A Comparative Investigation of First and Fourth Year Pre-service Teachers' Expectations and Perceptions of Emotional Intelligence

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Abstract: This article reports on the perceptions and expectations of pre-service teachers (PSTs) on the role of Emotional Intelligence (EI) taught as part of a teacher preparation course. The research was conducted across core units in first and fourth years of an undergraduate education degree in an Australian university. The researchers used a mixed method study. Online survey data from 208 students were analysed, using descriptive statistics for quantitative data and thematic analysis for open-ended responses. Results indicate that PSTs' understandings of EI included awareness and management of emotions in oneself and others. They perceived EI as highly important to teachers in various aspects of teaching such as classroom management, student well-being and classroom pedagogy. Additionally, first year students stated that they expected to learn about EI in their teacher education program, however fourth year students expressed that they had not learnt about EI during their course.

Keywords: Emotional Intelligence (EI); pre-service teachers (PSTs); expectations; perceptions; initial teacher education (ITE)

Introduction

Affect and emotion in education is a growing field, and for teachers, research indicates that the role of emotions broadly encompasses two aspects. First is the teachers' self-awareness and reflection of their own emotions in their work, also called emotional literacy. (Yeigh, Woolcott, Donnelly, Whannell, Snow, & Scott, 2016). Second is the awareness and management of students' emotional and affective needs, which includes helping students reflect on and manage their own emotions as part of their personal wellbeing (Schonert-Reichl, 2017). Affect in pedagogy is defined as "measure of the experience and understanding" (Yeigh et al., 2016 p. 108) and that offers a fundamental component in pre-service teacher training in relation to the self-assurance and capability. Decades of research have shown that teaching is one of the most stressful professions alongside other professions such as nursing (Montgomery & Rupp, 2005). Teachers can experience high degrees of stress such as coping with physical and emotional overload. Particularly in Australia, more recent attention has been focused on teachers' wellbeing (Acton & Glasgow, 2015) and mental health (McLean, Abry, Taylor, Jimenez, & Granger, 2017). Research carried out in 2015 by the Association for Teachers and Lecturers illustrated that 76% of 876 participants sampled, stated that the workload was excessively high and had considered leaving the profession due

to the high levels of stress and emotional workload (McCallum, Price, Graham, & Morrison, 2017). Teachers need to be mentally prepared to overcome the possibility of academic workload, anxiety, stress amidst varied emotions, feelings and realities (Dick & Wagner, 2001). Research involving students in schools has also recently emerged. A *Young Minds Matter* survey on adolescent mental health and wellbeing found that: "understanding the sorts of emotional aspects that students experience during their development is a core part of the curriculum in teacher education" (Goodsell et al., 2017, p. 115). For this reason, the awareness of students' emotions and affective needs is very important. For instance, a study conducted by Lomas, Stough, Hansen and Downey (2012) in Victoria suggested that adolescents who have greater EI skills are more equipped to overcome bullying or to be subject of victimisation.

There is a strong need to explore pre-service teacher education curricula to identify and analyse whether social and emotional knowledge and strategies to cope with complex challenges that require critical thinking and control of emotions is present. This has been highlighted by Turner and Stough (2019) in their scoping review about pre-service teacher and EI where the argument involves a need for research in order to facilitate more information about PSTs' experiences on EI in ITE (initial Teacher Education). Has an understanding of EI been explicitly taught at university to pre-service teachers, before entering the workplace, in their case, a school?

This study explores how pre-service teachers perceived and used or explained an understanding of the term, Emotional Intelligence (EI). This study, defines EI as "involving the ability to perceive accurately, appraise and express emotion; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions" (Salovey & Mayer, 1990, p. 35).

Limited research has been conducted exploring pre-service teacher education, specifically the role of Emotional Intelligence (EI) in the curriculum at university level. Studies such as Yeigh et al. (2016) suggest the need for further research providing a clearer relationship between affect and cognitive emotional learning in PSTs. Acton and Glasgow (2015) suggest also, that there is a need to integrate aspects of EI that can support teachers' wellbeing. Yager (2011) suggested that "longitudinal research" (p.122) is required to allow researchers to examine the impact of and need for a personal and professional curriculum analysis. This article offers a lens exploring expectations and perceptions of PSTs enrolled in an undergraduate Bachelor of Education degree in a Victorian higher institution in Australia. The investigation focuses on pre-conceived views of the definition, role and understanding of EI during pre-service teachers' first year of study, comparing this data to that of PSTs in their last year as they transition from their university degree to the profession of teaching. This study sought to collect data to address the following specific research questions:

- What are the expectations and perceptions of first and fourth year PSTs of the role of Emotional Intelligence in their education degree?
- What are the differences between these expectations and perceptions in the two groups?

