

Early Childhood Teachers' Wellbeing and Mental Health During the COVID-19 Pandemic – Kosovo Case

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Abstract

Faced with the situation of COVID-19, preschool teachers' mental health was threatened. The aim of the study was to discover the presence of anxiety, depression and mental wellbeing in preschool teachers and to understand the possible associations with sociodemographic variables. This study was conducted with 203 female preschool teachers in Kosovo, with the mean age 37.08 (SD = 10.31) and teaching experience MA = 10.40; SD = 9.15. Preschool teachers voluntarily completed the WHO (five) Well-Being Index, Generalized Anxiety Disorder-7, Patient Health Questionnaire-9 (PHQ-9) and a sociodemographic survey through a web-based Google form. Descriptive, the comparison and the correlation of variables was determined. Three multiple standard regression analyses were run to predict respectively mental wellbeing, anxiety and depression. Around half of the preschool teacher (52.7%) reported scores falling within moderate to severe levels for anxiety, while 43.9% of them reported mild to severe level of depression. We found significant difference in depression levels between preschool teachers living in the city, who showed higher values ($p = .005$). Preschool teachers working in public institutions had higher mental wellbeing scores than those working in non-public institutions ($p = .013$). Only anxiety significantly predicted the wellbeing contributing to approximately 34.3 of the variances ($p = .000$). The situation with Covid-19 has increased anxiety, depression levels and putting to the risk the wellbeing of preschool teacher. In these really challenging times, preschool educators welcome professional assistance for their mental health and it is the obligation of the institutions to provide this.

Keywords: COVID-19; Kosovo; Mental Health; Preschool educator; Wellbeing.

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1. Introduction

The work of preschool teachers is, first and foremost, the work of nurturing and caring for the very young and it is in this work that teachers find their greatest satisfaction [1]. As never before, preschool teachers are under the pressure of major changes in the early education and meeting ever-increasing demands, especially of parents to meet ambitious achievement and requirements. The work of preschool teaching is changing, and changing rapidly while very little attention is being given to the effects of these changes on teachers or their well-being [2], especially when considering that preschool teachers' job is an emotional effort [3]. According to [4, 5] the work of educators involves complex emotion work, including the need for educators to manage their own emotions in response to children, families, colleagues and circumstances. Studies have shown that teaching has one of the highest levels of stress and burnout [6] although the results are mixed. Studies [7, 8] reported that the teaching has the highest levels of stress and burnout, which interfere with mental health, while [9, 10] reported a negative relationship between mental health status, burnout and depression. Two studies found that child care workers report clinically depressive symptoms at values of 36.1% and 24% of clinical depression, while another study indicate that ECE workers earn low wages and experience poor mental well-being [11-13]. Although [14] in their meta-analytic study showed that Chinese preschool teachers' mental health conditions are at least as good as, if not better than, those of other kinds of teachers. Links between educators' and children's well-being is supported by an increasing number of research. According to [15] about 250 million children of children aged up to 5 years, are considered to be at risk of not reaching their optimal developmental. The author in [16] stated that "researchers across many national contexts are increasingly recognizing the connections between early childhood educators' well-being and their capacity for providing high quality education and care". Research evidence shows both the positive effects for children of educators' well-being [17- 19] and the negative effects when educators' well-being is compromised [20]. Further, compromised educator well-being can be financially costly for early childhood services [21] families and the educators themselves. However, there is far less documented research on early childhood educators' well-being [22]. Clearly, in just a few years, there has been an intensification of interest in researchers' focus on educators' well-being [23, 24] especially during a global health pandemic such as COVID-19, with results that indicate that preschool teachers exhibit a trend toward increases in mental health symptoms [25–27]. A study of 143 preschool teachers working in 20 kindergartens located in different regions of Slovenia, found that 48.8% of the preschool teachers have mental health problems [28]. The authors in [29] in their last study, found that about 67% of preschool teachers indicated that they felt nervous, anxious, or worried more often and about 48% felt down, depressed or hopeless more often than before the COVID-19 crisis, while [30] also found that in relation to the impact of the pandemic, preschool teachers reported a negative impact on their wellbeing (86%). Participants who had the longest work experience in the sector and who worked with mixed age groups reported higher well-being. [30]. Associations between years of work experience and sub-optimal well-being of EC teacher, has been linked in other research to lower risk of turnover [31]. To our knowledge, this is the first study that measures wellbeing and mental wellbeing at preschool teachers, almost two years after the first case with Covid-19. We aimed to discover and understand the presence of anxiety, depression and mental wellbeing in preschool teachers' community, almost two years since the first cases of COVID-19 and also to explore the possible associations with sociodemographic variables.

