

Fernández Molina, M., Bravo Castillo, A. & Fernández Berrocal, P. (2019). Council of Europe Cultural Heritage and Education Policy: Preserving Identity and Searching for a Common Core? *Revista Electrónica Interuniversitaria de Formación del Profesorado*, 22(1), 209-223.

DOI: <http://dx.doi.org/10.6018/reifop.22.1.344131>

Profiles of Perceived Emotional Intelligence in Future Preschool Teachers: Implications for Teacher Education

Milagros Fernández-Molina¹, Ana Bravo Castillo² & Pablo Fernández-Berrocal³

¹Departamento de Psicología Evolutiva y de la Educación. Facultad de Ciencias de la Educación. Universidad de Málaga

²Departamento de Psicología. Facultad de Ciencias de la Educación. Universidad de Córdoba.

³Departamento de Psicología Básica. Facultad de Psicología. Universidad de Málaga

Abstract

Preprimary teachers' emotional adjustment is important for both personal and professional wellbeing and small students' development and wellbeing. However, little research has been conducted into emotional intelligence of preprimary teachers, despite their role as "socializers" in early childhood. The Trait Meta-Mood Scale was used to assess levels of perceived emotional intelligence in 418 future preschool teachers and four profiles were identified. Most had adequate levels, but we identified a group of students with inadequate levels of emotional attention. The findings highlight the importance of ensuring that teachers will be helped to develop different components of emotional intelligence during their initial training in college.

Key Words

Intelligence tests, preprimary teachers, emotional adjustment, college preparation.

Contacto:

Milagros Fernández Molina. ¹Departamento de Psicología Evolutiva y de la Educación. Facultad de Ciencias de la Educación. Universidad de Málaga. mfernandezm@uma.es

Perfiles de Inteligencia Emocional Percibida en futuros maestros de Educación Infantil: Implicaciones para la formación docente

Resumen

El equilibrio emocional de los maestro/as de educación Infantil es importante para su bienestar personal y profesional, y para el desarrollo de sus pequeños alumnos pero existe escasa investigación con este grupo, a pesar del importante papel como socializadores en edades tan tempranas. En este estudio se usó el TMMS-24 para evaluar la inteligencia emocional percibida de 418 estudiantes universitarios de Educación Infantil identificándose cuatro tipos de perfiles. Aunque la mayoría obtuvo niveles adecuados, se encontró un grupo con niveles problemáticos en atención emocional. Los resultados insisten en la importancia de ayudar a estos futuros maestros a desarrollar los diferentes elementos de la inteligencia emocional durante la formación inicial universitaria.

Palabras clave

Tests de inteligencia, maestros de infantil, ajuste emocional, formación universitaria.

Introduction

Teacher Education and quality teaching has been studied in the last years from different international approaches (Caires, Almeida, & Vieira, 2012; Cochran-Smith & Villegas, 2015; Day & Hong, 2016; Livingston, 2016; Wall & Hall, 2016). Contextual, individual and psychological factors, like wellbeing, burnout and emotional intelligence, have been related with personal and professional teachers functioning (Arís Redo, 2009; Augusto, López-Zafra, Martínez & Pulido, 2006; Cazalla-Luna & Molero, 2016; Eldor & Shoshani, 2016; Malinen & Savolainen, 2016; Mérida López & Extremera, 2017; Moé, 2016). Labor conditions became more complex and stressful in the schools due to political and social pressure, evaluation process, multicultural pupils and families, high need communities or student outcomes. For example, teachers' burnout rates as high as 33% have been reported (Palomera, Gil-Olarte, and Brackett, 2006). Also, strong relationships have been discovered between satisfaction with life, teacher self-efficacy, job satisfaction, extra work, burnout, stress, engagement, and teacher's emotional skills (Pena & Extremera, 2012; Pena, Rey, & Extremera, 2012; Wells, 2015; Bosqued, 2008). Furthermore, many of the factors associated with the predisposition to develop burnout are characteristic of the teaching profession and, therefore, of preschool teachers. These factors include being in constant contact with other people's emotions, having to deal with high levels of pressure from society and the challenging demands of families, and having personal characteristics such as a heightened sensitivity to the feelings and needs of others. Higher levels of workplace stress were associated with greater conflict in teacher-child relationships in the Head Start Program (Whitaker, Dearth-Wesley, & Gooze, 2015). Also, teachers were more likely to quit if they had less desire to stay teaching in the early childhood field, were less happy, had a worse relationship with their supervisor, felt insufficiently skilled to cope with classroom

demands, or if they were less well educated (Wells, 2015). For thus, emotional competencies, like emotional intelligence (EI) plays an important role in coping with the stressful teaching conditions and decreasing teacher work stress and foster resilience is an important goal for teachers, school principals and policy makers (Caires, Almeida, & Vieira, 2012; Day & Hong, 2016; Urquijo, Extremera, & Vila, 2015; Gohm, Corser, & Dalsky, 2005). Research involving teachers has also found that EI protects against burnout and is associated with greater engagement with work in primary and preschool teachers and that female teachers reported higher levels of emotional perception than did their male colleagues (Pena, Rey, & Extremera, 2012). Of particular interest in this regard is research suggesting that preschool teachers have a relatively well-defined motivational and attitudinal profile that distinguishes them from teachers at other levels, a profile that would equip them to cope adequately with workplace stress. That positive profile has been found in studies with undergraduates students on early childhood education courses compared with their peers in other areas of study. These students are almost exclusively female, and they have a primary interest in early childhood education, are studying their degree of choice, and achieved a higher mean grade in their university entrance exams (Fernández-Molina, González & del Molino, 2011; Camina & Salvador, 2007; Latorre & Pérez, 2005; Caballero-García & Sánchez-Ruiz, 2018).

