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Original

When pre-service teachers' lack of occupational commitment is not enough to explain intention to quit: Emotional intelligence matters! ☆

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ABSTRACT

This study provided evidence on the moderator role of emotional intelligence in the relationship between occupational commitment and intention to quit teaching in a sample of 780 pre-service teachers. Results showed that occupational commitment and emotional intelligence jointly predicted variance of intention to quit teaching after controlling for sociodemographic factors and teacher self-efficacy beliefs. In particular, pre-service teachers with low occupational commitment and low emotional intelligence reported higher intentions to quit teaching than their counterparts with high levels of emotional intelligence. Findings also suggested appraisal of others' emotions and use of emotions as the main emotional intelligence dimensions related with occupational commitment to explain intention to quit teaching. These findings may serve as a starting point for implementing training programs on emotional abilities aimed at promoting more positive attitudes toward teaching as a way of reducing the current teacher attrition crisis.

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Cuando la falta de compromiso ocupacional del profesorado novel no es suficiente para explicar la intención de abandono: ¡La inteligencia emocional importa!

RESUMEN

Este estudio aporta evidencia sobre el papel moderador de la inteligencia emocional en la relación entre compromiso ocupacional e intención de abandono de la enseñanza en una muestra de 780 profesores noveles. Los resultados muestran que compromiso ocupacional e inteligencia emocional explican conjuntamente varianza de intención de abandono de la enseñanza después de controlar factores sociodemográficos y creencias de autoeficacia docente. En concreto, profesores noveles con bajo compromiso ocupacional y bajos niveles de inteligencia emocional informan de mayor intención de abandono de la enseñanza que sus compañeros con mayores niveles de inteligencia emocional. Los resultados también sugieren que percepción interpersonal y asimilación emocional son las dimensiones de inteligencia emocional más relacionadas con el compromiso ocupacional para explicar la intención de abandono de la enseñanza. Estos hallazgos pueden servir como punto de partida para implementar programas de entrenamiento en habilidades emocionales con el objetivo de promover actitudes más positivas hacia la carrera docente como medio para reducir la crisis actual de abandono de la enseñanza.

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Introduction

Teacher attrition is increasingly considered a major concern due to its multiple educational, social and economic consequences (Torenbeek & Peters, 2017). While it has been asserted that student performance is related to how experienced the teacher is (Hanushek et al., 2004), teacher attrition negatively affects

students' achievement (Boyd, Lankford, Loeb, & Wyckoff, 2005). Likewise, high teacher attrition reduces teamwork and negatively affect schools' sense of community (Guin, 2004). Besides, the administrative and economic costs of teacher attrition are significant, because replacements must be found or trained (Brill & McCartney, 2008). Consequently, Richardson and Watt (2005) have described this issue as a "retention crisis" that has gained extant attention from researchers and institutions worldwide (Brill & McCartney, 2008; OECD, 2005).

As stated above, turnover intention and desire to quit teaching have been at high levels in recent decades (Torenbeek & Peters, 2017). Given that occupational stress among educators is highly prevalent worldwide, it is not surprising that this factor has been traditionally linked with decreased satisfaction and reduced commitment with teaching profession (McCarthy, Lambert, Lineback, Fitchett, & Baddouh, 2016). However, there are marked differences among educators leaving their career. Guarino, Santibañez, and Daley (2006) reported that teacher attrition rates follow a U-shaped pattern. Accordingly, high rates of abandonment are found among new entrants to the profession. This pattern is found in most countries (OECD, 2005). Although retaining novice teachers is economically more productive than replacing them or hiring new teachers, research into predictors of intention to quit among pre-service teachers is still scarce (Brill & McCartney, 2008). Therefore, this line of research constitutes a promising approach to target efforts at alleviating the current teacher attrition crisis (Klassen & Chiu, 2011).

There is evidence on a crucial antecedent of eventual withdrawal such as intention to quit teaching. As there is evidence that intention to quit predicts withdrawal behaviors (Hackett, Lapierre, & Hausdorf, 2001), intention to quit teaching is considered as a reliable precursor of withdrawal for both pre-service and in-service educators (Conley & You, 2009; Pfitzner-Eden, 2016). Among the prominent efforts at promoting more positive attitudes toward teaching and reducing the current retention crisis, there has been research into personal and contextual factors associated with decisions to leave teaching (Chan, Lau, Nie, Lim, & Hogan, 2008). While teacher stress or occupational commitment are related to intentions to quit, there are individual differences regarding educators' personal resources affecting their attitudes toward teaching profession (e.g., teacher self-efficacy and emotional abilities; Klassen & Chiu, 2011; Mérida-López & Extremera, 2017). However, integrative studies on these variables are needed to explore and understand their relationships with intention to quit.

Occupational commitment

Hackett et al. (2001) defined occupational commitment as "the level of attachment to, or desire to work in, a particular career role" and argued this variable plays a central role in predicting intention to quit a career and, hence, in actual withdrawal behavior (Meyer, Becker, & Vandenberghe, 2004). This attitudinal variable is influenced by personality, self-efficacy and experience (Meyer et al., 2004), being a key factor for promoting retention among educators (Klassen & Chiu, 2011). In fact, occupational commitment has been found to be positively associated with decisions to choose teaching as a profession (Rots, Aelterman, Vlerick, & Vermeulen, 2007). Conversely, occupational commitment is identified as a predictor of desire to abandon education among pre-service and in-service teachers (Conley & You, 2009; Klassen & Chiu, 2011). Thus, we expect pre-service teachers' occupational commitment to be negatively associated with intention to quit (H1).

