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Fostering Organizational Empowerment: Impact of an Intervention Program on Stress Management and Physical Activity Motivation among Teachers in Portugal and Brazil

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Abstract: Teaching is one of the hardest occupations according to the International Organization of Teachers (IOT), affecting teachers' emotional and physical well-being and impacting their professional performance. Intervention programs addressing this issue usually result in a significant reduction in stress and an improvement in teachers' entire quality of life. Physical activity has been recognized as a critical aspect of non-pharmaceutical stress-reduction measures, favorably improving mental health. This quasi-experimental study used pre- and post-intervention assessments to assess the impact of a physical exercise promotion program on stress levels and motivation for regular physical activity among teachers in the first six years of schooling in Portugal and Brazil. This study included 33 instructors from both countries' educational institutions in an 8-week intervention that included 40 sessions of cardiorespiratory conditioning, muscle strengthening and stretching, relaxation, and meditation techniques. The Stress Perception Scale (EPS-10) and the Motivation Inventory for Regular Physical Activity Practice (IMPRAF-54) were used to assess participants. The findings show a strong link between years of teaching experience and stress levels. After the intervention, there were statistically significant changes in stress levels and motivation to engage in physical exercise. Specifically, 78.9% of teachers reported less stress, and the respondents felt more motivated to exercise for stress control (84.4%), for competitiveness (97%), and for aesthetic enhancement (57.6%). In summary, this study suggests that exercise is an excellent way to reduce stress and increase enthusiasm for physical activity, with Portuguese teachers outperforming their Brazilian counterparts.

Keywords: stress; physical exercise; teaching activity; physical intervention program

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1. Introduction

Education is an intrinsic human condition, and its practice existed before we were able to comprehend it. School education has emerged as a crucial aspect of human growth through teaching and learning, with the goal of expanding and enhancing the individual's intellectual ability toward social, moral, cognitive, affective, social, and institutional training (Gatti 2013). Schools are institutions that play a significant role in the socialization of all those who are involved in this scenario, such as teachers, administrators, students, and families, and thus must respect each of these subjects' freedom, specificity, potentiality, and individual requests. Individuals take their obligations and roles as citizens into account in this arena as they process their global development through educational interventions designed and executed within and beyond the classroom (Da Silva and Timbó 2017).

In this approach, the school is a change agent and a development factor, acting not just as a resource enhancer but also as a space of openness and solidarity, justice and mutual

accountability, tolerance and respect, wisdom, and knowledge. Given that we live in a culture where schooling is important to social structure, teachers play a critical role in the development of that society by contributing to emancipatory and cooperative processes (Clock et al. 2018).

Being a teacher entails engaging in a professional activity that necessitates disciplinary and pedagogical knowledge, because teaching, in addition to being a social and historical act, entails training people to understand and interpret information as part of the process of creating new knowledge (Carmo and Franco 2019). On the other hand, the understanding of teaching work is constantly confronted with new paradigms that lead us to reflect on its practices, processes, school times, and spaces, because we understand that the role of education and educator in the social context is constantly being updated and that its functions change as society continues to change (Da Cunha 2018).

As we can see, schooling is full of difficulties. Teaching consists of a variety of technical–didactic activities derived from scientific knowledge and human connections and organized in a certain manner within the school. Teachers' obligations today extend far beyond the exchange of knowledge in the classroom. Individual and collective planning, contact with educators, participation in committees and meetings, reporting, mastery of digital tools, construction of political–pedagogical projects, searching for cultural and financial resources to improve the training process, and development of extracurricular projects are some of the activities that comprise the framework of teacher functions (Carlotto et al. 2015; Carlotto and Palazzo 2006; Charlot 2005; Hagemeyer 2004; Ireland et al. 2007; Nóvoa 1999; Sartori 2017).

All these responsibilities, of course, contribute to high levels of stress associated with the profession, especially when combined with a lack of social recognition, devaluation of the occupation, low pay, and high workload (Abacar 2011; Araújo and Sousa 2013; Awa et al. 2010; Borba et al. 2017; Batista et al. 2010; Caran et al. 2011; Carlotto 2002; Carraro et al. 2010).

