

WAYS OF MOTIVATING HUMAN RESOURCES IN THE PUBLIC EDUCATION SYSTEM

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Abstract: This article presents ways to motivate teachers in Romania and other European countries, based on the analysis of educational policy documents, legislative documents, curricular ones that underlie the motivation of education staff, and the literature on career management. Using the Eurostat database, we analyzed and estimated the level of motivation of teachers in pre-university education. For the education system and teaching career management, it has been observed that financial motivation factor is not the most important one, but professional development and the pleasure of teaching are, and the responsibility is assumed together with the recognition of their efforts. The main challenge is to determine the most appropriate ways to motivate teachers in order to increase their performance.

Keywords: motivation, human resources, education goals, education system.

1. INTRODUCTION

Over the years, international practice has shown that a successful education system cannot exist without a competent, well-trained and dedicated teaching staff. Therefore, people who work within the system must have high performance in terms of scientific knowledge and be a model of behavior for society as a whole.

By excellence, the teaching profession means the permanent formation and development of the teacher, so that they can offer to the one they teach a comprehensive perspective on the field they lead. Teachers must participate in a training program that will help them grow their careers on a regular basis until they retire.

It must be guaranteed that teachers will participate in educational courses or self-trainings for an indefinite period of time since it is essential for them to have an image of the modern scientific world and to learn effective ways of engaging with colleagues and students/pupils. Such a development can be achieved by motivating teachers in order to improve their skills, enabling them to build a modern and diverse educational offer, focused on the development needs of employees.

There are different ways to motivate employees, including teachers in this case, but the first step in identifying the best solutions is to describe what motivation is and why it is important in the teaching-learning process.

2. LITERATURE REVIEW

We often wondered “what is motivation and why is it important in the teaching-learning process?”. The authors of this work looked into current research and scientific literature in order to answer this question.

According to Smith & Cronje, Maslow's Hierarchy of Needs is one of the most widely used motivation theories (1992). Maslow's theory is founded on the idea that people desire to improve what they want to achieve in their lives, thus they rank their needs in order of significance. Maslow established a five-stage theory based on basic human needs such as physical, social, biological, and psychological requirements. This theory categorizes and organizes human needs into a number of categories based on their achievement. The following categories can be seen as a result of the organization, which is done in order of diminishing priority:

- physiological requirements such as food, shelter, and clothes;
- physical protection requirements in terms of safety and security;
- social needs, i.e., the want to interact with others;
- esteem needs, such as being acknowledged by others;
- desires for self-actualization, such as the desire to be successful or leave a legacy.

Maslow's hierarchy of needs is utilized to create theoretical foundations as well as to explain job satisfaction. Pedagogues are still normal people with needs that must be met, and they prioritize their needs in order to do so. There are additional demands, such as acknowledgment and admiration from pupils, coworkers, or parents, in addition to their basic wants. (Badubi, 2017)

Clayton Alderfer (1969) comes up with a theory of motivation explained by three types of needs: existence, relationships and development. The novelty that Alderfer brings to Maslow is that in order to fulfill a higher need, it is no longer necessary to meet your basic needs, the lower order ones. The process of regression through the frustration of needs is the basic theme of the theory developed by Alderfer.

David McClelland (1955, 1976) developed a functional theory for motivating employees in any organization. In the case of McClelland, the needs are not hierarchical and are those of achievement, affiliation as well as power. Depending on the prevailing need, tasks that can be successfully performed will be distributed to each employee.

Another researcher who turned his attention to motivation is Victor Vroom (1964), who is one of those who did not study the causes of motivation, but rather focused on the process by which motivation appears. His theory analyzes valence, instrumentality and expectation. Adams (2005) developed a new theory of motivation, which he named equity theory, based on Porter-Lawler (1968) expectancy theory that focuses on the comparison of the relationship between the different rewards types and employees' effort at work.

When we have an equal relationship, we can say that the employee has satisfaction at work.

In 1973, Adair came up with a new theory of motivation which he calls Rule 50-50 and explains that 50% of the motivation comes from inside a person and 50% from the environment in which he works. Essential to this theory is that 50% of motivation comes from outside and therefore cannot be controlled.

All these researchers and all these theories about motivation are trying to find a way to understand and implement highly effective motivation mechanisms at the level of organizations (Pânișoară, & Pânișoară, 2016).

In the motivation process it is also very important what kind of evaluation the organization applies, both in general, but also on different levels and factors that determine job satisfaction.

Herzberg's Two-factor hypothesis (1966, 2003), also known as Motivator-Hygiene, was discovered in a research done by Herzberg among accountants and engineers to determine what makes an individual feel good or awful about their profession (Saif et al., 2012). Recognition, achievement, responsibility, and advancement are the five satisfiers that Herzberg identified as five aspects of employment that bring satisfaction. Also, according to Herzberg, the following elements contribute to employee demotivation: managerial style, institutional politics, work relationships, supervision, working environment, and pay rate.

Douglas McGregor devised two of the most well-known motivational theories, Theory X and Y, in his 1960 book *The Human Side of Enterprise*. Although McGregor's XY theory has been heavily attacked in subsequent research for its rigidity, it continues to be a foundation on which practitioners build their various managerial strategies and styles, decide how to grow their people resources, and improve their organizational culture. The X-Y theory is straightforward: it divides personnel into two types, referred to as type X and type Y, and thus necessitates two distinct managerial styles.

Workers that adhere to theory X try to avoid work as much as possible, are careless, and constantly evade their responsibilities. Because he is referred to be an average employee, X is uninterested in the demands of the organization, which he is a part of and which is resistant to change. As a result, in the workplace, employee X must be forced to conform to the firm's aims by a number of tactics, including fines and penalties. In terms of both theories, X and Y, Y workers believe it is usual to put in both intellectual and physical effort at work since they are responsible for a wide variety of activities and are driven by the rewards that come with them. Some may regard McGregor's (1960) method to be oversimplified, because both internal and external influences have a significant impact on one's performance at work.

Professional motivation or motivation for work is a particularly important aspect for both the employees and the employers. For employees work is one of the central areas of human life and activity, the adult spends most of his time in work. For employers, due to the direct implication, motivation affects the performance of an institution. The issue of motivation in the institution was born from the need to find answers to a number of questions, such as: Why do people work? Why do some people work more and others less? Why does an employee with greater skills and competencies than others get lower results than another with lower skills? How can employees be stimulated to have performance consistent with their own potential? Why do people change jobs? and so on.

