Abstract
The present paper aims to investigate the complex issue of work engagement during a time of constant change and confusion for the Romanian pre university teachers. Additionally, the research intends to show the way in which this category of employers coped with the teaching methods change during March-June 2020 (i.e. the period of time in which all pre university educational institutions of Romania deployed solely online classes). It is assumed that the feeling of engagement that belonged to a specific set for the professional activities, e.g. meeting physically the students in a classroom, was influenced by the change of the teaching environment and the challenges brought by it. In order to gain a better understanding for the previously mentioned issues, data was gathered through an online questionnaire answered by schoolteachers and later on analyzed according to quantitative research methods. The results of this study could be of importance for any of the educational field’s stakeholders as the challenges brought by the Covid-19 pandemic are still not over and a coherent human resources strategy should continue to be developed. Hence, this paper also aims to discuss the implications of engaged and disengaged teachers during these changing times and to offer human resources management suggestions.

Keywords: work-engagement, teachers, education, human resources, covid-19.

1. INTRODUCTION

On the 11th of March 2020, the World Health Organization declared that the Covid-19 epidemic is a pandemic. Hence, the world has started to change its behavior in order to prevent the spread of the new virus. One of the first and most important recommended measures was the social distancing that send almost the entire population into telework. The teachers made no exception.

Starting March the 11th, 2020, kindergartens, primary schools and high schools across Romania had all their physical classes suspended due to Act no.6/09.03.2020 stated by the National Committee for Special Emergency Situations, followed by Act no.79/DGIP/10.03.2020 issued by the Ministry of National Education. However, none of this official document gave clear instructions to the almost 2.8 million pre university children (Peticila, 2019) and 170,000 pre university teachers (Bechir, 2019). During the following
months each teacher, together with each school decided for themselves how to design and implement the teaching activities in lack of formal instructions from the Ministry of National Education. The school year 2019/2020 ended through online activities for all children except the ones from the terminal years, such as the 8th grade and the 12th grade who returned under special covid-19 hygiene conditions to review the syllabus of their exams. Those three months meant a complete change of paradigm for schools across the country and not only, as traditionally teaching activities in the pre university system means face to face interaction between the teachers and their students.

However it is acknowledged the fact that March-June 2020 was a period of great confusion, anxiety and incentive to adapt for all the actors belonging to the national educational system, the present study focuses mainly on teachers and on the challenges they had to face.

The necessity of such a research comes in the context where studies regarding work engagement focused exclusively on teachers, even though in increased numbers in the last years, are still in their beginnings. Hence, an even more particular investigation on teachers’ work engagement under covid-19 pandemic could bring another perspective to understanding this concept.

2. LITERATURE REVIEW

In this part of the article, the focus is on presenting a brief summary on the latest research about the concept of work engagement, with a special interest in the teachers’ work engagement. Additionally, a particular significance will be given to the context in which this study is developed, the Covid-19 pandemic.

Work engagement

Work engagement has been a growing preoccupation for the human resources specialists and not only, for the past years. However, the starting point for most of the studies concerning this concept is the definition proposed by Schaufeli et. al. (2002). It states that the engagement is a positive, fulfilling, work related state of mind that is characterized by vigour, dedication and absorption. The three key components of this definition, the vigour, the dedication and the absorption are understood by the authors that developed this approach of defining the work engagement, as it follows. The vigour dimension is described as the mental resilience shown in the working activities and the high levels of energy. The second key concept, the dedication dimension, is presented as the strong involvement in one’s work together with feelings of significance, challenge, pride, enthusiasm and inspiration. Last but not least, the absorption dimension represents when an employer is characterized by being fully concentrated and happy about its work and with a difficulty with detaching from its duties.

The same authors as mentioned above, initially developed a tool to measure the work engagement, named the Utrecht Work Engagement Scale, UWES – 17, to which they have subsequently proposed a
shortened version, the UWES – 9 with only 9 questions (Schaufeli et al., 2006). For the present study the UWES-9 version is used to measure the teachers’ work engagement.

**Work engagement for teachers**

Lately, it is a constant increased attention for studying the work engagement of teachers suggested by a 2018 study (Perera et al., 2018) motivated by the interest in gaining evidence that shows a connection between the behavior, the beliefs and the emotional dimension of teachers and the results obtained by their students. The work done by a teacher has numerous specificities that offer uniqueness to this occupation. Researches of the last decade have shown that teaching is a challenging job emotionally, physically and intellectually (Van Wingerden et al., 2019). Moreover, recent studies from right before the burst of Covid-19 pandemic were advancing the need for the western societies of having teachers capable to educate children in a digitalized and globalized world (Van Wingerden et al., 2019).

