On-site vs Online Teaching: Challenges and Coping Strategies

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Abstract: We address in this work the relationship between the perceived demands of the teaching profession as they are conceptualized by job demands-resources model and the teachers coping strategies activated in on-site and online teaching. The participants (N=127) were a convenience sample of Romanian teachers. Specifically, we found that the teaching demands are perceived as being more challenging in online environment when teaching involves interacting with talented children, with children with behavioural problems or with abandoned children. Teachers from rural areas perceive the online teaching of talented children more demanding compared to teachers from urban areas and there are correlations between the teachers' seniority and the teaching demands. The obtained results also showed that some teaching demands in online situation correlate significantly with certain coping strategies (e.g. the positive reappraisal coping strategy is activated by teachers who perceive the different levels of children's development as being challenging in online situation, and the acceptance strategy is used by teachers who resent an increase in teaching workload due to children who disturb the activity in the classroom). These findings are discussed in order to develop strategies to enhance the quality of teaching practices.

Keywords: *demands of teaching profession, coping strategies, on-site and online teaching.*

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1. Introduction

Teaching is simultaneously perceived as a highly demanding and highly rewarding job. The high level of reported stress (Johnson et al., 2005; Johnson & Birkeland, 2003; Neves de Jesus & Lens, 2005; Stoeber & Rennert, 2008; Harmsen et al., 2018) is mainly associated with teachers' working conditions (Skaalvik & Skaalvik, 2011; Day et al., 2007). Excessive workload perceived by teachers is also related to low professional motivation, emotional exhaustion and leaving the teacher profession (Smithers et al. 2012, Skaalvik & Skaalvik, 2011). These high levels of workload perceived in normal teaching conditions have become significantly difficult and complicated when teaching activities must be adapted to online specific (MacIntyre et al., 2020, Crews et al., 2008). High levels of task complexity involve multileveled behavioural and processing demands requiring, therefore, a large number of personal resources (Kanfer & Ackerman, 1989).

This study examines the relationship between the perceived demands of teaching profession as they are conceptualized by "job demands-resources model" (Demerouti et al., 2001; Schaufeli & Bakker, 2004) and the teachers coping strategies activated in on-site and online teaching.

2. Problem Statement

The quality of teaching is related to job performance and is critically affected by teacher well-being. According to the "job demands-resources model" (Demerouti et al., 2001; Schaufeli & Bakker, 2004), the balance between job demands and self-perceived resources is considered the main condition for well-being. Job demands are defined as "those physical, social, or organizational aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs" (Demerouti et al., 2001). To avoid these costs, the job resources must be activated by including achieving work goals in a functional manner, by reducing job demands and their associated costs, and stimulating personal growth and development (Demerouti et al., 2001).

Prior work has shown that managing classroom demands include a large number of activities which increase the workload of teachers (Timperley & Robinson, 2000, Bubb & Earley, 2004, Gold & Windscheid, 2020, Clipa & Boghean, 2015). Furthermore, the online environment represents a variable that causes this intensity of teachers working soar (Crews et al., 2008, MacIntyre et al., 2020).

The Covid 19 pandemic crisis has also increased the psychological stress in the education system. Teachers had to deal with considerable changes in the teaching and organization of classroom management. School closures, switching to online education without prior training, and the mandatory restrictions have been factors that have increased psychological stress for teachers. In the context of these drastic changes, teachers in Romania have had to face the challenge of fully transferring all the lessons into the online system and of finding appropriate coping strategies (Obrad, 2020; Pânișoară et al., 2020). The teacher appraisal of these demands determines the activation of coping strategies in order to maintain the sense of self-efficacy (Lambert et al., 2009, Admiraal et al., 2000, Clipa, 2017) and to activate the professional well-being.