2. Materials and methods

2.1. Study design and procedure

This cross-sectional study was conducted using an online self-administered questionnaire of closed-ended questions, within a time span of 15 days. The participants were preschool teachers of 42 preschool public institutions and one of the biggest non-public preschool institutions in Kosovo. Through the first statement in the questionnaire, online consent was obtained from all participants, assuring them that the information collected would be kept confidential. The invitation stated that participation was voluntary and participants could withdraw at any time.

2.2. Study participants and sampling

This study was conducted with a total sample of 203 preschool teachers working in early childhood education sector in Kosovo. The age range of the final sample was 20 to 63 years old, with the mean age 37.08 ($SD = 10.31$). All the participants were female.

Of the sample, 25.6 % ($n = 52$) were working with children 0-3 years old, and 72.4 % ($n = 147$) were working with the group of 3-6 years old children. The participants' teaching experience ranged from 1 to 40 years ($M = 10.40$; $SD = 9.15$). The detailed demographic characteristics of the respondents are illustrated in Table 1.

2.3. Study instruments and measures

A questionnaire was designed to gather sociodemographic profile of participants including age (in years), place of residence (city vs. village), education level, work experience (in years), whether they working in public or private preschool institution, whether they infected with Covid-19 (yes, no, I don't know), whether they were vaccinated vs. non-vaccinated.

WHO (five) Well-Being Index

Among numerous assessments of well-being, which has been used in the research projects all over the world, the five-item World Health Organization Well-Being Index [32, 33], is a short and generic global rating scale measuring subjective well-being. Preschool teachers were asked to indicate for each of the five statements how they felt over the past two weeks using a six - point Likert scale ranging from 0 = "at no time", to 5 = "all of the time", for a time scale related to the past 2 weeks. Raw scores ranging from 0 to 25 are multiplying by four, so the result varies from 0 to 100. The result with the largest number shows one better welfare.

The Cronbach's alpha coefficient reported for the WHO-5 is >0.80 [34, 35]. The reliability coefficient in the current study was .87.

Anxiety

Symptom's anxiety over the last 2 weeks were assessed by the Generalized Anxiety Disorder-7 (GAD-7) [36].

These measures align closely with diagnostic criteria for generalized anxiety disorder. GAD-7, is a self-administered screening tool which takes less than 3 min to complete and is easy to score. Preschool teachers reported their symptoms using a 4-item rating scale ranging from 0 (not at all) to 3 (almost every day). The total anxiety scale was divided into: 0–4 minimal, 5-9 mild, 10-14 moderate, and 15–21 severe anxiety [36]. The measure was previously used in another study in Kosovo [37], with Cronbach alpha coefficients of .86). The Cronbach alpha coefficient in the current study was .90.

Depression

Symptoms of depression over the last 2 weeks were assessed by the Albanian version of Patient Health Questionnaire-9 (PHQ-9). The total PHQ-9 scale was divided into minimal (scores of 0-4), mild (5-9), moderate (10-14), and severe (15-27) levels of depression severity [38]. Respondents report their symptoms using a 4-item Likert rating scale ranging from “not at all”, “several days”, “more than half the days”, and “nearly every day”, scored as 0, 1, 2 and 3, respectively. PHQ-9 scores range from 0 to 27. The PHQ-9 it proven to be a valid tool for the general population [39-41]. The PHQ-9 was previously used in a study in Kosovo [42]. with Cronbach alpha coefficient of .8. The Cronbach alpha coefficient in the current study was .89.

2.4. Data analysis

The data were analyzed using the statistical program IBM SPSS Statistics for Windows, Version 25.0. First, descriptive statistics were calculated for the socio-demographic variables. The categories of depression and anxiety were categorized using the cut-off scores of the instruments in order to obtain the various levels (minimal, mild, moderate, severe). Then the comparison analysis was conducted, and the correlation of variables was determined. Three multiple standard regression analyses were run to predict respectively mental wellbeing, anxiety and depression from the group of other interested variables. For all the tests conducted, a p -value of ≤ 0.05 is considered statistically significant.

2.5. Ethical aspects

The study was performed in accordance with the Declaration of Helsinki. Study participation was anonymous and voluntary, and students could withdraw from the study without any consequences. Only the researchers had access to the research data.

3. Results

Mos of participants live in the city (79.8 %), working in public preschool institutions (63.1%). Mean overall score of mental wellbeing, anxiety and depression were respectively 68.16 (SD = 22.16); 10.40 (SD = 4.54); 5.24 (SD = 5.14). Moderate to severe symptoms of anxiety were reported by 18.7 % (38) of the participants and 34 % (69) had mild symptoms. Twenty nine percent of preschool educators reported moderate to severe symptoms of depression, while 14.8 % (30) had mild symptoms. Most of participants (82.8%) had been vaccinated with two doses, while only 48.5 % of them had been infected with Covid-19.

