Alberta Journal of Educational Research, Vol. 65.4, Winter 2019, 320-345

Emotional Intelligence Among School Teachers in Oman

Saleh Al-Busaidi,[1] Said Aldhafri,[1,2] Marwa Alrajhi,[1] Hussain Alkharusi,[1] Badar Alkharusi,[3] Abdullah Ambusaidi,[1] Khoula Alhosni[1]

1 Sultan Qaboos University, 2 The Research Council, 3 Ministry of Education

This paper sheds light into the role of emotional intelligence in school teaching. It reports the findings of a study that sought to investigate the emotional intelligence of 4,098 school teachers in the Sultanate of Oman in five dimensions using the Schutte Emotional Intelligence Scale (SEIS). The study also measured the relationship between teachers' emotional intelligence and a number of demographic teacher and school variables. The results showed that teachers' emotional intelligence was high in all five dimensions. There were variations in teachers' emotional intelligence based on certain teacher and school variables.

Cet article fait la lumière sur le rôle de l'intelligence émotionnelle dans l'enseignement. L'article fait rapport des résultats d'une étude ayant porté sur l'intelligence émotionnelle, selon cinq dimensions, de 4 098 enseignants dans le Sultanat d'Oman en employant l'échelle de Schutte sur l'intelligence émotionnelle. L'étude a également mesuré le rapport entre l'intelligence émotionnelle des enseignants et un certain nombre de variables démographiques liées aux enseignants et aux écoles. Les résultats indiquent que l'intelligence émotionnelle des enseignants étaient élevée pour toutes les dimensions. Des variations dans l'intelligence émotionnelle des enseignants se sont révélées selon les variables liées aux enseignants et aux écoles.

Emotional intelligence (EI) is generally defined as the ability to understand and explain emotions. One's emotions are said to convey knowledge about the person's relationship with the world around him/her, and that recognizing other people's emotions and reactions requires emotional intelligence. Emotions shape thinking by motivating and directing the person's attention and action towards a certain way of behavior; as a result, the person's reaction will depend to the level of intellectual maturity and emotional intelligence (Mayer & Salovey, 1997). Emotions may also assist in planning if the person can anticipate the reactions that might result from a certain action. Because of its role in our lives, EI has recently received considerable scholarly attention.

Career development involves not only cognitive abilities but also affective abilities in order to understand people's emotions and dealing with them effectively. Existing research suggests that individuals with a high level of EI enjoy more career success, build stronger work and personal relationships, and are in better health than those with a lower levels of emotional intelligence (Imrani, 2004; Keyser, 2013). Someone with higher emotional intelligence copes appropriately with workplace stress and the emotional behavior of their colleagues (Mehta, 2013). Such coping strategies can greatly enhance job satisfaction and lead to success.

The extensive work on EI helped position it as an important part of general intelligence (Bar-On, 2005). The popularity of the concept in the past two decades has led researchers to explore its potential impact on different aspects of human life, such as education, occupation, and health (Tsaousis & Nikolaou, 2005). Emotional intelligence has been found to influence not only behavior but also the way the individual thinks, solves problems, and develops self-efficacy (Chan, 2004; Isen, 1993).

Stone-McCown, Jensen, Freedman, and Rideout (1998) talked about the concept of *self-science* which deals with the inner world that people experience in their lives and is believed to significantly affect learning. Self-science is based on the assumption that learning does not take place in isolation from learners' feelings and that being emotionally intelligent is as important as learning other school subjects. Also referred to as *social emotional learning*, self-science relates to the ability to use previously acquired knowledge, skills, and attitudes to recognize and manage one's emotions, set and achieve goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions (Elias, 2006). This view of emotional intelligence is in line with the social constructivist perspective of emotions that argues that "emotions are not just remnants of our phylogenetic past, nor can they be explained in strictly physiological terms. Rather, they are social constructions, and they can be fully understood only on a social level of analysis" (Averill, 1980, p. 309). Another social perspective to emotions is related to the role cultural norms have in influencing the way we express our feelings. Cultural differences can play an important role in our understanding of EI as an overall construct and therefore culture should be incorporated into the application and evaluation of EI abilities. Huynh, Oakes, and Grossmann (2018) argued that the current understanding of EI is incomplete because it "does not reflect the fundamental role of culture for emotion appraisals, recognition, and regulation, nor does it reflect the consequences of these emotion processes for people's well-being" (p. 4). There is now growing acceptance about the cultural differences with regards to emotional intelligence.

Emotions and emotional intelligence have also been duly recognized to have particular relevance to school teachers who are vulnerable to high levels of stress and burnout due to the nature of their work (Babu & Vaitla, 2013). School teachers face many emotion-provoking events, such as responding to curricular changes, facing societal pressure for their students to achieve well on national exams, dealing with students' issues, and managing numerous tasks related to their teaching as required by the school. Students and teachers also go through a wide range of affective experiences which may adversely impinge upon the learning and teaching process. Teachers, being a very important element of the educational process, have to use social and emotional skills in their daily and constant interactions with students and other stakeholders. Emotional skills can help teachers adapt to the work environment and cope with its challenges (Asrar-ul-Haq et. al., 2017).

The present study is an attempt to examine the emotional intelligence of school teachers in the Sultanate of Oman. It also aimed at comparing teachers' emotional intelligence scores against a number of demographic teacher and school variables. Even though the topic has been researched extensively in the Western world, there is still scarcity of studies in the Arabic world, and more specifically in Oman. The few studies that exist chiefly focused on students or instructors in tertiary education; moreover, not much research has been carried out at the school level in this part of the world. The current study is therefore an attempt to fill that gap in the literature.

Emotional Intelligence

Until recently, human intelligence was exclusively associated with mental abilities. Intelligence quotient (IQ) tests were used to measure people's mental abilities which were seen as the best indicator and sometimes sole predictor of one's success. Emotions and reasoning were viewed as two opposite abilities; in fact, emotions were regarded as disorganized and immature. However, this view shifted with the publication of Daniel Goleman's book on Emotional Intelligence where he introduced the concept of emotional intelligence and its potential power and its relationship with intellectual processing. Researchers then realized that IQ alone failed to fully explain the outcomes of the human behavior (Goleman, 1995).

The emergence of emotion as a specific and separate intelligence is attributed to the work of Mayer, DiPaolo, and Salovey (1990), who defined *emotional intelligence* as the ability to recognize one's own and others' feelings and emotions, as well as being able to use this information to guide thinking and actions. Emotional intelligence is seen as a subset of Howard Gardner's (2004) theory of multiple intelligences (Salovey & Mayer, 1990). Research on emotional intelligence has intensified following Mayer et al.'s (1990) work, which has included research on the effect of emotional intelligence on people's personal and professional lives.