To the same extent, research into this field, meaning measuring the work engagement of teachers, is still scarce regarding the need for this sort of information. There is still a strong need to map the motivational and engagement patterns of teachers (Klassen et al., 2013, Yerdelen et al., 2018). Usually, the teachers’ engagement is measured in the context in which it is a mediator for other aspects of a teacher’s life such as the satisfaction or the level of wellbeing (Colomeischi, 2017).

**3. METHODOLOGY**

This section of the paper has the role to present the process of collection and organisation of the data necessary to answer the research’s questions. The study was designed to investigate the complex issue of work engagement during a time of constant change and confusion for the Romanian pre university teachers, as well as to show the way in which this category of employers coped with the teaching methods change during March-June 2020.

In order to obtain the desired data, it was used a quantitative approach for developing the data collection. For this purpose, it was chosen the investigation method developed through an online survey. The 32-question survey was designed and distributed through Google Forms platform. Regarding the chosen sample, it was spread across an availability sample and a total of 75 people, pre-university teachers have anonymously answered the questions.

**Sample description**

For the purpose of obtaining knowledge about the teachers’ work engagement, the change and the adaptation process they have gone through the Covid-19 pandemic, 75 answers have been analysed. The answers were obtained from pre-university teachers from across Romania. Regarding the respondents’ gender, 96% of them were females and only 4% males. This ratio follows the figures that
show that in general, in Romania, at pre-university level, female teachers are predominant, from 68.2% in technical schools to 99.7% in kindergartens. This ratio is found at European level as well (The Ministry of National Education, 2018).

Almost half of the respondents, meaning 49.3% or 37 teachers taught during the school year of 2019-2020 in Bucharest, the capital city of Romania and the rest in different counties. The following counties with the highest number of respondents were Iasi County, with 5 teachers answering the survey filling call, meaning 6.6% and Brasov County, with 4 respondents, representing 5.3% of the total answers.

Another significant piece of information regards the area in which the schools where the teachers taught were situated. Hence, 76% of the total respondent teachers gave classes in urban located schools, 22.6% in rural situated schools and only one respondent gave classes in schools from both rural and urban areas. This particular piece of information could give a hint regarding the technological possibilities of the schools its pupils and teachers, according to the data presented in table 1.

**TABLE 1. Penetration rates for fixed and mobile broadband internet at 31.12.2019**

| Fixed broadband connection per 100 urban households | 75.1% |
| Fixed broadband connection per 100 rural households | 49.3% |
| 3G and 4G Mobile broadband connection per 100 inhabitants | 87.4% |

Source: The 2019 ANCOM (The National Authority for Administration and Regulation in Communications) report

Table no.1 shows the fact that children belonging to the rural areas have less possibilities to access the online classes that the ones from the urban areas, meaning that their teachers are confronted with bigger challenges regarding the opportunity to keep in touch with them.

Table no. 2 shows the respondents’ age and number of years of teaching. This figure can give us a hint regarding the measure in which people are used with integrating the technology into their lives already.

**TABLE 2. Age and years of teaching of the respondents**

| Age       | Years of teaching | Average value | Median value | Average value | Median value |
|-----------|-------------------|---------------|--------------|---------------|--------------|
| 38 years old | 36 years old      | 9 years       | 5 years      |

Source: Author’s contribution
Figure no 1 shows in how many schools the respondent teachers taught during the school year of 2019-2020.

As previously mentioned, in lack of official directions that could have unified the teaching practices between March and June 2020, each school and sometimes each teacher conducted the teaching activities according to their own beliefs, capabilities, infrastructure. Hence, the fact that a significant percent of almost 35% of the respondent teachers gave classes into 2 or more schools involved a higher amount of work into aligning its teaching style to every school’s practices.

In terms of the subjects taught by the respondent teachers, 10 of the respondents are primary school teachers, 8 of them teach Romanian language, another 8 of them teach Economics and Business Education, some other 7 teach Mathematics and another 7 teach Human Sciences. The remaining respondents’ taught subjects as History, Geography, Foreign Languages, Computer Sciences, Biology, Music and Visual Arts.

**Survey description**

The data used for the present paper was collected in September 2020 and each of the respondent teachers answered benevolently at the survey.

The questionnaire consisted of four main sections, as it follows: the first section was designed for collecting characterization data for the respondents. Most of these data were presented in the above section and they are used to interpret the following results. The second section of the survey consisted of questions that could offer information regarding the degree in which the teachers were accustomed with the use of IT&C and how they managed to integrate it into their daily work from March till June 2020. The third part was designed in order to assess the perception of the teachers over telework, furthermore to gain information regarding the challenges they had to overcome and about their adaptation process during the
telework teaching activities from March until June 2020. This section consisted of both open and close ended questions in order to obtain high quality data. The first three sections were the author's own contribution.