Although pre-service and novice teachers, who are at risk of quitting the profession, often report that they feel stressed and dissatisfied, there are individual differences in decisions about leaving

teaching. For instance, it has been shown that teacher self-efficacy beliefs negatively predict quitting intentions among pre-service teachers (Klassen & Chiu, 2011). Likewise, high levels of personal resources such as emotional competence may enhance pre-service teachers' belief in their capability to deal with teaching-related stress and thus may influence their intention to quit (Tait, 2008). Indeed, scholars have directed extant attention to the role of emotional abilities as a personal resource with implications on positive attitudes and retention in diverse professional programs including teacher education (Parker, Taylor, Keefer, & Summerfeldt, 2018).

Emotional intelligence

One dimension that has consistently been reported to predict more positive attitudes regarding academic and occupational settings is the ability to perceive and express emotions, to use emotional information to facilitate thought, to use emotional reasoning and understanding and to regulate emotions (Mayer, Caruso, & Salovey, 2016). Indeed, the emotional intelligence (EI) construct has received extant attention in recent decades through the lens of two main theoretical models. While *trait* models of EI tend to define it as a lower-order personality construct referring to the tendency of an individual to manage their emotions, the *ability* model defines EI as the capacity to perceive, assimilate, understand, and manage emotions in oneself and others (Mayer et al., 2016). Therefore, we followed the ability EI framework.

Considering meta-analytic reviews of EI and personal and workplace outcomes, both performance-based and self-report measures are regarded as categories of ability EI instruments (Miao, Humphrey, & Qian, 2017; Sánchez-Álvarez, Extremera, & Fernández-Berrocal, 2016). Since self-report ability EI instruments use descriptive statements consistent with Mayer and Salovey's (1997) conceptualization of EI, these tests are used to assess self-perceptions concerning one's ability to recognize, process, and utilize emotion-laden information. Besides, self-report instruments are practical because they are relatively short and easy to administer (Law, Wong, & Song, 2004). In line with prior research examining pre-service teachers' EI (e.g., Chesnut & Cullen, 2014), a self-report ability EI test was used.

A mounting body of meta-analytic evidence has shown significant correlates of EI with personal well-being (Sánchez-Álvarez et al., 2016) or work attitudes (Miao et al., 2017). Likewise, educational research demonstrates that EI is a key personal resource for teachers due to its associations with higher engagement (Pena, Rey, & Extremera, 2012) and reduced teacher burnout (Mérida-López & Extremera, 2017). Furthermore, EI relates to more positive attitudes to teaching among in-service (Brackett, Palomera, Mojsa-Kaja, Reyes, & Salovey, 2010) and pre-service teachers (Chesnut & Cullen, 2014). Since accumulating empirical research shows that EI may account for unique variance in commitment and intention to quit, we expect pre-service teachers' EI to be positively related to occupational commitment (H2) and negatively associated with intention to quit (H3).

Interaction of pre-service teachers' occupational commitment and EI

Despite the large evidence on factors related to teacher attrition points to occupational commitment (Klassen & Chiu, 2011) and teacher self-efficacy (Bruinsma & Jansen, 2010; Pfitzner-Eden, 2016) as predictors of pre-service teachers' intention to quit, much less is known about the role of emotional abilities. Current literature shows both occupational commitment and EI influence pre-service teachers' intention to quit the profession. Although studies on pre-service teacher retention are needed to identify the personal factors that explain decisions about remaining in the profession

(Chan et al., 2008; Tait, 2008), research has not yet examined occupational commitment and EI as joint predictors of intention to quit.

There are theoretical and empirical reasons for expecting that pre-service teachers' occupational commitment and EI will interact to predict intention to quit. First, the namely moderator model of EI proposed by Côté (2014) suggests that the effects of occupational commitment on pre-service teachers' intention to quit may vary according to levels of EI. Second, a body of research has showed the predictive role of occupational commitment on intention to quit in pre-service teacher samples (Klassen & Chiu, 2011). Likewise, some studies have found positive associations between pre-service teachers' EI and commitment to teaching profession (Chesnut & Cullen, 2014). Therefore, we expect EI to modulate the relationship between occupational commitment and intention to quit after controlling for the effects of sociodemographic factors (i.e. age and gender) and teacher self-efficacy (H4).

Control variables

Sociodemographic variables including age and gender have often been used as covariates in studies examining teacher attrition (Borman & Dowling, 2008). There are gender differences in intention to quit teaching and age is also considered relevant to decisions about leaving (Guarino et al., 2006). Regarding personal resources, there is a large body of evidence linking teacher self-efficacy with higher satisfaction with and commitment to the profession and with lower intention to quit (Chesnut & Burley, 2015). With respect to pre-service teachers, Klassen and Chiu (2011) reported teacher self-efficacy was positively associated with occupational commitment and negatively linked with quitting intentions. This variable is also positively related to the length of time for which pre-service teachers intend to remain in the profession (Bruinsma & Jansen, 2010). Therefore, this study aimed to assess EI as a personal resource moderating the relationship between occupational commitment and intention to quit after controlling for relevant variables such as gender, age and teacher self-efficacy.

