Intergenerational learning and cooperation: a perspective of preschool teachers

Jurka Lepičnik Vodopivec, University of Primorska, Faculty of Education, Department of Educational Sciences, Cankarjeva 5, 6000 Koper, Slovenia, https://orcid.org/0000-0003-3238-7660

Dragan Partalo, University of Banja Luka, Faculty of Philosophy, Department of Pedagogy, Bulevar vojvode Petra Bojovića 1A, 78000 Banja Luka, Bosnia and Herzegovina, https://orcid.org/0000-0003-4680-1308

Aleksandra Šindić*, University of Banja Luka, Faculty of Philosophy, Department of Preschool Education, Bulevar vojvode Petra Bojovića 1A, 78000 Banja Luka, Bosnia and Herzegovina, https://orcid.org/0000-0001-8565-0464

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Abstract

The study explores intergenerational learning and cooperation in kindergarten. Given the importance of intergenerational learning in education and recognizing that intergenerational learning in kindergarten takes place in many and different interactions between different participants (preschool teachers, children, parents, grandparents, etc.), the perspective of preschool teachers on intergenerational learning was studied. The aim was to explore the perspective of preschool teachers on the factors of intergenerational learning and cooperation in kindergarten. A quantitative research paradigm that has cross-sectional design features was used. An online scaling technique was used to collect relevant data. Consistent with ethical considerations, data collection was voluntary and anonymous. Factor analysis identified three factors that indicate the perspective of Slovenian preschool teachers on intergenerational learning: challenges of intergenerational interaction, social (cohesion), professional and personal wellbeing and innovative intergenerational learning practices grouped into two polarized dimensions.

Keywords: intergenerational learning, innovative practices, intergenerational interaction, social cohesion, preschool teachers.

* ADDRESS FOR CORRESPONDENCE: Aleksandra Šindić, University of Banja Luka, Faculty of Philosophy, Department of Preschool Education, Bulevar vojvode Petra Bojovića 1A, 78000 Banja Luka, Bosnia and Herzegovina. E-mail address: aleksandra.sindic-radic@ff.unibl.org / Tel.: +387-51-325-811
1. Introduction

1.1. Conceptual or Theoretical Framework

Intergenerational learning, as a mutual process of knowledge exchange between members of different generations (Gerpott et al., 2017) allows combining, complementing and constructing knowledge, wisdom, skills, competencies, attitudes, norms and values between generations (Brower et al., 2021; Kaplan et al., 2020; Sprinkle & Urick, 2018). Due to modern social tendencies, results of scientific research and scientific knowledge, the beneficial effect of intergenerational learning and cooperation is recognized for all participants individually, and for progress, community cohesiveness, and acquisition of community social capital (Alonso et al., 2020; Del Gobbo et al., 2017; Gallagher & Fitzpatrick, 2018; Kump & Jelenc Krašovec, 2014; Kuyken et al., 2018; Sprinkle & Urick, 2018). In European countries, including Slovenia, intergenerational learning is increasingly present in many areas of life and work. Numerous forms and models of intergenerational cooperation in different fields can be observed in the contemporary Slovenian environment (Bizovičar & Sirk, 2015), especially in the context of the paradigm of active ageing/quality ageing and intergenerational solidarity (Hlebec et al., 2013; Hlebec & Filipovič Hrast, 2014) through the programs of many universities for the third age (Bogataj & Findeisen, 2008). Intergenerational programs represented in school and preschool institutions are a relatively recent practice in Slovenia (Ličen et al., 2021a).

The elders participate as guests in the educational work, while the students help the elders to acquire IC literacy (Symbiosis project). Projects for intergenerational learning and sustainable mobility are being implemented (Walking bus and Bike train project) through the organised accompaniment of children to kindergarten/school by the elderly, visits of kindergartens and schools to nursing homes (Hand in Hand project), visits to nature gardens and botanical gardens maintained by the elderly, reading stories to children in the hospital, etc. (Ličen, 2020; Ličen, et al., 2021b). Childhood Gives a Hand of Wisdom is a multi-year intergenerational project implemented in Slovenia at the national level within the Slovenian network UNESCO ASPnet (Associated Schools Project Network) and includes 7 kindergartens, 65 primary schools and 27 secondary schools. Intergenerational activities encourage responsibility towards oneself and others, with an emphasis on education for peace and non-violence, patience and cooperation between generations, and the preservation of cultural heritage and folk customs.