Emotional intelligence has been conceptualized into three views or models, namely the trait, ability, and mixed models. The trait model was developed by Petrides and Furnham (2001). According to this model, emotional intelligence is a set of self-perceived skills, competencies and personality traits. One of the renowned advocates of this approach is Reuven Bar-on (1997), who defined emotional intelligence as "a cross-section of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands" (p. 3). A number of other measures have been developed based on the perception of emotional intelligence as a trait, such as the Trait Emotional Intelligence Questionnaire (TEIQue) (Petrides, 2009) and the Schutte Emotional Intelligence Scale (SEIS) (Schutte et al., 1998). In these, emotional intelligence is measured through self-reports that assess one's behavioral dispositions and self-perceived abilities.

The ability model, on the other hand, was developed by Peter Salovey and John Mayer. This view regards emotional intelligence as emotion related to cognitive abilities. Here, emotional intelligence is measured through tests that assess the person's ability to use emotional information. Emotional intelligence is seen as "the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (Salovey & Mayer, 1990, p. 190). Mayer and Salovey believed that emotional intelligence is related to and enhances reasoning and problem solving (Mayer & Salovey, 1995). To reflect this, they further refined their definition and presented it in a four-branch model that defined emotional intelligence as the ability to (a) perceive emotion, (b) use emotion to facilitate thought, (c) understand emotions, and (d) manage emotions (Mayer & Salovey, 1997). These four levels of emotional intelligence arrange emotional intelligence from the psychologically lowest level of perception to the psychologically more complex level of conscious regulation of emotions. This explanation clearly illustrates the connection between thought and emotions, a relationship that Mayer and Salovey have strongly advocated through extensive research. For them, emotional intelligence is an intellectual ability that involves considerable thinking and making judgments about one's or other people's emotions, unlike traits which denote preferred ways to behaving. This description views

emotional intelligence as something that involves different abilities and levels. Salovey and Mayer have demonstrated how the emotional intelligence ability can be measured (Mayer, DiPaolo, & Salovey, 1990; Salovey & Mayer, 1990). The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) is modeled on ability-based IQ tests. This test measures the person's abilities in each of the four types of emotional intelligence.

The third model of emotional intelligence is the mixed model, which was developed by Daniel Goleman. This view defines emotional intelligence as a wide array of competencies and skills that influence leadership performance; in other words, the mixed model is more focused on the cooperate sector. Goleman's (1998) model evolved over the years. Initially it started with five domains, or dimensions, of emotional intelligence encompassing twenty-five competencies:

- Self-awareness: the ability to recognize one's emotions, strengths, weaknesses, drives, values and goals and recognize their impact on others;
- Self-regulation: the ability to control or redirect one's disruptive emotions and impulses and adapt to changing circumstances;
- Social skill: the ability to manage relationships to move people in the desired direction;
- Empathy: the ability to consider other people's feelings especially when making decision; and
- Motivation: being driven to achieve for the sake of success.

Within each of the five constructs, Goleman has identified a set of emotional competencies that are not innate talents or personality characteristics, but rather competencies that can be acquired and developed to improve performance. The model was refined following a statistical analysis by Richard Boyatzis (2000). The twenty-five competencies were then collapsed into twenty, and the five domains into the four: self-awareness, self-management, social awareness, and relationship management (Boyatzis, Goleman, & Rhee, 2000).

Despite the disagreements between the three views of emotional intelligence, they are widely used in the literature and have successful applications in different domains. The common principle in the three views about emotional intelligence is that emotional intelligence is important for social and professional life and that it can be measured, nurtured, developed, and augmented (Joshith, 2012).

Emotional Intelligence in Teaching

As has been argued above, emotional intelligence is being recognized as an important skill in the workplace. Employers are no longer only satisfied with the academic or technical qualifications that their employees bring to the workplace: employees also need soft or social skills such as the ability to adapt to change, resolve conflicts, and manage stress and emotions, and teaching is no exception. Teaching and learning are not only concerned with the acquisition of prescribed knowledge and skills, but they are essentially emotional practices (Hargreaves, 1998, 2001). Learning is largely based on the quality of the interactions that take place between students and teachers. As an emotional activity,

> teaching activates, colors, and expresses the feelings and actions of teachers. Teachers can enthuse their students or bore them, be approachable or standoffish with parents, trust their colleagues or be suspicious of them. All teaching is therefore inextricably emotional—by design or default. (Hargreaves, 2001, pp. 472-473)

Teachers experience negative and positive emotions such as anger, disappointment, satisfaction, affection, love, anxiety, etc. These affective states are likely to influence the relationship teachers have with their students and colleagues, which may in turn affect teaching and learning.

School teachers, in particular, face many emotion provoking events, such as negotiating curricular changes, societal pressure to ensure students score high on national exams, responding to students' issues, and handling the tasks related to their jobs inside and outside the classroom. School teaching is becoming more challenging due to a variety of factors. School teachers not only have to cope with the pressure of heavy teaching loads but also deal with student discipline problems in addition to demands from parents and administrations. The emotional stress of these additional demands can negatively impact the teacher's mental health, resulting in high levels of stress, burnout, and consequently leaving the profession altogether (Hsiang, 2016).

Many studies have been conducted on the role of emotional intelligence in school teaching. Ponmozhi1 and Nellaiyapen (2014) investigated the relationship between emotional intelligence and teaching competency of 622 student teachers in Tamil Nadu, a south Indian state. The researchers used an emotional intelligence scale by Hyde, Dhar, and Pethe (2001) and a teaching competency scale developed and standardized by the researchers themselves. The findings showed a significant positive relationship between emotional intelligence and teaching competency. The researchers also found that among the ten components of emotional intelligence, two subscales of emotional stability—self-awareness and overall emotional intelligence—were positive predictors of teaching competency of student teachers. Emotional intelligence has also been determined to correlate positively with other personality traits. For example, Rastegar & Memarpour (2009) explored the relationship between emotional intelligence and self-efficacy among Iranian English language teachers. They employed the Emotional Intelligence Scale (EIS) and the Teacher Sense of Efficacy Scale (TSES) to measure the two constructs. The findings revealed a positive significant correlation between the perceived emotional intelligence and self-efficacy. However, no significant differences were found among the teachers with regards to gender, age, or teaching experience. In another study, Rastegar, Razmi, and Ghavam (2011) examined the relationship between emotional intelligence and emotional empathy (a factor known to affect teachers' performance) among 50 Iranian teachers (21 males, 29 females) teaching English in an institute in Iran. The researchers used the Emotional Intelligence Scale by Schutte et al. (1998) and the Multi-Dimensional Emotional Empathy Scale by Caruso and Mayer (1998). The findings showed a positive significant correlation between emotional intelligence and emotional empathy.

Lenka and Kant (2012) researched the relationship between emotional intelligence and professional development of 120 secondary school teachers in Rampur District in India using the Emotional Intelligence Scale (EIS) and a professional development scale created by the researchers. The study found a significant positive relationship between the teachers' emotional intelligence and their professional development. That is, the teachers who are emotionally intelligent are also more professionally developed.

