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An empirical examination of the role of emotional knowledge in the teaching profession

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Modern society has plunged us into a maelstrom of telematics information with little control. Teachers from any field must be trained in order to pass on the confidence and values to withstand this media pressure to their students. To this end, one of the areas of knowledge on which greater emphasis should be placed is that related to emotional intelligence. The study reported on here focused on this type of knowledge among professional music studies teachers in conservatories, asking what the perception of this group on the aforementioned area of knowledge is and to what extent it has been received during their initial training. For this investigation we used a quantitative methodological approach, and via descriptive analysis, a non-parametric Wilcoxon signed-rank test, and inferential analysis, we found significant differences regarding the two scales considered: level of agreement and emotional intelligence training received. Furthermore, regarding the descriptive variables, significant differences were also found through the application of the Mann-Whitney *U* and Kruskal-Wallis test.

Keywords: emotional intelligence; initial training; knowledge; teachers

Introduction

Any education system should have the main objective of containing a high level of quality in all elements that comprise it. One of the main pillars within the educational sphere is, without a doubt, teaching staff (Vélaz de Medrano & Vaillant, 2009). Teachers should have effective initial training as a precursor to their professional lives, which affords them the tools to be able to act in the face of the multiple situations that arise on a daily basis.

Teacher knowledge for teaching has been studied from various platforms. On the one hand, its understanding and origins have been explored. On the other hand, the knowledge obtained from research, and transmitted via training, has been compared with the other knowledge generated by teachers themselves from their experience (Clandinin & Connelly, 1987; Elbaz, 1983, 1991). Also, there has been research into the knowledge that teachers themselves impart: pedagogical knowledge, didactic knowledge of content, and so on (Hoover, Mosvold, Ball & Lai, 2016; Riveiro-Villodres, Blanco-Encomienda & Latorre-Medina, 2018). Furthermore, there has been analysis of cognitive processes followed by teachers during lesson planning, when they are interacting with their students and when they are assessing their own actions and those of their students (Fennema & Franke, 1992; Ingvarson, Meiers & Beavis, 2005).

In the 1980s, studies on the knowledge that a teacher should possess began to increase. One of the authors who focused most on this question was Shulman (1987), who established the following types: content knowledge; general pedagogical knowledge; curriculum knowledge; curricular teaching knowledge; knowledge of learners and their characteristics; knowledge of educational contexts; knowledge of objectives, aims and educational values, and of their philosophical and historical foundations.

To this group of knowledges proposed by Shulman, we can add one more: emotional intelligence knowledge, a subject of increasing interest by the scientific community (Awang, Mohd Faiz, Yusof, Ab Rahman & Warman, 2017; Buzinde, Foroughi & Godwyll, 2019; Hodzic, Scharfen, Ripoll, Holling & Zenasni, 2018; Krishnan, Goel, Singh, Bajpai, Malik & Sahai, 2017; Newton, Teo, Pick, Ho & Thomas, 2016). Along this line, the aim of this study was to ascertain what the understanding of emotional intelligence knowledge was, and to what degree teaching staff in professional music studies in conservatories have received it in their initial training.

Theoretical Background

Emotional intelligence in the teaching-learning process

The concept of emotional intelligence is ever more present in our lives, implying that it has become a field of study being incorporated into all professions (Isaza & Calle, 2014), and in the case of education, the occurrence of this incorporation is even quicker (Karaman Özlü, Avşar, Gökalp, Ejder Apay, Altun & Yurttas, 2016). The term “emotional intelligence” is a constant topic in our society, and in the same vein there is also a repeated occurrence of studies on the need to include this knowledge in all educational spheres and levels (Naylor, Cowie, Walters, Talamelli & Dawkins, 2009; Salas Román, Alcaide Risoto & Hurtado Marín, 2018). These studies show the positive results stated when this type of knowledge is considered in the curriculum. The first studies undertaken on the concept of emotional intelligence and its importance for inclusion as part of the teaching-learning process, were by Mayer and Salovey (1997). They defined the concept of emotional intelligence as the ability to perceive emotions, to access and generate emotions to assist thought, to understand emotions and emotional meanings, and to reflectively regulate emotions in order to promote both better emotions and thought. More recent studies also confirm that the educational process and the personal development of the student improve if accompanied by reinforcement and learning from emotional awareness (Jansen, Moosa, Van Niekerk & Muller, 2014; O'Regan,

2003; Payton, Weissberg, Durlak, Dymnicki, Taylor, Schellinger & Pachan, 2008). All of the inquiries carried out demonstrate that, in effect, favourable differences occur when emotional intelligence is introduced into the teaching-learning process, improving students' overall development (Bisquerra, Punset, Mora, García Navarro, López-Cassà, Pérez-González, Lantieri, Nambiar, Aguilera, Segovia & Planelis, 2012; Escribano González, Bejarano Franco, Zúñiga Fernández & Fernández Gijón, 2010; Şahin, Özer & Deniz, 2016).

This brings with it the call for the necessary instruction in emotional intelligence by teachers of any discipline (Alam & Ahmad, 2018; Pérez Pérez & López Francés, 2010), who are aware of the role played by emotions in their daily task (Palomera, Fernández-Berrocá & Brackett, 2008). Emotional intelligence should be presented as one more subject in initial teacher training for any discipline. This argument was forward by Bisquerra Alzina (2005), who advocates the creation of an emotional intelligence subject. He defines this subject as a continuous, ongoing process that seeks to strengthen the development of emotional competencies as an essential element in the overall development of students, with the objective of equipping them for life. This all has the aim of increasing personal and social well-being. According to Bisquerra Alzina (2005), upon completing this emotional intelligence subject, future educators of any discipline will have acquired the following skills:

- Understanding the relevance of emotions in education and daily life.
- Becoming aware of their own emotions and those of others in social interactions.
- Regulating their own emotions and exercising emotional control in conflictive everyday situation, in particular regarding classroom dynamics.
- Establishing better interpersonal relationships, in the workplace and family environment, and in social settings.
- Dealing with learners more effectively and satisfactorily, taking the emotional dimension into consideration.
- Carrying out an analysis of the context to identify emotional needs that should be attended to through an emotional education programme.
- Formulating objectives for an emotional education programme whose achievement supposes the satisfaction of priority needs.
- Determining possible indicators that allow the designing of specific intervention strategies, along with the aspects that the programme assessment should affect.
- Designing a programme that promotes the development of emotional skills in learners.
- Designing strategies and activities, or selecting them from among existing ones, in order to apply them in the implementation of the programme.
- Applying the programme to a group class, preferably in the framework of the Tutorial Action Plan.
- Assessing the programme, using the previously

created indicators as a reference.