The fourth section of the survey designed in order to gain information about the teachers’ work engagement, was based on the use of a scale taken from Research Central, with the corresponding statements and respecting the scoring methods. (http://www.researchcentral.ro/index.php?action=listateste&ID=452). The Utrecht Work Engagement Scale or the UWES-9, includes 9 items and measures the work engagement according to Schaufelli et al. (2002) definition.

4. RESULTS AND DISCUSSIONS

In this part of the paper, the focus is on offering an interpretation on the data obtained through the survey and to attentively analyse them. It is of great importance to put the obtained information in both the context of the actual scientifically knowledge as well as in the context of today’s society. In this way, the present study could be of help for fellow researchers and different other stakeholders interested in the topic and willing to further develop it.

Measuring the work engagement of teachers

| TABLE 3. MEAN VALUES FOR THE WORK ENGAGEMENT DIMENSIONS (N=75) |
|---------------------------------------------------------------|
| Dimension          | Mean value |
|-------------------|-------------|
| Vigor             | 5.08        |
| Dedication        | 5.41        |
| Absorption        | 5.08        |

Source: Author’s contribution

As it can be noticed in table number 3, the mean values for the entire number of respondents are the following: a score of 5.08 for the vigour dimension, a score of 5.41 for the dedication dimension and a score of 5.08 for the absorption dimension. According to the Utrecht Work Engagement Scale Manual, all scores between 5 and 6 correspond to a frequency of a couple of times per week or daily in feeling vigorous, dedicated and absorbed by one’s work.

| TABLE 4. MEAN VALUES FOR THE WORK ENGAGEMENT DIMENSIONS FOR DIFFERENT CATEGORIES OF TEACHERS |
|------------------------------------------------------------------------------------------------|
| Category of teachers | Teaching in urban areas (N=57) | Teaching in rural areas (N=17) | Teaching in 1 school (N=49) | Teaching in 2 or more schools (N=26) |
|----------------------|-------------------------------|-------------------------------|-----------------------------|--------------------------------------|
| Dimension            |                               |                               |                             |                                      |
As shown in table number 4 when computed separately for different categories of teachers, the work engagement scores for each of the three dimensions are quite close to the scores obtained by the entire analysed population.

**The vigour dimension**

Regarding the vigour dimension, the people teaching in the urban area obtained an almost identical score, whereas the people teaching in rural areas and in two or more schools obtained slightly higher scores. On the other hand, people teaching in only one school obtained a score a little bit smaller than the entire population for the vigour dimension.

As all scores indicate a high level of vigour for all the teachers, it can be noticed that the highest scores are obtained by the ones teaching in rural areas and by the ones giving classes in two or more schools. As the definition for the vigour dimension states that it represents the mental resilience shown for the working activities, it can be assumed that those normally teaching under these conditions, were not supplementary affected by the Covid-19 pandemic and lockdown conditions and continued their work in the same vigorous way.

**The dedication dimension**

This dimension of the work engagement is the one where the respondent teachers scored the highest, with a value of 5.41 for the entire population. As this dimension represents the strong involvement of someone into its work, this result shows the fact that the teachers were very involved into adapting themselves to the newest conditions of doing their jobs and that they did their best to overcome the challenges brought by the Covid-19 pandemic to the educational system. Additionally, it can be observed that the scores for different categories of teachers follow the same pattern noticed for the vigour dimension scores, with slightly higher values for the teachers giving classes in the rural areas and into two or more schools.

**The absorption dimension**

This dimension got scores similar to the ones for the vigour dimension. They show the fact that teachers were more times a week or even daily absorbed with the work they had to do and got into a full concentration mode. The value for the entire population is 5.08, with scores a little bit below for the teachers giving classes in urban areas and into only one school. However, it can be assumed that the feeling of absorption came as a natural consequence for the fact that all the teachers had to rethink their
teaching strategy, most likely to learn new tools and to find mechanisms to interact and interest their students.

**Change and adaptation during March-June 2020 for the teachers**

An important issue raised by the necessity to telework for pre university teachers was given by their level of IT&C literacy and their abilities to design and give classes in an online environment rather than the usual face to face system. The following figures show how the respondent teachers assessed these issues.

Figure number 2 illustrates that in a percentage of 78.7% the respondent teachers gave online classes from a laptop, whereas the second most used device was the smartphone, in a percentage of 65.3%. This figure indicates that for those using exclusively the smartphone, the process of conducting an online class should have been more difficult as a smartphone has limited options for creating and editing a document, for instance. These numbers should be correlated as well with the ones shown by figure number 6 which shows the platforms used for giving online classes. Hence, a quite significant percentage of 68% used WhatsApp instant messaging app to keep in touch with their students and for sending and receiving materials. However, the most used platform was Google Classroom, in a percentage of 70% as it became quickly popular due to different advantages: the fact that it was free and people could have accessed it only by having a Gmail account and by having a user friendly and intuitive menu. Last but not least, the third most popular option to keep in touch with students was Zoom platform for video conferencing.