The present study

In this research, we aim to address the aforementioned gaps of knowledge via the examination of the moderating role of a personal resource (i.e. EI) in the relationship between occupational commitment and intention to quit in a sample of pre-service teachers, that is, candidates following academic degrees to become educators. This study contributes to the literature of teaching and teacher education in several ways. First, considering pre-service teachers' intentions to quit teaching contributes to the limited literature on this field may serve as a promising avenue for promoting more positive attitude toward teaching at early stages of teaching career, when critical attrition rates are found. Second, testing both direct and joint effects of occupational commitment and emotional abilities as predictors of intention to quit may lead to a better understanding on the processes related to decisions about leaving teaching career. Likewise, providing significant results whilst controlling for classical predictors of intention to quit teaching such as age, gender and teacher self-efficacy beliefs may strength the validity of this research. Finally, findings from this study may help designing more effective programs to promote more positive attitudes toward teaching career and, hence, retention of qualified teachers.

Method

Participants

A total of 780 pre-service teachers (69.6% female; M_{age} = 25.27, SD = 5.98, range = 18–54) took part in the study. The participants were students at two public universities in Southern Spain; most were studying for a master's degree in Secondary School Education at the University of Málaga (61.7%; 64% female) or the University of Huelva (13.8%; 52.8% female). Moreover, participants were first-years students of childhood education (20.9%; 96.9% female) or primary education (3.6%; 71.4% female) at the University of Málaga. Most students (90.6%) had no practical experience of teaching at the time of the study. The mean length of teaching experience for the remaining 9.4% of participants was approximately seven weeks (M = 49.68 days; SD = 37.30; range = 7–120).

Instruments

Occupational commitment was measured with an overall six-item scale based on the work by Klassen and Chiu (2011) and previously used by Hackett et al. (2001). Participants are requested to response using a Likert scale ranging from (1) "Disagree strongly" to (9) "Agree strongly" (e.g., "I definitely want a career in teaching"). This scale provides an index of overall *occupational commitment*, that is, a general score regarding participants' levels of attachment to a particular career role (i.e. teaching career). This instrument showed excellent reliability in prior research with pre-service teachers (Klassen & Chiu, 2011). The scale was professionally translated from English into Spanish using the back-translation method. In our study, this measure showed good reliability (Cronbach's α = .82, McDonald's Ω = .83, CR = .82, AVE = .45).

Emotional intelligence was measured with the Spanish version of the Wong and Law Emotional Intelligence Scale (Extremera, Rey, & Sánchez-Álvarez, 2019; Law et al., 2004). This self-report ability EI tests consists of 16 items using a Likert scale ranging from (1) "Totally disagree" to (7) "Totally agree" (e.g., "I am quite capable of controlling my own emotions"). This scale comprises four *EI* dimensions that showed good reliability in this study: *appraisal of one's own emotions* (α = .81, Ω = .82, CR = .83, AVE = .55), *appraisal of others' emotions* (α = .77, Ω = .78, CR = .78, AVE = .48), *use of emotion* (α = .75, Ω = .76, CR = .77, AVE = .47), and *regulation of emotion* (α = .83, Ω = .84, CR = .84, AVE = .58). Nonetheless, a global EI score was used given our main interest in the whole EI construct (Law et al., 2004; Pena et al., 2012). Overall EI showed good reliability (α = .86, Ω = .86).

Teacher self-efficacy was assessed with the Teachers' Sense of Efficacy Scale-Short Form (Tschannen-Moran & Woolfolk-Hoy, 2001). This 12-item test assess the respondent's perceptions of their level of a broad range of abilities considered relevant to teaching using a Likert scale ranging from (1) "Nothing" to (9) "A great deal" (e.g., "How much can you do to control disruptive behavior in the classroom?"). The scale comprises three dimensions that showed good reliability with our sample: *student engagement* (α = .80, Ω = .81, CR = .82, AVE = .53), *instructional strategies* (α = .82, Ω = .82, CR = .82, AVE = .54), and *classroom management* (α = .85, Ω = .85, CR = .86, AVE = .60). However, we followed the authors' recommendations and used the overall score as a more adequate indicator for pre-service teachers (Tschannen-Moran & Woolfolk-Hoy, 2001). The total scale showed good reliability (α = .92, Ω = .92). The instrument has shown adequate psychometric properties with Spanish samples (Mérida-López, Extremera, Sánchez-Álvarez, Quintana-Orts, & Rey, 2018).