Within this type of knowledge and due to the current increase in classroom violence, it is essential for teachers, especially those who face these situations on a daily basis, to be trained to deal with them. In accordance with Valle-Barbosa, Muñoz de la Torre, Robles-Bañuelos, Vega-López, Flores-Villavicencio and González-Pérez (2019), bullying is considered to be any type of aggressive behaviour towards members of the educational community.

Bullying in schools can be defined as a category of aggressive behaviour in which there is an imbalance of power, and the aggressive act is repeated over time (Olweus, 1999). It presents three roles, the bully, the victim and the bystander (Boulton & Smith, 1994; Oh & Hazler, 2009; Salmivalli, Lagerspetz, Björkqvist, Osterman & Kaukiainen, 1996). It has been found that bullying behaviour starts from the pursuit of high status and a dominant group position (Pellegrini, 2002). Bullies are selective and choose victims who are submissive and insecure (Salmivalli & Isaacs, 2005). Regarding bystanders, Fischer, Greitemeyer, Pollozek and Frey (2006) suggest that their helping behaviour decreases when others are present (bystander effect). Together with bullying, and encouraged by telematic pressure, cyberbullying and mass internet usage among children and teenagers is rapidly growing (Fernández-Montalvo, Peñalva & Irazabal, 2015; Finkelhor, Mitchell & Wolak, 2000).

There is an ever increasing number of centres where education for coexistence is a priority, on the one hand, due to the importance of the values that implicitly include this task, and on the other, the increasing conflict that continues to arise in classrooms (Pérez Pérez & López Francés, 2010). Educators must know how to transmit attitudes that favour healthy relationships between students, and even programme debates and reflection on types of power and its abuse, keys to coexistence, identification and management of feelings and emotions in interpersonal exchanges between students, and the solving of problems in the classroom via group collaboration (Avilés Martínez, 2011). In the same way, it is important to educate healthy habits of self-protection and best practices in virtual spaces (Echeburúa & Requesens, 2012; Luengo Latorre, 2014; Vega-Osés & Peñalva-Vélez, 2018). This is why it is necessary for teachers to be trained in matters of emotional intelligence, and provided with techniques that help to prevent or address conflicts so that they do not manifest themselves as bullying or other types of harassment at school.

Professional Music studies teachers

Professional music studies in Spain are taught in institutions known as conservatories. These studies had their origins in the Royal Madrid Conservatory in 1830, and from then on other conservatories were

created throughout Spain. Although their initial purpose was to train professional musicians, with the passage of time more and more graduates of these studies have ended up working as music studies teachers. For a long period, while the study plans approved in 1942 and 1966 remained in force, the curriculum for these studies was based on training in material or content, with other aspects such as didactics and pedagogy being practically ignored until 1990 with the approval of the General Arrangement of the Educational System Act.

Our study, as we have set out in previous paragraphs, focused on emotional intelligence and, more specifically, on the degree of assessment and level of training of professional music studies teachers. The relationship between music and emotions is a connection supported by multiple, diverse studies (Juslin & Sloboda, 2001; Koelsch, 2010; Robinson, 2008; Trainor & Schmidt, 2003), to which it appears logical that music studies teachers should be instructed in this type of knowledge.

Music studies students normally begin learning at very young ages, and musical experiences in early childhood have a lifelong influence (Ruismäki & Tereska, 2006). For many years these students face situations of great stress, such as excessive workload, practice, competition with others and the physical and emotional tension involved in public performance (Osborne & Kenny, 2005; Tripiana, 2016). The way of coping with this excessive effort is through relaxation and self-control techniques, high intrinsic motivation and a positive self-concept (Asmu, 1986; Holgado, Navas & Marco, 2013; Schmidt, 2005; Torres Estarque, 2013). Educators in these disciplines should help prepare students by showing them the appropriate techniques and strategies for coping with this physical and emotional burden (Wristen, 2013).

Sastre Morcillo (2014) details a series of emotional skills that learners of music should acquire.

- Self-concept: students should be aware of their progress and the discipline that this requires, knowing their weak and strong points.
- Self-motivation: students must work on the capacity for improvement in the face of increasingly autonomous study.
- Social skills: relating to other classmates in musical groups or group subjects.
- Bodily self-control, for mastering public performances and tests, controlling stress and/or anxiety.
- Empathy, which should be forthcoming in musical performances with other students, and even with the public in order to produce the communication necessary for generating emotion.

It is the educator, in this case the professional music studies teacher, who should know how to transmit these skills to students, to which we again stress the need to include emotional intelligence in teacher training. Instructing teachers in this type of

knowledge is very important, as much for their emotional skills development (Cabello, Ruiz-Aranda & Fernández-Berrocal, 2010; López-Bernad, 2015), as for the teaching-learning process of students.

Method

The methodological framework of our study was inspired by the attributes of the quantitative approach, more specifically, of a descriptive and inferential approach (Buendía Eisman, Colás Bravo & Hernández Pina, 1998; Cohen & Manion, 2002).

Instrument

The data collection instrument we used in our study was the questionnaire, created ad hoc for this research. As a result of the extensive literary review carried out, we created a bank of items related to the types of knowledge that teachers should possess (Bolívar, 2005; Carter, 1990; Concepción Cuétara, 2012; Connelly, Clandinin & He, 1997; De Vicente Rodríguez, 1994, 2006; Escarbajal Frutos, 2010; Shulman, 1987; Vallés Villanueva, 2005; Vicente & Aróstegui, 2003; among others).

A draft questionnaire was created that was reviewed by experts in pedagogic and musical studies and, once a definitive design was obtained adhering to indications on appropriateness, clarity and relevance for each of the items indicated by these experts, it was duly validated through a factorial analysis. Regarding the reliability of the instrument, a Cronbach's Alpha coefficient value equal to 0.969 was obtained.