1.2. Related Research

The positive results of intergenerational projects for children and the elderly and for connecting the institutions in which they participate in projects are indicated by numerous studies in different countries (Feyh et al., 2021; Golenko et al., 2020; Gallagher & Fitzpatrick, 2018). Intergenerational cooperation has been recognized as desirable in the workplace, among staff (King & Bryant, 2017; Gerpott et al., 2017), and thus among preschool teachers. Due to different growing up conditions, different learning experiences and life experiences, colleagues of different generations approach work and management in different ways (Berkep, 2014; McDonald, 2008). Generations differ in the representation of wisdom, memory, expertise, fluid and crystallized intelligence, ICT skills, experiences and reflections in the context of lifelong learning (Vizek Vidović & Vlahović Štetić, 2007), and intergenerational cooperation is an important prerequisite for combining all these characteristics and by that is support for the professional development and acquisition of preschool teachers competencies (Partalo et al., 2022). However, numerous studies suggest that differences between generations related to upbringing, lifestyle, future goals, value system, and asymmetry of power can
lead to antagonisms and conflicts (McDonald, 2008; Penttila, 2009; Tost et al., 2008; Wade- Benzoni & Tost, 2009; Boz, 2018).

1.3. Purpose of the Study

Starting from the importance of intergenerational learning in upbringing and educational work and from the knowledge that intergenerational learning takes place among educational workers in various forms of interaction (Brücknerova & Navotny, 2017), the study explores the perspective of Slovenian preschool teachers on intergenerational learning. Considering that the topic is contemporary and the practice is insufficiently researched and that in recent decades intergenerational learning has become more prevalent in Slovenia, the emphasis in the paper is on the feedback of practitioners with the aim of reviewing current practice and theoretical thought and deriving pedagogical implications. The study aims to examine the perspective of Slovenian preschool teachers on the factors of intergenerational learning and cooperation in preschool institutions.

2. Method and Materials

2.1. Research Model

In accordance with the research goal, a quantitative research approach with a cross-sectional design was applied. The research has the characteristics of a descriptive and correlation study. An online scaling technique was applied to collect relevant data. In accordance with ethical considerations, data collection was voluntary and anonymous.

2.2 Participants

The survey was conducted on a sample of 108 preschool teachers employed in kindergartens in Slovenia. The basic characteristics of the sample of preschool teachers are shown in Table 1. The structure of the sample was determined with an appropriate sample and the voluntary participation of educators in the research.

<table>
<thead>
<tr>
<th>Sample characteristics</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years of service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>up to 5 years</td>
<td>24</td>
<td>22.22</td>
</tr>
<tr>
<td>6 to 14 years</td>
<td>40</td>
<td>37.04</td>
</tr>
<tr>
<td>15 to 24 years</td>
<td>24</td>
<td>22.22</td>
</tr>
<tr>
<td>over 24 years</td>
<td>20</td>
<td>18.52</td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>100.00</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>104</td>
<td>96.30</td>
</tr>
<tr>
<td>Male</td>
<td>4</td>
<td>3.70</td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>100.00</td>
</tr>
<tr>
<td>Workplace</td>
<td></td>
<td></td>
</tr>
<tr>
<td>preschool teacher</td>
<td>80</td>
<td>74.10</td>
</tr>
<tr>
<td>preschool teacher assistant</td>
<td>28</td>
<td>25.90</td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>100.00</td>
</tr>
</tbody>
</table>

2.3. Data Collection Tools

An independently created research instrument, a questionnaire with a five-point Likert-type scale, was used, which was previously applied to a sample of preschool teachers with similar characteristics.
in Bosnia and Herzegovina (see: Šindić et al., 2022a). The instrument, in its original form, contained 42 claims, but during the process of factor analysis and analysis of reliability on the cause of preschool teachers from Slovenia, it was reduced to 21 claims. During the construction and definition of individual statements, indicators based on general theoretical starting points and understandings of intergenerational learning, are adapted to the context of preschool and the profession of preschool teachers (Šindić et al., 2022a). Cronbach’s Alpha scalar coefficient is α = 0.845, and the following coefficients were determined for individual subscales - factors: first factor, α = 0.861 (N of Items = 8), second factor, α = 0.797 (N of Items = 8) and third factor, α = 0.830 (N of Items = 5). The mentioned factors were extracted by the factor analysis procedure, which is elaborated in detail in the chapter Results and discussion. Item-total correlations range from 0.412 to 0.733. These findings indicate that it is an instrument of high internal consistency.