Non-financial reward tactics represent a good manner for appreciating the best employees, beside the well-known financial ones. Although each individual has his or her own expectations, it is leaders' responsibility to develop, find and align with theories and practices that are appropriate to bring satisfaction in the work their employees need.

But, there are many theories good to be used, not just an universal one. Regarding empowering the employees, they should be motivated to use a tool in order to express their opinions on the manner in which they want to be motivated, like rewards or promotions.

Looking into existing literature, Alam and Farid (2011) conducted a study that involved 80 teachers from Rawalpindi, Pakistan. In the study it was demonstrated that teachers' low salaries affected their work quality, coming from the fact that most of the teachers confessed they were not satisfied with their salaries. The majority of the respondents involved in this study were not entirely satisfied with their economic status.

A good number of teachers felt that they have more abilities than others. Most teachers considered that students are the ones responsible for their low results and not the teachers. Teachers should also receive incentives and be rewarded based on their results.

Orsini et al (2020) observed, based on a correlational analyses and structural equation modeling, that teachers who are part of a work climate which can be described as supportive supervisor-teacher relationship and who perceive students' motivation as autonomous, had a positive impact on teachers' satisfaction of their basic psychological needs and also anticipate autonomous motivation to teach. Their study was one of the first that examined in detail the process of teachers' motivation to teach others (Orsini et al. 2020). Other researchers (Ciobanu & Androniceanu, 2015; Profiroiu, 2011) argue that in order to achieve strategic objectives and improved institutional results, more emphasis must be directed to developing a motivating and challenging work environment, as well as fostering professional development and performance.

3. RESEARCH METHODOLOGY

The purpose of this study is to determine the most appropriate ways in order to motivate teachers to increase their performance. We have analyzed a collection of data available on the Eurostat database and from several other reports provided by the European Union's institutions for different European countries.

The attractiveness of being a teacher, the induction into the teaching profession and the initial education of the tutor, continuity of the professional development, mobility around the countries, teachers' well-being at work represents one of the most important criteria that should be taken into consideration for analyzing the data.

There were 3 indicators analyzed for the attractiveness of the teaching profession, such as: the proportion of the lower secondary education teachers, by age groups, which are on permanent employment or fixed-term contracts or the one represented by those which are happy with their fees and the difference between their average gross salaries(EUR), per year and GDP per capita, lower secondary education, 2018-2019 (EACEA, 2021).

4. RESULTS AND DISCUSSIONS

This section of the paper tries to put together various information that can lead us to offer an answer to the paper's question: "what is motivation and why is it important in the teaching-learning process?".

The results of the analysis we undertook are presented below.

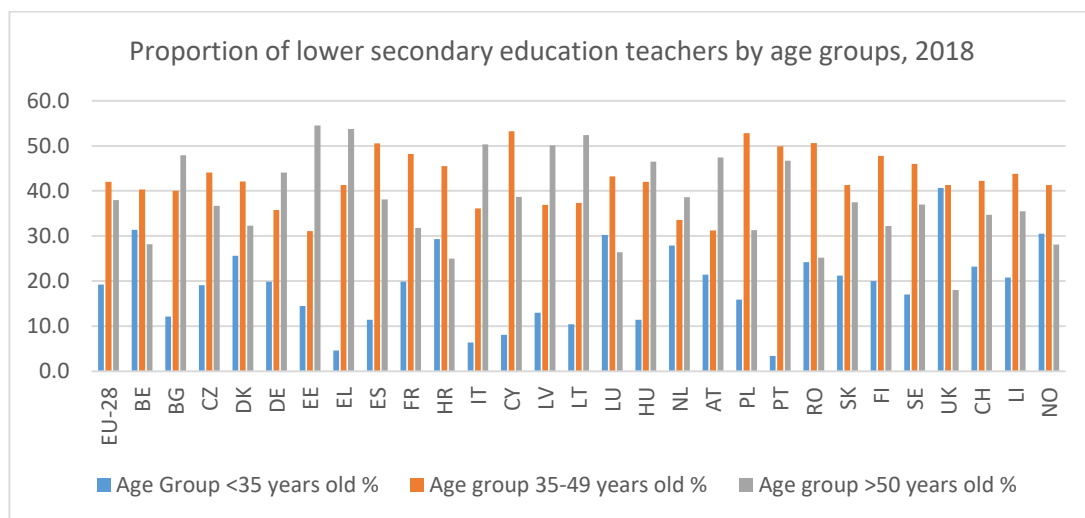


FIGURE 1: TEACHERS IN LOWER SECONDARY EDUCATION BY AGE GROUPS IN 2018.

Source: Eurydice, based on Eurostat/UOE data.
cited in European Commission/EACEA/Eurydice, 2021

According to the analysis of teachers' situation, based on data collected taking into account the age, it can be seen that in European countries the percentage of teachers age 35-49 is slightly higher, but predominates the

segment of teachers over 50 years in countries such as Latvia, Lithuania, Italy, Bulgaria, while in countries such as Romania, Poland, Scandinavian countries, teachers in the age segment between 35-49 years are represented in a large number. This situation shows us that during last years, the education sector has become more attractive for the young population. Among the main reasons that determine this is the stability and safety of the job by concluding employment contracts for an indefinite period, also corroborated with an increase in salaries in this sector of activity.