Intention to quit was assessed with the three-item occupational withdrawal intentions scale (Hackett et al., 2001). Responses were given on a scale ranging from (1) "Disagree strongly" to (9) "Agree

Table 1
Descriptive analyses and correlations

	1	2	3	4
1. Occupational commitment	–			
2. Teacher self-efficacy	.31[**] [.23 to .39]	–		
3. Emotional intelligence	.17[**] [.08 to .26]	.36[**] [.28 to .44]	–	
4. Intention to quit	−.64[**] [−.69 to −.58]	−.32[**] [−.40 to −.24]	−.20[**] [−.29 to −.11]	–
M	7.62	7.43	5.24	1.87
SD	1.52	.91	.70	1.43

[**] $p < .01$.

strongly" (e.g., "I think about quitting the teaching profession"). This scale has shown excellent reliability (Klassen & Chiu, 2011). The instrument was professionally translated from English into Spanish using the back-translation method. In our study, reliability was excellent ($\alpha = .92$, $\Omega = .93$, CR = .94, AVE = .83)..

Procedure

Students were invited to participate in a study of "the motivation of future teachers". Research assistants informed potential participants that participation was voluntary and would be anonymous, providing questionnaires to students who were willing to participate. Undergraduate students of childhood and primary education completed the questionnaires during scheduled classes, whereas postgraduate students completed the questionnaires during their attendance at workshops. This study was carried out in accordance with national and international ethical considerations and was approved by the ethic committee of the University of Málaga (66-2018-H).

Data analysis

After calculating means, standard deviations, and internal consistency for the main study variables we carried out correlation analyses to gain information about the relationships amongst the study variables. We also assessed whether pre-service teachers' EI moderated the association between *occupational commitment* and *intention to quit* while controlling for gender, age and *teacher self-efficacy*. The SPSS macro PROCESS (Model 1; Hayes, 2013) was used to test this hypothesis. All continuous predictors are centered to reduce potential multicollinearity problems and we computed 5000 bootstrapped samples with 95% CI (Hayes, 2013). Effect size statistics (f^2) were calculated to assess the percentage of outcome variance uniquely explained by the interaction term, that is, the effect size of the interaction product. The criteria proposed by Aguinis, Beaty, Boik, and Pierce (2005) for small ($f^2 \geq .005$), medium ($f^2 \geq .01$), and large moderator effects ($f^2 \geq .025$) was followed.

Results

Descriptive analyses

As Table 1 shows, the associations among the variables followed the expected pattern. *Occupational commitment* and *intention to quit* were negatively associated. EI and *teacher-self efficacy* were positively related to *occupational commitment* and negatively associated with *intention to quit*. Therefore, results supported H1, H2 and H3.

Moderation analysis

In H4, we anticipated EI to moderate the relationship between *occupational commitment* and *intention to quit* after controlling for the effects of age, gender and *teacher self-efficacy*. Results are shown in Table 2. With respect to control variables, *teacher self-efficacy* was a significant predictor of *intention to quit*. Regarding main effects of *occupational commitment* and EI, it was found that only *occupational commitment* predicted *intention to quit* after accounting for the effects of the covariates. Finally, the *occupational commitment* × EI interaction term was found to explain a medium ($f^2 = .01$) additional amount of variance in *intention to quit*. A 43% of the variance was explained [$R^2 = .43$; $F(6,773) = 98.16$; $p < .01$]. Thus, results supported H4.

To illustrate the effect of the interaction on *intention to quit* we plotted the regression of *occupational commitment* on *intention to quit* at high and low levels of EI (see Figure 1). Following standard procedures (Hayes, 2013), conditional effects at plus and minus one standard deviation from the mean of EI were estimated to determine whether the simple slope of *occupational commitment* on *intention to quit* was statistically significant for low (i.e. $<M − 1SD$) and high (i.e., $>M + 1SD$) EI scores. Although *occupational commitment* was negatively associated with *intention to quit* at both levels of EI (low and high), this relationship weakened as EI increased. Specifically, there was a negative association between *occupational commitment* and *intention to quit* which was weaker at high levels of EI [$b = −.48$; $t(773) = −11.59$; $p < .01$] than low levels of EI [$b = −.62$; $t(773) = −18.11$; $p < .01$]. Ad hoc analyses revealed a difference between the slopes ($p < .01$).

Post hoc analyses were conducted to determine whether particular EI dimensions moderate the *occupational*

Table 2
Tested moderation model with intention to quit as outcome

	B	SE b	R^2	95% CI
			.43[**]	
Constant	3.14[**]	.43		2.30 to 3.98
Gender	.10	.09		−.08 to .27
Age	−.00	.01		−.01 to .01
Teacher self-efficacy	−.19[**]	.05		−.29 to −.10
Occupational commitment	−.55[**]	.03		−.60 to −.49
Emotional intelligence	−.10	.06		−.22 to .02
Occupational commitment × emotional intelligence	.10[**]	.04		.03 to .17

Note. B: unstandardized beta. *SE b*: standard error of beta.
[**] $p < .01$.

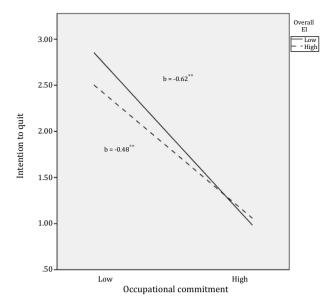**Figure 1.** Relationship of occupational commitment and EI for explaining intention to quit. *Note.* EI: emotional intelligence. $**p < .01$.
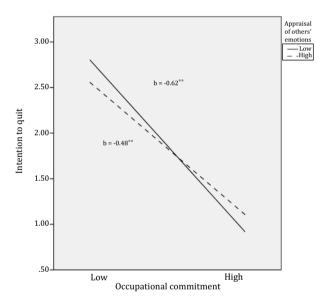

Figure 2. Relationship of occupational commitment and appraisal of others' emotions for explaining intention to quit. $**p < .01$.