Coping is a complex process that allows individuals to deal with stressful situations. The environmental demands and resources are evaluated in relation with personal dispositions (Turliuc & Duca, 2014, Schipor & Vatavu, 2017, Rusu et al., 2019, Schipor et al., 2011). Coping strategies are considered by Monat and Lazarus (1991) as being the „individual's efforts to master demands (conditions of harm, threat, challenge) that are appraised (or perceived) as exceeding or taxing one's resources". In their seminal article, Folkman and Lazarus (1984) proposed "the transactional model of stress and behavioral self-regulation" that distinguishes two types of coping strategies: problem-focused strategies, aiming to solve the perceived problem or alter the source of stress, and emotion-focused strategies pursuing to manage the emotional stress associated with the situation. While early studies emphasized the problem-focused strategies as being more functional, further research recognizes that combining the two coping strategies is more beneficial (Carver et al., 1989; Boniwell & Tunariu, 2019). The wide used Folkman and Lazarus' two-dimensional model of coping was completed by a multidimensional model developed by Carver et al. (1998) that proposed fourteen strategies grouped in three main behavioural factors: approach strategies, avoidant strategies, and neither approach nor avoidant strategies. Garnefski et al. (2002) underlined that "the regulation of emotions through cognitions is inextricable associated with human life". They emphasised the necessity to clearly differentiate the cognitive coping from behavioural coping. Cognitive emotions regulation is considered a broad process which includes nine cognitive strategies. These strategies were divided in two separate types: the theoretically "more adaptive" strategies (positive refocusing, positive reappraisal, putting into perspective, refocus on planning, and acceptance), and the theoretically "less adaptive" strategies

(rumination, self-blame, blaming others, and catastrophizing) (Garnefski et al., 2002).

While wide literature focuses on teacher stress and coping behavioral strategies, limited research has explored the cognitive coping strategies in the online teaching tasks. The main purpose of this study is to investigate the teachers' coping strategies activated in on-site and online teaching demands.

This study contributes to the existing literature by expanding the knowledge about the teaching demands and about the emotional coping methods used by the teacher in both classical and online system. As far as we know, this is the first Romanian research that highlights the differences between online and on-site teaching in terms of how teachers feel the demands of their profession and also with respect to the strategies of emotional coping.

3. Present study

The present research aims to answer the following research problems:: (1) Are there differences in the demands of the online teaching profession compared to the on-site teaching situation? (2) What coping strategies do teachers use in online and on-site teaching situations when they encounter different demands?

In the present study we intend to investigate the relationship between demands of teaching profession and coping strategies in online and on-site situations.

Firstly, our study objective is to investigate the differences between the demands that teachers perceive in on-site activities, compared to the situation of online activities. Secondly, we aim to investigate the correlations between the demands perceived by teachers and their coping strategies. The research hypotheses are:

H1: Teachers will perceive more demands in online activities than on-site activities.

H2: Coping strategies correlate with the demands perceived by teachers both online and on-site.

4. Method

4.1. Procedure and participants

The present study is an investigative research based on questionnaires. In the first half of May 2020, a set of online questionnaires was applied to 127 pre-university Romanian teachers in the form of a snowball. Subjects participated voluntarily and they were not reimbursed for

participation in this study. The study involved 127 Romanian teachers, most of them female ($n = 123$), with ages between 19 and 55 ($M = 39.26$ years, $SD = 9.20$). 73 of them came from urban areas and 54 from rural areas. The didactic experience ranged from less than a year to 37 years ($M = 15.46$, $SD = 10.04$). Participating teachers worked in all school levels: preschool (11%), primary school (63%), middle school (18.1%), and high school (7.9%). Data were collected using a web-based questionnaire that was posted in targeted Facebook groups. Several rounds of questionnaire distributions were necessary to increase the response rate. This study was approved by the Institutional Review Board of University. All participants have received and gave their online informed consent. They were also informed that they could exit from the study at any time. Subjects participated voluntarily and they were not reimbursed for participation in this study.