For these and several other reasons, teaching work has proved to be an intense and exhausting activity, with negative reflections on the health and quality of life of teachers (Araújo and Sousa 2013; Nóvoa 1999; Martins et al. 2014; Massa et al. 2016). As a result of the above, the health of the teacher has become an increasingly investigated topic, and research shows that both in their job function and in the institutional and social context in which they are inserted, teachers are exposed to numerous stressors (Carlotto 2011; Gasparini et al. 2006; Silveira et al. 2014). The International Labour Organization (ILO) has identified teaching as a high-risk occupation for health, occupying second place among the professional categories associated with occupational diseases (Organizaçao Internacional do Trabalho—OIT 2012). Occupational stress is caused by an individual's incapacity to manage with the sources of pressure linked with his or her work environment, which might have physical or mental implications. It refers to a collection of physical and/or emotional responses that are harmful to the human being and the organization because of job demands that do not match the employee's abilities, resources, or requirements, and it is regarded as a negative problem in the individual's life in this sense (Afonso and Gomes 2012; Inácio et al. 2023).

Analyzing the teaching practice reveals that it is impossible to eliminate the stress of the "teaching-learning" process and that it must be reduced to manageable levels so that teachers can perform their duties efficiently and without jeopardizing their physical and mental health. Intervention programs with teachers targeted at lowering stress levels are critical since research shows that participants who participate exhibit beneficial changes in risk factors for high stress levels, as well as increased quality of life (Awa et al. 2010; Dias et al. 2017; Hatch et al. 2018; De Moraes et al. 2019).

In this instance, physical activity can be considered an effective stress-reduction method, assisting in the prevention and alleviation of symptoms, and contributing to the improvement of overall health and the performance of occupational responsibilities (Bretland and Thorsteinsson 2015; Carraro et al. 2010; Garcia and Benevides-Pereira 2003; Da Mota et al. 2019).

That is, physical activity improves physical and mental health and has a favorable impact on the biological and social worlds, lending credence to the notion that physically active people are less likely to contract diseases (Da Mota et al. 2019; De Moraes et al. 2019; Dias et al. 2017; Freitas et al. 2014; Gerber et al. 2013; Hatch et al. 2018; Olson et al. 2014; da Silva et al. 2016).

In this context, the general objective of this work is to elaborate, implement, and evaluate an intervention program that aims to reduce stress and promote motivation for regular physical activity among teachers of the first 6 years of schooling, recruited from Portugal and Brazil. The specific objectives are to (1) evaluate the impact of the intervention implemented on the level of stress and motivation for the regular practice of physical activity in teachers of the first 6 years of schooling and (2) conduct a comparative study of the effect of intervention on the stress level and motivation for practicing physical activity between the two samples from Portugal and Brazil.

2. Materials and Methods

This study employed a correlational, explanatory, and retrospective action research design to validate the program's effectiveness. Thus, action research can be characterized as a type of social study with an empirical foundation. However, unlike the "traditional" research approach, which only includes the component related with theory (activity), this research method includes the practical part (action); i.e., by doing action research, we are associating theory with practice (Fonseca 2012; Inácio et al. 2023), in which stress levels and motivation for physical exercise were assessed before and after the intervention. The intervention was carried out between May and August of 2021. The sampling method was non-random, purposeful, and convenient considering volunteers were chosen for their proximity to the researchers (Marôco 2018).

2.1. Procedures

The program covered 8 weeks, was divided into 3 stages, and included a total of 40 sessions. Of the 44 teachers who started the project, 33 remained until the completion of the intervention program, and 11 were excluded because they did not comply with at least 60% (24 sessions) of the proposed activities. The content of the sessions was taught through video lessons with a duration of between 10 and 30 min and submitted individually through the WhatsApp mobile app, as well as a request for execution that should be completed as soon as the content of the session was completed.

The study was developed in three phases:

(1) The first phase corresponds to the evaluation before the intervention (T0). The level of stress and motivation for the regular practice of physical activity among the teachers was assessed through the Google platform, and the link was sent by email and/or the WhatsApp app to the study participants.
(2) The second phase corresponded to the implementation of the intervention, which lasted 8 weeks, with 5 sessions per week, accounting for a total of 40 sessions.
(3) The third phase corresponds to the post-intervention evaluation (T1), in which the same instruments referred to in T0 were used to analyze the effects of the intervention on the subjects. In this phase, the instruments were also made available on the Google platform and the link sent by email and/or the WhatsApp app.

In the intervention, participants performed cardiorespiratory conditioning exercises, through short displacements and vertical and horizontal jumps; muscle strengthening, with activities that prioritize the basic movements of the human body, such as sitting, standing, lying down, pushing, and pulling; muscle stretching, through flexibility exercises that promote the healthy stretching of the muscle fibers of large muscle groups; joint mobility, with specific activities that prepare the joints to perform efficiently large-scale movements; and meditation, through the presentation of techniques that allow the mind to reach a state of calm and relaxation.