**FIGURE 2. THE DEVICES USED BY THE TEACHERS IN THE ONLINE CLASSES**

Source: Author’s contribution

Furthermore, figure number 3 shows the fact that the majority of teachers, in a percentage of 84% did own the device they used for the telework. In this context, it has to be reminded the fact that during March-June 2020, the Ministry of National Education did not offer any material support for the teachers in need to do telework, hence, people had to continue working using the tools they already had on hand.
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FIGURE 3. THE DEVICES OWNED BY THE TEACHERS FOR THE ONLINE CLASSES
Source: Author’s contribution

Regarding the IT&C literacy of the pre-university teachers, the respondents for this research stated in a percentage of 52% that they pre-owned knowledge about the usage of the platforms, however they had to improve them in order to cope with the new requirements and necessities. Additionally, it has to be reminded the fact that the mean age of the respondents is of 38 years old, so young people that are already used with integrating the technology into their lives. This theory is supported also by the 32% percentage of people who stated that they were already good at using the necessary platforms for giving online classes.

FIGURE 4. TEACHERS’ IT&C KNOWLEDGE FOR DESIGNING AND GIVING ONLINE CLASSES
Source: Author’s contribution

In terms of whether teachers felt that the telework they had to do between March and June 2020 improved or not their IT&C skills, as shown in figure number 5, 78.7% of the respondents stated that their abilities got improved and only 21.3% did not feel they have learnt new skills during this period of time.
In lack of clear recommendations and instructions from the Ministry of National Education, each school and each teacher designed on its own the development of online teaching. Hence, in a quite high percentage of 72%, the respondent teachers tried to keep the classes according to the school schedule. On the other hand, there were also almost 15% of the teachers that admitted the fact they only kept in touch with their students in writing.
Benefits and obstacles

Almost 60% of the respondent teachers think that the teaching process was changed in a very high way or in totality during March – June 2020.

When asked about the benefits of the online teaching, 21% of them stated they do not see any benefit of moving the teaching activities in an online system. The rest of them offered benefit examples such as more time spent with their families, enjoying the comfort of their homes while working, gaining the time they would have spent in traffic – as part of personal benefits and on the other hand, it was the recognition of some professional gains such as the improvement of IT&C abilities, having the possibility of designing more interesting classes, the easy and quick access at resources.

On the other hand, in terms of obstacles they accused the lack of proper infrastructure, the lack of physical contact with their students and the possibility of receiving genuine, real time feedback from them, the amount of extra work they had to do in order to adapt their pre-existing materials, the risk to be superficial in the teaching activities. Hence, all respondent teachers claimed they had difficulties in keeping in touch with their students, work colleagues and parents of their students.

5. CONCLUSIONS

The purpose of this study was to gain understanding on the matter of work engagement related to the pre-university teachers work during Covid-19 pandemic times as well as to investigate the challenges the teachers had to face and their coping mechanisms in order to adapt to online teaching activities.

Related to the teachers’ work engagement, as the figures presented in the previous section of this research paper showed, all respondent teachers had high scores on all the three dimensions of the work
engagement as defined by Schaufelli et al. (2002). This could evidence the fact that teachers are a category of employers engaged to the work itself (i.e. teaching) and the exterior context has a little influence on their work, engagement wise. A similar conclusion was also found in other related researches (Misu, 2020) where the engagement scores were not influenced by the type of contract under which an employer teacher was hired.

Most likely, as the Covid-19 pandemic is still going on, researches related to its impact on different aspects of the teacher’s work are still incipient.

Furthermore, this research also evidenced the fact that March – June was a time of great challenge for teachers and they had to make impressive efforts to adapt their work to the new teaching activities, as shown in their answers presented in the previous section of the paper. On the other hand, they were able to find the advantages of those months and to extract benefits that could be used in the future.

In terms of stakeholders that could make use of this paper’s findings, there might be the pre-university schools’ principals, their hierarchical superiors, the Ministry of National Education, other teachers, parents of students and even students themselves. Moreover, there could as well be some other categories of stakeholders that might be interested in further developing this study and explore in more details the teachers’ work engagement and their behaviour during Covid-19 pandemic.

Last but not least, it has to be taken into consideration the fact that this study has major limitations, starting with the rather small number of respondents. The sample was an availability one and it does not cover all categories of teachers in order to give this research’s statistical significance. There are many chances that a replication of this study on a different sample to produce different results and give us more in-depth information about the teachers’ work engagement, their challenges and the adaptation process they have gone through the Covid-19 pandemic.

In the end, the question that the main stakeholders should constantly address to themselves is how to keep this strategic human resource of a country more and more engaged to its job no matter the exterior context is.

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