Emotional competencies are particularly important for teaching as a caring profession because they may affect the academic, social, and emotional development of students, especially in early childhood (Aritzeta et al., 2016; Bisquerra, 2005; Coplan, Bullock, Archbell, & Bosacki, 2015; Morris, Denham, Bassett, & Curby, 2013; Pianta et al., 2014; Whitaker, Dearth-Wesley, & Gooze, 2015). The preschool years, especially between age 3 and 6, are a crucial stage in the development of core abilities, such as attachment, social competencies and emotional self-regulation, that are of enormous importance for a child's subsequent development (Bodrova & Leong, 2007), and children need an adult as a model of positive behavior, with adequate levels of EI (Ciucci, Baroncelli, & Toselli, 2015; Mir, Battle, & Hernández, 2009; Morris, Denham, Bassett, & Curby, 2013; Whitaker, Dearth-Wesley, & Gooze, 2015). Children need a teacher who shows empathy and sensitivity towards others, develops a style of emotion socializer, uses child-appropriate language, has a capacity for attention, listening, and understanding, and is capable of regulating their own emotions. Children who lived with sensitive caregivers who showed a high emotional capacity for attachment have a better social and emotional status, more complex play behavior, and who made greater gains in academic achievement and cognitive skills, and positive teacher-student relationships are more likely to develop (Colwell, Gordon, Fujimoto, Kaestner, & Korenman, 2013; Morris, Denham, Bassett, & Curby, 2013; Whitaker, Dearth-Wesley, & Gooze, 2015; Coplan, Bullock, Archbell, & Bosacki (2015). In the last years, research focused on children's social-emotional competence and the prevention of problem behavior found preschool context could be studied. Preschool teacher training in emotional management is important in order to detect, prevent and managing children outcomes.

International research on the quality of child care has paid particular attention to the relationship between the academic and/or in-service training received by teachers and the emotional and academic functioning of their students (Ciucci, Baroncelli, & Toselli, 2015; Pianta et al., 2014; Zhai, Raver, & Li-Grining, 2011; Whitaker, Dearth-Wesley, & Gooze, 2015). It is important to prepare to future teachers to develop personal skills using self-evaluation of

their strengths and weakness because they need the development of support systems for ecological transition and training period in the University and for early career (Caires, Almeida & Vieira, 2012; Timoštšuk, & Ugaste, 2012). However, university formation used to not include matters and activities in order to evaluate and training future teachers' emotional competencies despite it is known that these capacities can be improved. Due the Bologna Process, the European Higher Education Area developed changes in Education Colleges as to enlarge the number of year preparation, to promote more contacts with real schools, to extent the curricula, or to study psychological matters on childhood wellbeing, etc., but these political changes have not kept in mind the importance of future teachers' individual characteristics or future teachers' emotional skills preparation.

In conclusion, there are theoretical models that describe the emotional skills of teachers and which can be used to evaluate and training different aspects of psychological wellbeing among educational professionals and their relationships with children wellbeing, and because relationships have been demonstrated between teachers' emotional competencies, teachers' wellbeing and children's wellbeing, it could be argue that it is important to study emotional competencies in the college time and to include future teachers' self-evaluation and strong training in emotional strengths and competencies in the initial period during University preparation (Figure 1).

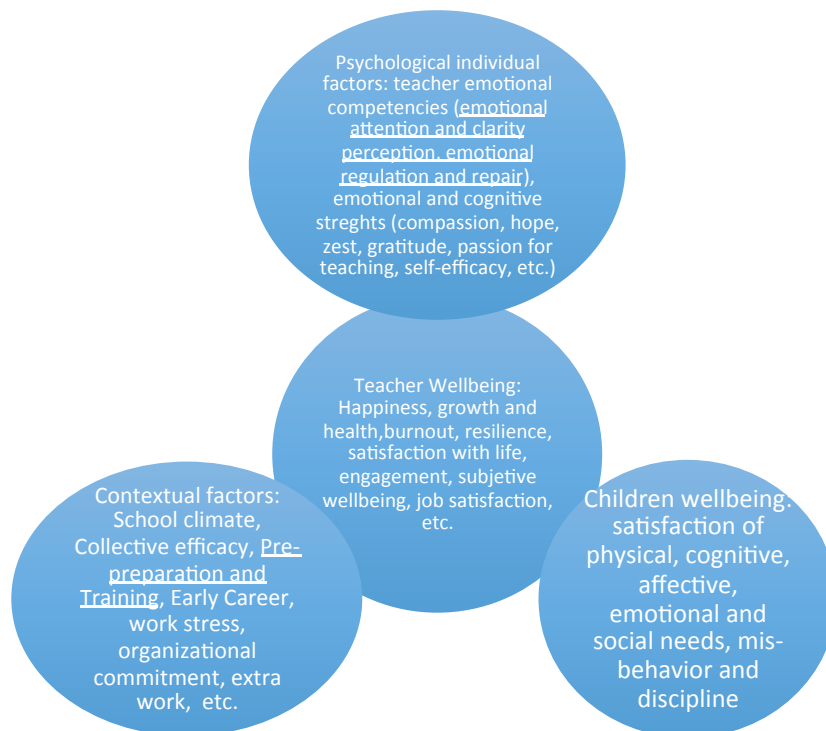


Figure 1. Conceptual framework: Relationships between teachers and children's wellbeing and teachers' emotional competencies, and teacher training