Figure 3. Relationship of occupational commitment and use of emotion for explaining intention to quit. $**p < .01$.

$[b = -.50; t(773) = -12.99; p < .01]$ was less intense than it was at low levels $[b = -.61; t(773) = -18.05; p < .01]$. Finally, ad hoc analyses showed a significant difference between the slopes ($p < .05$).

Discussion

This study addressed the lack of research linking EI, occupational commitment and intention to quit and represents an important first step toward understanding how pre-service teachers' perception of their emotional abilities may help to explain their intention to quit once occupational commitment and variables such as age, gender and teacher self-efficacy beliefs have been taken into account. The pattern of associations amongst the study variables was in line with previous studies, suggesting occupational commitment is a relevant factor predicting lower intentions to quit teaching (Klassen & Chiu, 2011). As in earlier research EI was found to be positively associated with occupational commitment and negatively associated with intention to quit (Chesnut & Cullen, 2014).

Regarding the interaction hypothesis (H4), the finding that EI did not directly predict intention to quit may be explained by means of the mediated relation between this personal resource and withdrawal intentions (e.g., academic engagement; Parker et al., 2018). However, the interaction between occupational commitment and EI uniquely explained a significant percentage of variance in intention to quit. After controlling for teacher self-efficacy beliefs, pre-service teachers who reported both low occupational commitment and low EI reported a higher intention to quit than their counterparts with higher EI. These findings suggest that overall EI might be a protective factor for quitting intention in pre-service teachers. Consistent with Côté's (2014) work, those high-EI pre-service teachers reporting low commitment may use their emotional abilities to identify whether they are experiencing emotional states related to their career (e.g., distress or insecurity), which may facilitate the use of emotional strategies to ameliorate these reactions.

Our novel findings suggest specific EI dimensions (i.e. appraisal of others' emotions and use of emotions) can contribute explaining pre-service teachers' intention to quit in the context of low occupational commitment. The ability model of EI assumes that the appraisal of others' emotions dimension represents awareness

commitment-intention to quit relationship after controlling for variance in age, gender and *teacher self-efficacy*. Results showed that *appraisal of others' emotions* ($p < .01$) and *use of emotion* ($p < .05$) did moderate the relationship between *occupational commitment* and *intention to quit*. Contrarily, neither *appraisal of own emotions* ($p > .10$) nor *regulation of emotion* ($p > .10$) interacted with *occupational commitment* to predict *intention to quit*.

As shown in Figure 2, there was a negative association between *occupational commitment* and *intention to quit* at high levels of *appraisal of others' emotions* $[b = -.48; t(773) = -12.70; p < .01]$ and this relationship appeared to be stronger at low levels of this EI dimension $[b = -.62; t(773) = -18.84; p < .01]$. Ad hoc analyses showed the slopes were significantly different ($p < .01$).

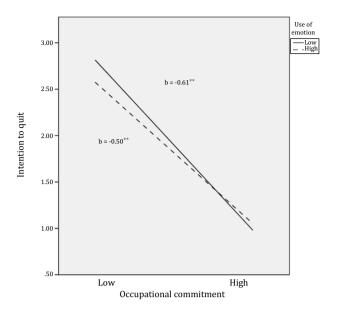Figure 3 shows that the association between *occupational commitment* and *intention to quit* at high levels of *use of emotion*

of, and sensitivity to, the emotions of others (Mayer et al., 2016). As Jennings and Greenberg (2009) noted, a teacher needs to be able to recognize individual students' emotions to respond effectively to their needs. Given that the ability to appraise others' emotions can help teachers garner important information about students' attitudes, goals and intentions, it is not surprising that those pre-service teachers committed to teaching and who perceive themselves good at appraising others' emotions report less intention to quit the profession than counterparts who perceive themselves to be less able to appraise others' emotions. The finding that the occupational commitment-intention to quit relationship is moderated by use of emotions could arise because having a high ability to make use of one's emotions pushes one toward constructive activities and performance (Côté, 2014). Pre-service teachers are often required to use emotions to facilitate cognitive activities which involve creating emotions appropriate for a situation (e.g., motivating or encouraging students) and this may explain why participants who scored highly on use of emotions were less likely to intend to quit teaching than their counterparts with lower perceived ability to use emotions.

Results showed that neither appraisal nor regulation of own emotions interacted with occupational commitment to predict levels of intention to quit. Recent literature suggests practicum experience may play a role in the correlates of certain EI dimensions such as appraisal and regulation of own emotions. For example, both appraisal and regulation of own emotions are found to predict weekly energy levels in the context of practical training (Pekaar, Bakker, van der Linden, Born, & Sirén, 2018). Relatedly, these EI dimensions are related to coping processes among experienced educators (Vesely, Saklofske, & Leschied, 2013). Conceivably, these insignificant findings may be partially explained in terms of the study sample comprised of a majority of participants with no teaching experience. Undoubtedly, further research is needed to confirm whether practical experience may reveal differential results regarding the potential moderating role of appraisal and regulation of own emotions in the relationship between commitment and retention.