Literature

This section will offer a brief background to EI theory, including its historical background, diverse definitions and applications in education.

Historical Background of Emotional Intelligence (EI)

Emotions play an essential role in students' learning. These are often defined as the crucial factor to determine life goals, to feel excitement, joy, hope, interest, but also to experience the not so pleasant emotions such as fear and embarrassment. All these factors constitute and contribute to the process of learning (Pekrun & Linnenbrink-Garcia, 2014). Human beings are a mixture of reason and emotions (Gayathri & Meenakshi, 2013). This is to say, we are often able to critique situations with a meticulous precision but when we use our emotions, we are able to empathise with the feelings of others, our own feelings and to understand different and sometimes complex emotional situations.

Despite the fact that there is currently an inordinate amount of interest on the importance of emotions, these had been ignored in the first tests that measured intelligence. The first test used to measure intelligence was developed in France in 1905 by Alfred Binet and Theodore Simon (Gayathri & Meenakshi, 2013). The purpose of developing this test was to measure academic success in students (Siegler, 1992). However, since its inception, research and analysis have found that the test focused on testing reasoning and logical aptitude of a person (Stys & Brown, 2004). Emotions were not part of the intelligent quotient (IQ) test. It was not until 1962 when Schachter and Singer suggested that emotions involved a psychological and cognitive evaluation of stimulations that interest and simultaneous research began to emerge on the importance of EI (Dursun, Emul, & Gencoz, 2010). During this time research moved from seeing emotions as disruptive to reasoning, to positing that emotion and reason were interconnected (Palomera, Fernández-Berrocal, & Brackett, 2008). With this differentiation, cognition and emotion were linked and referred to as cognition and affect (Mayer, 2006).

The study of emotions, emotional knowledge, socio emotional learning or emotional intelligence started to increase considerably.

The Theory of Emotional Intelligence

The theory of Emotional Intelligence has its roots in Social Intelligence which was first introduced by Thorndike in the 1920's (Kihlstrom & Cantor, 2000). Salovey and Mayer (1990) recognised that emotions were *disorganised interruptions* and focused on establishing Emotional Intelligence (EI) as a distinct and independent intelligence. Their research was important in terms of discovering a new field, linking the roots of EI to social intelligence. Salovey and Mayer (1990) stated that EI was associated with positive mental health, as their research found emotionally intelligent people had a more positive link to their social environment, whereas those found lacking EI were generally not as positive to their social environment. They claimed that the theory and concept of EI during this time needed clarification and developed a four-branch ability model.

Salovey and Mayer (1990) created a model that offered a definition based on the premise that EI involved regulating emotions in one's self and in others. Further to this work, more research in the field emerged by theorists such as Goleman (1998) and Bar-On (2006). Understanding the similarities and differences between these theorists is important in the theory of Emotional Intelligence. The Salovey and Mayer model (1990) offered the notion that emotions are a *cognitive process* where people can move from a place where they find themselves in an unpleasant situation to a place where they can control their own emotions as a process of *intellectual ability*. Their model consisted of four branches: emotional perception, emotional assimilation, emotional understanding and emotional management. These authors created a test that could potentially measure an individual's EI. This test, called

the Multibranch Emotional Intelligence Scale (MEIS), was later replaced by the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). The instrument was validated using 5000 participants (Stys & Brown, 2004) and demonstrated accuracy in the measurement of EI. Later Goleman (1998) popularised the term EI in a bestselling book. The Goleman (1998) model argued that the concept of EI needed further description as EI comprised "abilities such as being able to motivate oneself and persist in the face of frustrations; control impulse and delay gratification; to regulate one's moods and keep distress from swapping the ability to think; to empathise and to hope" (Goleman, 1998, p. 37). Goleman's model agreed with Salovey and Mayer (1990) that all competencies involved in EI could be learnt as they were not innate talents. Goleman (1998) attempted to further describe EI by highlighting that every individual was born emotionally intelligent, however by explicitly learning EI competencies, a person could become more emotionally intelligent. His model links four areas: self-awareness, self-management, social awareness and relationship management. Goleman (1998) established a model that also measured EI. This instrument called the Emotional Competency Inventory (ECI) included questions relating to outcomes such as an individual's life success, management skills, workplace performance, perceptions of leadership in a group and organisational skills (Gayathri & Meenakshi, 2013).