In the field of psychology, the model that has attracted the most research attention is PEI Salovey & Mayer Model (Salovey & Mayer, 1990) that use Emotional intelligence to refer to the capacity to process emotional information in a way that unifies emotion and reason, such that our emotions can be used to enhance our reasoning and enable us to think more intelligently about our emotional life, and perceived emotional intelligence (PEI) is defined as metaknowledge that people have about their own emotional skills (Salovey, Stroud, Woolery, & Epel, 2002; Mayer & Salovey, 1997). The Trait Meta-Mood Scale evaluates the three dimensions of Attention (i.e., the capacity to attend to and reflect on one's feelings), Clarity (i.e., the ability to understand one's emotional states), and Repair (i.e., the ability to use positive thinking to repair negative mood states). The TMMS-24 is the most widely used test of PEI in many countries, both in clinical studies and in sociological and educational research (Cazalla-Luna & Molero, 2016; Palomera, Gil-Olarte, & Brackett, 2006; Pena & Extremera, 2012; Sánchez-Nuñez & Latorre Postigo, 2012). Notably, however, the majority of studies conducted with practicing or future teachers treat teachers from different educational stages as if they were a homogeneous group, and it is common to find study samples that include a mix of teachers from across quite different levels, such as secondary and preschool education or include radically different professions, such as educational psychologists and preschool teachers or medical professions (Pena, Rey, & Extremera, 2012; Caballero-García & Sánchez-Ruiz, 2018; Cazalla-Luna, Ortega-Alvarez, & Molero, 2015; Aritzeta et al., 2016). What is lacking, therefore, in this research context are studies that aim specifically to assess levels of PEI among trainee and practicing preschool teachers, a professional sector with a distinct personal, vocational, and training profile, despite it could be necessary to detect their emotional strengths and weakness for the teacher preparation period in order to training them. The key findings of those studies that have applied the TMMS-24 to practicing or undergraduate trainee teachers are in Table 1.

Table 1.

Studies that evaluate PEI with TMMS-24 in samples of teachers.

	Bueno, Teruel, and Valero (2005)	Palomera, Gil-Olarte, and Brackett (2006)	Cazalla-Luna, Ortega-Alvarez, and Molero (2015) and Cazalla-Luna and Molero (2016)
Participants	Teacher training students in different specialist areas	Practicing teachers (preschool, primary, and secondary) and Future teachers	Students from different educational specialties
Attention	<i>Mean</i> = 3.39	<i>Mean</i> = 3.44	<i>Mean</i> = 3.22
Clarity	<i>Mean</i> = 3.33	<i>Mean</i> = 3.34	<i>Mean</i> = 3.64
Repair	<i>Mean</i> = 3.33	<i>Mean</i> = 3.21	<i>Mean</i> = 3.53

The Current Study

The aim of the present study was to describe and analyze levels of PEI in a sample of future preschool teachers, focusing specifically on the three dimensions of Attention, Clarity, and Repair, in order to differentiate and characterize teacher profiles, to detect lacks of future teachers in their emotional preparation, and to propose future policy and actions for college preparation.

Research question 1: How the future preschool students evaluate their own emotional attention, clarity and repair? In which competences have they the highest or worst scores?

Research question 2: Could we to identify profiles of future preschool teachers on the basis of their PEI results? Could we expect to find that these students would show adequate or high levels on the three dimensions of PEI, and consequently that the majority of them would have a positive, useful and adaptive profile for teaching preschool children?

Research question 3: Do the students differed according to age and the year they entered training? Do the future preschool students need more preparation among emotional intelligence in the college period? Which students could need emotional training?

Method

Participants and Procedure

The sample comprised 418 trainee teachers (98.6% women) with a mean age of 20.2 years (range: 19-27). At the time of assessment they were all enrolled in the second year of the degree in Early Childhood Education offered by University of Malaga (Spain). The sample was recruited across three student intakes. Of the 418 participants, 26.6% corresponded to the 2010-2011 academic intake, 49.5% to the 2011-2012 intake, and 23.9% to the 2012-2013 intake. For each intake, all currently enrolled students were invited to participate in the study, and they all volunteered to do so. The very high proportion of women in the sample reflects the fact that in our country most students of early childhood education are female, with very few men applying for such courses.

The pencil-and-paper test was administered in a single session in a regular classroom of the university. All test papers were anonymous, except for the respondent's age and gender. After collecting the completed questionnaires the data were entered into SPSS v22.

Measures

Perceived emotional intelligence was assessed using the reduced version of the TMMS (TMMS-24; original version by Salovey et al., 2002). The TMMS-24 is a 24-item Likert-type scale (anchored by 1 = not agree and 5 = strongly agree) that assesses the respondent's meta-knowledge of mood states and provides an index of PEI in three dimensions: Attention, Clarity, and Repair. Cronbach's alphas for the three dimensions were satisfactory: Attention ($\alpha = .87$), Clarity ($\alpha = .84$), and Repair ($\alpha = .82$).