Emotional intelligence has also been found to impact students' academic achievement (e.g., Farooq, 2003; Roy, Sinha, & Suman, 2013). For example, in his study of 246 students in Pakistan, Farooq (2003) discovered that students with high emotional intelligence scores, especially in the areas of interpersonal skills, intrapersonal skills, adaptability, general moods, and stress management skills, tend to be more successful in school. The researcher concluded

that these particular emotional intelligence skills help students manage their studies and "grow into more caring and responsible human beings" (Farooq, 2003, p. 93).

Teachers' emotional intelligence has also been noted to influence students' perceptions towards their teachers. Barłożek (2013) studied the relationship between the English teachers' level of emotional intelligence and the way they were perceived by their students in Poland. There were 20 secondary school teachers and 493 students who took part in the study. The results showed that the teachers with a higher level of emotional intelligence received much higher positive appraisals from students in comparison to those of lower emotional intelligence. Barłożek (2013, p. 106) explained that the students found emotionally intelligent teachers to be "empathic and preoccupied with the students' emotional life. Such teachers adopted a friendly and warm approach towards the learners by motivating, encouraging and treating them with respect" (p.106). This was also observed in the work of Mohamad and Jais (2016) who found a significant correlation between the four dimensions of emotional intelligence (self-regulations, self-awareness, self-motivation, and social skills) and job performance among 212 secondary school teachers in Malaysia as measured by a questionnaire.

Emotional Intelligence and Demographic Characteristics

Numerous studies have been conducted on the relationship between emotional intelligence and demographic variables such as gender, socio-economic status (SES), school type, and work experience. The general observation is that the relationship is not always positive and for some variables the findings are not conclusive. Trivedi and Shakya's (2014) study, also in India, found the opposite. They investigated the emotional intelligence of 300 prospective Indian teachers in relation to gender, caste, and SES. The researchers found a significant difference in the emotional intelligence levels of both the male and female prospective teachers in favor of the male teachers. The prospective teachers who belong to a certain Indian ethnic group (GEN category) scored high on the emotional intelligence scale compared to the other groups (OBC and SC). However, the prospective teachers' SES did not result in any significant variation in emotional intelligence. In another Indian study, Babu and Vaitla (2013) measured the relationship between emotional intelligence and gender, school type (elementary versus secondary), and socioeconomic status of 100 elementary and secondary school teachers in the Visakhapatnam District of Andhra Pradesh, India. The findings revealed a positive relationship between the economic status and emotional intelligence of the teachers. However, no significant differences in the teachers' emotional intelligence were found with regards to gender and school type. More recently, Pooja and Kumar (2016) investigated the connection between demographic variables and emotional intelligence among employees in India. The results showed significant differences in the levels of emotional intelligence in relation to demographic variables. Female employees were found to be emotionally more intelligent than male employees. Age was also found to correlate positively with emotional intelligence. A similar relationship was observed between emotional intelligence the number of years of work experience. With regards to qualifications, the researchers found that employees with non-technical education were more emotionally intelligent than their technical counterparts.

In the United States, Davis (2006) examined the influence of SES and various other demographic factors on the emotional intelligence of 129 special education teachers in the Houston Count, Georgia, School System, using a general emotional intelligence scale and a demographic questionnaire created by the researcher. The researcher detected statistically

significant differences in emotional intelligence based on experience, race, age, annual salary, level of degree held, type of teacher preparation program completed, and socioeconomic status. However, no statistically significant differences were found in the participants' emotional intelligence by gender or the urban/rural location of the school. In another study in the United States, Thornqvist (2011) explored the relationship between emotional intelligence and a number of demographic variables among teachers from four different school districts in Florida, using the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). The researcher identified that white teachers demonstrated higher scores on emotional intelligence than their Black or Hispanic counterparts.

In Malaysia, Yoke and Panatik (2016) did not find any significant differences in emotional intelligence among Malaysian public school teachers with regards to gender and work experience. In a cross-cultural study, Sergio, Dungca, and Ormita (2015) measured the role of demographic factors (gender, civil status, work time schedule, and nationality) in emotional intelligence of call center employees from the Middle East, Iran, Pakistan, Russia, India, and the Philippines. The researchers found that emotional intelligence was influenced by gender, civil status, nationality, and work schedule. The study revealed that call center representatives who are male, single, and whose work time schedule is opposite to the work hours of the businesses they serve are more emotionally competent than their counterparts. In addition, Russians were emotionally more aware, self-confident, and capable of assessing and managing themselves. On the other hand, Indian and Filipino call center representatives showed more competence in handling relationships, being mindful of others' feelings and needs, as well as showing more skill at persuading others. These studies clearly indicate the complexity of the relationship between emotional intelligence and the various demographic variables. Despite a plethora of research studies, the findings remain inconclusive. Hence, the current study was conducted.

Related Studies in Oman

A few studies on emotional intelligence have been conducted in Oman but due to the length limit we cannot describe them all here (e.g. Alhinai, 2016, Hassan & Al-Damen, 2016; Sulaiman, 2013). Hans, Mubeen, and Al Rabani (2013) found no significant differences in the level of emotional intelligence among 100 instructors working in private higher education institutions in Muscat based on age, gender, or work experience. However, Suleiman (2013) observed higher levels of emotional intelligence among female students compared to males among 323 students at Sultan Qaboos University in Oman. More recently, Balasubramanian and Al-Mahrooqi (2016) investigated emotional intelligence among 60 university English language learners in Oman. The study was based on the students' self-perceptions using a questionnaire of multiple choice and open-ended questions. The results showed that students exhibited skills of self-awareness and motivation but lacked social skills, self-regulation, and empathy.

One important observation about these studies is that they primarily focused on students or instructors in higher education institutions. The researchers could not find studies on school teachers. The present study is therefore intended to make contributions to the knowledge on emotional intelligence in general and emotional intelligence among Omani school teachers in particular.

The Study

The present study aimed at examining the emotional intelligence levels of school teachers in the Sultanate of Oman using an Arabic version of the Schutte Emotional Intelligence Scale (SEIS) (Schutte et al., 1998). The study attempted to address four research questions:

- What are the teachers' emotional intelligence levels?
- What is the relationship between teachers' emotional intelligence and their years of teaching, school size, number of teachers in school, and number of workshops taken?
- Are there statistically significant differences in teachers' levels of emotional intelligence based on their interest/lack of interest in teaching and their intention to leave/stay in the profession?
- How does the teachers' emotional intelligence vary based on gender, school level, specialization, district, qualification and students' socioeconomic status?

The reason for choosing these particular demographic variables was that these variables have been studied in several research studies and have been found to affect emotional intelligence in one way or another. In addition to this, the researchers wanted to experiment with other variables that had not been researched before, such as the teachers' intention to stay or leave the profession, prior training, and students' grade level.