Whilst, Goleman's (1998) test was validated by using a previous version of an EI test (Self- Assessment Questionnaire developed by Boyatzis in 1994) and after using the instrument with approximately 6000 participants in the USA and UK. It is still considered to lack reliability, as it cannot be determined if a person is being honest and/or self-aware of his/her own emotional competencies (Stys & Brown, 2004). Despite criticism, Goleman's (1998) model offers an understanding and place for EI in leadership, management and workplaces, so are still used and applied today in many professional development workshops and programs for companies across the globe.

Finally, the Bar-On (2006) model of EI complemented the model developed by Goleman (1998), by adding further categories such as stress management and general mood components including *optimism* and *happiness*. His model included five categories, which were divided into fifteen subcategories involving intrapersonal, interpersonal adaptability, stress management and general mood components. Bar-On also developed his own test to measure Emotional Quotient (EQ) called Emotional Quotient Inventory (EQ-i) which was validated with 4000 participants from the USA and Canada (Stys & Brown, 2004). He defined EI as the ability and strength one has to be positive, stress tolerant and happy no matter what the circumstances. Bar-On's model attempts to measure an individual's ability to deal with highly complex and difficult demands and stressful environments instead of measuring cognitive abilities (Bar-On, 2006).

Emotional Intelligence as a theory includes a belief that the quality of life links to an understanding of managing emotions and developing positive productive relationships with others. This article uses a definition of EI based on the work of Salovey and Mayer (1990), where people need to first be able to *perceive* their emotions. When we do this, we then move to the stage where we *assimilate*. At this stage, we are capable of differentiating between different types of emotions. The next stage involves *understanding* our emotions because we are able to distinguish and transition from one emotion to another to reach the last stage called *managing* our emotions.

EI in Australian Teacher Education Courses

Policies related to teacher preparation as well as certification requirements have further increased in Australia as government has intensified efforts in improving teacher education programs (White, 2016). An Australian Government report *Action now: Classroom Ready Teachers* (2014)*,* proposes that changes need to be addressed to develop a strong course accreditation that can benefit teachers in today's classrooms. Information about socio-emotional learning (SEL) in school contexts is still a matter of study and research (Victoria State Government, 2018). However, to date few studies focus on EI in pre-service teacher education. Eren (2014) examined prospective teachers' emotional styles in regards to how they felt about teaching and their future teaching practice. Results indicated that PSTs' emotions about their teaching must be taken into consideration.

A relational study on prospective teachers' emotions about teaching and emotional styles has found a positive relationship between prospective teachers and their expectations about their future teaching (Eren, 2014). Aspects such as enjoyment were found prevalent and more prominent in comparison to feelings like anger or anxiety. Eren's (2014) study limitations and aspects for further research into teacher education suggested expanding teacher education research to other domains. This study focuses the lens on pre-service teacher education and the role and perceived importance of EI in the preparation of future teachers in all the domains that include the Bachelor of Education degree in an Australian university.

Method

This study used a mixed methods design to gather quantitative and qualitative data simultaneously (Creswell, 2009).

Participants

Participants in this research are pre-service teachers (PSTs) enrolled in the Bachelor of Education (Honours) with a specialisation in primary and secondary education. The PSTs' ages ranged between 18 and 38. A purposeful sample from a total of 614 first and fourth year core units PSTs (First year students: 22 males, 86 females: Fourth year students: 23 males, 77 females) were invited to participate in the study through an online course Moodle site together with invitations sent together with explanatory letters and consent forms to tutorial groups. Two hundred and eight students in total participated in this study.
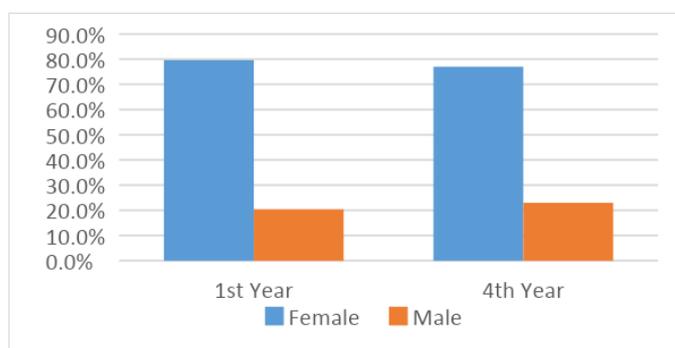