It should be noted that this study was part of a bigger investigation into the role of the different types of knowledge in the teaching profession (content knowledge; general pedagogical knowledge; curriculum knowledge; curricular teaching knowledge; knowledge of learners and their characteristics; knowledge of educational contexts; knowledge of objectives, aims and educational values, and of their philosophical and historical foundations; emotional intelligence knowledge). Thus, the questionnaire was divided into two fundamental parts: a first section with questions on respondent identification details (gender, age, years of experience, study plan graduated from and postgraduate qualifications), and a second part where the items appear grouped according to the different types of knowledge, using a Likert-type scale of four points to analyse their level of agreement (1 = Disagree, 2 = Partially agree, 3 = Agree, 4 = Strongly agree) and another scale for knowing to what extent this has been transmitted during their initial training (1 = To no extent, 2 = To some extent, 3 = To a sufficient extent, 4 = To a great extent). For this study we focused on emotional intelligence knowledge, selecting a total of eight items that define this aspect.

Sample

The research was carried out across Spanish territory, focusing on the professional music conservatories at autonomous regional and municipal level. In Spain there are 198 professional music conservatories, with a total staff of 8,340 teachers.

To obtain the sample we contacted all of the professional conservatories via e-mail and telephone, requesting that they disseminate the questionnaire among their teaching staff. The sample was finally composed of 353 educators, of which 44.5% were female and 55.5% male.

With regard to the age of the respondents, the highest percentage corresponds to the 41 to 50 range (41.4%), followed by that of 30 to 40 (32.3%). The other ranges are 51 to 60 (17.5%), under 30 (7.1%) and over 60 (1.7%).

Regarding the experience of the participating teachers, two ranges stood out, 11 to 20 years (40.8%) and 21 to 30 years (30.3%). The other ranges were 10 years or less (23.2%) and more than 30 years (5.7%).

In relation to the two last identification variables, study plan and postgraduate qualification, taking into account that the age range with the greatest participation comprised teachers between 41 and 50, it was expected that the highest number of respondents would have graduated from the study plan approved in 1966 (71.7%), a plan that saw its last years of enrolment at the end of the 90s. And, for the same reason, we were able to foresee that the postgraduate qualification with the highest

percentage was going to be the Certificate in Teaching Aptitude, which indeed showed the highest percentage (43.3%).

Data Analysis

As an initial approximation to the analysis of the data, we carried out a descriptive analysis (measurements of central tendency and dispersion, as well as absolute and relative frequencies) to gain an overall view of the sample and its form of distribution.

Furthermore, to check for significant differences regarding the two scales considered, level of agreement on the different items that make up knowledge on emotional intelligence and training received by the respondents, we applied the Wilcoxon signed-rank test.

Finally, to verify whether the training received and agreement on the different statements regarding knowledge on emotional intelligence were determined by gender, age, experience, study plan graduated from, and the postgraduate qualifications of the respondents, we carried out an inferential analysis using the Mann-Whitney *U* and Kruskal-Wallis tests to compare independent samples.

Results

Descriptive Analysis

Table 1 shows the percentages, averages and standard deviations obtained in each of the items that comprise knowledge on emotional intelligence, regarding the two scales considered: level of agreement and training received.

Table 1 Percentages, averages and standard deviations corresponding to level of agreement

	Percentages				\bar{x}	<i>SD</i>
	1 Disagree	2 Partially agree	3 Agree	4 Strongly agree		
1 Know how to motivate students	0.3	2.5	21.8	75.4	3.72	0.519
2 Know different control techniques as regards student behaviour	1.1	4.8	32.3	61.8	3.55	0.643
3 Know how to listen and accept different points of view of students and colleagues	0	4.0	32.0	64.0	3.60	0.566
4 Achieve a favourable emotional atmosphere of trust and respect in relationships with students	0	0.3	20.7	79.0	3.79	0.417
5 Know how to use techniques and procedures that stimulate personal growth in students	0.8	1.4	23.8	73.9	3.71	0.536
6 Know how to assess the changes that occur in the overall development of students	0	4.2	31.7	64.0	3.60	0.571
7 Know how to recognise bullying and other types of harassment at school	0	3.1	24.6	72.2	3.69	0.526
8 Know what to do when faced with bullying and other types of harassment at school	0.3	3.1	28.3	68.3	3.65	0.556

Focusing on Table 1, we can see that the trend of responses given by the professional conservatory teachers was quite homogenous, with the average scores for each item oscillating between 3.55 and 3.79. If we pay attention to the standard deviations, they also show little difference between the

responses of teachers, with the dispersion framed between 0.417 and 0.643.

Following on with the descriptive analysis and attending to the percentages brought together in the items with the highest average scores, we can verify that the value of the highest average is presented by

three items: item 4, “teachers should achieve a favourable emotional atmosphere of trust and respect in relationships with students” ($\bar{x} = 3.79$), item 1, “teachers should know how to motivate students” ($\bar{x} = 3.72$) and item 5, “teachers should know how to use techniques and procedures that stimulate personal growth in students” ($\bar{x} = 3.71$). Very close to these are items 7 ($\bar{x} = 3.69$) and 8 ($\bar{x} = 3.65$). These results show that for over 90% of professional conservatory teachers it is very important to know how to recognise when bullying is occurring, as well as knowing how to deal with it and other types of harassment at school. Items 3 and 6 appear with the same value ($\bar{x} = 3.60$), also affording great relevance to knowing how to listen to and accept different points of view from students and colleagues, and assessing the changes that occur in the overall development of students.

Furthermore, if we focus on the lowest average scores, at the very bottom is item 2 “teachers should know different control techniques as regards student behaviour” ($\bar{x} = 3.55$).

Regarding the values reached in the standard deviation, item 4 is that which reflects the highest average value and in turn obtains the lowest standard deviation ($SD = 0.417$). These results reflect the fact that this statement enjoys a better level of consensus amongst the respondent teachers. We draw attention to item 2 as it is the variable that has achieved the highest standard deviation value ($SD = 0.643$). In this case, the greatest data dispersion reveals a more heterogeneous distribution of the percentages between two of the four answer options.

For these same statements the teachers were required to assess to which degree it had been transmitted to them during their initial training (Table 2).