Method

Sample. The sample consisted of 4,098 teachers of mathematics and science in primary and middle government schools in the Sultanate of Oman. There are two main reason for focusing on teachers of these two school subjects. First, in an era dominated by science, mathematics, and technology, it is imperative that students are equipped with these skills and knowledge so that they are able to function (Furner & Kumar, 2007). This requires competent and emotionally intelligent teachers who can create meaningful learning situations. Second, since the striking data of the 2007 Trends in International Mathematics and Science Study (TIMSS)—where Omani school children scored extremely low compared to many developed and developing countries—Omani educators have been very concerned about identifying the problems and improving the standards of science and mathematics instruction (Ministry of Education and The World Bank, 2012). Part of this reform is investigating teacher-related factors as they influence students' motivation and academic achievement. There is a consensus among specialists in the education circles in Oman (and probably worldwide) that teachers should be the main target of educational reform both at the pre-service and in-service teacher education levels (Al Jabri, Silvennoinen, & Griffins, 2018). One way of improving teaching is through focusing on promoting teachers' quality of life, sense of efficacy beliefs, and emotional intelligence. Hence, the current study focuses on examining teachers' emotional intelligence as an important factor in improving teaching and learning standards.

The teachers represented all the eleven geographical districts in Oman. About two-thirds of the teachers were females (68%) and one third males (32%). The vast majority of the teachers had completed bachelor's degrees (89%). A small segment held diplomas or higher diplomas (11%): these teachers graduated from teacher preparation colleges in the 1980s before the four-year bachelor's degree programs became common, while the higher diploma teachers are those

who graduated from college programs and obtained a teaching qualification (higher diploma) after graduation.

About one third (34%) of the teachers came from cycle one (grades 1 to 4) and about two thirds (66%) from cycle two (grades 5 to 10). Of the cycle two teachers, 29.2% teach mathematics and 36.7% teach science. In cycle one, mathematics and science are taught by the same teacher. There was a fairly even representation of geographical districts in the sample. The small numbers from Braimi, Musandam, and Wasta reflect the comparatively small populations in these districts. In addition, according to the teachers, the majority of the students (80.6%) come from medium-high socio economic backgrounds, and the rest are positioned at either the low or the high ends of the SES spectrum. In addition to the above demographic factors, the researchers checked two other variables for their potential impact on teachers' level of intelligence: first, teachers' interest in their job, and second, their intention to leave the profession. Based on the results, the majority of the teachers (84.8%) indicated interest in their career while a small percentage (15.2%) expressed dislike for teaching. The teachers were divided almost equally in their intention to stay or leave the profession (52.7% and 47.3% respectively).

Instrument. The participants responded to an Arabic version of the Schutte Emotional Intelligence Scale (SEIS) (Schutte et al., 1998). The SEIS is a self-report measure with 33 items scored on a 5-point Likert scale. Schutte et al. (1998) used principle component factor analysis which supported a one-factor solution of 33 items. The test was designed to reflect the emotional intelligence dimensions suggested by the Salovey and Mayer (1990) in their model of emotional intelligence. Nevertheless, several other studies have recommended more than one factor solution (Gignac, Palmer, Manocha, & Stough, 2005; Jonker & Vosloo, 2008; Ng, Wang, Kim, & Bodenhorn, 2010). For the purpose of the current study, the SEIS was translated into Arabic. The accuracy of the translation was validated by the entire research team members who spoke Arabic and English. Validity and reliability of the whole instrument were examined for the SEIS using the current sample data and as reported elsewhere (Alrajhi, et al., 2017). A confirmatory factor analysis (using EQS) supported a 5-dimension solution for the SEIS. The dimensions were

- Appraisal and expression of emotions in the self (e.g., I am aware of my emotions as I experience them);
- Appraisal of emotions in others (e.g., By looking at their facial expressions, I recognize the emotions people are experiencing);
- Regulation of emotions in the self (e.g., I have control over my emotions);
- Regulation of emotions in the other (e.g., I arrange events others enjoy); and
- Utilization of emotions (e.g., When I am in a positive mood, solving problems is easy for me).

Alrajhi, et al. (2017) reported sufficient fit indices to support the 5-dimension solution (e.g., CFI = 0.88, GFI = 0.90, and RMSEA = 0.06). Cronbach's Alpha values ranged between 0.60 and 0.82 for the five dimensions.

Results

According to the descriptive statistics, the teachers generally demonstrated high levels of

emotional intelligence in all five dimensions. The dimension of utilization of emotions scored the highest (M = 4.16) while the dimension of appraising others' emotions scored the lowest (M = 3.89). The researchers measured the teachers' levels of emotional intelligence using a one sample t-test and found the teachers' actual mean scores to be significantly higher than the theoretical mean, as shown in Table 1.

Moving to the second research question, Pearson Correlation coefficients were obtained between the five dimensions of emotional intelligence and the teacher variables (years of experience and workshops) and school variables (school size and number of teachers). As shown in Table 2, the correlation coefficients varied across the five dimensions in relation to the four teacher and school variables. The correlation was found to be significant in some cases but it

Table 1

Descriptive Statistics, One Sample T-Test, and Reliability

EI dimensions	*n*	*M*	*SD*	*α*	*t*	*df*	*p*
Appraisal of self[a]	4097	4.03	0.49	0.62	134.98	4096	0.000
Appraisal of others[b]	4094	3.89	0.60	0.78	95.00	4093	0.000
Regulation of self[c]	4098	4.09	0.52	0.57	132.42	4097	0.000
Regulation of others[d]	4094	4.14	0.48	0.64	149.47	4093	0.000
Utilization[e]	4098	4.16	0.43	0.74	170.54	4097	0.000

[a] Appraisal of self: Appraisal and expression of emotions in the self. [b] Appraisal of others: Appraisal of emotions in others. [c] Regulation of self: regulation of emotions in self. [d] Regulation of others: regulation of emotions in others. [e] Utilization: utilization of emotions.

Table 2

Correlation Coefficients Between Emotional Intelligence and School and Teacher Variables

	Experience	School size	No. of Teachers	Workshops	Appraisal of self[a]	Appraisal of others[b]	Regulation of self[c]	Regulation of others[d]	Utilization [e]
Experience	-								
School size	0.01	-							
No. of Teachers	0.00	0.17**	-						
Workshops	0.23**	0.09**	-0.01	-					
Appraisal of self[a]	0.07**	-0.05**	0.02	0.06**	-				
Appraisal of others[b]	0.05**	-0.06**	0.03	0.08**	0.53**	-			
Regulation of self[c]	0.04*	-0.05**	0.04**	0.08**	0.58**	0.39**	-		
Regulation of others[d]	0.02	-0.07**	0.05**	0.10**	0.62**	0.54**	0.59**	-	
Utilization [e]	0.01	-0.04*	0.06**	0.07**	0.63**	0.53**	0.60**	0.65**	-

[a] Appraisal of self: Appraisal and expression of emotions in the self. [b] Appraisal of others: Appraisal of emotions in others. [c] Regulation of self: regulation of emotions in self. [d] Regulation of others: regulation of emotions in others. [e] Utilization: utilization of emotions.
*<.05, **<.01

was weak across the five dimensions of emotional intelligence. Teaching experience correlated positively with appraisal of self, appraisal of others, and regulation of self. School size correlated negatively with all the five dimensions. The number of teachers in school correlated positively with regulation of self, regulation of others and utilization of emotions. Finally, the number of workshops taken correlated positively with all five dimensions of emotional intelligence.

