Več kot 90 % vzgojiteljev je imelo zaključeno prvo (bolonjsko) stopnjo univerzitetnega izobraževanja za vzgojitelje. Pri zbiranju podatkov so bila upoštevana načela etičnosti pri raziskovanju. Sodelovanje je bilo prostovoljno in anonimno.

Uporabljena je bila faktorska analiza zaradi preverjanja zanesljivosti raziskovalnih instrumentov, določanja faktorjev medgeneracijskega učenja v vrtcu (gl. Šindić, Partalo in Ličen, 2022). Izračunali smo osnovne deskriptivne parametre spremenljivk našega raziskovanja in korelacije med njimi (Pearsonov koeficient). Uporabljena je bila regresijska analiza (Stepwise method), da bi ugotovili prediktorje zastopanosti kompetenc vzgojiteljev. Definirane so bile naslednje spremenljivke: kompetence vzgojiteljev; rojstno leto; leta delovne dobe; profesionalno sodelovanje in osebnostna rast (v okviru medgeneracijskega sodelovanja na delovnem mestu); inkluzija starejših v vzgojno delo, delo in humanistično izobraževanje; predsodki in stereotipi. Zadnje tri našete spremenljivke so bile s faktorsko analizo izpostavljene kot faktorji medgeneracijskega učenja v vrtcu (gl. Šindić, Partalo in Ličen, 2022).

Najbolj izražena povezanost (pozitiven Pearsonov koeficient ($r = 0,297^{**}$), statistično pomemben na ravni 0,01) se je pokazala med spremenljivkama kompetence vzgojiteljev in inkluzija starejših v vzgojno delo. Obstaja tendenca, da so starejši bolj vključeni v vzgojno delo v tistih skupinah, kjer delajo vzgojitelji, ki so sebe ocenili kot bolj kompetentne. Statistično pomembna vrednost Pearsonovega koeficienta za spremenljivke kompetence vzgojiteljev in profesionalno sodelovanje in osebnostna rast (pozitiven Pearsonov koeficient ($r = 0,203^{*}$), statistično pomemben na ravni 0,05) kaže na proporcionalno medsebojno odvisnost teh spremenljivk. Torej, če je v vrtcu bolj zastopano sodelovanje med kolegi različnih starosti, bi lahko pričakovali,

da so kompetence vzgojiteljev bolj razvite. Tako po oblikah distribucije kot tudi po aritmetičnih sredinah je opazno, da vprašani visoko vrednotijo svoje kompetence in medgeneracijsko učenje, kar bi lahko bilo povezano z dejstvom, da ima večina vprašanih zaključeno prvo stopnjo univerzitetnega izobraževanja, to je visoko formalno izobrazbo. Sodobne raziskave ugotavljajo, da je formalna izobrazba najpomembnejši faktor, ki vpliva na razvoj kompetenc (Barenthien idr., 2020; Sucuoglu idr., 2014). Statistično pomembna vrednost Pearsonovega koeficienta za spremenljivko kompetence vzgojiteljev in nato druga za drugo leto rojstva in delovna doba (Pearsonov koeficient: $r = -0,196$, $*r = 0,228$, $*\text{statistično pomembni na ravni } ,05$) kaže na tendenco, da starejši vzgojitelji z več let delovne dobe ocenjujejo sebe kot bolj kompetentne. Razlog za to bi lahko bil v tem, da pri enako izobraženih vzgojiteljih daljša delovna doba omogoča tako bogatejše profesionalne izkušnje kot tudi več možnosti za profesionalno izpopolnjevanje z neformalnim izobraževanjem in neformalnim učenjem. Podobne rezultate o medsebojni odvisnosti delovnih izkušenj in profesionalnih kompetenc vzgojiteljev predšolskih otrok za posamezne kompetence navajajo tudi Šindić in Pribišev Beleslin (2018) ter Sucuoglu idr. (2014).

Skladno s preverjenimi pogoji so bile v regresijski model vključene kompetence vzgojiteljev kot kriterijska spremenljivka. Preverjane prediktorske spremenljivke so bile profesionalno sodelovanje in osebna rast (v okviru medgeneracijskega sodelovanja na delovnem mestu), inkluzija starejših v vzgojno delo in humanistično izobraževanje ter leta delovne dobe. Z uporabo regresijske analize (Stepwise method) smo dobili dva statistično pomembna modela, ki pojasnjujeta odnos med vključenimi spremenljivkami. Vrednost Adjusted R square kaže, da je mogoče s prvim modelom pojasniti okoli 6%, z drugim modelom pa okoli 12% variance kriterijske spremenljivke – kompetence vzgojiteljev. V prvem modelu sta kot prediktor navedena inkluzija starejših v vzgojno delo in humanistično izobraževanje. V drugem modelu je temu dodan še prediktor leta delovne dobe. V obeh modelih je izključen prediktor profesionalno sodelovanje in osebna rast.

Prvi model kaže, da inkluzija starejših v vzgojno delo in humanistično izobraževanje prispevata k razvoju ravni profesionalne kompetence vzgojiteljev ($\beta = 0,256$). Lahko bi torej pričakovali, da če je v nekem vrtcu bolj zastopana inkluzija starejših v vzgojno delo, bolj bodo naglašene kompetence vzgojiteljev. Iz tega lahko sklepamo, da medgeneracijsko učenje in sodelovanje lahko pozitivno vplivata ne samo na starejše in otroke, temveč na vse vključene, kot trdijo raziskave iz drugih okolij (Boivin, 2021; Golenko idr., 2020; Oropilla in Ødegaard, 2021). Drugi model kaže na okrepljen prispevek inkluzije starejših v vzgojnem delu ($\beta = 0,283$) in to, da so leta delovne dobe prepoznana kot prediktor s podobno intenzivnostjo ($\beta = 0,271$). Iz tega lahko sklepamo, da so ob vključenosti starejših v vzgojno delo v nekem vrtcu in daljši delovni dobi vzgojiteljev podvojene možnosti, da imajo vzgojitelji bolj razvite kompetence.

Ugotovitve raziskave potrjujejo, da programi vključevanja starejših v vrtce ne prispevajo le k vzgoji otrok in humani dimenziji za starejše, temveč so pomembni tudi za razvoj profesionalnih kompetenc vzgojiteljev. Na temelju ključnih ugotovitev raziskave in relevantne literature lahko sklenemo, da lahko upravičeno govorimo tudi o kompetencah vzgojiteljev za medgeneracijsko učenje, ki so povezane z vseživljenjskim učenjem/izobraževanjem vzgojiteljev ter etičnimi, socio-emocionalnimi, komunikacijskimi in osebnostnimi značilnostmi vzgojiteljev predšolskih otrok.

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