Stage 1 (E1) aimed to insert physical activity (AF) into the day-to-day lives of teachers and included the first 2 weeks of the program. During this stage, 10 sessions were held, 4 of them with cardiorespiratory and muscle strengthening exercises, 4 sessions focused on muscle stretching and joint mobility exercising, and 2 other sessions with an initiation to meditation activities.

Stage 2 (E2) was aimed at raising the intensity of the performed activity from "light" to "moderate". This stage consisted of 4 weeks (Weeks 3, 4, 5, and 6), totaling 20 sessions: 8 sessions based on cardiorespiratory and muscle strengthening exercises, 8 sessions on muscle stretching and joint mobility exertions, and 4 sessions focused on meditation techniques.

Stage 3 (E3) was intended to develop the autonomy of the subjects for physical activity, stimulating the teachers to search for ways to practice physical activity regularly and pleasantly, such as, for example, to insert walks and/or outdoor cycling, swimming classes in the summer, or sports with which they identify, among others. This stage consisted of the last 2 weeks of the intervention (10 sessions), with 4 sessions aimed at cardiorespiratory and muscle strengthening exercises, 4 for muscle stretching and joint mobility, and 2 for meditation.

2.2. Instruments

In T0 and T1, we used a questionnaire for sociodemographic data and lifestyle, work, and aspects of health and occupational risks (QSETES) (Monteiro 2001) and the Stress Perception Scale (EPS10) (Cohen et al. 1983). The EPS items were designed to see to what extent the subjects perceived their unpredictable, uncontrollable, overloaded lives and the level of stress they experienced (Cohen et al. 1983; Cohen and Williamson 1988). We also used the Motivation Inventory for the Regular Practice of Physical Activities, which is an instrument based on the ideas of the Theory of Self-Determination (Ryan and Deci 2000), 54-item version (Balbinotti and Barbosa 2006), where it is said that a subject can be motivated at different levels, intrinsically or extrinsically.

2.3. Sample General Characteristics

This study included 33 primary school teachers from Brazil and Portugal. We applied the following exclusion criteria: being away from teaching activities; having less than one year of teaching experience; not being available to engage in the interventions; and/or not carrying out at least 60% of the proposed sessions.

Among the 33 teachers who participated in the study, 72.4% were 35 years of age or younger; 57.6% were female; 42.4% had children; 60.6% did not live with a partner, that is, they were single, divorced, or widowed; 54.4% taught in Portuguese institutions; and 45.6% taught in Brazil. In relation to the degree of schooling, 42.4% had some type of specialization, and 12.1% had a master's degree. Most teachers had taught for 5 years or less (42.4%) and were not in training (42.4%) (Table 1).

Table 1. Sample characteristics.

		n	%
Gender	Female	19	57.6%
	Male	14	42.4%
Country	Brazil	15	45.5%
	Portugal	18	54.5%
Scholarly Degree	Degree	15	45.5%
	Specialization	14	42.4%
	Master	4	12.1%

Table 1. *Cont.*

		n	%
Marital State	Single	16	48.5%
	Divorced	13	39.4%
	Widowed	1	3%
		3	9.1%
Children	Yes	14	42.4%
	No	19	57.6%
Additional study	Yes	14	42.4%
	No	19	57.6%
Years of Teaching	0–5	14	42.4%
	6–10	10	30.3%
	11–20	4	12.1%
	>20	5	15.2%

2.4. Statistical Analysis

IBM SPSS software version 23.0 for windows was used for the calculation of averages (M) and standard deviations (DP). In view of the impossibility of considering the central limit theorem (Marôco 2018), which indicates the possibility of using parametric tests on samples of over 30 observations, the non-parametric Spearman and Mann–Whitney U tests were used to measure the degree of association between pairs of variables. The null hypothesis was rejected when the critical significance level for its rejection (p) was less than 0.05.

2.5. Ethical Approval

This study adhered to the Declaration of Helsinki and received approval from the Ethics Commission of the Polytechnic of Coimbra (CEIPC) under the number 43_CE IPCC/2021. All participants gave their written consent in a free and informed manner.

3. Results

3.1. The Impact of the Intervention Program on the Stress Level in Teachers

The intervention reduced stress levels in 83.3% and 73.4% of teachers in Portugal and Brazil, respectively. This drop was statistically significant (p = 0.031 in the Portuguese sub-sample and p = 0.006 in the Brazilian sub-sample) (Table 2).