Limitations and future research avenues

There are limitations to this research that should be considered. First, the use of self-report instruments increased the risk of common method bias. Although format of responses with no right or wrong answers and the adequate construct reliability of the study variables contribute reducing this issue (Conway & Lance, 2010), future studies including both self-report ability EI tests together with performance-based ability EI instruments are advised (Vesely-Maillefer & Saklofske, 2018). Second, further research into the interplay of EI with contextual variables (e.g., classroom disturbances) and personal resources (e.g., self-efficacy related to classroom management) is needed to achieve a broader understanding of commitment to teaching profession. Such research should adopt prospective designs to test the development of occupational commitment and changes in this attitudinal factor that may occur during the first career stages of pre-service teachers (Guarino et al., 2006). Since we examined overall commitment, a fruitful avenue would be to test the interactive role of EI and specific facets of commitment and motivation to become a teacher (Bruinsma & Jansen, 2010).

Third, a limitation relates to the group of pre-service teachers taking part in this study, most of whom had no practical experience of teaching. It is possible that the participants do not sufficiently know the educational context, which may partially explain the differential results by EI dimensions. Indeed, further research with participants in the process of training for teaching may help to clarify whether self-focused appraisal and regulation moderate

the relationship between commitment and retention outcomes (Cejudo & López-Delgado, 2017). Finally, it should be noted that, compared with the size of the main effects, the percentage of variance in intention to quit attributable to the interaction between occupational commitment and EI was very modest. However, the effect size of the interaction was medium according to the criteria proposed by Aguinis et al. (2005) and, besides, even a 1% contribution of the total variance should be considered noticeable, as the efficiency of the estimation of these interactions is primarily low (McClelland & Judd, 1993).

Implications

Despite its limitations, this study expands the scarce literature on the role EI plays on pre-service teachers' intention to quit, providing evidence that EI moderates the relationship between occupational commitment and intention to quit. Likewise, findings from this research suggested that two specific EI dimensions (i.e. appraisal of others' emotions and use of emotions) may need further consideration for predicting intention to quit teaching career among pre-service teacher samples in a context of low occupational commitment.

Besides underlining the need of considering emotional abilities within theoretical model explaining teacher retention, these results suggest two main practical applications for the fields of teaching and teacher education. First, occupational commitment and EI scales could be used as screening devices in pre-service teachers to identify those at risk of abandoning their teaching career. Our findings showed the highest scores for intention to quit were reported by participants who reported both low occupational commitment and low EI. Similarly, pre-service teachers with low occupational commitment who perceived themselves to have limited ability to appraise others' emotions or use their own emotions also reported higher intention to quit than counterparts who perceived themselves to have higher levels of these EI dimensions. Rather than selecting pre-service teachers on the basis of their self-reported occupational commitment or EI we suggest that these scales should be used alongside other indicators to help identify pre-service teachers who are most at risk of quitting the teaching profession. Self-report EI and occupational commitment scales should not be used as a substitute for other well-established predictors of intention to quit (i.e. low teacher self-efficacy beliefs or perceived stress) and should only be warranted while explaining unique variance in intention to quit (Parker et al., 2018).

Our findings suggest that although reporting a low commitment to teaching career is associated with higher intention to quit among pre-service teachers, it appears that having EI may matter in this association. Since the need of complementing teacher education curricula with development of socio-emotional competences among future teachers has been argued (Palomera, Briones, Gómez-Linares, & Vera, 2017), our findings suggest the potential value of incorporating development of occupational commitment (Klassen & Chiu, 2011) and EI training interventions (Vesely-Maillefer & Saklofske, 2018) in multi-faceted positive psychology interventions in an effort to promote teacher retention.

Given the alarming global increases in novice teachers' leaving the profession together with the educational, social and economic impact of teacher attrition it is critical to preserve teachers' motivation and commitment (Brill & McCartney, 2008). Thus, strategies to promote more positive attitudes to teaching are urgently needed along with better tools for dealing with sources of educator stress impairing their mental health (Pulido-Martos, López-Zafra, Estévez-López, & Augusto-Landa, 2017). Among these efforts, providing EI training for pre-service teachers appears to be a promising avenue to reduce their intention to quit.

Acknowledgement

References

Aguinis, H., Beaty, J. C., Boik, R. J., & Pierce, C. A. (2005). Effect size and power in assessing moderating effects of categorical variables using multiple regression: A 30-year review. *Journal of Applied Psychology*, *90*(1), 94–107. http://dx.doi.org/10.1037/0021-9010.90.1.94

Borman, G. D., & Dowling, N. M. (2008). Teacher attrition and retention: A meta-analytic and narrative review of the research. *Review of Educational Research*, *78*(3), 367–409. http://dx.doi.org/10.3102/0034654308321455

Boyd, D., Lankford, H., Loeb, S., & Wyckoff, J. (2005). Explaining the short careers of high-achieving teachers in schools with low-performing students. *American Economic Review*, *95*(2), 166–171. http://dx.doi.org/10.1257/000282805774669628

