Emotional intelligence in university Physical Education teachers

PILAR PUERTAS-MOLERO, ANTONIO PÉREZ-CORTÉS, MARÍA SÁNCHEZ-ZAFRA, CAROLINA CASTAÑEDA-VÁZQUEZ
University of Granada, Spain

ABSTRACT

Currently, teaching is one of the professions most highly affected by stress due to the large number of tasks involved and the continuous contact with students, among others, which generate weariness towards the profession, hence the importance of developing high levels of Emotional Intelligence. Why this is so important is that it enables teachers to deal optimally with frustration, and to know how to act appropriately when facing the various situations that arise in a classroom, as well as giving them the ability to communicate and listen, and thus adapt themselves to those situations. These factors are necessary to ensure the promotion of a correct teaching-learning process. By means of this research we aim to discover the mental state of university teachers by conducting a cross-sectional and descriptive study. As a data collection instrument, the TMMS-24 was applied to a sample of Physical Education teachers working in universities. The results showed that people who teach this subject have good levels of empathy with their students, possessing the ability to understand and empathise with them, thus having a good ability to control their feelings, and thus enhancing their mental well-being, which is reflected in the teacher’s job satisfaction. Key words: EMOTIONAL INTELLIGENCE, TEACHERS, UNIVERSITY, MENTAL WELLNESS, PHYSICAL EDUCATION.

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Corresponding author. Department of Didactics of Musical, Plastic and Body Expression, University of Granada, Spain.
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INTRODUCTION

The teaching profession through the various stages of education is dependent on a great many skills that teachers have to acquire and subsequently transmit (Reisoglu, Gedik & Goktas, 2013). From this perspective, the teacher's task is to focus on creating situations that will facilitate the students' success and integral development, transferring up-to-date and motivating knowledge and contributing to students' development during the teaching-learning process of an autonomy that will help them cope with real life situations in the future (Asrar-ul-Haq, Anwar & Hassan, 2017; Gutiérrez, Ibáñez, Aguilar & Vidal, 2016).

However, the significant numbers of abilities these professionals have to master, their continuous contact with students and colleagues, difficult situations they have to face on a daily basis and extra work that has to be done outside working hours, among others, are some of the challenges that expose teachers to high levels of pressure (Barłożek, 2015). These factors are generating symptoms of stress and anxiety in teachers, leading to such consequences as feelings of emptiness, low job satisfaction, low self-esteem, insomnia, eating disorders and even the development of "burnout", which has severe repercussions for the quality of teaching (Baranovska & Doktorova, 2014; Pu, Hou, Ma & Sang, 2017).

In this regard, authors such as Fernández-Berrocal, Cabello, Castillo & Extremadura (2012), Goleman (2012) and Meshkat & Nejati (2017), demonstrate that Emotional Intelligence is a psychosocial factor, contributing positively to the handling of tense situations, which is understood as an ability to perceive, assimilate, understand and manage emotions. Likewise, this construct acts by making good use of a person's ability to manage both their own emotions and those of others, allowing them to discriminate between the positive and negative effects of emotions, and facilitating the adjustment and control of thoughts and actions (Joseph & Newman, 2010; Patel, 2017).

Similarly, research studies such as the one by Pyhältö, Pietarinen & Salmela (2011), emphasise the need to develop positive emotions in teaching staff, since they are a crucial factor in the teaching-learning process, the understanding of feelings in educational contexts is thus an indispensable component in the training of teachers. In addition, Hosotani & Imai (2011), along the same lines, highlighted the fact that within teachers’ work environment there is a wide range of factors that influence their emotions, among them those perceived between teacher and student, teacher and colleagues, teachers and superiors and so on (Salguero, Extremera, & Fernández-Berrocal, 2012).

For these reasons, several research studies have already been carried out that bring to light the fact that one of the most useful methods of developing Emotional Intelligence is the practice of physical and sporting activity, which reinforces emotional skills through the feeling of belonging to a group, thus improving the ability to cooperate in order to achieve a common goal (Kim, Khon & Aidosova, 2016; Tillmann, Krishnadas, Cavanagh & Petrides, 2013).