Table 2. Impact of the intervention on the stress level in each sample.

Country	Intervention	Result	N	%	Z(p)
Portugal	Stress_POS—Stress	Worsened	3	16.7%	−2.163 (0.031)
		Improved	15	83.3%	
		Maintained	0	0%	
		Total	18		
Brazil	Stress_POS—Stress	Worsened	2	13.3%	−2.734 (0.006)
		Improved	11	73.4%	
		Maintained	2	13.3%	
		Total	15		

Note: POS = after the intervention.

3.2. The Impact of Intervention on the Level of Motivation for the Regular Practice of Physical Activity among Portuguese Teachers

Overall, the results show that teachers were more motivated after the intervention. The results reveal that among the Portuguese sample, 88.8% felt more motivated to perform physical activity with the aim of "Stress Control" (p < 0.001), 44.4% to improve "Health" (p = 0.286), 94.4% for "Competitiveness" (p < 0.001), and 61.1% to improve "Es-

thetics" ($p = 0.004$). The only question in which the Portuguese felt less motivated was for "Socialization", with 83.3% ($p = 0.001$) (Table 3).

Table 3. Impact of intervention at the level of motivation for the regular practice of physical activity among Portuguese teachers.

			N	%	Z(*p*)
Portugal	Percentil_SC_POS—Percentil_SC	Worsened	1	5.6%	−3.491 (<0.001)
		Improved	16	88.8%	
		Maintained	1	5.6%	
		Total	18		
	Percentil_HE_POS—Percentil_HE	Worsened	6	33.3%	−1.068 (0.286)
		Improved	8	44.4%	
		Maintained	4	22.3%	
		Total	18		
	Percentil_SO_POS—Percentil_SO	Worsened	15	83.3%	−3.253 (0.001)
		Improved	3	16.7%	
		Maintained	0	0%	
		Total	18		
	Percentil_CO_POS—Percentil_CO	Worsened	0	0%	−3.624 (<0.001)
		Improved	17	94.4%	
		Maintained	1	5.6%	
		Total	18		
	Percentil_ES_POS—Percentil_ES	Worsened	1	5.6%	−2.864 (0.004)
		Improved	11	61.1%	
		Maintained	6	33.3%	
		Total	18		
	Percentil_PL_POS—Percentil_PL	Worsened	9	50%	−0.474 (0.636)
		Improved	8	44.4%	
		Maintained	1	5.6%	
		Total	18		

Note: SC = stress control; HE = health; SO = socialization; CO = competitiveness; ES = esthetics; PL = pleasure; POS = post-intervention.

3.3. The Impact of Intervention on the Level of Motivation for the Regular Practice of Physical Activity among Brazilian Teachers

As in the group of Portugal, the Brazilians also found themselves more motivated after the intervention sessions. In this case, it can be seen that 80% of Brazilians felt more motivated to practice physical exercise with the intention of "Stress Control" ($p = 0.003$), 100% for "Competitiveness" ($p = 0.001$), 53.3% for improving "Esthetics" ($p = 0.061$) and "Health" ($p = 0.099$), 46.7% for "Socialization" ($p = 0.593$), and 60% for "Pleasure" ($p = 0.271$). The factors "stress control" and "competitiveness" showed statistically significant differences, whereas "health", "socialization", "esthetics", and "pleasure" did not show a statistically significant increase (Table 4).

Table 4. Impact of intervention on the level of motivation for the regular practice of physical activity among Brazilian teachers.

			N	%	Z(*p*)
Brazil	Percentil_SC_POS—Percentil_SC	Worsened	1	6.7%	−2.971 (0.003)
		Improved	12	80%	
		Maintained	2	13.3%	
		Total	15		
	Percentil_HE_POS—Percentil_HE	Worsened	4	26.7%	−1.650 (0.099)
		Improved	8	53.3%	
		Maintained	3	20%	
		Total	15		
	Percentil_SO_POS—Percentil_SO	Worsened	7	46.7%	−0.534 (0.593)
		Improved	7	46.7%	
		Maintained	1	6.6%	
		Total	15		
	Percentil_CO_POS—Percentil_CO	Worsened	0	0%	−3.411 (0.001)
		Improved	15	100%	
		Maintained	0	0%	
		Total	15		
	Percentil_ES_POS—Percentil_ES	Worsened	3	20%	−1.873 (0.061)
		Improved	8	53.3%	
		Maintained	4	26.7%	
		Total	15		
	Percentil_PL_POS—Percentil_PL	Worsened	5	33.4%	−1.100 (0.271)
		Improved	9	60%	
		Maintained	1	6.6%	
		Total	15		

Note: SC = stress control; HE = health; SO = socialization; CO = competitiveness; ES = esthetics; PL = pleasure; POS = post-intervention.