Brackett, M. A., Palomera, R., Mojsa-Kaja, J., Reyes, M. R., & Salovey, P. (2010). Emotion-regulation ability, burnout, and job satisfaction among British secondary-school teachers. *Psychology in the Schools*, *47*(4), 406–417. http://dx.doi.org/10.1002/pits.20478

Brill, S., & McCartney, A. (2008). Stopping the revolving door: Increasing teacher retention. *Politics & Policy*, *36*(5), 750–774. http://dx.doi.org/10.1111/j.1747-1346.2008.00133.x

Bruinsma, M., & Jansen, E. (2010). Is the motivation to become a teacher related to pre-service teachers' intentions to remain in the profession? *European Journal of Teacher Education*, *33*(2), 185–200. http://dx.doi.org/10.1080/02619760903512927

Cejudo, J., & López-Delgado, M. L. (2017). Importancia de la inteligencia emocional en la práctica docente: un estudio con maestros. *Psicología Educativa*, *23*(1), 29–36. http://dx.doi.org/10.1016/j.pse.2016.11.001

Chan, W.-Y., Lau, S., Nie, Y., Lim, S., & Hogan, D. (2008). Organizational and personal predictors of teacher commitment: The mediating role of teacher efficacy and identification with school. *American Educational Research Journal*, *45*(3), 597–630. http://dx.doi.org/10.3102/0002831208318259

Chesnut, S. R., & Burley, H. (2015). Self-efficacy as a predictor of commitment to the teaching profession: A meta-analysis. *Educational Research Review*, *15*, 1–16. http://dx.doi.org/10.1016/j.edurev.2015.02.001

Chesnut, S. R., & Cullen, T. A. (2014). Effects of self-Efficacy, emotional intelligence, and perceptions of future work environment on pre-service teacher commitment. *The Teacher Educator*, *49*(2), 116–132. http://dx.doi.org/10.1080/08878730.2014.887168

Conley, S., & You, S. (2009). Teacher role stress, satisfaction, commitment, and intentions to leave: A structural model. *Psychological Reports*, *105*(3), 771–786. http://dx.doi.org/10.2466/PR0.105.3.771-786

Conway, J. M., & Lance, C. E. (2010). What reviewers should expect from authors regarding common method bias in organizational research. *Journal of Business and Psychology*, *25*(3), 325–334. http://dx.doi.org/10.1007/s10869-010-9181-6

Côté, S. (2014). Emotional intelligence in organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, *1*, 459–488. http://dx.doi.org/10.1146/annurev-orgpsych-031413-091233

Extremera, N., Rey, L., & Sánchez-Álvarez, N. (2019). Validation of the Spanish version of Wong Law Emotional Intelligence Scale (WLEIS-S). *Psicothema*, *31*(1), 94–100. http://dx.doi.org/10.7334/psicothema2018.147

Guarino, C. M., Santibañez, L., & Daley, G. A. (2006). Teacher recruitment and retention: A review of the recent empirical literature. *Review of Educational Research*, *76*(2), 173–208. http://dx.doi.org/10.3102/00346543076002173

Guin, K. (2004). Chronic teacher turnover in urban elementary schools. *Education Evaluation and Policy Analysis*, *12*(42), 1–25. http://dx.doi.org/10.14507/epaa.v12n42.2004

Hackett, R. D., Lapierre, L. M., & Hausdorf, P. A. (2001). Understanding the links between work commitment constructs. *Journal of Vocational Behavior*, *58*(3), 392–413. http://dx.doi.org/10.1006/jvbe.2000.1776

Hanushek, E. A., Kain, J. F., Rivkin, S. G., Hanushek, E. A., Kain, J. F., & Rivkin, S. G. (2004). Why public schools lose teachers. *The Journal of Human Resources*, *39*(2), 326–354. http://dx.doi.org/10.3368/jhr.XXXIX.2.326

Hayes, A. (2013). *Introduction to mediation, moderation and conditional process analysis: A regression-based approach.* New York: Guilford Press.

Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research*, *79*(1), 491–525. http://dx.doi.org/10.3102/0034654308325693

Klassen, R. M., & Chiu, M. M. (2011). The occupational commitment and intention to quit of practicing and pre-service teachers: Influence of self-efficacy, job stress, and teaching context. *Contemporary Educational Psychology*, *36*(2), 114–129. http://dx.doi.org/10.1016/j.cedpsych.2011.01.002

Law, K. S., Wong, C.-S., & Song, L. J. (2004). The construct and criterion validity of emotional intelligence and its potential utility for management studies. *Journal of Applied Psychology*, *89*(3), 483–496. http://dx.doi.org/10.1037/0021-9010.89.3.483

Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey, & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Implications for educators* (pp. 3–31). New York: Basic Books.

Mayer, J. D., Caruso, D. R., & Salovey, P. (2016). The ability model of emotional intelligence: Principles and updates. *Emotion Review*, *8*(4), 290–300. http://dx.doi.org/10.1177/1754073916639667

McCarthy, C. J., Lambert, R. G., Lineback, S., Fitchett, P., & Baddouh, P. G. (2016). Assessing teacher appraisals and stress in the classroom: Review of the classroom appraisal of resources and demands. *Educational Psychology Review*, *28*(3), 577–603. http://dx.doi.org/10.1007/s10648-015-9322-6

McClelland, G., & Judd, C. (1993). Statistical difficulties in detecting interactions and moderator effects. *Psychological Bulletin*, *114*, 376–390.

