Psychological Reaction of Teachers in the Context of the Covid Pandemic 19

Gabriela Sorina VANCU¹, Anca Manuela EGERĂU²

¹ University lecturer, University of Aurel Vlaicu, Arad, Romania, vancugabriela@yahoo.com
² University lecturer, University of Aurel Vlaicu, Arad, Romania, anca_petrou@uav.ro

Abstract: The Covid 19 pandemic, is a period with a strong impact in all areas of the families, their social, economic, political and educational life. The rules and sanitary measures to prevent the spread of the pandemic, the educational policies, as well as the isolation, quarantine of some teachers, imposed the transition from classical education to online one. This transition, and also the need for digitalization, have led to major changes in teaching activity and implicitly have affected the well-being of teachers. The present study investigates the psychological reactions of 73 teachers as well as the effectiveness of a psychological intervention applied to 15 teachers, who showed severe psychological reactions during the pandemic period. The motivation of the study derives from the need to offer quick methods and techniques for managing the emotional states they went through. The psychological intervention model presented in the article, aims to reduce the symptoms of stress, anxiety and depression that teachers experience during a pandemic situations, and also to help them apply psychological intervention techniques to regain their well-being.

Keywords: pandemic period; online education; stress; anxiety; depression; pandemic; well-being of teachers; psychological interventions, social support.

1. Introduction

In the current context, in which the entire educational process took place, for a long time, in the online environment, both students and teachers had to adapt quickly to the new conditions, to make changes and adjustments in their behaviour but also in the way of conducting professional activity (transition to online teaching-learning, virtual teacher-student relationship). These changes, as well as the stressors generated by the pandemic, on a population with an already high level of pre-existing stress, such as the teaching profession, have generated additional stress that has manifested physically, mentally and behaviourally, sometimes leading to development of maladaptive coping mechanisms, which can later lead to psychological and even psychiatric problems.

The role of psychologists, is to study stressors and find psychological methods to ensure the well-being of teachers and students.

2. Review of literature

One of the studies that explored the impact of COVID-19 on the education and well-being of teachers and students, found that approximately 25% of the sample of teachers, reported symptoms of stress, which positively correlated with increased concerns about how to teach in the online environment, and how to deal with social isolation (Besser et al., 2020).

"Social isolation (desocialization) implies a lack of contact between the individual and society. This can be a problem for people who are very sociable or have professions that involve face to face relationships.” An example in this area is the teaching profession (Sfetcu, 2020).

On the background of social isolation, the low possibilities of collaboration with other teachers and the lack of direct interaction with students, stress can cause negative transformations on emotional, mental, behavioural and relational level. Zlate (2007) referred to stress as the psychological or physiological response of a person to an environmental stressor.

The method of coping, seeking social support, providing emotional support from family, friends or colleagues, can be interpreted as a necessity, a need, to be able to cope with stress (Xiao et al., 2020). A person feels the need to fit into the social groups he resonates with, these groups satisfying his essential need belonging (Maslow, 2013). Interpersonal relationships,
interaction with the environment, as well as self-positioning, can be factors that generate well-being (Thoits, 2012).

Psychological well-being is expressed by the following factors: autonomy, self-acceptance, personal development, positive relationships with others, control over the environment, purpose/meaning of life, social relationships (Ryff, 1989).

Social support reduces the anxiety symptoms of individuals when facing a stressor (Bodin 2019). Levels of social support are closely linked to the incidence of depression and anxiety, low levels of social support are more likely to lead to symptoms of depression and anxiety when individuals are exposed to stress and social support can be a valuable predictor of mental health (Cao et al., 2020). Thus, it is reasonable to hypothesize that higher levels of social support could help the mental health of people who have experienced the COVID-19 pandemic.

The burden of online teaching tasks was one of the factors that contributed to the increase of the stress level of teachers, because they were forced to use online means of communication, which some did not know before, having to learn quickly. A study conducted in China by teachers, found that 16.5% of participants reported symptoms of moderate to severe depression; 28.8% reported moderate to severe anxiety symptoms and 8.1% reported moderate to severe stress levels (Wang et al., 2020).