4. Discussion

The main goal of this work was to elaborate, implement, and evaluate an intervention program that aims to reduce the level of stress and promote motivation for the regular practice of physical activity among teachers of the first 6 years of schooling, recruited from Portugal and Brazil. In terms of sample characteristics, we highlight the low average age of the participants, with 72.4% of the teachers studied being 35 years or younger. This fact contradicts research that claims that the teaching profession no longer attracts as many future professionals as it once did, resulting in a shortage of young people seeking this profession (De Araújo and Purificação 2021; Ratier and Salla 2018). Given the sample's youthful age, the teachers are largely at the start of their professional careers, as our data show, with 72.7% having 10 years or less of experience. Because the majority is female (57.6%), this result is consistent with recent surveys that show the prevalence of women in the early stages of education (Santos 2017; Pordata 2020).

The two groups did not show significant differences in the questions "drug use", "employment accident history", "homework performance", "exercise practice", "pain history", "alcohol consumption", and "supplementary employment" when the sociodemographic characterization of the sub-samples was compared. Large proportions of the Brazilian and Portuguese teachers (45% and 40%, respectively) have a second job. This condition could be related to low remuneration, which has long been a problem in the teaching profession (Lourencetti 2014; De Souza et al. 2018). However, there were significant differences in the amount of time spent in the classroom; on average, the Brazilian teachers engage in 6 h and 15 min more of activity each week (28 h and 23 min) than the Portuguese teachers (22 h and 8 min). Concerning the "history of unemployment", 53.5% of the Brazilian teachers had been unemployed for at least one year, while 35.3% of the Portuguese teachers were in

the same situation. In terms of "tobacco use", only 6.7% of the Brazilians had this habit, compared to 33.3% of the Portuguese teachers.

In terms of time spent traveling from home to work, the Portuguese took approximately 35 min, whereas the Brazilians took approximately 1 h and 20 min. Furthermore, 73.3% of the Brazilian teachers rely on public transportation to complete the aforementioned journey, whereas just 16.7% of the Portuguese teachers do. Finally, 60% of the Brazilian teachers have continued their studies, while 27% of Portuguese students work and study.

Regarding the level of stress of teachers prior to the intervention, the results obtained show that the teachers studied have a high level of stress, as also indicated by several studies conducted in Portugal and Brazil (Araújo and Sousa 2013; Borba et al. 2017; Cortez et al. 2017; Martins et al. 2014; Massa et al. 2016; Mendes et al. 2016). Teachers were asked in the questionnaire what situations they consider stressful in their daily teaching lives, and the most frequently cited situations were "relationship with students" (18), "relationship with school coordination" (12), "hourload" (10), "relationship with those responsible for students" (9), "low professional recognition" (8), and "low remuneration" (7). This result aligns with previous studies related to this subject (Batista et al. 2010; Gomes et al. 2010; Pocinho and Capelo 2009; Ramos 2009).

It was observed that the teachers were mainly motivated to increase their "physical fitness" and "esthetics". This could indicate that physical exercise is still related with physical health in most situations, although mental health advantages are still not considered by a substantial percentage of teachers.

When comparing the results obtained in terms of stress and motivation in the two subsamples (Portugal and Brazil), prior to the intervention, we noticed that the teachers from Brazil had a slightly higher level of stress than the teachers from Portugal. This finding can be linked to socioeconomic variables in Brazilian society, specifically the index of violence in Brazilian schools, which has been increasing year after year. In 2015, the Organization for Economic Cooperation and Development conducted a global survey of school violence rates with 100,000 teachers and primary education directors from 35 countries, allowing them to conclude that Brazil ranks first in violence against teachers, with 12.5% of teachers surveyed in the country being victims of verbal aggression and/or intimidation by students at least once a week (Facci 2019). Other factors that could justify the high levels of stress among Brazilian teachers include the longer commute to work, greater reliance on public transportation, and the extra workload associated with second jobs and study, as mentioned above in the comparison between the two populations.

In our study, the Portuguese teachers exceeded the Brazilian teachers in terms of motivation. The elements that motivated the Portuguese teachers were "health", "socialization", "competitiveness", "aesthetics", and "pleasure", while the Brazilian teachers were only motivated by "health" and "aesthetics". As previously stated, "stress control" was not a component that elicited motivation in any of the categories; we coupled these data with the fact that physical exercise is still exclusively correlated with physical health.