In order to answer the third research question, we used a two-sample independent t-test. The results in Table 3 show significant differences across the five dimensions of emotional intelligence in favor of those who chose teaching based on interest.

Similarly, statistically significant differences were found in the teachers' emotional intelligence levels based on the intention to leave/stay favoring those who expressed interest to stay in the profession, which are reported in Table 4.

Table 3

The Two Sample Independent T-Test on the Differences Based on Interest in Teaching

EI dimensions	Interest in teaching	Number	M	SD	t	df	P
Appraisal of self	No	611	3.89	0.50	-7.23	820	0.000
	Yes	3418	4.05	0.48			
Appraisal of others	No	611	3.78	0.61	-4.93	833	0.000
	Yes	3416	3.91	0.59			
Regulation of self	No	611	3.97	0.55	-5.42	812	0.000
	Yes	3419	4.11	0.51			
Regulation of others	No	611	4.03	0.50	-5.76	817	0.000
	Yes	3416	4.16	0.48			
Utilization	No	611	4.08	0.47	-4.74	792	0.000
	Yes	3419	4.18	0.42			

Table 4

Emotional Intelligence by Intention

EI dimensions	Intention to leave	Number	M	SD	t	df	P
Appraisal of self	No	2122	4.06	0.47	3.92	3893	0.000
	Yes	1902	4.00	0.50			
Appraisal of others	No	2121	3.92	0.59	3.76	3934	0.000
	Yes	1901	3.85	0.61			
Regulation of self	No	2122	4.14	0.50	6.65	3893	0.000
	Yes	1903	4.03	0.54			
Regulation of others	No	2121	4.18	0.46	5.68	3833	0.000
	Yes	1901	4.09	0.51			
Utilization	No	2122	4.19	0.41	3.91	3821	0.000
	Yes	1903	4.13	0.46			

Finally, the fourth research question was concerned with the possible differences in teachers' emotional intelligence levels based on a number of demographic teacher and school variables. First, the results of the independent t-test showed significant gender differences in favor of the female teachers in all five emotional intelligence dimensions: this is presented in Table 5.

The second school variable was related to the education level of the school: cycle one or cycle two. Cycle one schools are essentially primary schools that teach students in grades 1 to 4 while cycle two schools teach grades 5 to 10. In Oman, cycle one grades are taught by female teachers. In order to avoid the confounding effect of gender in the results, the researchers excluded male teachers from this analysis. That is, the comparison only included females teachers in cycle one and cycle two. The results showed significant differences in favor of the cycle one teachers, as shown in Table 6.

Table 5

The Two Sample Independent T-Test on the Differences Based on Gender

EI dimensions	Gender	Number	M	SD	t	df	P
Appraisal of self	Male	1310	3.90	0.52	8.18	2603	0.000
	Female	1393	4.06	0.45			
Appraisal of others	Male	1309	3.78	0.62	5.28	2681	0.000
	Female	1391	3.91	0.61			
Regulation of self	Male	1310	4.01	0.55	3.98	2656	0.000
	Female	1393	4.09	0.51			
Regulation of others	Male	1309	4.03	0.54	5.18	2563	0.000
	Female	1391	4.13	0.45			
Utilization	Male	1310	4.03	0.48	9.95	2534	0.000
	Female	1393	4.20	0.39			

Table 6

ANOVA on the Differences Based on School Level

EI dimensions	School level	Number	M	SD	t	df	P
Appraisal of self	Cycle one	1394	4.12	0.46	3.31	2784	0.001
	Cycle two	1393	4.06	0.45			
Appraisal of others	Cycle one	1394	3.97	0.55	2.91	2747	0.004
	Cycle two	1391	3.91	0.61			
Regulation of self	Cycle one	1395	4.16	0.50	3.72	2784	0.000
	Cycle two	1393	4.09	0.51			
Regulation of others	Cycle one	1394	4.25	0.43	7.38	2773	0.000
	Cycle two	1391	4.13	0.45			
Utilization	Cycle one	1395	4.25	0.39	3.24	2785	0.001
	Cycle two	1393	4.20	0.39			

Table 7

Emotional Intelligence by Specialization

EI dimensions	Specialization	Number	M	SD
Appraisal of self	Both math and science cycle one	1394	4.12	0.46
	Math cycle two	1198	4.00	0.48
	Science cycle two	1505	3.97	0.50
	Total	4097	4.03	0.49
Appraisal of others	Both math and science cycle one	1394	3.97	0.55
	Math cycle two	1195	3.83	0.63
	Science cycle two	1505	3.86	0.60
	Total	4094	3.89	0.60
Regulation of self	Both math and science cycle one	1395	4.16	0.50
	Math cycle two	1198	4.06	0.54
	Science cycle two	1505	4.04	0.52
	Total	4098	4.09	0.52
Regulation of others	Both math and science cycle one	1394	4.25	0.43
	Math cycle two	1195	4.08	0.51
	Science cycle two	1505	4.07	0.49
	Total	4094	4.14	0.48
Utilization	Both math and science cycle one	1395	4.25	0.39
	Math cycle two	1198	4.12	0.45
	Science cycle two	1505	4.11	0.44
	Total	4098	4.16	0.43

The next comparison was based on specialization. Here, the teachers were divided into three groups: teachers who taught both math and science, teachers who only taught math, and teachers who only taught science. The first group of teachers taught in cycle one whereas the last two groups of teachers taught in cycle two. Table 7 shows the means and standards deviations in teachers' emotional intelligence between the three groups of teachers.

The researchers then used ANOVA to check for the level of significance among the three groups as indicated in Table 8. The results indicate statistically significant differences based on subject in favor of cycle one teachers in all five emotional intelligence dimensions. This means that female teachers teaching both mathematics and science to primary school children demonstrated the highest levels of emotional intelligence.

Regarding the geographic district, the results show variation in the scores among the eleven districts. The dimension "utilization" scored the highest average mean (4.16) whereas the dimension "appraisal of others" scored the lowest (3.89) among the five emotional intelligence dimensions across all districts. It is also interesting to note that Sharqiya North tends to achieve the lowest and Musandam the highest in almost all of the dimensions.