Figure 1. Percentages of male and female participants in first and fourth year

Survey Construction, Collection and Analysis

With ethical approval from the university, PSTs were invited to complete an anonymous online survey via online advertisements in two core units - one in the first year students and another in the fourth year students. The survey instrument contained a set of questions investigating PSTs' understanding of EI and their expectations and perceptions about the role of EI in their pre-service education course. The survey contained items inclusive of demographic information (such as gender, age, course enrolled), Likert type response items and open-ended questions. Since there is no pre-existing instrument, parts of the survey adopted the written structure of the items in a questionnaire created by Pickering and Howard-Jones (2007) on the role of neuroscience in education. PSTs' views about the role of EI in their pre-service teacher education course were sought through open-ended questions.

The data was collected using a Qualtrics survey platform. Quantitative data was analysed using SPSS IBM (Pallant, 2016). Descriptive statistics employed include frequency counts and percentage distribution. Inferential statistics (t-tests) were used to compare the mean scores between first and fourth year PSTs. Qualitative data were analysed using thematic analysis (Braun & Clarke, 2006). Participants' open-ended responses were coded and categorised into themes.

Findings
Understanding EI

The first part of the survey provided insights of pre-service teachers' (PSTs) understandings of EI. PSTs were asked to describe in 2-3 sentences what they believe EI is. The data was coded using thematic analysis (Braun & Clarke, 2006). Data was downloaded from Qualtrics, then data extracts were analysed and coded in Excel using columns to identify themes. Finally, all themes were allocated a percentage and analysed using graphs. Understandings about EI are shared below in Table 1. A higher percentage of PSTs in first year students stated that EI is about the awareness of emotions in terms of thinking about the understandings of our own emotions and the emotions of others (33.3%). In contrast, fourth year students PSTs expressed that EI was the ability to control and manage emotions (22.8%).

Themes*	N	First year students	N	Fourth Year students	Sample comments
Understanding the emotions (of others and our own)	59	33.3%	37	21.6%	"I believe emotional intelligence to be an <u>individual's control and understanding of their personal emotions</u>"
Ability to control and manage emotions	36	20.3%	37	22.8%	"The <u>ability to connect with others and control your own emotions</u>. Being able to control emotions in different stimulus".
Ability to empathise	25	14.1%	34	20.9%	"It is an <u>individual's capacity to empathise</u>, sympathise and emotionally respond and react to situations".
Awareness of emotions	23	12.9%	29	17.9%	"Emotional Intelligence (EI) is an <u>awareness of one's own emotions and the emotions of others</u>. It is also the awareness of one's own behaviour/actions and how they influence emotion".

Ability to communicate and interact	28	15.8%	7	4.3%	"It is an ability to control one's emotional and <u>interact with other people</u>".
Expressing emotions appropriately	0	0%	12	7.41%	"Ability to be aware of, in control of and <u>be able to express your emotions</u>"

Table 1. First and fourth year PSTs' understandings of EI

Perceptions on the Importance of the Role of EI to a Teaching Career

The second part of the survey involved the perceptions first and fourth year PSTs have on the importance of EI in different aspects of their future teaching (shown in Table 2).

Both first and fourth year PSTs perceived EI as highly important (mean scores were mostly more than 4) to their future teaching. Independent-sample t-tests were conducted to compare the mean scores for first year students and fourth year students on the importance of EI to their future as a teacher in areas such as classroom management, delivering wellbeing programs, and making decisions about curriculum content. There was no significant difference in the scores for first years students ($M = 4.62$, $SD = .593$) and fourth years students ($M = 4.49$, $SD = .643$; $t = 1.540$, $p = 0.125$, two tailed) in classroom management. In terms of delivering wellbeing programs for first years ($M = 4.59$, $SD = .644$) and fourth years ($M = 4.53$, $SD = .611$, $t = 0.735$, $p = 0.463$, two tailed), there was no significant difference. However, in the last item, making decisions about curriculum content, there was a significant difference of first year students ($M = 4.13$, $SD = .885$) and fourth year students ($M = 3.77$. $SD = .941$, $t = 2.846$, $p = 0.005$, two tailed). To summarise, the use of EI in classroom management, delivering wellbeing programs and making decisions about curriculum content were found to be very important, with few significant differences between the groups, except on the aspect of curriculum decisions.