Considering the relationship between years of teaching experience and the level of stress displayed by teachers, we discovered a moderate but significant relationship between these two variables, implying that teachers become more stressed as their years in the profession progress. We can associate this with some factors, such as a lack of professional accomplishment and demotivation for work, because various studies show that "age" is directly related to the feeling of professional accomplishment and motivation for labor practice; that is, as the years pass, workers stop feeling accomplished in their profession and lose motivation to exercise the function that is assigned to them (Cardoso et al. 2002; Coelho and Diniz-Pereira 2017; Gomes et al. 2006; Da Mota et al. 2019).

When we assessed the impact of the intervention on the assessed sample, we found that there was a positive impact on both stress reduction and motivation increase. In this case, analyses showed that 78.9% of the subjects reported significantly reduced stress levels after the sessions, indicating that physical activity is an ally in promoting mental health, as other studies have shown.

Concerning motivation, the intervention resulted in greater motivation for physical exercise practice for the reasons of "stress control" (84.4%), "competitiveness" (97%) (significant increase), "aesthetics" (57.6%), "pleasure" (51.5%), and "health" (48.5%). The only motivating factor that showed a decrease in the indices of motivation after the intervention was "socialization", with 66.7% of those tested showing less motivation for "socialization" after the intervention. We believe that this is due to the pandemic environment in which we studied, which resulted in social isolation. Dantas et al. (2021) specifically addressed the difficulty that individuals experience in returning to a sense of security in the pursuit of social relationships in the aftermath of the pandemic. Perhaps this is why the teachers included in this study did not identify socialization as a factor motivating them to engage in physical activities.

5. Conclusions

Teaching is a high-stress occupation. According to research, many teachers in Brazil and Portugal suffer from stress-related problems, which is concerning. Considering this discovery, the development of stress management programs becomes essential, and physical exercise is given as one of the primary approaches for obtaining psychological benefits, stress reduction, and health promotion.

The main goal of this work was to implement and assess an intervention program targeted at lowering stress and increasing motivation for regular physical activity in teachers of the first six years of school, and this goal was met. In this study, teachers had a high level of stress prior to the intervention, and the factors that most influenced mental distress and, as a result, aided in the increase in stress were the relationship with the students, the teachers' responsibilities, and the school administration, feeling overworked, a lack of professional and social recognition, devaluation of the profession, and low remuneration. Furthermore, it was established that teachers have a low level of motivation to engage in physical exercise to regulate stress, socialize, and have fun, and that the only factors that deterred motivation in teachers were improved health and esthetics. Brazilian teachers were shown to be more stressed than Portuguese teachers in the pre-intervention comparison of the sub-samples from Portugal and Brazil. Some characteristics that may be related to this data were discovered as the work progressed, such as the fact that Brazilian teachers spend more hours on their commute, have a higher hourly burden, and sleep fewer hours per day.

It was discovered that the intervention program had a positive influence on stress levels and motivation for regular physical activity in both samples. In terms of stress levels, 83.3% of the Portuguese teachers and 73.4% of the Brazilian teachers reported a decrease (statistically significant reduction). In terms of motivation, 88% of the Portuguese teachers and 80% of the Brazilian teachers now see "stress control" as a motivating factor for regular physical activity (a statistically significant increase).

Considering these results, it is suggested to promote this type of action in schools, aiming at improving stress management and promoting the quality of life of teachers, which would have a positive impact on the school environment and promote better academic results. It is also suggested that this type of intervention cover a larger sample, considering that the greater limitation of this study is the size of the sample, which does not allow us to generalize these results. We also emphasize the necessity for further research into other variables, such as the verification of the existence of an increase in the quality of sleep of teachers who participate in these types of programs (Inácio et al. 2023). Another important limitation of this study was the lack of a control group, so we intend to conduct another investigation involving larger samples and one control group in each country.

There apparently exists a reality very distant from the context of most schools, both in Brazil and in Portugal, and our study showed that programs of this type of intervention are easy to implement, given the short duration of the exercises (5 to 20 min), which can be adapted so that they are feasible in any physical space and with the materials available in any school, such as chairs, plates, and balls. Faced with the above, this study is expected to contribute to a greater awareness of the importance of physical exercise, allowing a

significant decrease in stress levels and, consequently, promoting the mental health of teaching professionals.

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