Mérida-López, S., & Extremera, N. (2017). Emotional intelligence and teacher burnout: A systematic review. *International Journal of Educational Research*, *85*, 121–130. http://dx.doi.org/10.1016/j.ijer.2017.07.006

Mérida-López, S., Extremera, N., Sánchez-Álvarez, N., Quintana-Orts, C., & Rey, L. (2018). ¿Crees que serás buen docente? Propiedades psicométricas de la adaptación al castellano del Teachers' Sense of Efficacy Scale-Short Form en profesores noveles. In *Paper presented at the II International Conference on Work Psychology and Human Resources, 1–3 March 2018.* Valencia: Spain. http://dx.doi.org/10.13140/RG.2.2.11698.50880

Meyer, J. P., Becker, T. E., & Vandenberghe, C. (2004). Employee commitment and motivation: A conceptual analysis and integrative model. *Journal of Applied Psychology*, *89*(6), 991–1007. http://dx.doi.org/10.1037/0021-9010.89.6.991

Miao, C., Humphrey, R. H., & Qian, S. (2017). A meta-analysis of emotional intelligence and work attitudes. *Journal of Occupational and Organizational Psychology*, *90*(2), 177–202. http://dx.doi.org/10.1111/joop.12167

OECD [Organisation for Economic Co-operation and Development]. (2005). *Teachers matter: Attracting, developing, and retaining effective teachers.* Paris: OECD.

Palomera, R., Briones, E., Gómez-Linares, A., & Vera, J. (2017). Filling the gap: Improving the social and emotional skills of pre-service teachers. *Revista de Psicodidáctica*, *22*(2), 142–149. http://dx.doi.org/10.1016/j.psicoe.2017.05.005

Parker, J. D. A., Taylor, R. N., Keefer, K. V., & Summerfeldt, L. J. (2018). Emotional intelligence and post-secondary education: What have we learned and what have we missed? In K. V. Keefer, J. D. A. Parker, & D. H. Saklofske (Eds.), *Emotional intelligence in education: Integrating research with practice* (pp. 427–452). Cham: Springer.

Pekaar, K. A., Bakker, A. B., van der Linden, D., Born, M. P., & Sirén, H. J. (2018). Managing own and others' emotions: A weekly diary study on the enactment of emotional intelligence. *Journal of Vocational Behavior*, *109*, 137–151. http://dx.doi.org/10.1016/j.jvb.2018.10.004

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), 341–358. http://dx.doi.org/10.1387/Rev.Psicodidact.4496

Pfitzner-Eden, F. (2016). I feel less confident so I quit? Do true changes in teacher self-efficacy predict changes in preservice teachers' intention to quit their teaching degree? *Teaching and Teacher Education*, *55*, 240–254. http://dx.doi.org/10.1016/j.tate.2016.01.018

Pulido-Martos, M., Lopez-Zafra, E., Estévez-López, F., & Augusto-Landa, J. M. (2017). The moderator role of perceived emotional intelligence in the relationship between sources of stress and mental health in teachers. *The Spanish Journal of Psychology*, *19*(7), E7. http://dx.doi.org/10.1017/sjp.2016.8

Richardson, P. W., & Watt, H. M. G. (2005). 'I've decided to become a teacher': Influences on career change. *Teaching and Teacher Education*, *21*(5), 475–489. http://dx.doi.org/10.1016/j.tate.2005.03.007

Rots, I., Aelterman, A., Vlerick, P., & Vermeulen, K. (2007). Teacher education, graduates' teaching commitment and entrance into the teaching profession. *Teaching and Teacher Education*, *23*(5), 543–556. http://dx.doi.org/10.1016/j.tate.2007.01.012

Sánchez-Álvarez, N., Extremera, N., & Fernández-Berrocal, P. (2016). The relation between emotional intelligence and subjective well-being: A meta-analytic investigation. *The Journal of Positive Psychology*, *11*(3), 276–285. http://dx.doi.org/10.1080/17439760.2015.1058968

Tait, M. (2008). Resilience as a contributor to novice teacher success, commitment, and retention. *Teacher Education Quarterly*, *35*(4), 57–75.

Torenbeek, M., & Peters, V. (2017). Explaining attrition and decreased effectiveness of experienced teachers: A research synthesis. *Work*, *57*(3), 397–407. http://dx.doi.org/10.3233/WOR-172575

Tschannen-Moran, M., & Woolfolk-Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, *17*, 783–805.

Vesely, A. K., Saklofske, D. H., & Leschied, A. D. W. (2013). Teachers-the vital resource: The contribution of emotional intelligence to teacher efficacy and well-being. *Canadian Journal of School Psychology*, *28*(1), 71–89. http://dx.doi.org/10.1177/0829573512468855

Vesely-Maillefer, A. K., & Saklofske, D. H. (2018). Emotional intelligence and the next generation of teachers. In K. V. Keefer, J. D. A. Parker, & D. H. Saklofske (Eds.), *Emotional intelligence in education: Integrating research with practice* (pp. 377–402). Cham: Springer.