Table 1: Descriptive statistics.

Variables		Frequency (N)	Percentage %
Place of residence	City	162	79.8
	Village	41	20.2
	Total	203	100
Preschool institution	Public	128	63.1
	Private	75	36.9
Education level	Middle school	13	6.4
	Faculty	157	77.3
	Master	33	16.3
Age group	0-3 years old	52	25.6
	3-6 years old	147	72.4
	Missing	4	2
Vaccination	1 vaccine	23	11.3
	2 vaccines	168	82.8
	Not vaccinated	12	5.9
Educators infected with Covid -19	Yes	93	45.8
	No	71	35.0
Using the Early education platform	Don't know	39	19.2
	Yes	102	50.2
	periodically	62	30.5
	Rarely	23	11.3
	No	15	7.4
	Missing	1	0.5
Age	MA/SD	37.08	10.31
Mental Wellbeing	MA/SD	68.16	22.16

Table 2: Severity of anxiety and depression according to cut of scores.

	Minimal	Mild symptoms	Moderate symptoms	Severe symptoms
Anxiety	96 (47.3)	69 (34)	26 (12.8)	12(5.9)
Depression	114 (56.2)	59 (29.1)	16 (7.9)	14 (6.9)

Around half of the preschool teacher 96 (47.3%) reported scores falling within minimal levels for anxiety, while for depression more than half of them (n=114, 56.2%) reported minimal level of depression (Table 2).

Table 3 presents the means and standard deviations of the variables and their intercorrelation values. The mental wellbeing was significantly negatively correlated only with anxiety ($r(203) = -.572, p = .000$). The anxiety was significantly positively correlated with education level ($r(203) = .141, p = .044$) and negatively correlated with age ($r(203) = -.153, p = .029$) and with experience ($r(203) = -.147, p = .036$).

The vaccination was positively correlated with age ($r(203) = .179, p = .010$) and with experience ($r(203) = .184, p = .008$), but not with mental wellbeing, anxiety and depression.

Table 3: Bivariate correlations between mental wellbeing, anxiety, depression with demographic and Covid-19 pandemics contextual related experiences.

	<i>M(SD)</i>	1	2	3	4	5	6	7
1.Mental Wellbeing	68.16 (22.16)	1						
2.Anxiety	10.40 (4.54)	-	1					
		.572**						
3.Depression	5.24 (5.14)	.016	.061	1				
4.Infection with Covid-19	1.73 (.76)	.109	-.010	.014	1			
5. Vaccination	1.95 (.41)	.162	-.042	-.005	-.089	1		
6. Education level	16.07 (1.30)	-.032	.141*	-.040	.028	.023	1	
7. Age	37.08 (10.31)	-.018	-.153*	-.062	-.133	.179*	-.210**	1
8. Experience	10.40 (9.15)	-.007	-.147*	-.057	-.078	.184*	-.165*	.801*

Note: Correlation is significant at the 0.01 level (2 – tailed)

A series of Mann-Whitney tests were conducted to look for possible differences in mental wellbeing, anxiety and depression at preschool teachers, by place of residence, type of preschool institutions and the age group of children they work with. We found significant difference in depression levels between preschool teachers living in the city, who showed statistically significantly higher than the preschool teacher living in the village ($U = 2377.50, p = .005$). Preschool teachers working in public preschool institutions had higher mental wellbeing scores than those working in non-public preschool institutions ($U = 3795.50, p = .013$).

We didn't find any statistical differences between preschool teachers who work with children 0-3 years old versus those working with 3-6 years old children. Kruskal-Wallis analysis doesn't reveal significant differences by levels of education and vaccination status. The only significant difference in wellbeing, is found by being infected with Covid-19, $\chi^2 (2, n = 203) = 11.58, p = .003$, with a mean rank wellbeing score of 90.69 for Yes, 120.99 for No and 94.38 for I don't know.

Table 4 presents the results of a multiple standard regression analysis for the mental wellbeing, anxiety and depression scores from age, education, years of experience, vaccination, infection with Covid-19 of preschool teachers. In model for wellbeing, only anxiety significantly predicted wellbeing scores and contributed to approximately 34.3 of the variances ($\Delta R^2 = .343, F (7, 202) = 14.52; p = .000$). In the model of anxiety, these variables statistically significantly predicted anxiety, $F (7, 202) = 16.48, p = .000$, contributed to approximately 37.2 of the variances. Only age and wellbeing added statistically significantly to the prediction. In model for depression, none of the variables showed statistically significantly prediction.