Data Analyses

Data were coded and analyzed using SPSS v22. Mean scores (\pm SD) were computed for each of the three dimensions of PEI, and we also calculated, again for each dimension, the proportion of students achieving each of the three levels of EI (high, moderate, low)

defined by the scale's authors. Pearson correlation coefficients were calculated to determine the correlations between the three dimensions of PEI. We assessed whether academic intake was related to scores on the three dimensions of PEI, using ANOVA with post hoc Bonferroni correction to identify any significant differences between means. The effect size of any observed differences was measured using Cohen's *d*. Cronbach's alphas for the present sample were .83 for Attention, .85 for Clarity, and .86 for Repair.

In order to describe profiles of PEI for our students we assigned a numerical score between 0 and 2 to the level they achieved (low, moderate, high) on each of the three dimensions, as follows. For Attention, a score of 0 was assigned to the 'high' and 'low' levels, and a score of 2 to the 'moderate' level. The reason for this is that both high and low levels of attention are regarded as being inadequate for optimum psychological functioning. By contrast, for both Clarity and Repair a score of 2 was assigned to the 'high' level, a score of 1 to the 'moderate' level, and 0 to the 'low' level. This was done because for both these dimensions the highest level is considered the most positive, while the low level is regarded as inadequate. This scoring system meant that each student would have a total score between 0 and 6, and it was on the basis of this score that the profiles were generated.

Results

Table 2 shows the mean scores obtained in the sample as a whole for each dimension of PEI and the percentage of students achieving each of the three possible levels for each dimension of PEI. It can be seen that the distribution of percentages is similar in each of the three dimensions, and that the majority of students were at the moderate level: 67.2% for Attention, 62.9% for Clarity, and 58.6% for Repair. The smallest proportions correspond to the high level of EI, while at the low level the percentages range between 23% and 30% of participants.

Table 2.

Descriptive statistics and Percentage in each level

	Mean(SD)	Min-Max	Level in each dimension					
			Low		Moderate		High	
			N	%	N	%	N	%
Attention	3.58(0.67)	1.75-5.00	97	23.	28	67.	40	9.6
			2	1	2			
Clarity	3.36(0.67)	1.63-5.00	12	29.	26	62.	33	7.9
			2	2	3	9		
Repair	3.37(0.78)	1.00-5.00	12	29.	24	58.	50	12.
			3	4	5	6	0	
Total			41	100	41	100	41	100
			8		8		8	

Table 3 shows the distribution of the sample according to the total numerical score obtained by each participant based on the level they achieved on each of the three dimensions of PEI.

Table 3.

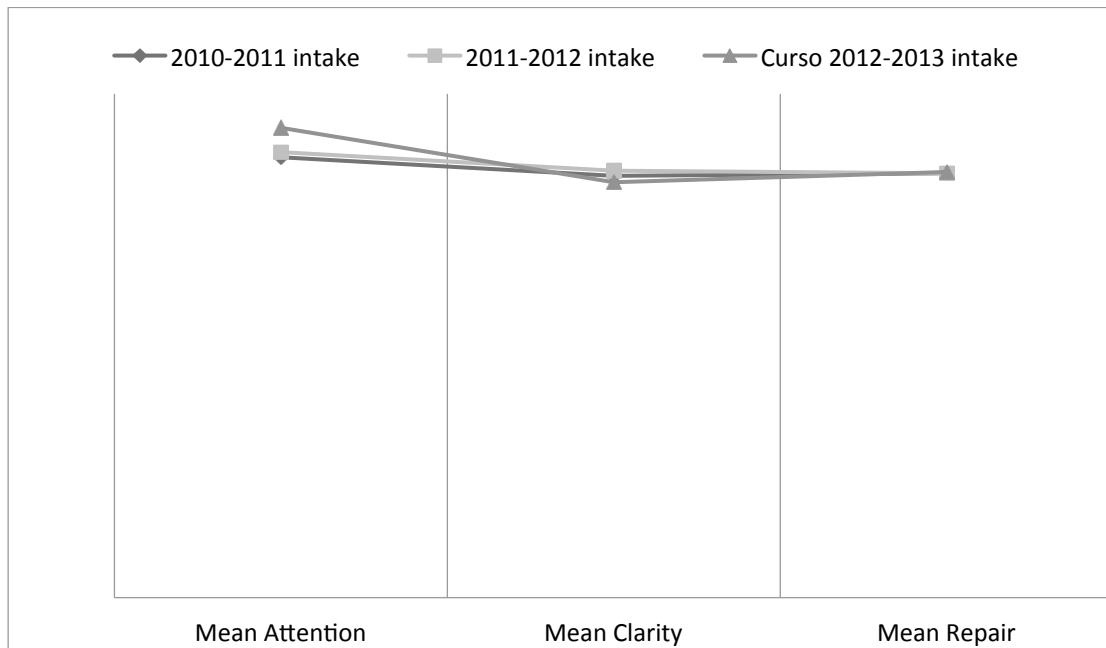
Percentage in total score PEI

Global PEI Level		N	%	Valid Percentage	Cumulative Percentage
Poor	0	22	5.3	5.3	5.3
	1	51	12.2	12.2	17.5
	2	81	19.4	19.4	36.9
Low	3	80	19.1	19.1	56
Adequate	4	141	33.7	33.7	89.7
Optimum	5	39	9.3	9.3	99
	6	4	1.0	1.0	100
Total		418	100.0	100.0	