2.4. Data Collection Process

The survey was conducted during November and December 2021 in such a way that preschool teachers were invited by e-mail to fill out a questionnaire created within the Google Forms application on a voluntary basis.

2.5. Data analysis

Principal Component Analysis was used in the data analysis, while the Varimax method was used for factor rotation. The analysis of descriptive statistical indicators (Mean, Standard deviation, Skewness, Kurtosis) and correlation analysis (Pearson correlation coefficient) were performed on the extracted factors. IBM SPSS Statistics 26 statistical software was used in the data processing. Monte Carlo PCA for Parallel Analysis was used to determine the number of factors using the parallel analysis method.

3. Results

Checking the assumptions for the application of factor analysis, it has been found that the value of the Kaiser-Meyer-Olkin measure of sampling adequacy is KMO = 0.753. According to Field (2017), values in the 0.70s can be named as middling, which indicates that the sample size is adequate for conducting factor analysis. Bartlett’s test of sphericity is statistically significant (χ² = 938,664, df = 210; p <0.001), which is an indication that the null hypothesis that the correlation matrix is, in fact, an identity matrix needs to be rejected. The decision on the number of factors was made based on the Kaiser-Gutmann criterion of eigenvalues, Horn’s parallel analysis, as well as Cattell’s scree test. Although eigenvalues indicated that as many as five factors have a value greater than 1, it has been opted for a three-factor solution based on Scree plot analysis and parallel analysis. Also, the three-factor solution proved to be the purest in terms of interpretability. Three factors were singled out in the rotated matrix of factor saturation (Table 2).

Table 2

Rotated factor loads: Preschool teachers’ perspective on intergenerational learning

<table>
<thead>
<tr>
<th>Items</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagreements with colleagues are frequent due to conflicts between generations that do not grow into tolerance and understanding and hinder communication.</td>
<td>0.793</td>
</tr>
<tr>
<td>Younger preschool teachers do not cooperate enough out of fear of older colleagues.</td>
<td>0.772</td>
</tr>
<tr>
<td>Successful cooperation between preschool teachers of different generations cannot be achieved due to conflicts between generations.</td>
<td>0.741</td>
</tr>
</tbody>
</table>
Older preschool teachers treat younger colleagues with contempt.
Working with colleagues of other generations is frustrating for me because we don’t have the same language, worldview and upbringing.
Younger preschool teachers do not show respect and do not respect the rich professional experience of older colleagues.
Older preschool teachers are conservative and traditional and stifle the innovation of younger colleagues.
Conflicts that arise due to the difference between preschool teachers of different generations make it difficult to work in kindergarten and the professional development of preschool teachers.
The joint action and learning of people of different generations have a positive effect on establishing a balance between theoretical and experiential (practical) knowledge.
Intergenerational projects enable better cooperation between the preschool institution and the family and the local community.
People develop and shape themselves in a social context, so communication and connection between people of different generations are important.
The development of science and technology enables new knowledge and insights that we can acquire through the joint action of people of different generations (e.g., environmental knowledge, computer literacy, inclusion).
Intergenerational learning enables the design of new, innovative practices.
Intergenerational learning enables more successful coping with challenges and overcoming problems in the daily work of preschool teachers.
Intergenerational learning programs and projects are desirable for the professional development of preschool teachers.
I am happy to work with colleagues who are much older and/or younger than me.
I want to develop new forms of intergenerational cooperation in which preschoolers and the elderly will participate.
Involving elderly people in educational work in kindergarten for children and me is a field of intergenerational dialogue and learning.
In the educational work of the preschool institution, it is necessary to realize different intergenerational approaches and models in a wider scope.
I support visits to nursing homes or visits to some other organizations that bring together retirees.
The organization of activities with grandparents has great educational values (concerning tradition, culture, religion, traditional games, cuisine, art, etc.).

The factors are named as follows:
- first factor: challenges of intergenerational interaction,
- the second factor: social (cohesion), professional and personal wellbeing,
- third factor: innovative intergenerational learning practices in kindergarten.