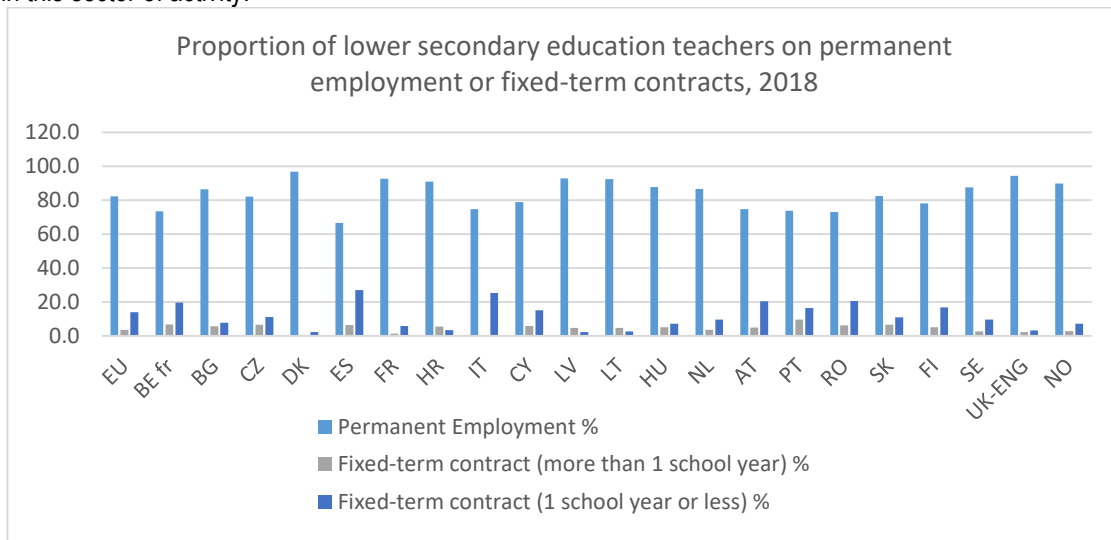


FIGURE 2: PROPORTION OF TEACHERS IN LOWER SECONDARY EDUCATION ON PERMANENT EMPLOYMENT OR FIXED-TERM CONTRACTS IN 2018

Source: Eurydice, on the basis of TALIS 2018 cited in European Commission/EACEA/Eurydice, 2021

Regarding the indicator listed above, teachers on permanent employment or fixed-term contracts it was found that in all countries predominates in a proportion of over 60% permanent employment, but some countries such as Italy, Spain, Austria and Romania have almost 20 % of employment for fixed-term contract for 1 school year or less.

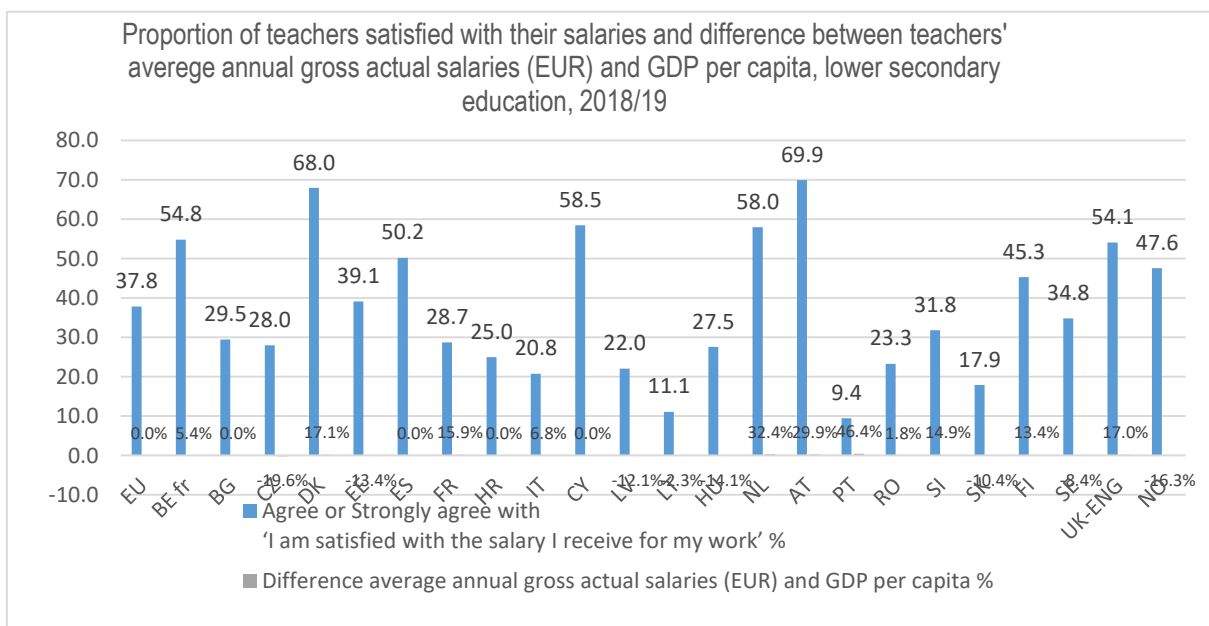


FIGURE 3: PROPORTION OF TEACHERS SATISFIED WITH THEIR SALARY AND DIFFERENCE BETWEEN TEACHERS' AVERAGE ANNUAL GROSS ACTUAL SALARIES (EUR) AND GDP PER CAPITA, 2018-2019, LOWER SECONDARY EDUCATION

Source: Eurydice, on the basis of Eurydice and TALIS 2018 cited in European Commission/EACEA/Eurydice, 2021

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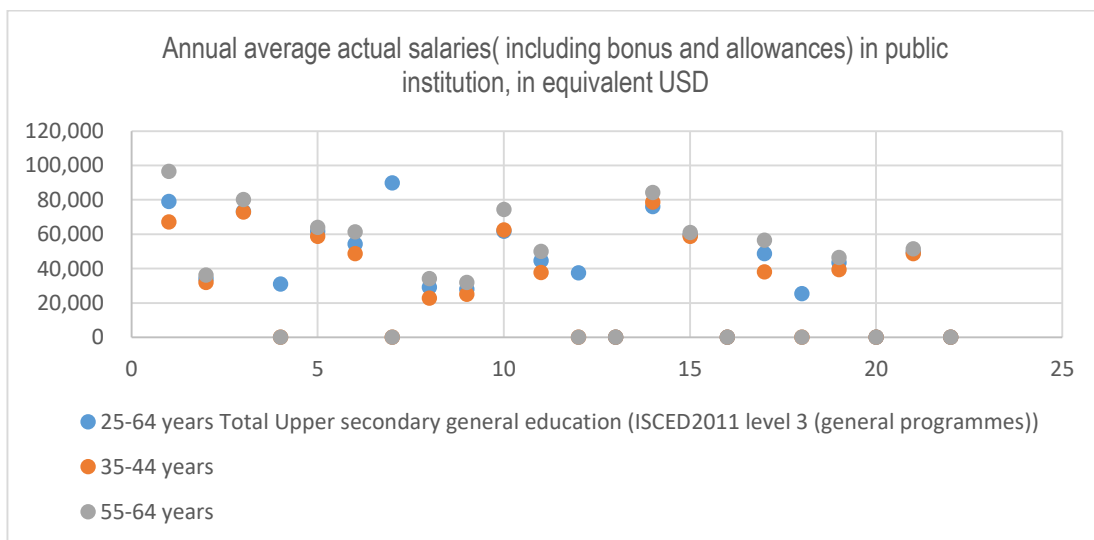