4.2. Instruments

Participants completed demographic information regarding age, gender, education, work experience, class and school where they teach. They also completed a series of tools for assessing the demands of the teaching profession and coping strategies for both online and on-site teaching.

To evaluate the teachers' perception towards the teaching demands, we applied the scale demands for Children with Problem Behaviors (demands related to behavior management and interactions with students that disrupt the learning environment in the classroom - 4 items) and the scale for Other Student Related Demands (demands from students, such as Romanian language acquisition and physical disabilities - 11 items) from the Classroom Appraisal of Resources and Demands (CARD, Lambert et al., 2001). Demands scale assesses severity class demands on a 5-step Likert scale, ranging from 1 ("not demanding") to 5 ("extremely demanding"). The teachers evaluated the demands for both the online and the online situation. In the present study, Cronbach's alpha was $\alpha = .866$ (for demands in on-site situation) and $\alpha = .864$ (for demands in online situation).

To investigate the coping strategies of teachers was applied the Romanian version of the Cognitive Emotional Regulation Questionnaire - CERQ (Perte & Miclea, 2011, Garnefsky et al., 2002), which is a self-report questionnaire measuring coping/emotion regulation strategies. CERQ has 36 items, each referring to what a person thinks when facing a negative or stressful life event. The items are divided proportionally over nine subscales, each scale has 4 items. Thus, the questionnaire distinguishes among nine different cognitive coping strategies: self-blame, acceptance, rumination, positive refocusing, refocus on planning, positive reappraisal, putting into

perspective, catastrophizing, other-blame. In the present study, Cronbach's alpha was $\alpha = .77$ for self-blame, $\alpha = .70$ for acceptance, $\alpha = .82$ for rumination, $\alpha = .83$ for positive refocusing, $\alpha = .76$ for refocus on planning, $\alpha = .80$ for positive reappraisal, $\alpha = .81$ for putting into perspective, $\alpha = .71$ for catastrophizing, and $\alpha = .81$ for other-blame.

4.3. Analytic Strategy

We used IBM SPSS 22 for descriptive statistics, correlations, and t-tests for paired samples.

5. Findings

5.1. Preliminary analysis

The preliminary analyses evaluated three demographic variables: the teachers' environment of residence (rural or urban), the teachers' school location (rural or urban) and the teachers' seniority.

The t tests for independent samples demonstrate that there were no significant differences between participants teaching in urban areas compared to those teaching in rural areas in terms of classroom demands, both in the online and on-site contexts. Also, the differences were verified according to the residence environment of the participants and we found differences between rural and urban areas in terms of three aspects: teaching talented children in online ($t(125) = -2.354$, $p < .020$), teaching abandoned children or children from foster care in online ($t(125) = 2.062$, $p = .041$) and on-site ($t(125) = 2.250$, $p = .026$) situations. In this regard, we found that teachers from rural areas perceive the online teaching of talented children more demanding ($m = 2.74$), compared to teachers from urban areas ($m = 2.15$). Instead, teachers in urban areas feel more challenged when teaching abandoned children both online ($m = 1.58$) and on-site ($m = 1.42$), compared to teachers who work in rural areas ($m_{\text{online}} = .96$; $m_{\text{on-site}} = .85$).

The results did not show significant differences in the types of coping used by teachers, depending on the environment of residence or the environment in which the school is located.

We tested whether there are correlations between the teachers' seniority and the teaching demands. We found that teachers with less experience are more likely to consider more demanding the situations where they teach children with physical disabilities in the online context ($r = -.176$, $p = .048$).

We tested whether there are correlations between the seniority of teachers and the teaching demands. We found that less experienced teachers

are more likely to feel more stressed when they teach children with physical disabilities in the online context ($r = -.176$, $p = .048$), when they teach abandoned children online ($r = -.223$, $p = .012$) and on-site ($r = -.203$, $p = .022$), when they teach children who disrupt class activity online ($r = -.215$, $p = .015$) and on-site ($r = -.204$, $p = .021$), and when they teach children with behavioural problems ($r = -.193$, $p = .030$).