Table 2 Percentages, averages and standard deviations corresponding to degree of training received

	Percentages				\bar{x}	SD
	1 To no extent	2 To some extent	3 To a sufficient extent	4 To a great extent		
To what extent was the following transmitted:						
1 Know how to motivate students	19.3	38.5	23.2	19.0	2.42	1.006
2 Know different control techniques as regards student behaviour	31.7	37.7	21.5	9.1	2.08	0.944
3 Know how to listen and accept different points of view of students and colleagues	18.7	41.1	24.9	15.3	2.37	0.957
4 Achieve a favourable emotional atmosphere of trust and respect in relationships with students	12.5	32.7	28.7	26.1	2.68	0.996
5 Know how to use techniques and procedures that stimulate personal growth in students	20.1	37.4	24.6	17.8	2.40	1.001
6 Know how to assess the changes that occur in the overall development of students	28.0	36.5	24.4	11.0	2.18	0.967
7 Know how to recognise bullying and other types of harassment at school	47.6	29.7	9.9	12.7	1.88	1.036
8 Know what to do in the face of bullying and other types of harassment at school	51.0	30.0	11.0	7.9	1.76	0.939

These results obtained from the descriptive analysis show a tendency closer to heterogeneity in the respondents' scores. On the one hand, the average for the transmission of these aspects in the initial training of the educators in question oscillates between 1.76 and 2.68. On the other hand, the values represented in the standard deviation are between 0.939 and 1.036.

According to the findings, we see that the statement with the lowest average score corresponds to item 8 ($\bar{x} = 1.76$), followed by item 7 ($\bar{x} = 1.88$). In this manner, 81% of the teachers recognised having received little or no training on knowing how to act in the face of bullying and other types of harassment, and over 77% of the respondents said they had hardly received any training on knowing how to recognise bullying and other types of harassment at school.

If we address the statements with the highest scores, the value of the maximum average

corresponds to item 4, “should achieve a favourable emotional atmosphere of trust and respect in relationships with students” ($\bar{x} = 2.68$). Despite this, over 45% of these teachers declared not having received much training in this aspect. Continuing with the highest averages, we draw attention to items 1 ($\bar{x} = 2.42$), 5 ($\bar{x} = 2.40$) and 3 ($\bar{x} = 2.37$), with half of the respondents acknowledging having received little training on knowing how to motivate and stimulate personal growth in students, and on knowing how to listen to different points of view of both students and fellow teachers.

Concentrating on the standard deviation values, we highlight item 7; “know how to recognise bullying and other types of harassment at school” with the highest value ($SD = 1.036$), which indicates a more heterogeneous distribution among the four possible answers: 47.6% of the teachers recognised not having received any training on this aspect,

29.7% little training, 9.9% sufficient training and 12.7% a lot of training.

In contrast, the item with the lowest standard deviation score was number 8 ($SD = 0.939$), as such showing the greatest consensus regarding teacher scores. The majority responded to *no extent* (51%) or to *some extent* (30%) for how to act in the face of bullying and other types of harassment at school.

Wilcoxon Signed-Rank Test

Following the application of this non-parametric evaluation, the Wilcoxon signed-rank test, we can argue that there are significant differences between the level of agreement between the teachers and the training received in each item that covers knowledge on emotional intelligence (see Table 3).

Table 3 Differences in perception between level of agreement and training received regarding knowledge on emotional intelligence

Teachers should:	Training/Agreement		Wilcoxon	
	Difference	SD	z	p
1 Know how to motivate students	-1.30	0.762	-14.175	0.000***
2 Know different control techniques as regards student behaviour	-1.47	0.793	-14.919	0.000***
3 Know how to listen and accept different points of view of students and colleagues	-1.23	0.761	-14.106	0.000***
4 Achieve a favourable emotional atmosphere of trust and respect in relationships with students	-1.11	0.706	-13.421	0.000***
5 Know how to use techniques and procedures that stimulate personal growth in students	-1.31	0.768	-14.166	0.000***
6 Know how to assess the changes that occur in the overall development of students	-1.42	0.769	-14.707	0.000***
7 Know how to recognise bullying and other types of harassment at school	-1.81	0.781	-15.163	0.000***
8 Know what to do in the face of bullying and other types of harassment at school	-1.89	0.747	-15.493	0.000***

Note. *** $p \leq 0.01$.

These discrepancies show us that these teachers, despite having received scarce training regarding this knowledge, do consider emotional intelligence to be very important for going about their profession. As such, the agreement score is higher in all variables.

Inferential Analysis

Table 4 shows the results obtained following the application of the Mann-Whitney U and Kruskal-Wallis test.

Table 4 Contrast of differences for items corresponding to knowledge on emotional intelligence

Item	Scale	Gender	Age	Experience	Study plan	Postgraduate
1	Training	0.808	0.015**	0.005***	0.004***	0.678
	Agreement	0.619	0.841	0.894	0.716	0.150
2	Training	0.673	0.454	0.024**	0.027**	0.425
	Agreement	0.112	0.329	0.865	0.521	0.444
3	Training	0.574	0.036**	0.031**	0.002***	0.839
	Agreement	0.374	0.577	0.345	0.987	0.141
4	Training	0.625	0.089*	0.020**	0.055*	0.853
	Agreement	0.294	0.574	0.461	0.944	0.066*
5	Training	0.413	0.018**	0.013**	0.001***	0.384
	Agreement	0.082*	0.984	0.960	0.652	0.051*
6	Training	0.347	0.129	0.021**	0.030**	0.349
	Agreement	0.054*	0.640	0.939	0.409	0.117
7	Training	0.924	0.007***	0.007***	0.002***	0.505
	Agreement	0.556	0.982	0.374	0.683	0.951
8	Training	0.871	0.113	0.040**	0.016**	0.600
	Agreement	0.836	0.986	0.184	0.455	0.645

Note. * $p \leq 0.10$, ** $p \leq 0.05$, *** $p \leq 0.01$.

We can observe that, regarding the gender variable, significant differences exist when it comes to the level that respondents' agreement with item 5, "know how to use techniques and procedures that stimulate personal growth in students" and item 6, "know how to assess the changes that occur in the

overall development of students." These two aspects were scored more highly by females for whom higher mean ranks were obtained.