The Chinese government has issued guidelines for emergency response in psychological crisis situations for patients with COVID-19 and health care workers, through multidisciplinary collaboration for the formation of mental health teams. When we refer to the emotional, psychological well-being, we can say that it means "the effort to reach perfection, that is, to realize the true potential of the person" (Ryff & Keyes, 1995, p. 100).

The concept of well-being is defined as the person's subjective perception of the cognitive quality of life, of psychological health and life satisfaction, and in terms of the affective component, personal, positive or negative emotional experience is included (Landen & Wang, 2009).

Starting from Carl W. Buehners quote (1898-1974): „They may forget what you said - but they will never forget how you made them feel. " , we emphasize the importance of ensuring the well-being of the teacher, which indirectly influences the mental state of the student (Torkos & Egerău, 2020; Coșarbă & Torkos, 2020). If the teacher has a high level of positive emotional states compared to negative emotional states, the student will implicitly have a high level of psychological well-being (Salami, 2011).
3. Research design

The research of the present article was based on the questionnaire method. This instrument was applied, with the purpose of collecting data regarding the coping methods, and psychological reactions of teachers from Arad County.

We applied scales to interpret the results of the questionnaire we developed in the present research. I used SPSS 20. We applied the T test and the Pearson correlation.

3.1. Objectives of the study

One of the main objectives of the study was to assess the level of stress, depression and anxiety in teacher’s behaviour during online teaching.

The second goal was to identify effective coping methods to reduce the psychological reactions caused by the pandemic. The quantitative data that has been collected in the period of 01.02.2021 and 10.06.2021, was introduced in the SPSS 20 statistical program for analysis.

3.2. Methodology

The research tool used in this study is the questionnaire on the psychological reactions of teachers during the SARS-CoV-2 pandemic, which was built from 6 scales from the Research Central website and which measures the psychological reactions and the coping methods of teachers during the pandemic.

Rating: The statements presented in the questionnaire are in the form of scales marked from 0 to 3, respectively from 0 to 4, and respondents had the opportunity to choose the answer options according to the degree it notifies, according to its status.

The scales found in the questionnaire called: Psychological reactions of teachers in the SARS-CoV-2 pandemic are:
1. Self-control scale (7 items), - coping scale
2. Social Media Search Scale (6 items) - coping scale
3. Stress Reaction Scale (Emotional Instability - 10 items, of which 5 reversed)
4. Coronavirus Anxiety Scale - Neopir (5 items)
5. Depression Scale (10 items, of which 5 reversed)
6. Wellness / Joy Scale (10 items, of which 5 reversed)

Through the questionnaire-based survey, the study desires to analyse the psychological reactions of 73 teachers during pandemics. The main instrument used was the questionnaire. In order to verify the validity of the
scales used, fidelity analyses were performed for the main instrument, used from Research Central website. This was important to specify, because of the validity of the questions used in the questionnaire regarding the subject of interest of the research.

3.3. Variables involved

- The independent variables of this research are: gender, age and background of the subjects,
- The dependent variables are: seeking social support, well-being, joy, self-control and emotional instability.

3.4. Research sample:

The target group participating in this research is made up of 73 teachers attending master's courses at the Faculty of Education, Psychology and Social Work - within "Aurel Vlaicu" University - Arad, aged between 25 and 55 years. The participants are 84.9% women and 15.1% men.

![Figure 1. Gender distribution](image)

Source: Authors' own conception

<table>
<thead>
<tr>
<th>Gender</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>62</td>
</tr>
<tr>
<td>Male</td>
<td>11</td>
</tr>
<tr>
<td>Subjects</td>
<td>73</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>%</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>84.9%</td>
<td>15.1%</td>
</tr>
</tbody>
</table>

Also, depending on the criterion of the environment of origin, the distribution of participants is as it follows: 79.5% of participants from urban areas and 20.5% of participants from rural areas.
Figure 2. Distribution based on the living environment

Source: Authors’ own conception

Table 2. Distribution based on the living environment

<table>
<thead>
<tr>
<th>Mediu de proveniență</th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subiecți</td>
<td>58</td>
<td>15</td>
<td>73</td>
</tr>
<tr>
<td>%</td>
<td>79,5%</td>
<td>20,5%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Authors’ own conception

4. Results and discussion:

Hypothesis 1: There is a direct proportional correlation between the coping method, the search for social support, well-being/cheerfulness, self-control and the age of the subjects.