52.214% of the total variance was explained by these three factors, of which the first factor refers to 20.565%, the second factor 17.069%, and the third factor 14.579% of the variance of the examined phenomenon.
Table 3

Descriptive statistics and correlations between factors

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>Sk</th>
<th>Ku</th>
<th>COII</th>
<th>SCPPW</th>
<th>IILPK</th>
</tr>
</thead>
<tbody>
<tr>
<td>COII</td>
<td>2.295</td>
<td>0.577</td>
<td>0.503</td>
<td>-0.644</td>
<td>-</td>
<td>-0.113</td>
<td>-0.114</td>
</tr>
<tr>
<td>SCPPW</td>
<td>4.521</td>
<td>0.408</td>
<td>-0.629</td>
<td>-0.434</td>
<td>-</td>
<td>0.338**</td>
<td></td>
</tr>
<tr>
<td>IILPK</td>
<td>4.526</td>
<td>0.515</td>
<td>-0.845</td>
<td>-0.330</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: COII – challenges of intergenerational interaction; SCPPW - Social (cohesion), professional and personal wellbeing; IILPK – innovative intergenerational learning practices in kindergarten; M – arithmetic mean; SD – standard deviation; Sk – skewness; Ku – kurtosis; ** – statistically significant at 0.001.

The established statistical indicators (Table 3) indicate that preschool teachers recognize but value low (M = 2.295, SD = 0.577) the intensity of manifestation of different Challenges of intergenerational interaction. On the other hand, preschool teachers express positive assessments of Social, professional and personal wellbeing (M = 4.521, SD = 0.408) as well as Innovative practices of intergenerational learning in kindergarten (M = 4.526, SD = 0.515). The correlation between the first with the second and the third factor indicates extremely low and negative correlation coefficients that are not statistically significant. As expected, a positive intensity correlation of 0.338, significant at 0.001 level, was found between SCPPW and IILPK. Skewness and Kurtosis values indicate minor deviations from the values inherent in normally distributed data.

4. Discussion

4.1. Challenges of intergenerational interaction

This factor could be considered based on the knowledge that people of different generations approach life, work and learning in different ways (Berkep, 2014). In their research, Hernaus & Pološki Vokic (2014) note that the interactions of professionals differ depending on the generation. Conflicts are also noticed due to different approaches to the use of modern technology in the service (Penttila, 2009). Tost et al. (2008) recognize the challenge of intergenerational interaction in egocentrism, asymmetry and non-reciprocity of power and decisions of people of different ages that can diminish the personal interest of individuals. The negative dynamics of intergenerational relations can also be seen through the tendency of uncoordinated interests of present and future generations, e. g. around the sustainability of resource levels (Wade-Benzoni & Tost, 2009). Murphy et al. (2010) note that due to different value systems, patterns of behaviour, and human characteristics, intergenerational conflicts are increasingly being studied by human resource experts. Preschool teachers in BiH identify prejudices and stereotypes in the field of intergenerational interaction, although they value them low (Šindić et al., 2022a). Burcar (2017) singles out ageism, a special type of prejudice based on underestimating the elderly, as an obstacle to finding new ways to achieve well-being. Slovenian preschool teachers highly value innovative intergenerational learning practices in kindergartens involving the elderly (third factor), which confirms that Slovenian preschool teachers, although recognize them, value low various challenges related to generational conflicts in their own work (Tables 2 and 3).

4.2. Social (cohesion), professional and personal wellbeing

The factor that indicates the wellbeings of intergenerational learning is a more comprehensive factor singled out in the responses of Slovenian preschool teachers in the context of intergenerational
learning and cooperation, and affirmative attitudes of Slovenian preschool teachers on this issue are recognized (Tables 2 and 3). Preschool teachers in BiH recognize intergenerational learning as important for personal and professional development (Šindić et al., 2022a) and the interdependence of educational competencies and intergenerational learning and cooperation (Partalo et al. 2022), and the need for additional education in this field (Šindić et al., 2022b). The results of the research of Brücknerova & Novotny (2015) indicate the importance of intergenerational cooperation for educational workers in the context of lifelong learning. In their study, Alonso et al. (2020) highlight intergenerational participation as important for acquiring general and special competencies of participants: students and elderly, and for meeting the social and environmental needs of the community, while Kump & Jelenc Krašovec (2014) point out that intergenerational cooperation contributes to community cohesion in different contexts.