Continuing with the age variable, five items show significant differences, all falling within the training scale. The higher the age, the less training

in each of the items relating to emotional intelligence knowledge. Thus, older teachers have more difficulty motivating students and stimulating their personal growth due to their lack of training.

Attending to the experience variable, there are significant differences for all items, all corresponding to the training scale. Specifically, training received for items 1, 3, 5, 7 and 8 was better for respondents with fewer years of experience (one to 10 years) and, in contrast, training for items 2, 4 and 6 was better for participants with more years of experience (31 to 40 years). In this sense, teachers with fewer years of experience received more training on how to recognise and deal with bullying and other types of harassment at school and how to motivate and stimulate students, while those with more experience were better trained in achieving a favourable emotional atmosphere of trust and respect in relationships.

For the study plan variable, there were significant differences in all of the training scale items: thus, teachers who qualified after 2006 received the most training on how to assess changes produced in the overall development of students, and recognise and deal with bullying and other types of harassment at school (items 6, 7 and 8). Teachers who qualified after 1995 were most trained in motivational techniques for students, knowing how to listen to students and colleagues, and using techniques and procedures for stimulating student growth (items 1, 3 and 5). And for items 2 and 4, teachers from the study plan approved in 1942 received the most training on how to exercise control over students and on the way to achieve a favourable climate of trust and respect.

Lastly, we can confirm that for the postgraduate qualifications variable there were two items (4 and 5) with significant differences, corresponding to the agreement scale. In particular, respondents lacking any type of postgraduate studies scored these statements most highly, and those teachers holding a master's degree in Secondary Education Teaching scored these items the lowest.

Conclusion

Modern society has plunged us into a maelstrom of telematics information with little control. Mass use of the internet by children and teenagers has brought with it a number of risks, including cyberbullying. In the face of this situation, educators in any field need to be prepared. They should be trained to transmit to their learners the confidence and values required to handle this media pressure. For this to take place, one of the areas of knowledge to which greater attention should be paid is that relating to emotional intelligence.

This study contributes to the understanding of the concept of emotional intelligence, the importance of which is even greater for teachers in

the music field. Specifically, it provides an analysis of the perception of professional music studies teachers on this type of knowledge, and the extent to which it was taught during their initial training. Thus, the findings of the study help address the lack of literature regarding the role of emotional intelligence in music studies and promote further research on the training of teachers in this material.

The results obtained reveal that teachers place relatively high importance on emotional intelligence. All of the statements on this type of knowledge obtained a high average score of over 3, with the item highlighting the importance of achieving a favourable emotional climate of trust and respect in relations with students scoring the highest. In contrast, training received regarding each of the statements in some cases fails to even score an average of 2, with the lowest corresponding to the item on how to deal with bullying and other types of harassment at school. We can confirm this finding with the non-parametric Wilcoxon test, which shows that there are relevant differences between the level of agreement and training received by this teaching sector, not having received the training that they consider opportune.

Furthermore, the results of the inferential analysis allow us to state that more significant differences exist for training scale than that relating to level of agreement. A higher number of significant differences exist for the study plan and experience variables. Specifically, those teachers who graduated in the most recent study plans and who had less experience received more emotional intelligence training, whereas educators that qualified in older study plans and had more experience received hardly any education in this type of knowledge.

In terms of the limitations of the research, we had some difficulties in locating previous studies that had focused on teacher training in the field of music studies. Another handicap was the lack of initial response we received from the conservatories, which forced us to contact most of them by telephone.

Finally, regarding future directions, given that this study forms part of a wider investigation that covers different types of knowledge, in order to analyse knowledge on emotional intelligence, we took into account a number of questions that could be complemented with others. We were able to look more closely into whether music studies teachers are trained to capture the attention and motivation of students, to prepare them emotionally for public performance and to deal with the excessive workload that combining compulsory studies which music requires. Future research could consider other types of knowledge, such as knowledge of educational contexts and of learners and their characteristics.

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Authors' Contributions

All authors participated in the literature review and the data analysis, wrote the manuscript and reviewed the final version.