FIGURE 4. ANNUAL AVERAGE ACTUAL SALARIES (INCLUDING BONUS AND ALLOWANCES) IN PUBLIC INSTITUTION, IN EQUIVALENT USD

Source: <https://stats.oecd.org/Index.aspx?DatasetCode=IDD>

By examining the percentage of tutors who are satisfied with their salaries, as well as the difference between their average annual gross actual salaries (EUR) and GDP per capita in lower secondary education, we discovered that the majority of teachers who agree or strongly agree with the salary received for their work come from Denmark, Cyprus, Austria, the United Kingdom, or Belgium, while teachers from Portugal, Lithuania, Slovakia, Romania, and other countries fall on the opposite end of the spectrum. The difference average annual gross actual salaries (EUR) and GDP per capita record the highest positive values in countries such as Portugal, Netherlands, Austria and high negative values in countries such as the Czech Republic, Norway, Hungary.

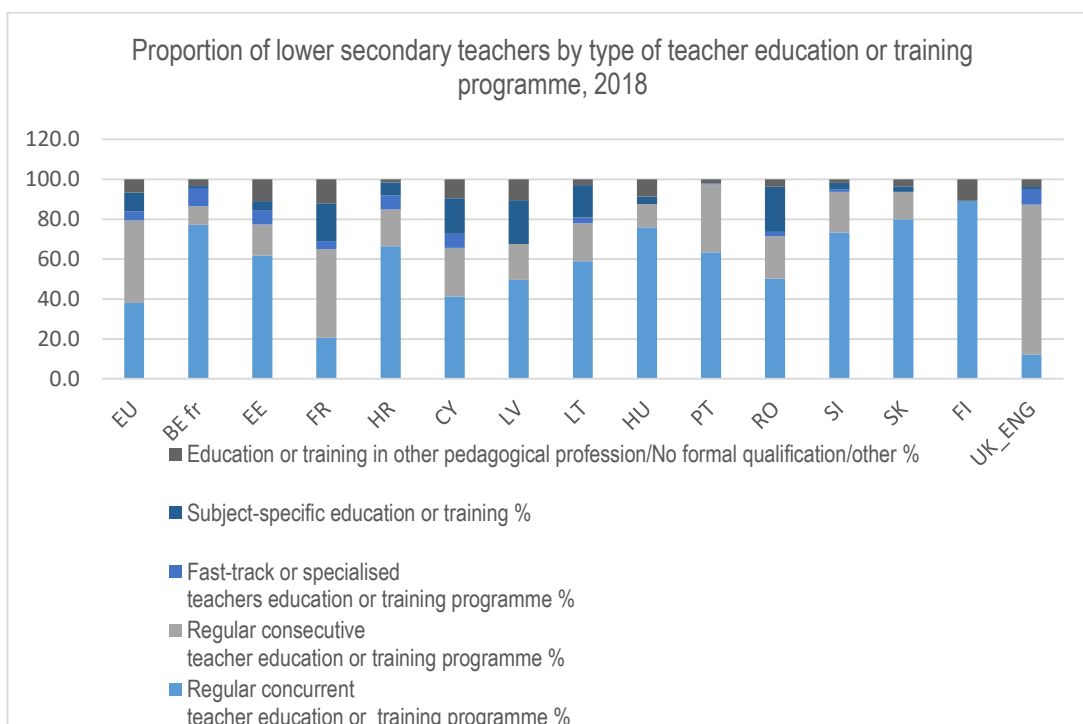


FIGURE 5: TEACHER PROPORTION BY TYPE OF TEACHER EDUCATION OR TRAINING PROGRAM IN LOWER SECONDARY, 2018.

Source: Eurydice, on the basis of TALIS 2018, cited in European Commission/EACEA/Eurydice, 2021

For the second indicator about initial teacher education and induction into the teaching profession we noticed that the most important teacher training programs are the regular consecutive or concurrent teacher education or training program.

In Figure 4 the comparison by age regarding the salaries obtained by teachers calculated inclusive with bonuses and allowances, we can observe that teachers aged 55-64 have the highest incomes. They can reach up to 100,000 USD / year, while for the other age categories the incomes vary between 30,000-60,000 USD / year.

At the level of European Union, for education or training in other pedagogical profession there are 6,6 percentage of secondary teachers involve, for subject specific education or training are 9,5%, for fast-track or specialized teachers training program is the lowest percentage, only 4,4%, for regular consecutive teachers education or training program are 41,9% and that, with 38.0% of lower secondary teachers, is the most popular type of teacher education or training program and regular concurrent teacher education or training program.