Table 8

ANOVA on the Differences Based on Subject

EI dimensions		Sum of Squares	df	Mean Square	p
	Between Groups	17.04	2	8.52	.0000
Appraisal of self	Within Groups	967.86	4094	0.23	
	Total	984.91	4096		
	Between Groups	15.16	2	7.58	0.000
Appraisal of others	Within Groups	1470.18	4091	0.35	
	Total	1485.34	4093		
	Between Groups	11.86	2	5.93	0.000
Regulation of self	Within Groups	1127.11	4095	0.27	
	Total	1138.97	4097		
	Between Groups	27.84	2	13.92	0.000
Regulation of others	Within Groups	949.53	4091	0.23	
	Total	977.38	4093		
	Between Groups	16.04	2	8.02	0.000
Utilization	Within Groups	768.36	4095	0.18	
	Total	784.41	4097		

The ANOVA test showed statistically significant differences among the eleven districts in all five emotional intelligence dimensions: this can be seen in Table 9. The Post Hoc ANOVA test results show different patterns of differences among the eleven districts as shown below:

1. Appraisal of self: Sharqiya South, Dofar, and Musandam scored the highest.
2. Appraisal of others: Muscat, Dofar, Musandam, and Wasta scored the highest.
3. Regulation of self: Dofar, Musandam, Sharqiya South, Muscat, and Wasta scored the highest.
4. Regulation of others: Batinah South, Dofar, Musandam, Sharqiya South, Buraimi, Muscat, and Wasta scored the highest.
5. Utilization of emotions: Muscat, Dofar, Musandam, and Wasta scored the highest.

Batinah North, Sharqiya North, Dakhiliya, and Dhahra regions were the lowest in all five emotional intelligence dimensions.

Moving to teachers' qualifications, the results showed significant differences among the three types of qualifications: diploma, higher diploma, and bachelor's degree. However, the dimension of utilization did not show significant differences among the three groups of teachers, which can be seen in Table 10. The Post Hoc ANOVA test showed that the differences were in favor of the diploma holders.

Finally, the researchers measured the differences in the teachers' emotional intelligence based on the students' socioeconomic status. The teachers were asked to indicate the SES of their school (low, medium, or high). The descriptive results indicated that the teachers teaching students from low or very low SES demonstrated the lowest emotional intelligence. In order to

measure the level of significance, we utilized ANOVA. The results shown in Table 11 indicate significant differences except for the dimension of self-regulation.

Table 9

ANOVA on the Differences in Emotional Intelligence Based on District

EI dimensions		Sum of Squares	df	Mean Square	p
	Between Groups	6.21	10	0.62	0.004
Appraisal of self	Within Groups	970.26	4053	0.23	
	Total	976.47	4063		
	Between Groups	15.41	10	1.54	0.000
Appraisal of others	Within Groups	1459.75	4050	0.36	
	Total	1475.16	4060		
	Between Groups	15.11	10	1.51	0.000
Regulation of self	Within Groups	1117.41	4054	0.27	
	Total	1132.52	4064		
	Between Groups	14.66	10	1.46	0.000
Regulation of others	Within Groups	955.29	4050	0.23	
	Total	969.95	4060		
	Between Groups	7.25	10	0.72	0.000
Utilization	Within Groups	771.65	4054	0.19	
	Total	778.90	4064		

Table 10

ANOVA on the Differences Based on Qualification

EI dimensions		Sum of Squares	df	Mean Square	p
	Between Groups	2.13	2	1.06	0.012
Appraisal of self	Within Groups	954.85	3998	0.23	
	Total	956.98	4000		
	Between Groups	5.79	2	2.89	0.000
Appraisal of others	Within Groups	1432.72	3995	0.35	
	Total	1438.51	3997		
	Between Groups	4.06	2	2.03	0.001
Regulation of self	Within Groups	1105.33	3999	0.27	
	Total	1109.40	4001		
	Between Groups	3.44	2	1.72	0.001
Regulation of others	Within Groups	947.16	3995	0.23	
	Total	950.61	3997		
	Between Groups	1.11	2	0.55	0.053
Utilization	Within Groups	759.78	3999	0.19	
	Total	760.89	4001		

The Post Hoc ANOVA test showed that the differences in emotional intelligence were in favor of the schools with students from medium, high, and very high socioeconomic backgrounds across the five dimensions.

Table 12 gives a summary of the results of the relationship between emotional intelligence and the different demographic variables.

Table 11

ANOVA on the Differences Based on Socio Economic Status

EI dimensions		Sum of Squares	df	Mean Square	p
	Between Groups	3.61	2	1.80	
Appraisal of self	Within Groups	845.97	3568	0.23	0.000
	Total	849.58	3570		
	Between Groups	5.93	2	2.96	
Appraisal of others	Within Groups	1251.77	3566	0.35	0.000
	Total	1257.71	3568		
	Between Groups	1.59	2	0.79	
Regulation of self	Within Groups	971.04	3569	0.27	0.054
	Total	972.64	3571		
	Between Groups	3.38	2	1.69	
Regulation of others	Within Groups	839.76	3566	0.23	0.001
	Total	843.14	3568		
	Between Groups	2.77	2	1.38	
Utilization	Within Groups	681.77	3569	0.19	0.001
	Total	684.54	3571		

Table 12

A Summary of the Relationship Between Emotional Intelligence and Demographic Variables

Variable type	Variable	Overall relationship/correlation
School variables	School size	Negative
	Number of teachers in school	Positive
	School level	Positive for Cycle one teachers
	District	Positive
	Students' socio-economic status	Positive
Teacher variables	Gender	Positive for female teachers
	Qualification	Positive
	Specialization	Positive for Cycle one teachers
	Teacher experience	Positive
	Number of workshops taken	Positive

Discussion

The present study set out to investigate the emotional intelligence of science and mathematics school teachers in the Sultanate of Oman. It specifically aimed at answering our four research questions:

- What are the teachers' emotional intelligence levels?
- What is the relationship between teachers' emotional intelligence and their years of teaching, school size, number of teachers in school, and number of workshops taken?
- Are there statistically significant differences in teachers' levels of emotional intelligence based on their interest/lack of interest in the specialization and their intention to leave/stay in the position?
- How does the teachers' emotional intelligence vary based on gender, school level, specialization, district, qualification and students' socioeconomic status?