Table 3. Correlations

<table>
<thead>
<tr>
<th>Correlations</th>
<th>seeking_social_support Pearson Correlation</th>
<th>self_controlling</th>
<th>Joyfulness</th>
<th>varsta</th>
<th>Neopri_Depr</th>
</tr>
</thead>
<tbody>
<tr>
<td>seeking_social_support</td>
<td>1</td>
<td>.408”</td>
<td>.401”</td>
<td>.234</td>
<td>-354”</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.046</td>
<td>.002</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>73</td>
<td>73</td>
<td>73</td>
<td>73</td>
<td>73</td>
</tr>
</tbody>
</table>

Source: Authors’ own conception
As it can be seen in Table 3, a direct correlation coefficient was obtained between the coping method Searching for Social Support and Well-Being / Joy, where $r = 0.401$, significant at a significance threshold $p < 0.01$, which explains the fact that, with the increase of the preference to adopt a coping style, the search for social support increases and the state of well-being / cheerfulness as well.

Social support refers to the help we receive from other people in different contexts, and this can be: emotional support, practical support, information support, especially in the case of older teachers who have been advised in the use of platforms and teaching online by young people and sometimes even by grandchildren. This is manifested by several actions such as: encouraging the use of platforms, offering the feeling of unconditional acceptance, understanding of the mistakes made, empathy, patience with repetitive explanations.

In addition to being an effective method of coping, seeking social support is also a necessity that is part of the "Hierarchy of Human Needs" in "Maslow's Pyramid" (Maslow 2013). The social environment is also where we can find our coping resources, such as seeking social support from others. People, who benefit from the support of family or friends, receive both emotional support, practical and informational support from them, and also support in solving problems, thus increasing the well-being of these people.

At the same time, the coping mechanism, the search for a social support, correlates directly proportionally with the self-control coping method, where $r = 0.408$, significant, at a significance threshold $p < 0.01$, which shows that, with the increase of the preference for using the method search for social support also increases the preference for the self-control coping method.

Social support is also reflected in the relationship between individuals, based on the kindness to offer help, altruism, reciprocity and attachment, which influences the well-being. This helps to reduce stress, helps us to mobilize our resources or re-evaluate the problem situation, in order to find solutions much easier.

Social support brings with it the emotional discharge used under the term Catharsis. There is a link between the coping method, searching for social support and the coping method, self-control by: the tendency to make an effort to control our own emotions in the future and would prove his well-being.

Also, the option for the coping method searching for social support, correlates directly proportional to the age of the subjects, where $r = 0.234$. 

478
significant at a significance threshold \( p < 0.05 \), which means that, with advancing age, the need to look for a social support is higher.

Based on the analysed studies, the researchers have identified that the main determinants of quality of life are: age, income level, psychological/emotional issues (well-being, life expectancy), health (mobility, functional autonomy), social participation and social support (involvement in professional, social, cultural, religious activities), social capital (relationships with family, friends), a sense of security. (Levy et al., 2002). Young teachers do not have problems with the use of technology and engaging in online courses, due to their skills and access to digitization, hopefully unlike older teachers who have lost touch with this technology and strive to keep up, asking for help and support from the young.

**Hypothesis 2.** Coping method the search for social support correlates inversely with the level of coronavírus depression and anxiety.

**Table 3.** Correlations of social support-self-control-joy-age-depression

<table>
<thead>
<tr>
<th></th>
<th>seeking_social_support</th>
<th>self_controlling</th>
<th>Joyfulness</th>
<th>varsta</th>
<th>Neopir_Depr</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pearson Correlation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>.400**</td>
<td>.401**</td>
<td>234*</td>
<td>-.354**</td>
</tr>
<tr>
<td><strong>Sig. (2-tailed)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.000</td>
<td></td>
<td>.000</td>
<td>.046</td>
<td>.002</td>
<td></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>73</td>
<td>73</td>
<td>73</td>
<td>73</td>
<td>73</td>
</tr>
</tbody>
</table>

Source: Authors’ own conception

As can be seen in Table 3, an inverse correlation coefficient was obtained between the coping method seeking social support and the level of depression, where \( r = -0.354 \) significant at a significance threshold \( p < 0.01 \), which shows the fact that with the increase of teachers' preference for the coping method, the search for social support, decreases the level of depression and anxiety. There is an inversely proportional correlation between seeking social support and depression, the prevalence of developing depression in teachers seeking support and emotional support is much lower than in those who do not seek support from others.