4.3. Innovative practices of intergenerational learning

Like the previous one, this factor is highly valued by Slovenian preschool teachers (Tables 2 and 3). It indicates the affirmative attitudes of preschool teachers, as well as the effort and tendency to deepen intergenerational cooperation and enrich educational work with intergenerational learning. It could be assumed that the positive practice of intergenerational learning in kindergartens in Slovenia contributed to the finding. In European educational circles, the affirmation of intergenerational programs is on the rise, which includes upbringing and education in early childhood (Gualano et al., 2018; McAlister et al., 2019), so the situation is similar in Slovenia.

There is a trend that the inclusion of older people in regular educational work through various programs, forms, models and activities is increasingly represented in Slovenian kindergartens (Ličen et al., 2021a). Rich and diverse intergenerational activities are present in the annual work programs of Slovenian kindergartens, which indicates that the practice in the field of intergenerational learning in Slovenian kindergartens is a constant practice. There are partial researches that point to numerous intergenerational projects and activities that enable children to develop mutual tolerance through the realization of sincere and friendly relations with the elderly (Ličen, 2020; Ličen et al., 2021b). Such activities shape the view of illness, old age, disability, death and grief, enabling children to understand and learn that they should give and receive.

Intergenerational learning is often based on real socio-emotional, experiential, perceived, cognitive and other problems and contributes to increasing ecosocial wellbeing, more successful integration of children into the culture in which they live, and integration of older people into regular educational work (Ličen et al., 2021). Research conducted by Gualano et al. (2018) shows that intergenerational projects have a positive impact on the perception of older people in the presence of children, and affect well-being, and mutual joy. In a study that investigates the socializing of preschool children and the elderly in Australia (Golenko et al., 2020), it is possible to see very positive impacts on the elderly and children. The inclusion of the elderly in educational work and the humanistic approach to education in the quantitative research conducted in 2021 was highly valued by preschool teachers in BiH (Šindić et al., 2022a).

4.4. Dimensions of intergenerational learning

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* Activities are implemented within the Slovenian network UNESCO ASPnet, see more at: https://www.aspnet.si/projekti/2019-2020/otrostvo-podaja-roko-modrosti.html
5. Conclusion

The quantitative study singled out three factors that indicate the perspective of Slovenian preschool teachers on intergenerational learning (challenges of intergenerational interaction; social (cohesion), professional and personal well-being; innovative practices of intergenerational learning in kindergarten), grouped into opposing dimensions. While the first, low-valued dimension indicates the limitations and challenges of intergenerational learning, the second dimension is highly valued and indicates the wellbeing of intergenerational learning and cooperation at the personal, professional, educational and social levels. It could be concluded that despite the fact that Slovenian preschool teachers, based on their own experience, practice and beliefs, see intergenerational differences as possible challenges in intergenerational cooperation, have strongly positive attitudes about intergenerational learning and cooperation in the context of social wellbeing, personal and professional development, and there is a desire, effort and tendency to enrich the educational practice in kindergarten by including the elderly in regular upbringing and educational work with preschoolers in order to achieve better educational effects.

Pedagogical practice, as a form of professional development and development of preschool teachers, is a living organism that is constantly changing and in which many interactions are created among the participants. It enables preschool teachers to test theoretical knowledge in practice and create new innovative practices based on acquired experience. This, in turn, places before them a requirement for constant continuous reflection on their own work, focusing on the process of changing, developing and improving educational practice, because researching their own practice is an integral part of the professional development of preschool teachers. The key is the change of preschool teachers, which is reflected in the readiness for continuous growth and development, research and learning, as well as networking and sharing knowledge with others in order to achieve quality practice. Establishing dialogue creates a common understanding, exchange and creation of new knowledge in the process of intergenerational learning, which leads to achieving a common meaning of learning. Through joint discussions and thinking about their own practice, preschool teachers change their practice and pave the way for a learning organization. Thus, they develop, build
and strengthen the possibility of reflection and critique of their own practice, which leads to the development of reflective practice.

6. Recommendations

In order to gain a deeper understanding of the perspective of Slovenian preschool teachers on intergenerational learning and its specifics, the research could be complemented by a study of a qualitative nature, such as a case study and action research.

7. Literature