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References

- Alam A & Ahmad M 2018. The role of teachers' emotional intelligence in enhancing student achievement. *Journal of Asia Business Studies*, 12(1):31–43. <https://doi.org/10.1108/JABS-08-2015-0134>
- Asmus EP Jr 1986. Student beliefs about the causes of success and failure in music: A study of achievement motivation. *Journal of Research in Music Education*, 34(4):262–278. <https://doi.org/10.2307/2F3345260>
- Avilés Martínez JM 2011. El papel de los miembros de la comunidad educativa en la lucha contra el maltrato entre iguales [The role of educational community members in the fight against bullying]. *Revista AMAzónica*, 6(1):114–132. Available at <https://dialnet.unirioja.es/servlet/articulo?codigo=3915948>. Accessed 4 September 2020.
- Awang H, Mohd Faiz NS, Yusof Y, Ab Rahman A & Warman S 2017. Emotional intelligence and commitment of vocational teachers. *Pertanika Journal of Social Science & Humanities*, 25:157–162. Available at [http://www.pertanika.upm.edu.my/Pertanika%20PAPERS/JSSH%20Vol.%2025%20\(S\)%20Apr.%202017/16%20JSSH\(S\)-0434-2017-1stProof.pdf](http://www.pertanika.upm.edu.my/Pertanika%20PAPERS/JSSH%20Vol.%2025%20(S)%20Apr.%202017/16%20JSSH(S)-0434-2017-1stProof.pdf). Accessed 3 September 2020.
- Bisquerra R, Punset E, Mora F, García Navarro E, López-Cassà È, Pérez-González JC, Lantieri L, Nambiar M, Aguilera P, Segovia N & Planelis O 2012. ¿Cómo educar las emociones? *La inteligencia emocional en la infancia y la adolescencia* [How to educate the emotions? Emotional intelligence in childhood and adolescence]. Barcelona, Spain: Hospital Sant Joan de Déu. Available at <https://faros.hsjdbcn.org/adjuntos/2232.1-Faros%206%20Cast.pdf>. Accessed 6 September 2020.
- Bisquerra Alzina R 2005. La educación emocional en la formación del profesorado [Emotional education in teacher training]. *Revista Interuniversitaria de Formación del Profesorado*, 19(3):95–114. Available at <https://www.redalyc.org/pdf/274/27411927006.pdf>. Accessed 2 September 2020.
- Bolívar A 2005. Conocimiento didáctico del contenido y didácticas específicas [Pedagogical content knowledge and subject matter didactics]. *Profesorado. Revista de Currículum y Formación del Profesorado*, 9(2):1–39.
- Boulton MJ & Smith PK 1994. Bully/victim problems in middle-school children: Stability, self-perceived competence, peer perceptions and peer acceptance. *British Journal of Developmental Psychology*, 12(3):315–329. <https://doi.org/10.1111/j.2044-835X.1994.tb00637.x>
- Buendía Eisman L, Colás Bravo P & Hernández Pina F 1998. *Métodos de investigación en psicopedagogía* [Research methods in psychopedagogy]. Madrid, Spain: McGraw-Hill.
- Buzinde C, Foroughi B & Godwyll J 2019. Youth leadership programs for community development and social action: A pedagogical approach. *Community Development Journal*, 54(4):677–694. <https://doi.org/10.1093/cdj/bsy015>
- Cabello R, Ruiz-Aranda D & Fernández-Berrocal P 2010. Docentes emocionalmente inteligentes [Emotionally intelligent teachers]. *Revista Electrónica Interuniversitaria de Formación del Profesorado*, 13(1):41–49. Available at <https://dialnet.unirioja.es/servlet/articulo?codigo=3163455>. Accessed 27 August 2020.
- Carter K 1990. Teacher's knowledge and learning to teach. In WR Houston, M Haberman & JP Sikula (eds). *Handbook of research on teacher education*. New York, NY: Macmillan.
- Clandinin DJ & Connelly FM 1987. Teachers' personal knowledge: What counts as 'personal' in studies of the personal. *Journal of Curriculum Studies*, 19(6):487–500. <https://doi.org/10.1080/0022027870190602>
- Cohen L & Manion L 2002. *Métodos de investigación educativa* [Educational research methods]. Madrid, Spain: La Muralla.
- Concepción Cuétara PM 2012. El desarrollo profesional docente del profesorado novel de la Universidad de Ciego de Ávila [The professional development of the new teachers of the University of Ciego de Ávila]. PhD thesis. Granada, Spain: University of Granada.
- Connelly FM, Clandinin DJ & He MF 1997. Teachers' personal practical knowledge on the professional knowledge landscape. *Teaching and Teacher Education*, 13(7):665–674. [https://doi.org/10.1016/S0742-051X\(97\)00014-0](https://doi.org/10.1016/S0742-051X(97)00014-0)
- De Vicente Rodríguez PS 1994. ¿Qué conocimiento necesitan los profesores? [What knowledge do teachers need?] *Innovación Educativa*, 3:11–31. Available at <https://minerva.usc.es/xmlui/handle/10347/5305>. Accessed 25 August 2020.
- De Vicente Rodríguez PS 2006. Algunos conceptos clave en el hacer del profesor [Some key concepts in the teachers' performance]. *Enseñanza*, 24:205–232. Available at https://gredos.usal.es/bitstream/handle/10366/69610/Algunos_conceptos_clave_en_el_hacer_del_profesor.pdf;jsessionid=D86128F137A7D874129260C79AAD9DE4?sequence=1. Accessed 25 August 2020.
- Echeburúa E & Requesens A 2012. *Adicción a las redes sociales y nuevas tecnologías en niños y adolescentes: Guía para educadores* [Addiction to social networks and new technologies in children and adolescents]. Madrid, Spain: Pirámide. Available at