On the basis of these total scores we grouped our students into four profiles, which we labeled as follows: optimum EI, adequate EI, low EI, and poor EI. It can be seen in Table 3 that 10.3% of participants obtained a high score (5 or 6 points), and were thus classified as having optimum EI. A score of 4 was obtained by 33.7% of students, who were classified as showing adequate EI. The 19.1% of participants who obtained a score of 3 were classified as presenting low EI. Finally, a score between 0 and 2 was obtained by 36.9% of students, who were classified as having poor EI.

Pearson coefficients for the correlations between age and the three dimensions of PEI show that age was not correlated with any of the three dimensions. A correlation (** $p < .01$) was observed between Repair and Clarity ($r=0.326^{**}$) and between Attention and Clarity ($r=0.250^{**}$). There was no correlation between Attention and Repair.

Figure 2 shows the mean scores for Attention, Clarity, and Repair according to the year in which the students began their training. It can be seen that there are hardly any differences between academic intakes on Clarity and Repair. On Attention, however, students from the 2012-13 academic intake scored higher than their peers in the other two years.



The results of the ANOVA with post hoc Bonferroni correction revealed a significant main effect for academic intake on the capacity to attend to emotions, $F(2, 415) = 3.437, p < .05$, partial $\eta^2 = .016$. Specifically, students from the 2010-11 academic intake differed significantly in emotional attention from their peers who began their studies in 2012-2013, $t(415) = -1.84, p < .05$, IC (95%)(-3.62; -0.06).

Discussion

Our first research question was about trainee preschool teachers would present adequate or high levels on each of these three dimensions. The mean scores obtained by our future professionals were generally high, and more than half of our students achieved a moderate level for each of the three dimensions of PEI, indicating that the majority of them regard themselves as having adequate emotional abilities. This suggests that the emotional competencies of these students would enable them to provide a model of positive behavior, promoting children's wellbeing and positive teacher-student relationships, and allowing them to understand and regulate their own emotional states (Colwell et al., 2013; Jiménez & Molina, 1989; Mir, Battle, & Hernández, 2009; Morris, Denham, Bassett, & Curby, 2013; Whitaker, Dearth-Wesley, & Gooze, 2015). Given the relationship described by other authors between coping and high levels of emotional clarity (8%) and repair (12%), our results also suggest that these students would use active coping and the positive reinterpretation of events, and that they would likely show engagement with work. These findings are fully consistent with the motivational and attitudinal profile reported in other studies of future preschool teachers (Camina & Salvador, 2007; Fernández-Molina, González & del Molino, 2011; Latorre & Pérez, 2005). However, results show that 30% of our sample rated themselves negatively on these two dimensions (29.2% and 29.4%, respectively). These data highlight the need to identify, assess, and monitor this sub-group of students from the start of their university training so as to ensure they receive the specific input required to develop these emotional skills.

Comparison of our results with those obtained by Bueno, Teruel, and Valero (2005) in a future primary teachers shows that our students scored higher on emotional attention ($M = 3.58$ vs. 3.36), but if we compare our results with those reported for future secondary teachers, our students scored lower on Clarity and Repair. That result suggest that our student have a stronger sense of the importance of attending to one's emotional states. A possible explanation for this is that students who are training to be secondary school teachers tend to be older and to already have a degree in another subject; consequently, they may either have developed a greater capacity to understand and repair their emotional states or perceive themselves as being more mature, which would imply greater self-awareness and better or more strategies for coping with their emotions.

The results for emotional attention merit separate consideration, since in this case both high and low scores are regarded as maladaptive in psychological terms. In other words, not attending to one's emotions and hypervigilance regarding emotional states are both considered to be inadequate for optimum psychological functioning. In this respect, almost 33% of our sample can be regarded as showing inadequate levels of emotional attention. The difference may be due to the fact that almost all of our students were women, a factor already noted by Pena, Rey, & Extremera (2012). In comparison with men, women tend to pay more attention to their own feelings and those of others. This is particularly important in the case of preschool teachers, since they are in contact with children aged between 0 and 6 years and must attend to their affective needs and emotions, which are more intense and more sensitive to adult influence. Indeed, this result is highly relevant to classroom practice, since a teacher who is able to perceive and understand her own emotions is better equipped to identify and manage the emotions expressed by her students; this is because, as Mir, Batlle, & Hernández (2009) and Ersay (2007) point out, a teacher with a greater awareness of her own emotions is less likely to ignore or trivialize the emotions of her students, and she will be more able to accept any kind of emotional expression, even if it is negative. In this respect, it would be important, during teachers' initial university training, to identify and intervene as required with those students who present high or low levels of emotional attention.