Depression can be felt by lack of joy, performance is substantially diminished, and relationships become increasingly strained, the person does not seek social support, is feeling lonely. Therefore, there are several reasons
why seeking social support helps in both preventing and combating depression (Sullivan et al., 2000).

"There are situations when anxiety is a second-order reaction to other problems, and people who are under a lot of stress can trigger a fear reaction, due to the decrease in general mental resistance." (Holdevici, 2011, p. 29).

Stable social relationships, can also determine contact and social support, which prevents depression as well as the risk of relapse (Aneshensel & Huba, 1984; Barnett & Gotlib, 1988).

**Hypothesis 3: There is an inverse correlation between stress response (emotional instability), age, and well-being/cheerfulness.**

**Table 4. Correlation of anxiety-depression-joy-self-control.**

<table>
<thead>
<tr>
<th></th>
<th>MFO_emotional_instability</th>
<th>Coronavirus_Ang_Scale</th>
<th>Neang_Depr</th>
<th>Joyfulness</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPQ_emotional_Instability</td>
<td>Pearson Correlation</td>
<td>.373**</td>
<td>.332**</td>
<td>.784**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.001</td>
<td>0.004</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>73</td>
<td>73</td>
<td>73</td>
<td>73</td>
</tr>
</tbody>
</table>

Source: Authors’ own conception

As it can be seen in Table 3, an inverse correlation coefficient was obtained between the stress response (Emotional Instability) and age, where r = -0.373, significant at a significance threshold p < 0.01, which means that, with the advancing age of teachers, emotional instability decreases, even in a pandemic context.

A person who has reached the chronological age of maturity is considered to have reached emotional maturity as well, so this period is characterized by the desire for productivity and achievement, the ability to orient himself to the outside, so there is a desire for professional and parental fulfilment (Erikson, 1968).

The period between 25 and 35 years is the period of stabilization, in social, marital and professional way, and acquisition of status with influence on the evolution of behaviour and personality. Characterized by stability, creative activity and professional development is also the adult age between 35 and 55 years. The roles played in society and the family are becoming more responsible and characterized by emotional maturation (Schiopu & Verza, 1981, p. 306-312).
At the same time, the reaction to stress (Emotional instability) correlates inversely with well-being, where $r = -0.722$, significant at a significance threshold $p < 0.01$, which means that as the reaction to stress increases (Emotional instability) well-being / cheerfulness, good mood decrease.

Well-being is the condition of a person to feel good both physiologically and psychologically and it is manifested by: emotional balance, joy, enthusiasm, good physical condition and mental tone (Brand, 2020). Obviously, when a person has emotional instability, that person’s emotional balance suffers, as does his well-being.

We found it interesting that depression and stress reactions (coping methods related to stress) correlate with anxiety about Coronavirus. An important thing is that the score obtained for depression is inversely proportional to the level of seeking social support, the reaction to stress also correlates inversely proportional to age and well-being.

"The self of the individual, chooses a defensive method or another - whether it is repression, displacement, transformation in the opposite direction, etc., which he analyzes both in conflict with the impulses and against the release of affections" (Freud, 2002).

The effectiveness of coping depends on the type of stress, the individual and the circumstances. Coping responses are partly controlled by personality (common traits), but also partly by the social environment, especially the nature of the stressful environment.

Thus, it can be stated that stress can cause negative transformations at emotional, mental, behavioural and relational levels, at the same time developing the psychic maladaptive mechanisms (Stănculescu, 2015), therefore with the onset of maladaptive mechanisms, anxiety of the SARS-CoV-2 virus also increases, confirming the hypothesis.

**Limitations:** Being an explorer-type experiment, we did not take into account the predictive factors (we did not analyze the causality), focusing mainly on correlation.