- <http://omextad.salud.gob.mx/contenidos/investigaciones/Guiaparaeducadores.pdf>. Accessed 18 September 2020.
- Elbaz F 1983. *Teacher thinking: A study of practical knowledge*. London, England: Croom Helm.
- Elbaz F 1991. Research on teacher's knowledge: The evolution of a discourse. *Journal of Curriculum Studies*, 23(1):1–19. <https://doi.org/10.1080/0022027910230101>
- Escarbajal Frutos A 2010. Pluriculturalidad, instituciones educativas y formación del profesorado [Multicultural, educational institutions and training of teachers]. *Revista Electrónica Interuniversitaria de Formación del Profesorado*, 13(3):95–103. Available at https://www.researchgate.net/publication/47380518_Multicultural_educational_institutions_and_training_of_teachers. Accessed 18 August 2020.
- Escribano González A, Bejarano Franco MT, Zúñiga Fernández MA & Fernández Gijón JL 2010. Programa de metodología didáctica para la mejora de la inteligencia emocional y el Aprendizaje Basado en Problemas (ABP) [Program of didactic methodology for the improvement of emotional intelligence and problem-based learning (PBL)]. *Revista Docencia e Investigación*, 20:271–305. Available at https://www.researchgate.net/profile/Maria_Teresa_Bejarano_Franco/publication/277263554_Programa_de_metodologia_didactica_para_la_mejora_de_la_inteligencia_emocional_y_el_Aprendizaje_Basado_en_Problemas_ABP/links/55f2983a08aedecb690216b2/Programa-de-metodologia-didactica-para-la-mejora-de-la-inteligencia-emocional-y-el-Aprendizaje-Basado-en-Problemas-ABP.pdf. Accessed 3 September 2020.
- Fennema E & Franke ML 1992. Teachers' knowledge and its impact. In DA Grouws (ed). *Handbook of research on mathematics teaching and learning: A project of the National Council of Teachers of Mathematics*. New York, NY: Macmillan Publishing.
- Fernández-Montalvo J, Peñalva A & Irazabal I 2015. Hábitos de uso y conductas de riesgo en Internet en la preadolescencia [Internet use habits and risk behaviours in preadolescence]. *Comunicar*, 22(44):113–120. <https://doi.org/10.3916/C44-2015-12>
- Finkelhor D, Mitchell KJ & Wolak J 2000. *Online victimization: A report on the nation's youth*. Alexandria, VA: National Center for Missing and Exploited Children. Available at <https://files.eric.ed.gov/fulltext/ED442039.pdf>. Accessed 22 September 2020.
- Fischer P, Greitemeyer T, Pollozek F & Frey D 2006. The unresponsive bystander: Are bystanders more responsive in dangerous emergencies? *European Journal of Social Psychology*, 36(2):267–278. <https://doi.org/10.1002/ejsp.297>
- Hodzic S, Scharfen J, Ripoll P, Holling H & Zenasni F 2018. How efficient are emotional intelligence trainings: A meta-analysis. *Emotion Review*, 10(2):138–148. <https://doi.org/10.1177/2F1754073917708613>
- Holgado FP, Navas L & Marco V 2013. The students' academic performance at the conservatory of music: A structural model from the motivational variables. *Revista de Psicodidáctica*, 18(2):257–273. <https://doi.org/10.1387/RevPsicodidact.6942>
- Hoover M, Mosvold R, Ball DL & Lai Y 2016. Making progress on mathematical knowledge for teaching. *The Mathematics Enthusiast*, 13(1):3. Available at <https://scholarworks.umt.edu/cgi/viewcontent.cgi?article=1363&context=tme>. Accessed 16 August 2020.
- Ingvarson L, Meiers M & Beavis A 2005. Factors affecting the impact of professional development programs on teachers' knowledge, practice, student outcomes & efficacy. *Education Policy Analysis Archives*, 13(10):1–26. Available at https://research.acer.edu.au/cgi/viewcontent.cgi?referer=https://scholar.google.com/&httpsredir=1&article=1000&context=professional_dev. Accessed 16 August 2020.
- Isaza GM & Calle JS 2014. Inteligencia emocional del maestro: Posibilidad para favorecer procesos de enseñanza-aprendizaje [Emotional intelligence of the teacher: Ability to promote teaching-learning process]. *Infancias Imágenes*, 13(1):140–142.
- Jansen CA, Moosa SO, Van Niekerk EJ & Muller H 2014. Emotionally intelligent learner leadership development: A case study. *South African Journal of Education*, 34(1):Art. # 748, 16 pages. <https://doi.org/10.15700/201412121000>
- Justlin PN & Sloboda JA 2001. *Music and emotion: Theory and research*. New York, NY: Oxford University Press.
- Karaman Özlü Z, Avşar G, Gökalp K, Ejder Apay S, Altun ÖŞ & Yurttaş A 2016. Comparison of the emotional intelligence levels of students receiving education in different fields. *Education Research International*, 2016:8508153. <https://doi.org/10.1155/2016/8508153>
- Koelsch S 2010. Towards a neural basis of music-evoked emotions. *Trends in Cognitive Science*, 14(3):131–137. <https://doi.org/10.1016/j.tics.2010.01.002>
- Krishnan C, Goel R, Singh G, Bajpai C, Malik P & Sahai S 2017. Emotional intelligence: A study on academic professionals. *Pertanika Journal of Social Sciences & Humanities*, 25(4):1555–1568. Available at <https://core.ac.uk/download/pdf/153832807.pdf#page=69>. Accessed 15 August 2020.
- López-Bernad L 2015. PIEC: Programa para el desarrollo de la inteligencia emocional en los conservatorios de música [PIEC: Program for the development of emotional intelligence in music conservatories]. PhD thesis. Madrid, Spain: Organización Escolar y Didácticas Especiales. Available at http://e-spacio.uned.es/fez/eserv/tesisuned:Educacion-Lopez/LOPEZ_BERNAD_Laura_Tesis.pdf. Accessed 24 September 2020.
- Luengo Latorre JA 2014. *Cyberbullying: Prevenir y actuar* [Cyberbullying: Prevent and act]. Madrid, Spain: Colegio Oficial de Psicólogos de Madrid.
- Mayer JD & Salovey P 1997. What is emotional intelligence? In P Salovey & DJ Sluyter (eds). *Emotional development and emotional intelligence: Educational implications*. New York, NY: Basic Books.
- Naylor PB, Cowie HA, Walters SJ, Talamelli L & Dawkins J 2009. Impact of a mental health teaching programme on adolescents. *The British*