Our second research question was on to identify profiles and we expect that the majority of trainee preschool teachers would present a positive and adaptive profile, one characterized by adequate levels on each of the three dimensions of PEI. To confirm whether this was the case, we summed the scores assigned to students on each of the three dimensions (Attention, Clarity, and Repair) and grouped them into four profiles, which we labeled as follows: optimum EI, adequate EI, low EI, and poor EI. The results appear to support our initial hypothesis since almost half the sample of students (44%) presented what can be regarded as a positive and adaptive profile, their overall level of PEI being classified as either optimum (10.3%) or adequate (33.7%).

It should also be noted, however, that 36.9% of our students were classified as having a poor profile, and they therefore constitute a sizeable group of future preschool teachers whose emotional competencies would be of concern for their profession. Students in this group include those who would need to improve on all three dimensions of EI, those who scored adequately on one dimension but need to improve on the other two, those who presented moderate levels of Clarity and Repair but an inadequate score on Attention, and those who scored high on either Clarity or Repair but presented low levels on the other two

dimensions. These findings suggest that any analysis of PEI needs to go beyond the separate consideration of each of its components. In our sample, focusing solely on the mean scores on the three dimensions and the percentages of students achieving moderate or high levels of PEI might give an overoptimistic view. Although this analysis of components is useful for targeting aspects that require intervention or prevention strategies, it is important to consider the overall profile of individual teachers, since each dimension of EI will, both in everyday life and in classroom practice, interact with the other two. Indeed, grouping their scores across the three dimensions provides more useful information when it comes to prioritizing the training needs of future teachers. For instance, it would seem advisable to focus initially on the emotional competencies of those future teachers who present a poor profile of EI, before moving on to target those with low EI. Fortunately, our analysis indicates that many future preschool teachers present an adequate or even optimum profile of PEI. Furthermore, high levels of EI are known to be associated with increased personal wellbeing and greater job satisfaction, since they reduce the impact of stress. It is important to identify future teachers with high levels of EI as they can make a valid contribution to the profession and to children's wellbeing, especially when one considers that they will not previously have received specific training in developing their emotional competencies and may not do so during their university training or subsequent career.

This study also analyzed whether the PEI of students differed according to the academic year in which they began their training. In contrast to the study by Bueno, Teruel, and Valero (2005), who compared year one and year three students at the same point in time, we analyzed different academic intakes in the same year of their degree studies (year two). Therefore, the difference we found refers to different student cohorts at the same point in their university training, whereas Bueno et al. (2005) sought to identify differences according to age, degree of maturity, and stage of training. These authors found no differences between their two student years and they conclude that this indicates that levels of PEI remain constant and that neither older age nor more training leads to higher levels of PEI. By contrast, we did observe differences between our student intakes, since those who began their training in the 2013-2014 academic year were more attentive to their emotions than were their peers from preceding years. It could, however, be due to sociological or developmental factors, since there is an observable trend in the university context for the newest students, in comparison with their peers from earlier intakes, to show a less developed sense of autonomy and of personal and academic discipline, coupled with an increased use of social media as a platform for expressing their emotions and presenting their lives. Another possible explanation has to do with changes in the way that their course was being taught. That is, it is possible that course tutors, increasingly aware of the importance of teaching emotional competencies, placed greater emphasis on content related to emotional skills.

Although the TMMS-24 is the most widely used measure of EI in our countries it has not previously been applied to a sample comprised exclusively of preschool teachers. In this respect, our study provides new data and contributes to closing this gap in scientific knowledge. The definition of four profiles of future preschool teachers, derived from their scores on the three dimensions of EI, is a further contribution of our study. Based on our findings, we conclude that the natural emotional competencies of many students who

enroll in early childhood education degrees will be insufficient when it comes to facing the challenges and responsibilities of classroom work with young children. It is essential to identify these students and provide them with the specific training they need. Teacher Education must include more training on future preschool teachers' emotional self-evaluation and emotional intelligence.

Limitations and Future Directions

This study has two main limitations that need to be considered. The first concerns the measure used and the need to analyze the EI of future teachers using an ability-based test such as the MSCEIT, as this would enable a comparison to be made between individual perceptions and actual ability. Second, a similar study now needs to be conducted in a sample of practicing preschool teachers, so as to compare the results obtained with those presented here. Future studies should also seek to examine the influence on PEI of personal factors such as years of experience, personal and academic experiences, and temperament, as well as the relationship between PEI, stress, burnout, and engagement in this professional group. Given, however, the importance of identifying classroom emotional intelligence (Aritzeta et al., 2016) and its relationship with PEI, these analyses would need to consider not only the personal factors reported by teachers but also other variables such as classroom climate and the quality of teacher-student relationships.

References

- Arís Redó, N. (2009). El síndrome de burnout en los docentes. *Electronic Journal of Research in Educational Psychology*, 7(2), 829-848.
- Aritzeta, A., Balluerka, N., Gorostiaga, A., Alonso-Arbiol, I., Haranduru, M. & Gartzia, L. (2016). Classroom emotional intelligence and its relationship with school performance. *European Journal of Education and Psychology*, 9, 1-8. DOI: <http://dx.doi.org/10.1016/j.ejeps.2015.11.001>
- Augusto, J. M., López-Zafra, E., Martínez, R. & Pulido, M. (2006). Perceived emotional intelligence and life satisfaction among university teachers. *Psicothema*, 18, 152-157.
- Bar-On, R. (1997). *The Bar-On Emotional Quotient Inventory (EQ-i): A test of emotional intelligence*. Toronto, Canada: Multi-Health Systems.
- Bisquerra, R. (2005). La educación emocional en la formación del profesorado. *Revista Interuniversitaria de Formación del Profesorado*, 19 (3), 95-114.
- Bosqued, M. (2008) *Quemados. El síndrome de burnout. Qué es y cómo superarlo*. Barcelona: Paidós
- Bueno, C., Teruel, M. P. & Valero, A. (2005). La Inteligencia Emocional en alumnos de Magisterio: La percepción y comprensión de los sentimientos y las emociones. *Revista Interuniversitaria de Formación del Profesorado*, 19 (3) 169-194.
- Bodrova, E., Leong, D.J. (2007). *Tools of the Mind. The Vygostkian Approach to early Childhood Education*, 2nd ed. Prentice Hall, New York.