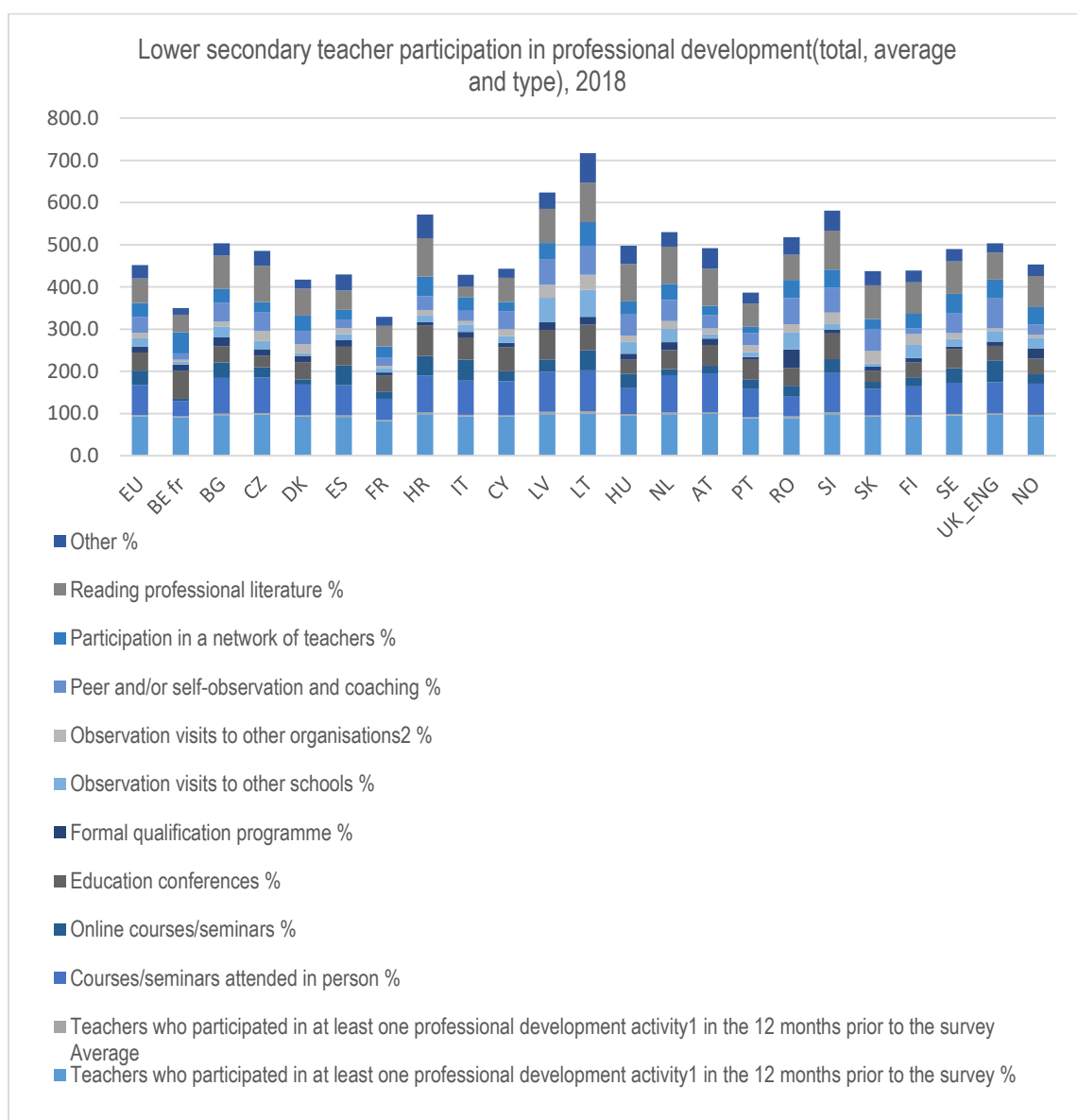


FIGURE 6. PARTICIPATION IN PROFESSIONAL DEVELOPMENT BY LOWER SECONDARY TEACHERS (TOTAL, AVERAGE, AND TYPE), 2018

Source: Eurydice, on the basis of TALIS 2018, cited in European Commission/EACEA/Eurydice, 2021

In this condition, we can notice that the most accessed education and training program for secondary teachers are the regular one, either consecutive or concurrent program.

Reading professional literature, as well as participation in a network of pedagogues, peer and/or self-observation and teaching, observation visits to other organizations or schools, formal qualification program, education conferences, online courses or seminars, face-to-face courses or seminars, and teachers who participated in at least one professional development activity during¹ in the 12 months or other are activities that contribute to professional development of teachers and all have approximately equal percentages in this process of professional development.

We analyzed the percentage of this type of continuing professional development at the level of European Union and we noticed that 92,5% teachers participated in at least one professional development activity for 1 in the last 12 months, 71% attended in person courses or seminars and 58,6% read professional literature.

At the opposite pole of these activities are observation visits in other organization or schools, participation in the network of teachers.

Participation of lower secondary teachers in the different type of teacher education background or training is one of the most important ways to motivate this category of employee to have satisfaction at work and to increase performance in this field of activity.

Other indicators, such as teacher appraisal, transnational mobility, and teachers' well-being at work, are depicted in Figures 7, 8, and 9 based on Eurydice's interpretation of statistical data. We noticed that in these respects, the proportion of lower secondary teachers who can be found in schools where the Principal exposes the frequency of presence, that most reports about frequency of appraisal are at least once a year, except in the case of transnational mobility.

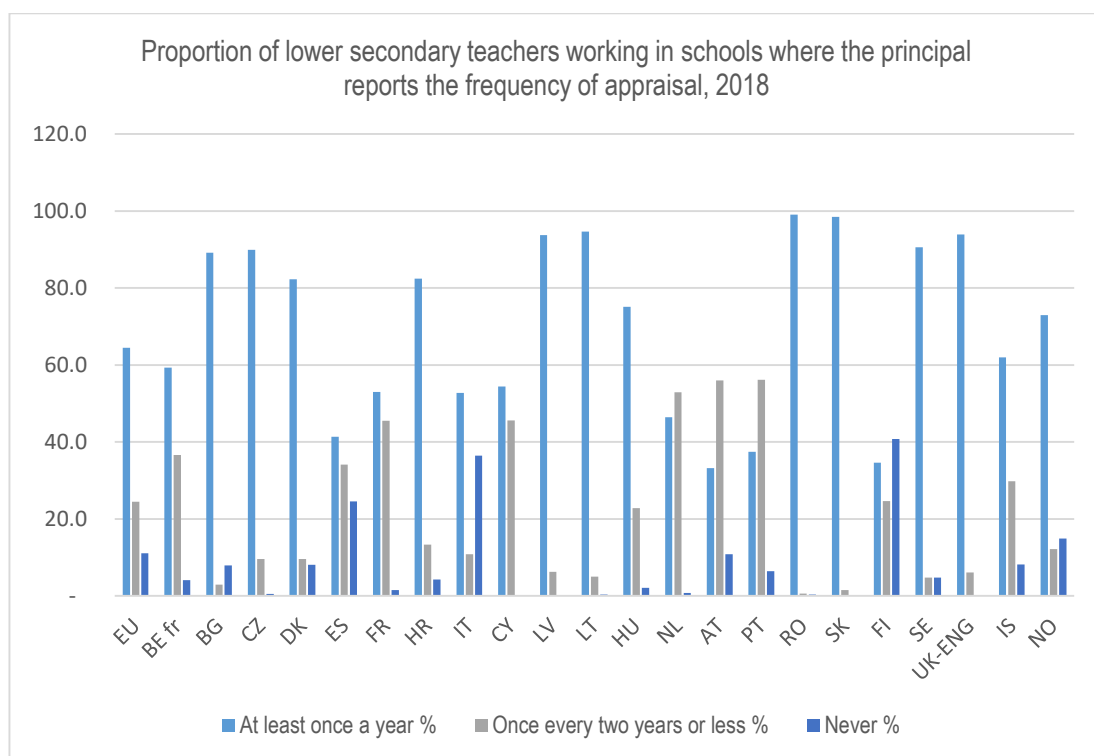


FIGURE7. PROPORTION OF LOWER SECONDARY TEACHERS WORKING IN SCHOOLS WHERE THE PRINCIPAL REPORTS THE APPRAISAL FREQUENCY, 2018