Question	Items	Course	N*	Mean**	SD	t	Sig 2 Tailed _p_ value
How important is Emotional Intelligence to you as a future teacher in the following aspects?	Classroom management	First Year students	106	4.62	.593	1.540	0.125
		Fourth Year students	100	4.49	.643		
	Delivering wellbeing programs	First Year students	106	4.59	.644	0.735	0.463
		Fourth Year students	100	4.53	.611		
	Making decisions about curriculum content	First Year students	106	4.13	.885	2.846	0.005*
		Fourth Year students	100	3.77	.941		

Table 2. Perceptions about the importance of EI in PSTs future teaching

*Two missing answers
*$p < 0.05$
**1 = not important at all, 2 = slightly important, 3 = moderately important, 4 = very important, 5 = extremely important

In the open-ended item referred to as _other_, the following comments were represented in both groups: "EI can be important in creating a sense of comfort and safety for students within the classroom", "EI can be important for dealing with parents and school staff", "EI can generate classroom comfort". To summarise, the role of EI is considered by both groups to be extremely important and very important for their future as a teacher.

Expectations of EI as Part of a Teacher Education Course

PSTs were asked the following questions and their responses analysed using thematic analysis (Braun & Clarke, 2006).

Please explain how Emotional Intelligence skills should be developed as part of the teachers' education course.

Do you believe that in your pre-service teacher education course you will learn (or have already learnt) about EI? If so, what knowledge do you think you will get (or already know)?

Table 3 represents the responses from PSTs with regard to their expectations about how they would like EI taught as part of their course. Similar percentages of first years (34.0%) and fourth years (31.5%) agreed that EI should be taught as part of the lectures and tutorials. There was a slight difference between first year students (18.0%) and fourth years (11.5%) in their expectations of having practical EI training and activities as part of the course. It is of interest that fourth year PSTs mentioned having an explicit class where EI is taught (11.5%), an approach not mentioned by the first year PSTs.

Category	*N*	*%*	Sample comments
First year students	*108*		
Lecture/tutorials/units	49	34.0%	'Through lectures, tutorials and reading/audio/visual materials'
Examples/ real-life teaching	33	23.0%	'Should be put in situations where it is important to know these skills. Use them in real life situations'
Practical training and activities	27	18.0%	'Providing training as to how we can deal with certain situations in classes that require a high level of EI'
Through interaction with teachers and students	18	12.0%	'Through interacting with classmates and teachers'
No idea/not sure	16	11%	'Not sure', 'I have no idea'
Feel already prepared on EI	3	2%	'I believe I already have a very strong EI and are able to read people and connect emotionally without being taught'.
Fourth year students	*100*		
Lecture/tutorials/units	41	31.5%	'I think it should be taught within a unit of study - I don't remember that we have explicitly been taught about EI in our course'
Examples/ real-life teaching	46	35.3%	'Should be revisited each year in relation to a specific example of how it would be applied in real-life teaching, instead of simply providing the "theory" or "definition"'
Practical training and activities	15	11.5%	'Should be taught in line with experiences we will be likely to experience on placement and give us practical strategies'
An explicit class about EI	15	11.5%	'Explicitly. Have a class dedicated to integrating EI' 'Maybe an entire unit on Emotional Intelligence and how that can be employed into the classroom. I feel this has been completely avoided during my degree alongside behaviour management techniques'
No idea/not sure	13	10%	'I have no idea', 'I'm not sure how it should be taught'

Table 3. Expectations about how EI skills should be taught as part of the teachers' education program

In the last survey question, first year PSTs were questioned on their expectations of having EI in their degree, whilst fourth years were questioned about whether they had gained any EI knowledge during their degree. Results are shown in Table 4.