- Caballero- García, A. & Sánchez-Ruiz, S. (2018). La felicidad en estudiantes universitarios. ¿existen diferencias según género, edad o elección de estudio? *Revista electrónica Interuniversitaria de Formación del profesorado*, 21(3), 1-18.
- Caires, S., Almeida, L. & Vieira, D. (2012) Becoming a teacher: student teachers' experiences and perceptions about teaching practice, *European Journal of Teacher Education*, 35:2, 163-178, DOI: <http://dx.doi.org/10.1080/02619768.2011.643395>
- Camina, A. & Salvador, I. (2007). Condicionantes y características de los estudiantes que inician Magisterio. Estudio descriptivo y comparativo entre especialidades. *Tendencias pedagógicas*, 12, 245-262.
- Cazalla-Luna, N. & Molero, D. (2016). Inteligencia emocional percibida, disposición al optimismo-pesimismo, satisfacción vital y personalidad de docentes en su formación inicial. *Revista de Investigación Educativa*, 34 (1), 241-258.
- Cazalla-Luna, N., Ortega-Álvarez, F. & Molero, D. (2015). Autoconcepto e Inteligencia Emocional en docentes en prácticas. *Revista Electrónica de Investigación y Docencia (REID)*, 14, 151-164.
- Ciucci, E., Baroncelli, A. & Toselli, M. (2015) Meta-emotion philosophy in early childhood teachers: Psychometric properties of the Crèche Educator Emotional Styles Questionnaire. *Early Childhood Research Quarterly*, 33, 1-11. DOI: <http://dx.doi.org/10.1016/j.ecresq.2015.04.006>
- Cochran-Smith, M. & Villegas, A. M. (2015). Framing Teacher preparation research: an overview of the field, part I. *Journal of Teacher Education*, 66(1), 7-20.
- Colwell, N., Gordon, R., Fujimoto, K., Kaestner, R. & Korenman, S. (2013) New evidence on the validity of the Arnett Caregiver Interaction Scale: Results from the Early Childhood Longitudinal Study-Birth Cohort. *Early Childhood Research Quarterly*, 28, 218-233. DOI: <http://dx.doi.org/10.1016/j.ecresq.2012.12.004>
- Coplan, R.J., Bullock, A., Archbell, K.A. & Bosacki, S. (2015). Preschool teacher's attitudes, beliefs, and emotional reactions to young children's peer group behaviors. *Early Childhood Research Quarterly*, 30, 117-127. DOI: <http://dx.doi.org/10.1016/j.ecresq.2014.09.005>
- Day, Ch. & Hong, L. (2016). Influences on the capacities for emotional resilience of teachers in schools serving disadvantaged urban communities: challenges of living on the edge. *Teaching and Teacher Education*, 59, 115-125.
- Ersay, P. (2007). Preschool Teachers' Emotional Awareness Levels and Their Responses to children's Negative Emotions. *Procedia – Social and Behavioral Sciences*, 191, 1833-1837. DOI: <http://dx.doi.org/10.1016/j.sbspro.2015.04.220>
- Fernández-Molina, M., González, V. & Del Molino, G, (2011). Perfil del alumnado universitario de Educación Infantil: un estudio descriptivo desde los inicios del Espacio Europeo de Educación Superior hasta los Estudios de Grado (2006-2010). *Revista de investigación educativa, RIE*, 8(29), 187-203.