No significant correlations were found between teachers' seniority and types of coping.

5.2. Results

To test the first hypothesis, *Teachers will perceive more demands in online activities than on-site activities*, we applied t test for paired samples. The results showed that teachers felt significantly more demands in the online teaching situation than in the on-site situation under the following conditions: when the number of students is high ($t = -5.37$, $p > .001$), when students come from different ethnic communities ($t = -3.12$, $p = .002$), when students have different levels of development ($t = -3.18$, $p = .002$), when there is a large number of students in the classroom with grades below the passing level ($t = -3.01$, $p = .003$), when there are students with different talents ($t = -3.19$, $p = .002$), when teacher work with abandoned children or children from foster care ($t = -2.21$, $p = .028$) (Table 1.)

In addition to these results, it is also observed that in three circumstances teachers perceive significantly more demands in the situation of on-site teaching, compared to online teaching. Specifically, they perceive as more demanding on-site situations when they work with students who have limited abilities to use the Romanian language ($t = 7.26$, $p > .001$), when there are students in the class who disturb the activity ($t = 2.97$, $p = .004$) and when students have behavioural problems ($t = 3.11$, $p = .002$) (Table 1.). In these conditions, the first hypothesis is partially confirmed.

Table 1. Differences between the demands felt by teachers in on-site teaching compared to online teaching (Paired Samples T-Test)

Demands		mean	t	df	Sig. (2-tailed)
1.	on-site	2,7480	-5,375	126	,000
	online	3,4173			
2.	on-site	2,4364	7,260	109	,000
	online	1,2364			
3.	on-site	1,3307	-3,128	126	,002

	online	1,5748			
4.	on-site	2,8976	-3,188	126	,002
	online	3,2677			
5.	on-site	1,9685	-3,010	126	,003
	online	2,1890			
6.	on-site	2,4488	-1,377	126	,171
	online	2,5906			
7.	on-site	1,2835	,000	126	1,000
	online	1,2835			
8.	on-site	2,1575	-3,194	126	,002
	online	2,4016			
9.	on-site	1,1811	-2,216	126	,028
	online	1,3228			
10.	on-site	2,0079	-1,281	126	,203
	online	2,1417			
11.	on-site	2,6063	2,975	126	,004
	online	2,2362			
12.	on-site	2,6457	-,640	126	,524
	online	2,7165			
13.	on-site	2,6299	3,117	126	,002
	online	2,2598			
14.	on-site	3,0866	1,048	126	,297
	online	2,9685			

Note. 1. Number of students in the class; 2. Children with limited abilities to use the Romanian language; 3. Children from different ethnic communities; 4. Different levels of children's development; 5. Number of children with grades / grades below the passing level; 6. Children with learning disabilities; 7. Children with physical disabilities; 8. Talented children; 9. Abandoned children or children from foster care; 10. Children who have a small number of attendances; 11. Children who disturb the activity in the classroom; 12. Children who do not follow the instructions received; 13. Children with behavioural problems; 14. Children who need more time and energy compared to other children.

To test the second hypothesis, *Coping strategies correlate with the demands perceived by teachers both online and on-site*, we used Pearson correlation analysis. The results obtained showed that some demands felt by teachers in online situation correlate significantly with certain coping strategies, as follows (Tables 2a, 2b):

- different levels of children's development, in online situation, is positively correlated with positive reappraisal ($r = .215$, $p = .015$)
- children who disturb the activity in the classroom, in online, situation is positively correlated with acceptance ($r = .201$, $p = .023$)
- children who need more time and energy compared to other children, in online situation, correlates positively with acceptance ($r = .258$, $p = .003$), refocus on planning ($r = .192$, $p = .031$) and positive reappraisal ($r = .234$, $p = .008$)
- abandoned children or children from foster care is negatively correlated with rumination in on-site ($r = -.194$, $p = .029$) and in online ($r = -.179$, $p = .044$).
- children who have a small number of attendances, in on-site situation, is positively correlated with catastrophizing ($r = .186$, $p = .036$)

The results confirm the second hypothesis.