Table 4: Multiple Regression Analysis Summary for variables and Mental Wellbeing (WHO-5), Anxiety (GAD-7) and Depression (PHQ-9).

	<i>Wellbeing</i>			<i>Anxiety</i>			<i>Depression</i>		
	B	St. err	Beta	B	St. err	Beta	B	St. err	Beta
Age	-.268	.227	-.125	-.093	.045	-.210*	-.006	.064	-.011
Education level	2.251	2.863	.047	.987	.571	.101	-.005	.812	.000
Vaccination	4.160	3.182	.077	.594	.640	.054	-.422	.905	-.034
Participants infected with COVID-19	1.910	1.712	.066	.079	.344	.013	.513	.485	.076
Years of experience	.039	.251	.016	.021	.050	.042	.011	.071	.020
Anxiety	-2.886	.291	-.592*				.139	.101	.123
Depression	.248	.252	.057	.070	.050	.079			
Wellbeing				-.116	.012	-.566*	.020	.020	.086
R2	.343			.372			.019		
F for change in R2	14.52			16.48			.531		

4. Discussion and conclusion

Preschool teachers are of the professional communities that have been most challenged by the pandemic situation, which has inevitably left its mark on the mental health and well-being of this community. This study aimed to discover the presence of anxiety, depression and mental wellbeing in preschool teachers’ community as a result of the situation created by COVID-19 and also to explore and understand the associations with sociodemographic variables. There is a high percentage of preschool teachers who show adverse psychological symptomatology with regard to levels of anxiety (52.7%) and depression (43.9%). Similar findings have been reported for anxiety and depression level at preschool educators also from [43- 46]. The preschool teachers who are not vaccinated, who do not know being infected with Covid-19, whose age was between 20-29 years old, working in public preschool institution and having 0-9 years of experience, showed higher level of anxiety compared to other groups. The symptomatology regarding the depression, showed that preschool teacher within range age 40-49 years and 20-29 years of experience have more depressive symptoms than their younger counterparts. We also attempted to identify the other socio-personal variables that could affect the depressive symptoms experienced by teaching professionals. The anxiety was significantly positively correlated with education level and negatively correlated with age and with experience. Other studies also found that preschool teachers with longer work experience, reported stronger wellbeing [45]. while the associations between years of work experience and preschool teacher wellbeing, has been found also by [47]. There may be several reasons related to these outcomes, considering the organization of preschool education during the pandemic period. Levels of anxiety and depression may have been influenced by the fact that during the pandemic, preschool teachers were periodically forced to use exclusive online learning, and periodically combined learning. Both

forms have significantly required the use of ICT. Although MEST with UNICEF support provided training for preschool educators for online learning, more than 70% of preschool educators stated that they do not possess the necessary technological skills to ensure a quality educational process. Also, [48] found that the use of ICT can create anxiety symptoms, while [49] showed that teacher understanding of such technology is below the standards required to face this new challenge. This level of anxiety and depression can also be the cause of work overload, which had increased significantly during this time of the pandemic, causing preschool educators to be 'at work' almost all day. The mental health of preschool educators needs continued research. This would increase the ability to provide the necessary and appropriate resources to more clearly understand the symptomatology and causes. Also, determining support to meet their needs and mitigate the negative effects of this pandemic on their overall well-being. We have to consider other studies' results that shows that wellbeing of preschool educators has negative consequences for children's experiences and learning, as well as for preschool teacher capacity for providing high quality education and care [50-52]. Such results make it important to understand the severity of this situation, and therefore immediate action must be taken to address it. We found that preschool teachers working in public institutions had higher mental wellbeing scores than those working in non-public institutions, which is in line with previous research [53-54]. It is now widely accepted that the well-being of preschool educators is inextricably linked to the quality of the program, hence the increased care of institutions for the mental health of preschool educators would not only help the well-being of educators but also ensure the quality of programs and indirectly also provides children's learning and development outcomes.

5. This study has several limitations

First, the sample in the present study included mainly public preschool educators and thus does not represent all preschool educators. In order to ensure a fully representative sample, future research should include educators in public and private preschool institutions and educators from the alternative forms of early education. Second, this study was a cross-sectional design, so causal pathways cannot be examined. Third, the early childhood teachers' wellbeing and mental health scores were based on self-reports, meaning that the results of this study may be affected by the socially desirable effect. Further longitudinal design or intervention research studies are needed and they should include multiple methods in order to explore, understand and assure indicators, factors and mechanisms of preschool teachers' mental health and well-being.

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