- Gohm, C., Corser, G. & Dalsky, D. (2005). Emotional intelligence under stress: useful, unnecessary, or irrelevant? *Personality and Individual Differences*, 39, 1017-1028. DOI: <http://dx.doi.org/10.1016/j.paid.2005.03.018>
- Livingston, K. (2016) Developing teachers' and teacher educators' professional identity in changing contexts, *European Journal of Teacher Education*, 39:4, 401-402, DOI: <http://dx.doi.org/10.1080/02619768.2016.1235822>
- Latorre, M. J. & Pérez, P. (2005). El perfil del estudiante de Magisterio y su formación práctica universitaria. *Revista Qurrriculum*, 18, 255-274.
- Malinen, O. & Savolainen, H. (2016). The effect of perceived school climate and teacher efficacy in behavior management on job satisfaction and burnout: a longitudinal study. *Teaching and Teacher Education*, 60, 144-152.
- Mayer, J., Caruso, D. & Salovey, P. (1999) Emotional intelligence meets traditional standards for an intelligence. *Intelligence*, 27, 267-298.
- Mérida López, S. & Extremera, N. (2017). Estado de la cuestión sobre inteligencia emocional y burnout en el profesorado por países, año de publicación, ciclos educativos e instrumentos de evaluación. *Profesorado. Revista de curriculum y formación del profesorado*, 21(2), 372-389.
- Mir, M., Batlle, M. & Hernández, M. (2009) Contextos de colaboración familia-escuela durante la primera infancia. *Revista Electrónica de Investigación Educativa y Socioeducativa*, 1(1), 45-68.
- Moé, A. (2016). Harmonious passion and its relationship with teacher well-being. *Teaching and Teacher Education*, 59, 431-437.
- Morris, C., Denham, S., Bassett, H. & Curby, T. (2013). Relations among teacher's emotion socialization beliefs and practices and preschoolers' emotional competence. *Early Education and Development*, 24, 979-999. DOI: <http://dx.doi.org/10.1080/10409289.2013.825186>
- Palomera, R., Gil-Olarte, P. & Brackett, M. (2006). ¿Se perciben con inteligencia emocional los docentes? Posibles consecuencias sobre la calidad educativa. *Revista de Educación*, 341, 687-703. Retrieved on 14 December, 2015 from: http://www.revistaeducacion.mec.es/re341_28.html.
- Pena, M. & Extremera, N. (2012). Inteligencia emocional percibida en profesorado de Primaria y su relación con los niveles de burnout e ilusión por el trabajo (engagement). *Revista de Educación*, 359, 604-627. DOI: <http://dx.doi.org/10.4438/1988-592X-RE-2011-359-109>
- Pena, M., Rey, L. & Extremera, N. (2012) Life Satisfaction and Engagement in Elementary and Primary Educators: Differences in Emotional Intelligence and Gender. *Revista de Psicodidáctica*, 17(2), 341-360.
- Peterson, Ch. & Seligman, M. E. P. (2004) *Character Strengths and Virtues A Handbook and Classification*. Washington, D.C.: APA Press Oxford University Press.

- Pianta, R. C., de Coster, J., Cabell, S., Burchinal, M., Hamre, B. K., Downer, J., Howes, C. (2014) Dose-response relations between preschool teachers' exposure to components of professional development and increases in quality of their interactions with children. *Early Childhood Research Quarterly*, 29 (4), 499-508. DOI: <http://dx.doi.org/10.1016/j.ecresq.2014.06.001>
- Rodríguez, J.M. & Fernández, M.^a J. (2012) Development and validation of a measuring instrument for Burnout Syndrome in Teachers. *The Spanish Journal of Psychology*, 15, 1456-1465. DOI: http://dx.doi.org/10.5209/rev_SJOP.2012.v15.n3.39429
- Salovey, P. & Mayer, J. D. (1990) Emotional intelligence. *Imagination, cognition and personality*, 9, 185-211.
- Salovey, P., Stroud, L.R, Woolery, A. & Epel, E.S (2002). Perceived emotional intelligence, stress reactivity and symptom reports: Further explorations using the trait meta-mood scale. *Psychology and Healthy*, 17, 611-627. DOI: <http://dx.doi.org/10.1080/08870440290025812>
- Sánchez Nuñez, M.T. & Latorre Postigo, J.M. (2012). Inteligencia emocional y clima familiar. *Behavioral Psychology*, 20(1), 103-117.
- Timoštšuk, I. & Ugaste, A. (2012) The role of emotions in student teachers' professional identity, *European Journal of Teacher Education*, 35:4, 421-433, DOI: <http://dx.doi.org/10.1080/02619768.2012.662637>
- Urquijo, I., Extremera, N. & Villa, A. (2015). Emotional intelligence, life satisfaction, and psychological well-being in graduates: the Mediating effect of perceived stress. *Applied Research Quality Life*, 30. DOI: <http://dx.doi.org/10.1007/s11482-015-9432-9>
- Vivas de Chacón, M. (2004). *Las competencias socio-emocionales del docente: una Mirada desde los formadores de formadores*. En I Jornadas Universitarias JUTEDU2004. Retrieved on 17 November, 2015 from: <http://www2.uned.es/jutedu/VivasChaconMireya-IJUTE-Comunicacion.PDF>. (retrieved 17.11.2015).
- Wall, K. & Hall, E. (2016). Teachers as metacognitive role models. *European Journal of Teacher Education*, 39(4), 403-418, DOI: <http://dx.doi.org/10.1080/02619768.2016.1212834>
- Wells, M. B. (2015). Predicting preschool teacher retention and turnover in newly hired Head Start teachers across the first half of the school year. *Early Childhood Research Quarterly*, 30, 152-159. DOI: <http://dx.doi.org/10.1016/j.ecresq.2014.10.003>
- Whitaker, R.C., Dearth-Wesley, T. & Gooze, R.A. (2015). Workplace stress and the quality of teacher-child relationships in Head Start. *Early Childhood Research Quarterly*, 30, 57-69. DOI: <http://dx.doi.org/10.1016/j.ecresq.2014.08.008>
- Zhai, F., Cybele, C. & Li-Grining, Ch. (2011). Classroom-based interventions and teachers' perceived job stressors and confidence: evidence from a randomized trial in Head Start settings. *Early Childhood Research Quarterly*, 26, 442-452. DOI: <http://dx.doi.org/10.1016/j.ecresq.2011.03.003>