

The Effects of Lockdown on Undergraduate Training and the Well-Being of Pre-Service Teachers

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Abstract

The aim of the study was to examine the well-being of pre-service teachers during the first lockdown. The changes in learning and leisure time were observed in the context of subjective satisfaction with education and experienced emotions. A total of 297 pre-service teachers (80% women; aged 17 – 30, $M = 21.91$, $SD = 2.13$) participated in the study during the first wave of the COVID-19 pandemic. All participants filled out questions on the number of hours per day they spent on preparation and leisure, before and during the pandemic period, subjective satisfaction with the education, feelings of anxiety and lack of control concerning the coronavirus pandemic, perceived risk of coronavirus, and the Positive and negative affect schedule. Subjective satisfaction with education during the pandemic was average ($M = 3.18$, $SD = 1.20$); compared to the pre-pandemic period, pre-service teachers spent a third of an hour more in their free time, but they also spent one more hour preparing for school duties. Moreover, experience of positive emotions decreased ($t = 10.61$; $p < .001$; $d = 0.62$) and experience of negative emotions increased ($t = 6.81$; $p < .001$; $d = 0.39$) during first wave of pandemic. Regarding well-being, the threat of coronavirus, feeling of powerlessness and perceived risk of coronavirus related to negative emotionality; perceived risk of coronavirus was associated with hours spent studying.

Keywords: Pre-Service Teacher, Profession Training, Well-Being

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Introduction

In general, the pandemics affected people and most areas of life. In this context, since the beginning of 2020, the pandemic has stimulated a lot of research into the impact of the disease, quarantine, or pandemic on people's mental health and behavior (in October 2022, Google Scholar offered more than 40,000 links to scientific studies published since 2020 for the keywords "psychological effects" and "COVID"). Even before the COVID-19 pandemic, scientists warned that epidemics and pandemics often leave stronger and longer-lasting psychological than a medical consequence. The fear of the disease is present in more people than they get sick (a review of studies related to the epidemics of Ebola in 2014-15 and SARS in 2003-2004 is given by Taylor, 2019). Moreover, research from previous epidemics shows that global pandemics significantly affect people's mental well-being (Cheng et al., 2004; Sim & Chua, 2004; K. K. Wu et al., 2005; Yan et al., 2004). For example, increased anxiety, fear, or depression were reported during the swine flu and SARS epidemics (Cheng et al., 2004; Kanadiya & Sallar, 2011; Wheaton et al., 2012). Furthermore, some people show symptoms of post-traumatic stress disorder even after the crisis was over (P. Wu et al., 2009).

Similarly, because the COVID-19 pandemic resulted in a specific context worldwide, the pandemic has seriously affected the daily routine of every person, increased the general feeling of uncertainty and fear of illness and death, and the number of stress factors (e.g. (Brooks et al., 2020; Gruber et al., 2020; Mazza et al., 2020; Qiu et al., 2020; Wang et al., 2020). González-Sanguino et al. (2020) found at the beginning of the pandemic that during the first wave of the pandemic in Spain, 20% of people suffered from anxiety, 18% of people had symptoms related to depression, and 16% had symptoms of post-traumatic stress. In addition, women showed more symptoms of anxiety, depression and post-traumatic stress than men. Similar findings were also reached in China (Qiu et al., 2020; Ran et al., 2020; Wang et al., 2020), Germany (Petzold et al., 2020), Italy (Mazza et al., 2020), and Slovakia (Šrol et al., 2021).

During the COVID pandemic, one of the measures was to close schools. Although most countries have switched to online education, the ways to meet specific psychological needs and support the well-being of children and youth have been insufficient (Wang et al., 2020). The closing of schools meant a radical change in the daily routine of entire families. Orgilés et al. (2020) found that 86% of parents noticed changes in their children's emotional state and behavior during the quarantine (problems with attention, boredom, irritability, restlessness, nervousness, feelings of loneliness and worry). A survey (Gdovinová, 2020) among high school students showed that high school students worried about their health or the health of their loved ones, felt more tired and dissatisfied during online lessons, and had poor sleep quality, more frequent headaches and spine problems.