Table 2a. Pearson correlation between coping strategies and teaching demands in online situation

	different levels of children's development	children who disturb the activity in the classroom	children who need more time and energy compared to other children	abandoned children or children from foster
positive reappraisal	.215*			
acceptance		.201*	.258**	
refocus on planning	.234**		.192*	
rumination				-.179*

** . Correlation is significant at the 0.01 level

* . Correlation is significant at the 0.05 level

Table 2b. Pearson correlation between coping strategies and teaching demands in on-site situation

	abandoned children or children from foster	children who have a small number of attendances
rumination	-.194*	
catastrophizing		.186*

*. Correlation is significant at the 0.05 level

6. Discussions

Our study results show the relationship between demands of teaching profession and coping strategies in online and on-site situations. In this section we use our results to draw a set of implications for the educational policy.

We found that online activities increase the perceived difficulty of teaching tasks in the case of managing a big number of students in the class, in the case of children with limited abilities to use the Romanian language, when children come from different ethnic communities or have different levels of development, and with the number of children with grades below the passing level. The teaching demands are also perceived as being more challenging in online environment when teaching involves relating with talented children, with children with behavioural problems or with abandoned children. These results suggest the requirement of reconsidering the educational strategies activated in online education when the mentioned situations are involved. Teachers' discomfort would be perceived as decreasing if they perceived some applied educational management strategies aiming to sustain teachers' efforts. The demographic variable such as teachers' seniority and the environment in which the school is located (rural or urban) must be taken into consideration as important landmarks to design this educational management interventions. Further research should investigate the educational policy measures considered by teacher as being effective to reduce these perceived difficulties.

Along with other studies conducted on teachers in Romania during the same period of the pandemic (Obrad, 2020; Pânișoară et al., 2020), the present study highlights specific elements that create additional challenges for the teacher's profession, both in the context of online teaching (the number of students, the different ethnic communities of the students, the different levels of students development, the students with grades below the passing level, talented students, the abandoned children or children from

foster care), and in the case of on-site teaching (when students have low abilities to use the Romanian language, when students disturb the activity and when students have behavioural problems). Through this comparative analysis, the present study is among the first studies that concretely highlight the difference in dynamics regarding the demands of the teaching profession perceived by teachers in the online and on-site situation. Through these results we can observe that new pedagogical guidelines are needed, and that the teachers should receive support from a methodological and professional point of view. The methodological standards need to be adapted to the changes brought about by the pandemic context, and this study highlights several issues of online teaching, compared to the situation of on-site teaching.

In these challenging situations, our study highlighted the relation between the perceived difficulty of the demand and the activated coping strategies. Therefore, in online situations, teachers who perceive the different levels of children's development as being challenging tend to activate to a greater extent the positive reappraisal coping strategy. Subsequently, there is a tendency to activate the acceptance strategy in the case of teachers who resent an increase in teaching workload due to children who disturb the activity in the classroom or those who need more time and energy. These results reinforce the idea of the teacher's capacity to activate adaptative cognitive coping strategies (Garnefski et al., 2002). Teacher training for online education must include the teachers' personal development involving resilience and coping strategies as a necessary goal.

7. Conclusions

(1) Are there differences in the demands of the online teaching profession compared to the on-site teaching situation? (2) What coping strategies do teachers use in online and on-site teaching situations when they encounter different demands? Based on our findings regarding these questions, we generated some directions for educational policy involving teacher training for online environments that may provide teachers with appropriate tools and positively impact their professional development. Assuming the non-inferential character of our results, we hope these outcomes will bring forward information for further studies and applications in this area.

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