Among the many benefits that the practice of physical and sporting activity can bring to university teachers, at an emotional level we can highlight the acquisition of competitive attitudes, as well as an appreciation of the value of the activity and the effort invested in it, in such a way as to orient teachers towards the achievement of goals (Adilogullari & Senel, 2014). At the physical level, a positive predisposition is developed towards understanding physical exercise as a valuable means in order to improve mental health as much as physical condition, generating an adherence to healthy habits (Duran, Lavega, Salas, Tamarit & Invernó, 2015). At the social level, an increase in both interpersonal and intrapersonal skills is produced, facilitating social relationships as a result of the multiple interactions (Gil & Martínez, 2015). And at a rational level, an
understanding is developed that enables to adapt to the different features of each activity in order to perform it optimally (Ristea, Macovei & Leonte, 2016).

According to the aforementioned, the teaching profession is in an alarming situation However, the regular practice of physical and sporting activity, provides adequate levels of Emotional Intelligence, the benefits of which can then be extrapolated to any daily activity; therefore this research study aims to describe levels of Emotional Intelligence and of physical activity in university PE teachers and to establish the relationship between emotional intelligence, the practice of physical activity and the gender of the participants.

MATERIAL AND METHOD

Design and participants
A non-experimental ex post-facto study was carried out, descriptive and cross-sectional, with a single measurement. The sample was made up of 437 university teachers aged between 24 and 70 (M= 44.30; D.T. = 10.057), representing 49.9% men (n=218) and 50.1% women (n=219). In order to decide on the study sample, we considered teachers working in the areas of corporal expression and physical and sporting education. Regarding the studied population, a representative sample was established by stratified random sampling techniques with a sampling error of 0.05 and I.C. = 95.5%.

Variables
The following variables were used in this study:

- Gender: categorised as male and female.
- Age: the age of each teacher taking part in the study was established.
- Physical activity: whether or not they practise physical activity for three hours or more per week.
- Emotional Intelligence: establishing the participants’ average score with regard to emotions and feelings, using a scale of 1 to 5 points in order to gauge emotional intelligence and the levels of attention to feelings, clarity of feelings and mood repair.

Instruments
In carrying out this research study the following instruments were used:

- Ad-Hoc questionnaire. A questionnaire was developed specifically to register sociodemographic variables and the practice or not of physical activity.
- Trait Meta-Mood Scale-24 (TMMS-24) self-report scale. The original version of this instrument is the Trait Meta-Mood Scale (TMMS-48) created by Salovey, Mayer, Goldman, Turvey & Palfai (1995), which assesses meta-knowledge of emotional states. TMMS-24 is the abridged version adapted to Spanish by Fernández-Berrocal, Extremera and Ramos (2004). The questionnaire is made up of 24 items, which are graded by means of a Likert scale with five options, ranging from 1: totally disagree to 5: totally agree. The items are structured in three emotional intelligence key dimensions with 8 items for each of them: attention to feelings (items 1-8; e.g., “I pay attention to feelings”), clarity of feelings (items 9-16; e.g., “I can often define my feelings”) and mood repair (items 17-24; e.g., “Although I sometimes feel sad, I am often optimistic”). Reliability of the original study for each component is: attention (α=0.900), clarity (α=0.900) and repair (α= 0.860). In the present study the reliability of the whole scale was α= 0.889, in attention to feelings α= 0.909, clarity of feelings α= 0.915 and mood repair α= 0.886, which is quite acceptable.
Procedure
In order to request the collaboration of participants, all of whom were university teachers in an area related to corporal expression and physical education and sport, an explanatory letter was written by the Department of Didactics of Music, Plastic and Corporal Expression of the University of Granada, giving details about the aim and nature of the research stud which was sent out by e-mail. The collection of data was carried out after school hours without any problems, the research team being constantly available to ensure correct application of the instruments described and to answer any queries. It should be noted that the 437 participants’ right to confidentiality was observed and 43 questionnaires were invalidated because they were not properly completed.

Data analysis
Statistical analysis of the data was performed using the statistical software IBM SPSS® in its version 22.0 for Windows. For basic descriptors, means and frequencies were used, whereas for the study of relations between variables t-student was used for dichotomous factors. Internal reliability of the instrument used was assessed by means of Cronbach’s Alpha, which had a reliability index of 95.5%.

RESULTS
Table 1 shows basic descriptors relating to gender of participants, practice of physical activity, and emotional intelligence of the university teachers. Women make up 50.1% of the sample of study, while men represent 49.9%. Regarding the practice of physical activity, 59.7% of the subjects practised at least three hours a week and 40.3% did not. Regarding feelings and emotions, general emotional intelligence presents acceptable average values (M = 3.70; S.D. = 0.544); the dimension with the lowest mean is attention to feelings (M = 28.23; S.D. = 6.901), followed by clarity of feelings (M = 30.04; S.D. = 5.999) and mood repair (M = 30.52; S.D. = 6.077).