Source: Eurydice, on the basis of TALIS 2018, cited in European Commission/EACEA/Eurydice, 2021

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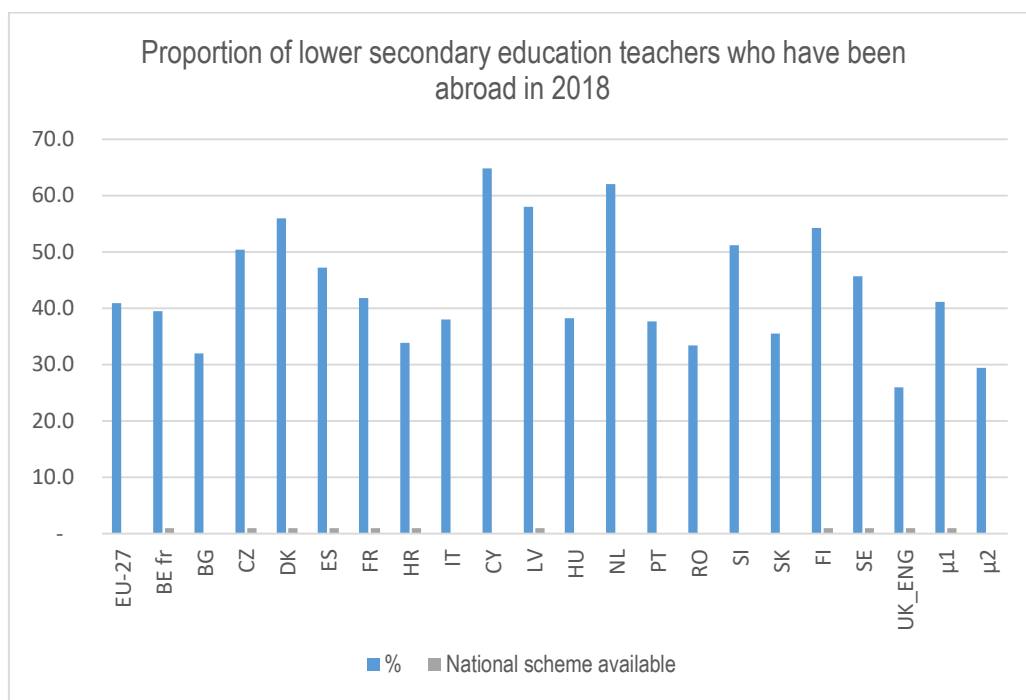


FIGURE 8. THE PERCENTAGE OF LOWER SECONDARY TEACHERS WHO HAVE TRAVELLED ABROAD IN 2018.

Source: Eurydice, on the basis of TALIS 2018, cited in European Commission/EACEA/Eurydice, 2021

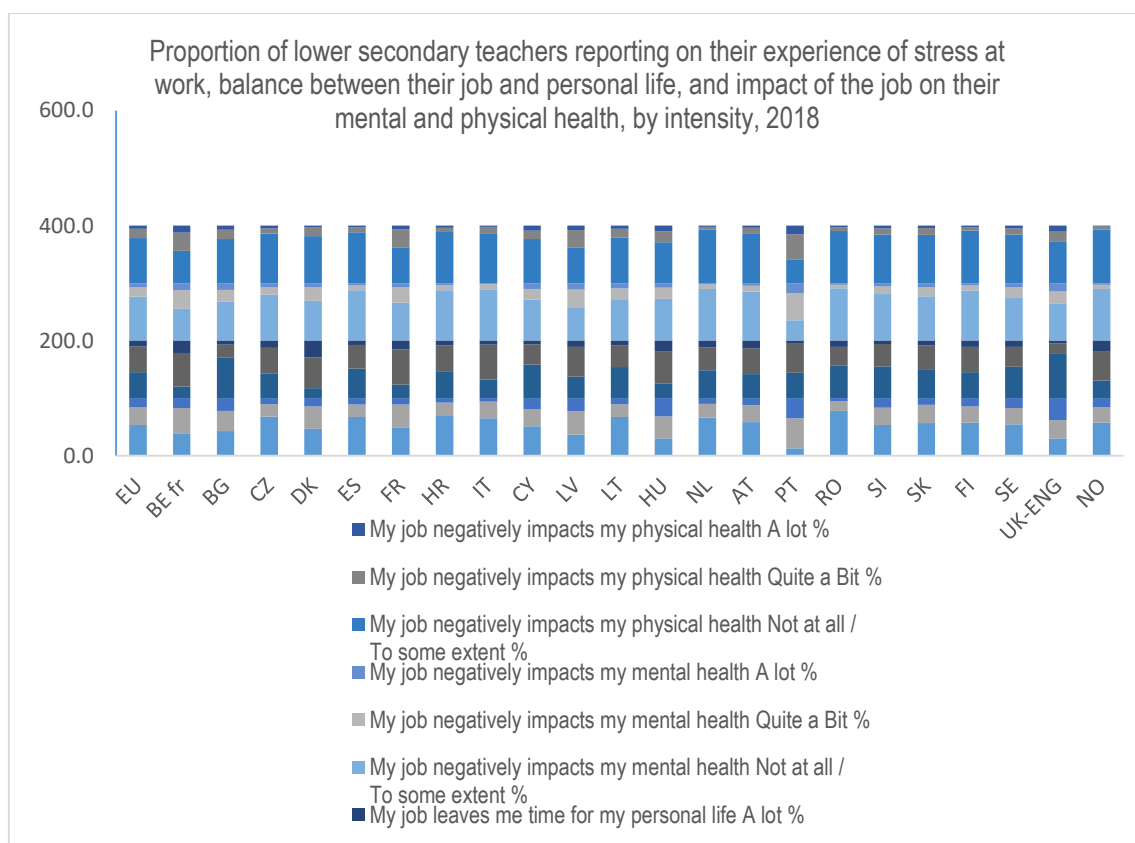


FIGURE 9. PROPORTION OF LOWER SECONDARY TEACHERS REPORTING ON WORK STRESS, BALANCE BETWEEN JOB AND PERSONAL LIFE, AND IMPACT OF JOB ON MENTAL AND PHYSICAL HEALTH, BY INTENSITY, 2018