Undergraduates were exposed to similar stressors as children and high school students. Universities were closed, courses moved to the online space, and in-person activities were interrupted. Such conditions led to perceived uncertain professional training, and it resulted in increased stress and negative emotionality: young adults reported more symptoms of depression, anxiety, stress and fear in several countries (e.g. Debowska et al., 2020; Chinna et al., 2021; Lopes & Nihei, 2021; Maia & Dias, 2020; Meda et al., 2021). In other studies, psychological well-being and satisfaction with life were found to protect the undergraduates' mental health (e.g. Bhullar et al., 2014; Li & Hasson, 2020; Machado et al., 2018; Yüksel & Bahadır-Yilmaz, 2019).

In the present study, we focus how undergraduates spend their time (preparation for lessons, free time), what is their satisfaction, feeling of threat, lack of control, perceived risk of COVID-19, and experiencing positive and negative emotions. The aim of the study was to examine teachers' training and the well-being of pre-service teachers during the first lockdown. The changes in learning and leisure time were observed in the context of subjective satisfaction with education and experienced emotions.

Methods

A total of 297 pre-service teachers (80% women) aged 17 – 30 ($M = 21.91$, $SD = 2.13$). Participants were students in pre-gradual teachers' training and were asked to participate through e-mail. The study was conducted during the first wave of the COVID-19 pandemic (spring 2020) through on-line google form. After signing a consent form, all participants filled out questions on the number of hours per day they spent on preparation and leisure, both before and during the pandemic period, subjective satisfaction with the education processes, anxiety concerning the coronavirus pandemic, lack of control concerning the coronavirus pandemic, perceived risk of coronavirus, and the Positive and negative affect schedule. Participation was voluntary and anonymous, and the participants did not receive any reward for their participation. The study was carried out following ethical principles introduced by the American Psychological Association.

Participants answered questions about the amount of free time and estimated the number of hours (per day) they spent on preparation for lessons (0=less than one hour; 5=5 and more hours), both before and during the pandemic period.

Then participants assessed how they were satisfied with the system of distance education, with institutional support from headmasters, founders, and ministry, and their teachers on a 6-point scale (1=completely dissatisfied; 6=completely satisfied; (Ballová Mikušková & Verešová, 2020). The mean was computed for subjective satisfaction with the system of distance education and satisfaction with institutional support. The higher score indicated higher satisfaction and more positive feedback.

Feelings of anxiety and lack of control concerning the coronavirus pandemic were measured by 6 statements reflecting anxiety and 6 statements reflecting the lack of control over lives or health (Šrol et al., 2021) on a 6-point scale (1 = completely disagree; 6 = completely agree). Next, participants rated the overall dangerousness of COVID-19 (3 statements; (Šrol et al., 2021) on a 6-point scale (1 = completely disagree; 6 = completely agree). The mean score was computed for the anxiety, the lack of control concerning the pandemics, and the perceived risk of coronavirus (the higher score indicated more intense feelings).

Finally, the Positive and negative affect schedule (PANAS; (Watson et al., 1988) was used to measure prevailing mood and emotions before and during the coronavirus pandemic on a 6-point scale (1=not at all; 6=very often). The higher score indicated stronger positive/negative emotions.

Results

Descriptive statistics of all variables are presented in Table 1. Subjective satisfaction with education during the pandemic, as well as satisfaction with institutional support, feelings of anxiety concerning the coronavirus pandemic, and lack of control concerning

the coronavirus pandemic were average (mean from 3.18 to 3.66 on 6-points scale). Only perceived risk of coronavirus was stronger ($M = 4.31$, $SD = 0.99$).