Category	N	%	Sample comments
First year students			
Yes, I will have/learn EI knowledge during my degree	82	66.1%	'I think I will acquire the knowledge or theory behind student learning in terms of EI; that is, how we can apply EI and adapt our teaching so that our students are optimally engaged'
No, I will not have any knowledge about EI during my degree	21	16.9%	'I do not think we will learn about it in the depth that we should'
Coping with mechanism to deal with emotions	10	8.1%	'I think I will learn more about it as I progress throughout university and hope to understand different coping mechanisms to deal with specific emotions of students'
How to use strategies on students	11	8.9%	'Yes, I think we will learn how to gauge students' emotional intelligence and understand why students may have low or high levels. Once this understanding is gained, strategies can be devised to combat this'
Fourth year students			
Yes, I had knowledge on EI during my degree	20	16.8%	'Having exposure to different personalities within school staff, helped improved my EI', 'Yes. How to have a positive relationship with students, colleagues and parents'
No, I did not have any knowledge about EI	71	59.7%	'Nope. I'm in 4th year and haven't heard about it till this survey', ''No. I am in fourth year and it has not been included in any aspects of my degree'
It was mentioned in the course but not covered deeply	20	16.8%	'I learnt about it briefly in first year. I feel like I know what it is, but there has been no further reference in my course, and I don't know practical ways that I could integrate emotional intelligence in schools'
There is a need to cover EI	8	6.7%	'Perhaps we need more of an explicit focus. So far, it has been discussed more in general tutorial conversation and as an implicit underlying notion within teaching'

Table 4. Expectations about EI knowledge in PSTs in the course of their degree

Interestingly, in Table 4, there were differences between the responses in first and fourth year PSTs. A significant result was that 66.1% of first years students expected to attain EI knowledge and skills during their degree. However, more than half of fourth years (59.6%), who were completing their studies, reported that they did not learn about EI during their degree. Although it is noted that this is a cross-sectional and not a longitudinal survey, the results suggest that there might be an incongruence between what students expect (first year students) and what students have experienced during the duration of their degree (fourth year).

Discussion

Although this is a small study in a specific Australian university which explored PSTs' expectations and perceptions of EI in first and fourth year courses, several interesting outcomes emerged. Firstly, with respect to Table 1, the perceptions students have about EI can be compared to the large body of literature that provides the definition for EI. Such definitions are consistent with theorists such as Bar-On (2006), Goleman (1998) and Salovey and Mayer (1990). Student definitions of EI were linked to similar references cited in the literature review, for instance, that EI is the understanding of our own emotions and the

emotions of others that EI is about interpersonal relationships, in how we read others and their feelings. It is clear from the findings that PST's in this study attempted to reflect and construct a response to their familiarity with EI outside any explicit teaching they may have experienced in their course. However, an understanding of the components (definition) of EI is only a start to analysing issues confronting teachers in the classroom. A possible explanation for these results may be due to the popularity of this topic over the last 20 years. Definitions given by students in this study can be linked to definitions of EI found in both popular media and academic research.

PSTs also pointed out that the use of EI, its implications and practice in future classrooms could be strengthened during their bachelor degree. No responses gave explicit examples of where in their course the teaching of EI would be most beneficial. The researchers of this study suggest data highlighted the importance of EI as a skill set in the classroom, this would suggest that the importance of any inclusion of teaching and understanding of EI would best be placed before PSTs professional school placements. As reported, first year PSTs in this study believed that EI would be taught at some point in their degree. Fourth year PSTs' responses were stronger in the necessity for explicit teaching of EI that they reported had not been experienced. Fourth year PSTs extensive experiences in classrooms formed these perceptions of EI as vital. The following extract is from a first year student on EI in their degree:

> *'If it was taught throughout my degree, I think the type of knowledge would be more applicable to how to deal with students, which is great, but I'd also like to know how I can employ EI to better understand myself'.*

These findings make a case for EI as an integral area of study in units preparing PSTs for classroom practice.

The results from this research strongly suggest that EI is important for PSTs and for their future teaching practice. However, whilst it seems that there is a clear understanding of EI as a theory, there is confusion around *how* PSTs' could apply EI in their future teaching. As reported in the data, sources of information that provided information about EI were mainly related to media, books and journals. However, this did not appear to be enough for PSTs to feel proficient or prepare them for future practice in the classroom. Concerns were raised by students for incorporating EI knowledge into the course that would make the application of EI clear and explicit. The following extract is from a fourth year student on EI in their degree:

> *'No, unfortunately I don't feel that EI has been taught in my pre-service training experiences. I know a little bit about EI through my own reading/exposure to EI stories in the media, but that's about all!*

Although the findings present a percentage of students engaging with EI in their current studies (particularly in first year students), most of the students claimed that there was a need to incorporate this essential topic as part of a unit, activities or workshops to provide PSTs with useful strategies that can assist in challenging teaching situations. In the current study, PSTs stated that assistance with the teaching of EI was a matter of urgency for future teaching and future emotional needs.