- Journal of Psychiatry*, 194(4):365–370.
<https://doi.org/10.1192/bjp.bp.108.053058>
- Newton C, Teo STT, Pick D, Ho M & Thomas D 2016. Emotional intelligence as a buffer of occupational stress. *Personnel Review*, 45(5):1010–1028.
<https://doi.org/10.1108/PR-11-2014-0271>
- Oh I & Hazler RJ 2009. Contributions of personal and situational factors to bystanders' reactions to school bullying. *School Psychology International*, 30(3):291–310.
<https://doi.org/10.1177%2F0143034309106499>
- Olweus D 1999. Sweden. In PK Smith, Y Morita, J Junger-Tas, D Olweus, R Catalano & P Slee (eds). *The nature of school bullying: A cross-national perspective*. London, England: Routledge.
- O'Regan K 2003. Emotion and e-learning. *Journal of Asynchronous Learning Networks*, 7(3):78–92.
- Osborne MS & Kenny DT 2005. Development and validation of a music performance anxiety inventory for gifted adolescent musicians. *Journal of Anxiety Disorders*, 19(7):725–751.
<https://doi.org/10.1016/j.janxdis.2004.09.002>
- Palomera R, Fernández-Berrocal P & Brackett MA 2008. La inteligencia emocional como una competencia básica en la formación inicial de los docentes: Algunas evidencias [Emotional intelligence as a basic competence in the initial training of teachers: Some evidence]. *Revista Electrónica de Investigación Psicoeducativa*, 6(2):437–454. Available at
<https://www.redalyc.org/pdf/2931/293121924010.pdf>. Accessed 12 August 2020.
- Payton J, Weissberg RP, Durlak JA, Dymnicki AB, Taylor RD, Schellinger KB & Pachan M 2008. *The positive impact of social and emotional learning for kindergarten to eighth-grade students: Findings from three scientific reviews*. Chicago, IL: Collaborative for Academic, Social, and Emotional Learning. Available at <https://www.casel.org/wp-content/uploads/2016/08/PDF-4-the-positive-impact-of-social-and-emotional-learning-for-kindergarten-to-eighth-grade-students-executive-summary.pdf>. Accessed 6 September 2020.
- Pellegrini AD 2002. Bullying, victimization, and sexual harassment during the transition to middle school. *Educational Psychologist*, 37(3):151–163.
https://doi.org/10.1207/S15326985EP3703_2
- Pérez Pérez C & López Francés I 2010. Educar para la convivencia en los centros escolares [Education for co-existence as part of the curriculum]. *EDETANIA*, 38:73–94.
- Riveiro-Villodres LE, Blanco-Encomienda FJ & Latorre-Medina MJ 2018. Conocimiento pedagógico: Valoración y formación inicial del profesorado [Pedagogical knowledge: Assessment and initial teacher training]. *Cadmo*, 2:78–96.
<https://doi.org/10.3280/CAD2018-002006>
- Robinson J 2008. Music and emotions. *Journal of Literary Theory*, 1(2):395–419. Available at <http://www.jltonline.de/index.php/articles/article/view/54/232>. Accessed 10 August 2020.
- Ruismäki H & Tereska T 2006. Early childhood musical experiences: Contributing to pre-service elementary teachers' self-concept in music and success in music education (during student age). *European Early Childhood Education Research Journal*, 14(1):113–130.
<https://doi.org/10.1080/13502930685209841>
- Şahin F, Özer E & Deniz ME 2016. Duyusal zekanın alana özgü yaratıcılığı yordama düzeyi: Üstün zekalı öğrenciler üzerinde bir inceleme [The predictive level of emotional intelligence for the domain-specific creativity: A study on gifted students]. *Eğitim ve Bilim [Education and Science]*, 41(183):181–197.
<https://doi.org/10.15390/EB.2016.4576>
- Salas Román N, Alcaide Risoto M & Hurtado Marín A 2018. Programas de intervención en inteligencia emocional para educación infantil [Intervention programmes on emotional intelligence for early childhood education]. *Revista de Estilos de Aprendizaje*, 11(22):137–165.
- Salmivalli C & Isaacs J 2005. Prospective relations among victimization, rejection, friendlessness, and children's self- and peer-perceptions. *Child Development*, 76(6):1161–1171.
<https://doi.org/10.1111/j.1467-8624.2005.00841.x>
- Salmivalli C, Lagerspetz K, Björkqvist K, Osterman K & Kaukiainen A 1996. Bullying as a group process: Participant roles and their relations to social status within the group. *Aggressive Behavior*, 22(1):1–15.
[https://doi.org/10.1002/\(SICI\)1098-2337\(1996\)22:1%3C1::AID-AB1%3E3.0.CO;2-T](https://doi.org/10.1002/(SICI)1098-2337(1996)22:1%3C1::AID-AB1%3E3.0.CO;2-T)
- Sastre Morcillo PM 2014. La inteligencia emocional en el aprendizaje de los alumnos de enseñanzas de régimen especial en los conservatorios de música [Emotional intelligence in the learning of students of special regime teaching in music conservatories]. *Dedica Revista de Educação e Humanidades*, 6:187–198. Available at <https://revistaseug.ugr.es/index.php/dedica/article/view/6972/6086>. Accessed 27 June 2020.
- Schmidt CP 2005. Relations among motivation, performance achievement, and music experience variables in secondary instrumental music students. *Journal of Research in Music Education*, 53(2):134–147.
<https://doi.org/10.1177%2F002242940505300204>
- Shulman LS 1987. Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1):1–23.
<https://doi.org/10.17763/haer.57.1.j463w79r56455411>
- Torres Estarque MJ 2013. Factores provocadores de estrés en los alumnos de conservatorio y bandas de música [Stress-provoking factors in conservatory students and music bands]. PhD thesis. Vigo, Spain: University of Vigo.
- Trainor LJ & Schmidt LA 2003. Processing emotions induced by music. In I Peretz & R Zatorre (eds). *The cognitive neuroscience of music*. New York, NY: Oxford University Press.
<https://doi.org/10.1093/acprof:oso/9780198525202.003.0020>
- Tripiana S 2016. Importancia de las estrategias de práctica instrumental en la educación musical superior [Importance of instrumental practice strategies in higher music education]. *Revista Electrónica Complutense de Investigación en Educación Musical*, 13:64–88.
<https://doi.org/10.5209/RECIEM.51606>

- Valle-Barbosa MA, Muñoz de la Torre A, Robles-Bañuelos R, Vega-López MG, Flores-Villavicencio ME & González-Pérez GJ 2019. La violencia y acoso escolar en una escuela de Guadalajara, México [Violence and bullying at a school in Guadalajara, Mexico]. *Revista Iberoamericana de Educación*, 79(2):43–58. <https://doi.org/10.35362/rie7923180>
- Vallés Villanueva J 2005. Competència multicultural en educació artística: Contextos y perspectivas de futuro en la formación de los maestros y las maestras [Multicultural competence in Art education: Contexts and future perspectives in the training of teachers]. PhD thesis. Girona, Spain: University of Girona. Available at <https://dugidoc.udg.edu/handle/10256/4596>. Accessed 30 September 2020.
- Vega-Osés A & Peñalva-Vélez A 2018. Los protocolos de actuación ante el acoso escolar y el ciberacoso en España: Un estudio por comunidades autónomas [The protocols of action against bullying and cyberbullying in Spain: A study by autonomous communities]. *International Journal of New Education*, 1(1):51–76. <https://doi.org/10.24310/IJNE1.1.2018.4924>
- Vélez de Medrano C & Vaillant A 2009. *Aprendizaje y desarrollo profesional docente* [Learning and teaching professional development]. Madrid, Spain: Organización de Estados Iberoamericanos para la Educación, la Ciencia y la Cultura.
- Vicente A & Aróstegui JL 2003. Formación musical y capacitación laboral en el Grado Superior de Música, o el dilema entre lo artístico y lo profesional en los Conservatorios [Musical and labor training in the Degree of Music, or the dilemma between the artistic and the professional in the Conservatories]. *Revista Electrónica de LEEME*, 12:1–14. Available at <https://ojs.uv.es/index.php/LEEME/article/view/9746/9180>. Accessed 6 September 2020.
- Wristen BG 2013. Depression and anxiety in university music students. *Update: Applications of Research in Music Education*, 31(2):20–27. <https://doi.org/10.1177%2F8755123312473613>