Table 1 Descriptive statistics of all variables

	M	SD	minimum	maximum
age	21.91	2.13	17.00	30.00
preparation (before)	2.37	1.21	1.00	5.00
preparation (during)	3.40	1.47	1.00	5.00
free time (before)	3.33	1.39	1.00	5.00
free time (during)	3.66	1.53	1.00	5.00
subjective satisfaction	3.18	1.20	1.00	6.00
satisfaction with institutional support	3.63	1.33	1.00	6.00
feeling of threat	3.27	0.59	1.00	5.00
lack of control	3.22	0.65	1.67	6.00
perceived risk	4.31	0.99	1.00	6.00
positive emotions (before)	3.42	0.71	1.30	5.00
negative emotions (before)	2.10	0.67	1.00	4.20
positive emotions (during)	2.97	0.82	1.00	5.00
negative emotions (during)	2.29	0.74	1.00	5.00

Note: M – mean, SD – standard deviation

The amount of free time and estimated the number of hours spent on preparation for lessons increased during lockdown in comparison to the period before pandemic (for free time: $t = 3.75$; $p < .001$; $d = 0.22$; for preparation: $t = 8.04$; $p < .001$; $d = 0.47$). Similarly, experienced negative emotions increased ($t = 6.81$; $p < .001$; $d = 0.39$) and experienced positive emotions decreased ($t = 10.61$; $p < .001$; $d = 0.62$).

Correlations are presented in Table 2. Age correlated positively with experienced positive emotions and negatively with the amount of free time. There were positive associations among feelings of threat, lack of control concerning the coronavirus pandemic and perceived risk of coronavirus. Not surprising, experienced negative emotions correlated positively with those feelings (and positive emotions related to them negatively).

Conclusion

The main aim of the study was to examine the well-being of pre-service teachers (how undergraduates spent their time, their satisfaction, feeling of threat, lack of control, perceived risk of COVID-19, and experiencing positive and negative emotions) during the first lockdown (COVID-19 pandemic).

Table 2 Correlation of well-being variables and teachers' training variables
(only during pandemics)

	1.	2.	3.	4.	5.	6.	7.
1. age	—						
2. preparation	-.09	—					
3. free time	-.17**	-.44***	—				
4. feeling of threat	.04	.08	-.05	—			
5. lack of control	.02	.06	.01	.37***	—		
6. perceived risk	.03	.19***	-.01	.31***	.29***	—	
7. positive emotions	.19**	.00	.05	-.11	-.09	-.05	—
8. negative emotions	.00	.11	-.13*	.23***	.31***	.23***	-.19***

Note: * $p < .050$; ** $p < .010$; *** $p < .001$

As expected, pre-service teachers had more free time. It was not surprising: due to closed schools, limited social contacts and the possibility of temporary work, students had more free time. On the other side, students spent more time by preparing for school duties than in the pre-pandemic period. This finding is consistent with Capinding's study (2021); she found out that students spent 0.6 more hours studying during pandemic then before pandemic. In other study, Bongale et al. (2021) revealed an increase in students who studied for more than 4 hours and more than 7 hours compared to the period before the pandemic.

Next, positive emotions decreased, and negative emotions of undergraduates increased during the first wave of the COVID-19 pandemic. Although symptoms of anxiety, depression, or stress were not directly measured, present findings are consistent with other research (Brooks et al., 2020; González-Sanguino et al., 2020; Gruber et al., 2020; Mazza et al., 2020; Orgilés et al., 2020; Petzold et al., 2020; Qiu et al., 2020; Šrol et al., 2021; Wang et al., 2020) that had revealed an increase in the negative emotionality. Addressing the increasing tendency of negative emotions is necessary because negative emotions have an impact on motivation, achievement goals, performance, effort, learning, cognitive processes, self-regulation, and self-efficacy (for review, see Rowe & Fitness, 2018).

To sum up, the proven relationship between weak well-being (the threat of coronavirus, feeling of powerlessness and perceived risk of coronavirus) and negative emotionality is not surprising and should be a reminder to take care of students' psychological hygiene. Research revealed that challenging situations such as the COVID-19 pandemic disturb their well-being.

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