We shall discuss the findings in relation to each research question. First, regarding the teachers' emotional intelligence levels, the mathematics and science teachers exhibited high levels in all five dimensions ranging from 3.89 to 4.16. The dimension about the ability to appraise others' emotions showed the lowest score (M = 3.89). This suggests that teachers are in need of some training in the area of recognizing other people's emotions. This is particularly important in the profession as learning is fundamentally based on the quality of interaction between and teachers and their students, and the teachers' ability to identify students' needs and emotions. The high emotional intelligence scores are a good indicator of the teachers' ability to deal with students given the demanding nature of the profession and the direct interaction teachers have with students and parents. As many research studies have shown, emotional intelligence can help school teachers deal with stressful situations and different work pressures (Farooq, 2003; Lenka & Kant, 2012; Rastegar & Memarpour, 2009; Ponmozhi1 & Nellaiyapen, 2014; Roy, Sinha, & Suman, 2013). Teachers who possess emotional competencies are less likely to experience burnout because they are able to work more effectively with challenging students and cope with work pressures. Such teachers are more likely to succeed because they are able to create a warm and safe classroom environment. Such teachers also enjoy with their students a respectful work environment. For example, when confronted with a student misbehaver, the emotionally competent teacher would not immediately resort to punishment but would try to understand the reasons promoting such behavior and try to redirect the student's behavior and energy appropriately. This kind of reaction can help foster caring and supportive relationships between teachers and students; in turn, this can lead to reducing the student behavior problems which consume a great deal of teachers' time and energy (Zakrzewski, 2013). Emotionally intelligent teachers receive much higher positive appraisals from students in comparison to those of lower emotional intelligence (Barłożek, 2013). Emotional intelligence has also been found to impact students' academic achievement (see for example, Farooq, 2003; Roy et al., 2013) and result in higher job satisfaction (Hekmatzadeh, Khojasteh, & Shokrpour, 2016; Nwankwo, Obi, Sydney-Agbor, Agu, & Aboh, 2013; Psilopanagioti, Anagnostopoulos, Mourtou, & Niakas, 2012; Salim, Nasir, Arip, & Mustafa, 2012).

The second research question focused on the relationship between the teachers' emotional intelligence scores and a number of teacher and school variables (teachers' years of teaching experience, school size, number of teachers in a school, and number of workshops taken). We

found that most of the correlations were significant, but they were weak at all levels of relationship. This is not supervising given the inclusiveness of findings across the globe about the impact of demographic factors on one's emotional intelligence (e.g. Mishra & Laskar, 2013). The only two emotional intelligence dimensions that correlated significantly with all four independent variables were appraisal of self and regulation of self. These dimensions are concerned with the person's ability to realize and control their emotions. The correlations suggest that experienced teachers are able to understand and regulate their emotions. This also explains the positive impact of workshops on teachers' level of emotional intelligence. On the other hand, school size appears to negatively affect teachers' emotional intelligence. This could be attributed to the increased responsibilities and stress teachers may experience in bigger schools compared to those in smaller schools. In larger schools, teachers have to deal with greater numbers of children which results in more teaching and administrative responsibilities—all of which make teachers vulnerable to high levels of stress and burnout. The greater the stress teachers experience the less able they become in managing their emotions (Bowen, Pilkington, & Rose, 2016).

The third research question is concerned with the differences in the teachers' emotional intelligence scores based on their interest/lack of interest in the specialization as well as their intention to leave/stay in the profession. The results showed significant differences across the five emotional intelligence dimensions in favor of those who chose teaching based on interest. Similarly, statistically significant differences were reported in the teachers' emotional intelligence levels based on the intention to leave/stay favoring those who expressed interest in staying in the profession. These two findings support the interconnection between interest and emotional intelligence. They also support the connection that previous studies have reported between emotional intelligence and job satisfaction (e.g. Hekmatzadeh et al., 2016; Nwankwo et al., 2013; Psilopanagioti et al., 2012; Salim et al., 2012). In fact, interest has been identified by Goleman (1998) as a key component of emotional intelligence. It acts as a personal drive towards achieving one's goals and enhancing performance (Mohamad & Jais, 2016) and this is part of the reported influence that emotional intelligence has on different aspects of one's personal and professional life (Mishra & Laskar, 2013).

However, one striking finding in the current study was the considerable number of teachers who expressed intent to leave the profession, which was close to 50%. Retaining qualified teachers has become a worldwide challenge for policy makers given the increasing demand for teachers and growing teacher attrition. The problem has been exacerbated by the worldwide declining interest in the teaching profession due to the challenging nature of the job and/or the lack of incentives (Al-Busaidi, 2019). Many teachers leave their job before they reach the retirement age given the demanding nature of the job (Podolsky, Kini, Bishop, & Darling-Hammond, 2016; Schaefer, Long, & Clandinin, 2012; Watt & Richardson, 2007). The large number of teachers intending to leave is perhaps an indication of their dissatisfaction with their job despite their high emotional intelligence scores. The majority of the teachers in this study (84.8%) indicated interest in the profession. One possible explanation for this apparent mismatch is that about two-thirds of the sample consisted of female teachers who are reportedly known for having higher turnover rates than their male counterparts due to certain sociocultural and work-related reasons (Ayyash-Abdo, 2000; Smithers & Robinson, 2003; Tapper, 2018). This may be more evident among Arabs, since nations in the Arab League—according to the results of a study conducted by the Gallup organization and reported in Forbes—scored among the lowest in emotional awareness in a poll of people from 151 countries (Bradberry, 2013).

The last research question was about the differences in the teachers' emotional intelligence according to gender, school level, specialization, district, qualifications, and students' socioeconomic status. With regards to gender differences, the findings were in favor of the female teachers across the five dimensions of emotional intelligence. In this study, the female teachers constituted two thirds of the sample. The research findings about gender differences are consistent with other studies (Pooja and Kumar, 2016; Sergio et al., 2015). However, it should be noted here that research on gender differences worldwide is not conclusive. A sizeable number of studies did not report significant gender variation (e.g. Babu & Vaitla, 2013; Birol, Atamtürk, Silman, & Sensoy, 2009; Davis, 2006; Mishra & Laskar, 2013; Yoke & Panatik, 2016). Yet a few other studies observed superiority of males over females (e.g. Trivedi & Shakya, 2014), which clearly calls for more research in the area. Another significant difference in emotional intelligence was found between teachers in different grade cycles. The differences were in favor of the cycle one teachers who make up more than one third of the sample. These teachers teach children in grades 1 to 4. It is therefore important that they have a high level of emotional intelligence, be empathetic towards children, and have the ability to deal with needs and interests which is part of teacher effectiveness. The researchers could not find any previous studies comparing the level of emotional intelligence between teachers teaching different grade levels. Therefore, the results of this study could be pioneering and need further research.

The third comparison tackled specialization. As mentioned earlier, the teachers were classified into three groups: teachers who taught both math and science (primarily cycle one teachers), teachers who only taught math, and teachers who only taught science. The results again favored the teachers teaching mathematics and science in cycle one, who by profession were all women. This is similar to the previous finding. According to Dunn (2002), females tend to have more empathy, interpersonal relationships, and social responsibility than their male counterparts. This is also consistent with the previous studies that reported superiority of females over males. This is beneficial for students at this age group who need teachers who are understanding, approachable, and sympathetic, and can create a warm and supportive learning environment (Ramana, 2013). The present study did not measure teacher effectiveness and its relationship with emotional intelligence. This is perhaps an area worthy of investigation especially given the fact that research on the connection between the two constructs is still not decisive.