Source: Eurydice, on the basis of TALIS 2018, cited in European Commission/EACEA/Eurydice, 2021

Looking at the data on teachers who have traveled overseas through mobility programs, we discovered that the Netherlands, Cyprus, and Latvia have the most significant mobility programs, but all nations have more than 25% instructors who have been abroad. Most of these activities are exchange experience program also for teachers with students, or only for teachers. This program has many types of topics and all of this contribute to professional development of every teacher, students or schools. Usually, the mobility program for teachers and students are European Union program such as Erasmus+, VET, scholar education or adult education. These mobility programs for teachers and students, usually take place from a few months to two years and consist of exchanges of good educational practices between teachers between partner countries participating in the mobility project.

It is a very good way to motivate teachers for their activity by accessing new educational perspectives and by building a well-being at work. It is also an excellent way to develop professionally and gain professional skills.

Instructors' well-being in the workplace is perhaps the most essential and comprehensive indicator that reveals the elements that contribute to motivating teachers. This indicator examines how much, quite a bit, or even not at all/ to some extent a job negatively impacts physical or mental health, as well as how much, quite a bit, or even not at all/ to some extent a job leaves time for personal life in percentages for a lot, quite a bit, or even not at all/ to some extent and experience stress in work. For European Union countries we noticed that the job does not negatively impacts the physical health (not at all 78,4%), and the mental health (not at all 76,8%). In respondents' opinion this kind of job leaves time for personal life (not at all - 45%) and 53,8% of the respondents considered that this experience is not at all a stressful work.

Regarding stress, we observed that the most stressed teachers are in countries like Romania, Czech Republic, Lithuania, Netherlands, Italy. On the other side the less stressed teachers are in Portugal, Belgium or Hungary. We noticed that in Portugal all the elements analyzed have very good scores in contrast with Romania, Netherlands and Finland.

Furthermore, as part of the extrinsic motivational factors, we have performed a comparison of the levels of income in the selected European regions.

TABLE 1. AVERAGE INCOME LEVEL FOR DEBUTANT TEACHERS (EUR/YEAR) TEACHING IN PUBLIC SCHOOLS IN 2017/2018

Region of Europe	Average income level for debutant teachers (EUR/year)
Central Western European countries	44,000
Central Southeastern European countries	9,000
Southern countries	23,000
Northern countries	37,000

Source: authors' adaptation after Teachers' and school heads' salaries and allowances in Europe Report (2020)

Table 1 shows us that there is a significant difference in the wage levels across the four main regions of Europe, which naturally leads to the next question: "what is the real impact of these figures in the teachers' extrinsic motivation and how does it affect performance?". If we consider that teachers' performance can be seen also with their students' results obtained at exams, we have decided to make a comparison between Table 2 numbers and the result of PISA international examination.

PISA (The Program for International Student Assessment) is an international assessment that measures reading, mathematics, and science literacy for students being 15 years old and it is organized every three years. The first PISA exam was conducted in 2000 and besides the above-mentioned curricula it also includes

measures of general or cross-curricular competencies including collaborative problem solving. PISA is based on functional skills that students have gained in the years of study as they are near the end of compulsory schooling. PISA is entirely coordinated by the Organization for Economic Cooperation and Development (OECD), and is conducted in the United States by NCES. The last PISA exam took place in Fall 2018.