Only 16.8% of fourth year students also stated that EI was mentioned but not covered with depth. This finding, whilst a small snapshot, suggests a need to restructure the degree in ways that EI can be explicitly taught to PSTs more than just giving it some random exposure during the course. It is also important to note that while EI can be taught and developed, it does not act as the most effective method to solve problems in a classroom, as it was stated by some of the respondents. These findings show that the PSTs surveyed supported EI being taught explicitly during their pre-service course. As Table 4 demonstrates, PSTs wanted to understand EI, but more importantly, to know how they could use EI in their practical

teaching. PSTs mentioned that understanding EI was important, but more importantly, how they could use this knowledge in practical teaching was essential. The results suggest that offering classes, lectures, case studies analyses or tutorials could help them to understand, identify, judge, and prepare for future positive or negative situations they might confront with their students. These findings support the need for further research into increasing emotional literacy that can benefit pedagogical confidence, as suggested by Yeigh et al. (2016).

Conclusion

Affect in education can be analysed from two perspectives. The first one involves teachers' self-awareness and feelings about their own emotions when teaching, and the second is concerned with how teachers can support students' emotional needs. The current study collected data on PSTs' expectations and perceptions about integrating EI in their future practice, as well as their views on EI. From the findings, it can be noted PSTs expressed strong, positive views about the importance of EI in education. In addition, PSTs perceive that EI is highly important to teachers in aspects such as classroom management, awareness and management of their own emotions and the emotions of others.

Overall, findings from this small study revealed that more research is clearly needed in affect and socio-emotional learning. Questions were also raised about how EI can actually be taught as part of the curriculum. In what specific ways can PSTs acknowledge, understand and practise the use of EI during their education? A rethink of the role of EI and affective theories within teacher education programs is needed to deliver learning capabilities that support the growth of PSTs. The scope of this study was limited in terms of data, only first and fourth PSTs in one Australian university were considered. For this reason, there is limited generalisability; it is recommended that this study be replicated in other universities.

This paper has described the perceptions and expectations of PSTs from two year levels in core subjects of a teaching degree in an Australian institution. This study calls for more debate for future course developers to address the needs of PSTs in conjunction with their desires and beliefs about EI, affect and other socio-emotional theories as part of their teacher education. Continued efforts are needed to make EI more accessible to PSTs who are being taught according to today's needs and professional standards.

References

Acton, R., & Glasgow, P. (2015). Teacher wellbeing in neoliberal contexts: A review of the literature. *Australian Journal of Teacher Education, 40*(8), 99-114. https://doi.org/10.14221/ajte.2015v40n8.6

Bar-On, R. (2006). The Bar-On Model of Emotional-Social Intelligence (ESI). *Psicothema, 18*, 13-25. Retrieved from http://www.psicothema.com/english/norms.asp

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. https://doi.org/10.1191/1478088706qp063oa

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: SAGE.

Dick, R., & Wagner, U. (2001). Stress and strain in teaching: A structural equation approach. *British Journal of Educational Psychology, 71*(2), 243-259. https://doi.org/10.1348/000709901158505

Dursun, P., Emul, M., & Gencoz, F. (2010). A review of the literature on emotional facial expression and its nature. *New/Yeni Symposium Journal*, 48(3), 201-215

Eren, A. (2014). Relational analysis of prospective teachers' emotions about teaching, emotional styles, and professional plans about teaching. *The Australian Educational Researcher*, *41*(4), 381-409. https://doi.org/10.1007/s13384-013-0141-9

Gayathri, N., & Meenakshi, K. (2013). A literature review of emotional intelligence. *International Journal of Humanities and Social Science Invention, 2*(3), 42-51. Retrieved from http://www.ijhssi.org/

Goleman, D. (1998). *Working with emotional intelligence*. New York, NY: Bantam Books. https://doi.org/10.1002/ltl.40619981008

Goodsell, B., Lawrence, D., Ainley, J., Sawyer, M., Zubrick, S., & Maratos, J. (2017). *Child and adolescent mental health and educational outcomes: An analysis of educational outcomes from Young Minds Matter (The second Australian Child and Adolescent Survey of Mental Health and Wellbeing).* Retrieved from https://youngmindsmatter.telethonkids.org.au/siteassets/media-docs---young-minds-matter/childandadolescentmentalhealthandeducationaloutcomesdec2017.pdf

Kihlstrom, J. F., & Cantor, N. (2000). Social intelligence. In R. Sternberg & S. B. Kaufman (Eds), *The Cambridge Handbook of intelligence,* (pp. 574-581). New York, NY: Cambridge University Press.