5. Conclusions

Following the statistical processing, all three hypotheses were confirmed:

- Teachers who more often adopt the style of coping in search of social support have a higher level of well-being and are more cheerful.
- The use of the coping method the search for social support determines the use of the self-control coping method as well.
• The method of coping the search for social support correlates directly proportional to the age of the subjects, and with age, the need to seek social support is higher.
• The search for social support is inversely correlated with the level of depression; people who have social-emotional support will be less likely to develop depression.
• Reaction to stress (Emotional instability) correlates inversely with age, which means that with age the level of the factor of emotional instability decreases so the increase in emotional stability with age.
• Reaction to stress (Emotional instability) correlates inversely with well-being, which means that as the reaction to stress (Emotional instability) increases, well-being / cheerfulness decreases, good mood.
• Stress response (Emotional instability) correlates directly with depression as well as Coronavirus anxiety scale, and with increasing stress response (Emotional instability) depression also increases, and with increasing stress response (Emotional instability) Coronavirus anxiety also increases.

6. Psychological intervention plan:

Objectives:
• to establish a functional relationship between the psychologist-teacher and to achieve the necessary compliance to carry out the entire psychological approach;
• to reduce the level of stress, anxiety and depression of teachers who show high levels of anxiety and depression;
• to assess the level of emotional states, as well as the information provided by the teacher about the pandemic;
• to make the teacher aware of who he is, what his desires and needs are, his self-knowledge and what tasks and restrictions he has during this period;
• to teach him to manage his emotions and learn new ways to behave during this pandemic;
• to learn relaxation exercises to reduce stress due to the pandemic;
• to measure the role of the efficiency/inefficiency of this Intervention Plan.
The psychological intervention will be built on 5 pillars:

- **TOPIC 1. ME AND MY FAMILY**
- **TOPIC 2. MY BODY AND MY EMOTIONS**
- **TOPIC 3. SOCIAL SUPPORT**
- **TOPIC 4. ONLINE TEACHING**
- **TOPIC 5. MY WELLBEING**

**Table 4.** Behavioural techniques for managing the emotional states generated by the pandemic, of teachers

<table>
<thead>
<tr>
<th>Technique name</th>
<th>Purpose</th>
<th>Activities</th>
<th></th>
</tr>
</thead>
</table>
| I. Interruption of negative thoughts | • temporary interruption of the series of negative thoughts that lead to the onset of anxiety or depression.  
• the situation in which the teacher is effectively flooded with intrusive memories and images. | • any activity that distracts from intrusive thoughts;  
• teachers should be encouraged to experiment and carry out activities that they enjoy (hobbies, sports, internet) collective activities are recommended;  
• this technique involves distracting them by counting in descending order or carrying out a routine activity that requires concentration (Often, they are pleasantly surprised at how quickly their stress level decreases) (Vancu, 2016). |       |
| II. Relaxing through breathing | • reducing anxiety                                                     | • any model of breathing technique that the teacher learns more easily;  
• the psychologist presents various relaxation techniques. |       |

**Holding breath**

Inhale through your nose until you count to 3, breathe in the lower part of your lungs. Hold your breath until you count to 3, then exhale through your mouth as you say "I'm relaxed."
Rhythmic breathing
Inhale through your nose until you count to 6, setting a rhythm that suits you. Exhale through your nostrils for the same amount of time. Do not hold your breath between inhaling and exhaling. Keep breathing at this rate for a few minutes.

Breath count
This type of exercise can be useful when teachers are "running away from ideas." This exercise can be applied for a minute or two as an abbreviated form of relaxation or can be extended to last 15 minutes or more, thus becoming a long form of meditation. Breathing relaxation is highly recommended but a suggestion is required: "I feel more and more relaxed" "I'm getting calmer"

III. Self-instruction and self-control
- learning some new coping abilities

The psychologist teaches the educator:
- to identify signs of anxiety, sadness, depression;
- to identify the cause of distress;
- to present the way they behave in such situations (concrete examples of behaviors);
- to analyze their maladaptive behavior;
- to find adaptive coping behaviors to use in stressful situations;
- to use a coping card that includes the following suggestions:
  "Even if I can't teach online very well, things can get better"
  "I have my family supporting me"

(By Spielberg, 1983)

References