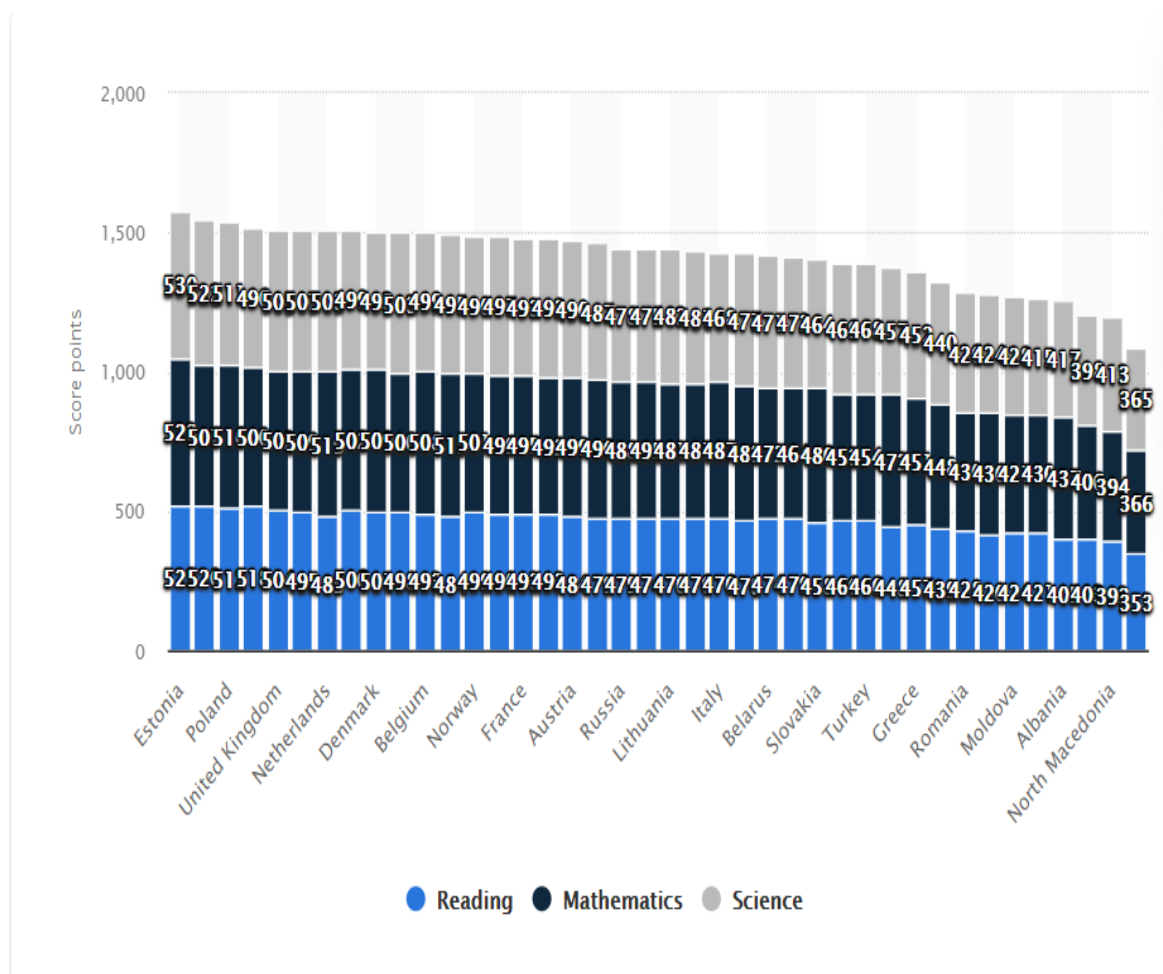


FIGURE 10. PISA RESULTS IN EUROPE IN 2018

Source: <https://www.statista.com/statistics/1084528/europe-pisa-results-by-category/>, (2021)

As observed in Table 2 if we compare the results obtained in the regions where debutant teachers have lower income with the ones where they have higher income, we can see that teachers' income do not affect students' performance, which means in the end, that as stated before, financial rewards are not the ones who motivate professors in their work. The average income level for Central Western European countries is the highest, yet the best results on the PISA exam are in Northern countries. We can also observe that in Central Southeastern European countries, where debutant teachers have the lowest income from the entire Europe, the average results on the PISA exam are not the lowest.

So, for the aspect as motivation in the field of education for secondary teachers, we can observed that the results of evaluation the international PISA test are very good for countries like Estonia, Poland, U.K., Netherlands, and very low for countries like, Greece, Romania, Bulgaria, but not because the teachers are performant in the countries with good results and because they have study program adapted to this type of evaluation, and in this countries the education program are adapted for practical situation not for theoretical information such as in countries with lower results.

TABLE 2. COMPARISON ON THE AVERAGE INCOME LEVEL FOR DEBUTANT TEACHERS (EUR/YEAR) TEACHING IN PUBLIC SCHOOLS IN 2017/2018 AND AVERAGE RESULTS ON REGIONS FOR PISA EXAM

Region of Europe	Average income level for debutant teachers (EUR/year)	Average results on regions for Pisa exam		
		Reading	Mathematics	Science
Central Western European countries	44,000	491	500.5	494.4
Central Southeastern European countries	9,000	469.75	477.6	472.7
Southern countries	23,000	468.2	475.5	467.2
Northern countries	37,000	500	501.8	504

Source: European Commission/EACEA/Eurydice, 2020

Observing these differences, we cannot stop to wonder, what exactly motivates teachers as long as there is no correlation between their income and their motivation.

A study from 2012 (Klassen et al) demonstrated that teachers who are motivated and engaged are satisfied with their careers, rarely thinking of quitting their profession, but having a high influence on their students' achievement. In their study they talk about two models who are highly related to teachers' motivation. The first one presented is related to job demands-resources, which supports a balance between job demands and personal development. The teaching demands are not avoidable, but it is recommended to invest in different resources such as social support, autonomy, feedback and coaching. The second model is oriented to the self-determination theory where perceptions of support for autonomy stimulates teachers' intrinsic motivation.

5. CONCLUSION AND RESEARCH LIMITS

The current paper intended to take a look at the European teachers' motivation beyond the most common one, meaning the financial one. First observations show us that teachers' motivation in their work does not fully correlate with the level of income specific to their countries.

The attractiveness of the teaching profession, as well as initial teacher education and induction into the teaching profession, continuing professional development, teacher appraisal, transnational mobility, and teachers' well-being at work, are all factors that contribute to teachers' motivation in their work.

Perhaps the most important element in terms of motivating teachers in the pre-university education system is the correlation of these factors and not their individualization. Motivation at work is a accumulation, a result of the interpenetration of factors that refer to the attractiveness of the profession, the pleasure and passion to teach, the initial training but also throughout the career, the evaluation of teachers, the experiences gained from programs transnational mobility and especially teachers' well-being at work, mental and physical impact and stress at work.

If we make a correlation between all the indicators represented in the graphs based on the interpretation of the data, we can see that there is a strong link between them and the geographical regions of Europe, but also an important impact that has the economic development of that state in process of teachers' motivation.

Thus, for the states located in Central and Southern Europe, where the level of economic development is higher, we can observe a predominance of employment contracts for an indefinite period, but also a lower attractiveness among young people, this profession being predominant for people over 50 years.

There is also a significant number of professional training courses among employees and there are numerous professional mobility projects such as Erasmus or Vet. Regarding the balance that is achieved between the teaching activity and its impact on physical or mental health, stress levels and time left for personal life, it can be seen that this profession is not the one that has a major negative effect on physical or mental health. Also, teachers do not consider their work stressful and believe that they have enough time for their personal life.

Taking into account all these aspects, we can consider that not the salary incomes represent the main motivating factors for this profession, but especially the pleasant working conditions, the reduced stress, the personal development and the passion for the activity carried out.

This paper has major limitations regarding various aspects. First of all, the lack of abundance on this topic in the literature made it harder to extract information about such a specific topic as motivation. Second of all, this study makes reference specifically to pre-pandemic times, hence a new investigation should be required in order to determine how teachers' motivation has changed during the COVID-19 times and the online teaching process.

Last but not least, we conclude that motivating such an important professional category, the teachers, requires constant effort because it is permanently influenced by numerous factors, both intrinsic and extrinsic. However, having a good understanding of what motivates teachers is a step forward to a better future.

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