Lomas, J., Stough, C., Hansen, K., & Downey, L. A. (2012). Brief report: Emotional intelligence, victimisation and bullying in adolescents. *Journal of adolescence*, *35*(1), 207-211. https://doi.org/10.1016/j.adolescence.2011.03.002

Mayer, J. D. (2006). A new field guide to emotional intelligence. In Ciarrochi, J., Forgas, J. P., & Mayer, J. D (Eds), *Emotional intelligence in everyday life, (pp.* 3-26). New York, NY: Psychology Press

McCallum, F., Price, D., Graham, A., & Morrison, A. (2017). Teacher wellbeing: A review of the literature Retrieved from https://www.aisnsw.edu.au/EducationalResearch/Documents/Commissioned%20Research/Teacher%20wellbeing%20A%20review%20of%20the%20literature%20-%20%20Faye%20McCallum%20AISNSW%202017.pdf

McLean, L., Abry, T., Taylor, M., Jimenez, M., & Granger, K. (2017). Teachers' mental health and perceptions of school climate across the transition from training to teaching. *Teaching and Teacher Education, 65*, 230-240. https://doi.org/10.1016/j.tate.2017.03.018

Montgomery, C., & Rupp, A. A. (2005). A meta-analysis for exploring the diverse causes and effects of stress in teachers. *Canadian Journal of Education, 28*(3), 458-486. https://doi.org/10.2307/4126479

Pallant, J. (2016). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS* (6th ed.) Sydney, Australia: Allen & Unwin.

Palomera, R., Fernández-Berrocal, P., & Brackett, M. A. (2008). Emotional intelligence as a basic competency in pre-service teacher training: Some evidence. *Electronic Journal of Research in Educational Psychology, 6*(2), 437-454. Retrieved from http://investigacion-psicopedagogica.org/revista/new/english/index.php

Pekrun, R., & Linnenbrink-Garcia, L. (2014). Introduction to emotions in education. In R. Pekrun & L. Linnenbrink-Garcia (Eds.), *Educational psychology handbook series. International handbook of emotions in education* (pp. 1-10). New York, NY: Routledge.

Pickering, S. J., & Howard-Jones, P. (2007). Educators' views on the role of neuroscience in education: Findings from a study of UK and international perspectives. *Mind, Brain, and Education, 1*(3), 109-113. https://doi.org/10.1111/j.1751-228X.2007.00011.x

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality, 9*(3), 185-211. https://doi.org/10.2190/DUGG-P24E-52WK-6CDG

Schonert-Reichl, K. A. (2017). Social and emotional learning and teachers. *Future of Children, 27*(1), 137-155. Retrieved from https://www.jstor.org/journal/futurechildren https://doi.org/10.1353/foc.2017.0007

Siegler, R. S. (1992). The other Alfred Binet. *Developmental Psychology, 28*(2), 179-190. doi:10.1037/0012-1649.28.2.179 https://doi.org/10.1037/0012-1649.28.2.179

Stys, Y., & Brown, S. (2004). *A review of the emotional intelligence literature and implications for corrections* (Report No. R-150). Retrieved from Correctional Service Canada: https://www.csc-scc.gc.ca/research/r150-eng.shtml

Turner, K. & Stough, C. (2019). Pre-service teachers and emotional intelligence: A scoping review. *Australian Educational Researcher*, 1-23. https://doi.org/10.1007/s13384-019-00352-0

Victoria State Government. (2018). *Social and emotional learning.* Retrieved from https://www.education.vic.gov.au/school/teachers/health/mentalhealth/Pages/socialemotion.aspx

White, S. (2016). Teacher education research and education policy-makers: An Australian perspective. *Journal of Education for Teaching, 42*(2), 252-264. https://doi.org/10.1080/02607476.2016.1145369

Yager, Z. (2011). Health education in teacher education: evaluation of learning design with embedded personal wellness learning and assessment focus. *Australian Journal of Teacher Education, 36*(10), 108-125. https://doi.org/10.14221/ajte.2011v36n10.6

Yeigh, T., Woolcott, G., Donnelly, J., Whannell, R., Snow, M., & Scott, A. (2016). Emotional literacy and pedagogical confidence in pre-service science and mathematics teachers. *Australian Journal of Teacher Education, 41*(6), 107-121. https://doi.org/10.14221/ajte.2016v41n6.7

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