Table 1. Basic descriptors regarding gender, practice of physical activity and levels of Emotional Intelligence in university teachers

<table>
<thead>
<tr>
<th>Gender</th>
<th>PPA</th>
<th>GEI</th>
<th>AF</th>
<th>CF</th>
<th>MR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>49.9%</td>
<td>Yes</td>
<td>5.00</td>
<td>28.23</td>
<td>30.04</td>
</tr>
<tr>
<td>Female</td>
<td>50.1%</td>
<td>No</td>
<td>5.00</td>
<td>28.23</td>
<td>30.04</td>
</tr>
</tbody>
</table>

Analysis of the university teacher’s emotional intelligence by gender (Table 2) showed significant associations both in general emotional intelligence (p = 0.26*) and in the dimension attention to feelings (p = 0.002*). Women (M=3.75; S.D. = 0.503) demonstrated higher parameters in emotional intelligence than men.
(M=3.64; S.D.= 0.571), as was also the case in attention to feelings, with women registering M= 29.27 (S.D.= 6.80) and men M= 27.19 (S.D.= 27.19).

Table 2. Emotional Intelligence by gender in university teachers

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean (M)</th>
<th>S.D.</th>
<th>Levene’s test</th>
<th>T-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEI Male</td>
<td>218</td>
<td>3.64</td>
<td>0.571</td>
<td>1.987</td>
<td>0.159</td>
</tr>
<tr>
<td>GEI Female</td>
<td>219</td>
<td>3.75</td>
<td>0.503</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AF Male</td>
<td>218</td>
<td>27.19</td>
<td>6.85</td>
<td>0.000</td>
<td>0.993</td>
</tr>
<tr>
<td>AF Female</td>
<td>219</td>
<td>29.27</td>
<td>6.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CF Male</td>
<td>218</td>
<td>29.83</td>
<td>5.97</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>CF Female</td>
<td>219</td>
<td>30.25</td>
<td>6.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MR Male</td>
<td>218</td>
<td>30.38</td>
<td>6.27</td>
<td>0.965</td>
<td>0.326</td>
</tr>
<tr>
<td>MR Female</td>
<td>219</td>
<td>30.66</td>
<td>5.88</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*General Emotional Intelligence (GEI) * Attention to Feelings (AF) * Clarity of Feelings (CF) * Mood Repair (MR)

The study of emotional intelligence in relation to the practice or not of physical activity (Table 3) brought statistically significant differences for general emotional intelligence (p = 0.001*), and for the dimension clarity of feelings (p = 0.018*) and mood repair (p = 0.004*). University teachers who practise physical activity for three or more hours a week have greater emotional intelligence (M = 3.76; S.D. = 0.540) than those who do not follow this pattern (M = 3.59; S.D. = 0.532). Regarding clarity of feelings, those who practise physical activity have higher values (M = 30.60; S.D. = 5.815) than those who do not (M = 29.22; S.D. = 6.185), the same applying to mood repair (M = 31.21; S.D. = 6.145 and M = 29.51; S.D. = 5.845).

Table 3. Emotional intelligence by practice of physical activity in university teachers

<table>
<thead>
<tr>
<th>PPA*</th>
<th>N</th>
<th>Mean (M)</th>
<th>S.D.</th>
<th>Levene’s test</th>
<th>T-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEI Yes</td>
<td>261</td>
<td>3.76</td>
<td>0.540</td>
<td>0.022</td>
<td>0.882</td>
</tr>
<tr>
<td>GEI No</td>
<td>176</td>
<td>3.59</td>
<td>0.532</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AF Yes</td>
<td>261</td>
<td>28.64</td>
<td>6.878</td>
<td>0.006</td>
<td>0.939</td>
</tr>
<tr>
<td>AF No</td>
<td>176</td>
<td>27.63</td>
<td>6.910</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CF Yes</td>
<td>261</td>
<td>30.60</td>
<td>5.815</td>
<td>1.106</td>
<td>0.294</td>
</tr>
<tr>
<td>CF No</td>
<td>176</td>
<td>29.22</td>
<td>6.185</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MR Yes</td>
<td>261</td>
<td>31.21</td>
<td>6.145</td>
<td>0.055</td>
<td>0.815</td>
</tr>
<tr>
<td>MR No</td>
<td>176</td>
<td>29.51</td>
<td>5.845</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Practice of Physical Activity (PPA)* General Emotional Intelligence (GEI) * Attention to Feelings (AF) * Clarity of Feelings (CF) * Mood Repair (MR)
DISCUSSION

The aim of this research has been to discover the levels of emotional intelligence in university teachers who teach in a field related to corporal expression or physical and sporting activity, as well as the relationship between this variable and the level of physical activity according to gender, there being several authors who confirm that this construct, together with physical exercise, plays a vital role in the area of education, as well as in that of social and mental wellbeing (Barłożek, 2015; Cazalla & Moreno, 2016; Di Fabio & Kenni, 2011; Munsawaengsub, Yimklib, Nanathamongkolchai & Apinanthatavech, 2009; Yildizbas, 2017).

The present study, involving 437 university teachers, revealed that the levels of Emotional Intelligence in these educational professionals are acceptable, the data being similar to those presented by Aguayo-Muela and Aguilar-Luzon (2017), who carried out a review of 16 studies conducted with Spanish teachers as the participants, finding this construct optimal. Likewise, Yildizbas (2017), established that teachers in Turkey who taught students at different educational stages, had suitable levels of Emotional Intelligence, concurring with this study on the dimension with the highest score being mood repair (Mouton, Hansenne, Delcour & Cloes, 2013; Tsvetkova, 2017).

With regard to levels of Emotional Intelligence by gender, in this study the highest scores were found in females both at the general level and in each of the dimensions. Similarly, the study conducted by Merida-López, Extremera & Rey (2017) on a sample of 310 teachers in different educational stages, concluded that women show higher levels in relation to the studied variable, which acted as a means of protection against feelings of depression or anxiety, the data being similar to those found by Chan (2008).

Likewise, Mounton, Hansenne, Delecour, Cloes (2013) and Yin (2015), confirmed that females in general tended to show higher levels of Emotional Intelligence, however, in their studies on a population of university teachers they found that men’s levels were higher in intrasocial abilities while women excelled in intersocial skills as a means to face effectively situations in which they were under pressure.

In the same way, the research study conducted by Alghamdi, Aslam & Khan (2017), involving 100 university teachers in Saudi Arabia, revealed no differences in Emotional Intelligence between genders, a discovery also supported by the study “Relationship between Job Satisfaction and Emotional Intelligence among school teachers of Kangra District of Himachal Pradesh”, conducted by Shinu, Renu and Lalita (2016).

In terms of relations between Emotional Intelligence and the practice of physical and sporting activity in university teachers, significant data were obtained relating to those teachers who practised physical exercise for Emotional Intelligence generally and in the dimensions of clarity of feelings and mood repair. These data were supported by other studies such as those by Albo, Núñez & León (2010), Szabo & Urbán (2014) and Fernández, Almagro & Sáenz (2014), who highlight that teachers who practise more physical activity are able to develop positive feelings and redirect their frustrations, thus being able to act in the best way when facing stressful situations (Extremera & Fernández-Berrocal, 2012; Salovey, Stroud, Woolery & Epel, 2002; Sloan, 2014).

In this regard, authors such as Adilogullari & Senel (2014), Gil & Martínez (2015) and Ristea, Macovei & Leonte (2016) confirmed that those teachers who practised physical and sporting activity in their free time had higher levels of Emotional Intelligence and set a good example to their students, instilling principles into them, and showing them how to channel frustrations and how to take decisions under pressure.
CONCLUSION

Through this research study it has been demonstrated that half the university teachers who teach in an area related to Physical Education practise physical and sporting activities outside the working environment, in addition to having adequate levels of emotional intelligence, which demonstrates that the practice of exercise is connected with an increase in this psychosocial construct. It was likewise verified that emotional skills are stronger in women than in men.

With regard to the relationship between practice of physical activity and sport and Emotional Intelligence, it is apparent that physical exercise contributes positively to the increase of this construct, since those university teachers who practised sport outside the working environment had better emotional clarity and mood repair, and were thus able to face their working day satisfactorily.

Nevertheless, it has to be pointed out that a measure of the limitations of this study is the fact that although the population was significant, it is not possible to apply the results to the whole population since they only provide information on the population that was the object of the study. Additionally, what stands out from these results is the great value of the practice of physical activity in guaranteeing the mental wellbeing of these professionals, on whom depends the quality of the teaching-learning process. To be encouraged, therefore, are implementations that apply this psychosocial construct to university teachers, since they are in charge of the training and imparting knowledge to the professionals of the future.

REFERENCES


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