The next comparison drawn was based on the geographic district. There are two main observations here. First, the dimension "utilization" scored the highest average mean (4.16) whereas the dimension "appraisal of others" scored the lowest (3.89) among the five emotional intelligence dimensions across the eleven districts. Teachers need the ability to utilize their emotions for the sake of facilitating performance and strengthening communication with colleagues, students, and families. Second, there were significant variations among the teachers in the eleven districts. Seven of the districts scored high in most categories, while the remaining four districts (Batinah North, Sharqiya North, Dakhiliya, and Dhahra) scored the lowest in all five emotional intelligence dimensions. This certainly requires further investigation.

With regards to teacher qualification, the results showed significant variations among the three types of qualifications in favor of the diploma holders. It was supervising to see that teachers with a bachelor degree scored the lowest, something that is rather supervising as one would expect that teachers with higher qualifications to exhibit greater emotional intelligence. This finding is partly supported by the study by Birol, et al. (2009) that found no significant differences between the educational level of Turkish school teachers and their emotional

intelligence scores. Another possible explanation is that the teachers with a diploma have accumulated a long experienced and have learned how to deal with work stress. The last variable checked against teachers' level of emotional intelligence was the learners' socio economic status (SES). A positive relationship was found between the two variables. That is, the higher the SES the greater the teachers' emotional intelligence. This relationship was statistically significant. This finding is quite revealing because it is known that "challenging classrooms, particularly ones with students of low socioeconomic or minority backgrounds, present additional instructional concerns, requiring teachers to utilize a specific skillset to motivate and manage learners" (Rust, 2014, 74). Therefore, one would expect that students from such backgrounds would be assigned capable and highly emotional intelligent teachers who could provide the necessary support through positive relationships. In reality, however, teachers' emotional intelligence is normally not assessed; therefore, it is not a factor in teacher allocation to different schools and districts. The findings of this study call for such consideration to be made in planning and teacher support.

These findings suggest that even though the teachers have high levels of emotional intelligence overall, teachers from certain groups (gender, district, etc.) and with certain qualifications and specializations will benefit from some additional training. School teachers, in particular, face many emotion provoking incidents in their professional life. As Bar-On (1997) has suggested, emotional intelligence is developmental and can be improved through training, programming, and therapy. Research studies have clearly shown that nurturing emotional intelligence in employees is possible and fruitful, and can result in change in thinking and behavior (Dolev and Leshem, 2016; Joshith, 2012).

Research suggests that emotional intelligence enhances job performance because an employee with a high level of emotional intelligence is likely to be more able to cope with occupational stress (Dong & Tim 2006). Individuals who are emotionally intelligent tend to be healthier because they can "accurately perceive and appraise their emotional states, know how and when to express their feelings, and can effectively regulate their mood states" (Salovey et al., 1999 p. 160). As a result, higher levels of emotional intelligence result in higher job satisfaction (Psilopanagioti et al., 2012; Salim et al., 2012).

Conclusion

Emotions and emotional intelligence have been duly recognized to have particular relevance to school teachers who are vulnerable to high levels of stress and burnout due to the nature of their work; indeed, teaching is one of the most stressful jobs whose success is fundamentally based on the effective interaction between students and teachers. However, teaching is becoming a very challenging job that requires teachers to have adaptive abilities such as appraisal of self and others, regulation of self and others, and effective utilization of emotions. Many studies have been conducted on emotional intelligence and its relationship with various demographic variables which have been shown to be complex and multifaceted. What this study attempted to do is to shed light on the level of emotional intelligence in schools in Oman, an area that has been missing in the literature. The study has revealed some important findings; some of which support previous studies, while others contradict them. The teachers in this study demonstrated high levels of emotional intelligence; however, variations were observed based on certain teacher and school factors. These variations indicate gaps in the teachers' emotional intelligence which needs to be addressed through professional development. Nevertheless, there is still a

need for more research to address the issues raised in this study, such as the influence of the subject and the district.

Acknowledgments

This research was generously funded by a grant (SR/EDU/PSYC/14/01) from Sultan Qaboos University, the Sultanate of Oman. This funding source had no impact on the conduct of the research and preparation of the article.

References

Al Busaidi, S. (2019). Exploring college of education students' aversion to teaching. *Pertanika Journal of Social Sciences & Humanities (JSSH), 27*(1), 149-163. Retrieved from http://www.pertanika.upm.edu.my/Pertanika%20PAPERS/JSSH%20Vol.%2027%20(1)%20Mar.%202019/10%20JSSH-3864-2018.pdf

Al Jabri, M., Silvennoinen, H., & Griffins, D. (2018). Teachers professional development in Oman: Challenges, efforts and solutions. International Journal of Learning, Teaching and Educational Research, 17(5), 82-103. https://doi.org/10.26803/ijlter.17.5.6

Alrajhi, M., Aldhafri, S., Alkharusi, H., Al-Busaidi, S., Alkharusi, B., Ambusaidi, A., & Alhosni, K. (2017). The predictive effects of math teachers' emotional intelligence on their perceived self-efficacy belief. *Teaching and Teacher Education, 67*, 378-388. http://dx.doi.org/10.1016/j.tate.2017.07.003

Alhinai, F. (2016). The relationship between emotional intelligence and students' achievement for grade 12 studies in Oman. In G. Chamblee & L. Langub (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2016* (pp. 992-1001). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

Asrar-ul-Haq, M., Anwar, S., & Hassan, M. (2017). Impact of emotional intelligence on teacher's performance in high education institutions of Pakistan. *Future Business Journal, 2*(3), 87-97. https://doi.org/10.1016/j.fbj.2017.05.003

Averill, J. R. (1980). A constructivist view of emotion. In R. Plutchik & H. Kellerman (Eds.), *Emotion: Theory, research and experience* (Vol. 1, pp. 305-339). New York, NY: Academic Press.

Ayyash-Abdo, H. (2000). Status of female teachers in the Middle East and North Africa region. *Journal of In-Service Education, 26*(1), 191-207. https://doi.org/10.1080/13674580000200100

Babu, B. P., & Vaitla, S. R. (2013). Emotional intelligence of school teachers. *International Journal of Education and Management Studies, 3*(1), 48-50. Retrieved from https://www.questia.com/library/journal/1P3-3265802991/emotional-intelligence-of-school-teachers

Balasubramanian, C., & Al-Mahrooqi, R. (2016). Emotional intelligence in language instruction in Oman: The missing link? *RELC Journal, 47*(2), 145-160. https://doi.org/10.1177/0033688216645471

Bar-On, R. (1997). *Bar-On Emotional Quotient Inventory (EQ-i): Technical manual*. Toronto, Canada: Multi-Health Systems.

Barłożek, N. (2013). Teachers' emotional intelligence—A vital component in the learning process. Wydawnictwo Uniwersytetu Łódzkiego [Publisher of the University of Lodz]. Retrieved from http://hdl.handle.net/11089/14974

Birol, C., Atamtürk, H., Silman, F., & Sensoy, S. (2009). Analysis of the emotional intelligence level of teachers. *Procedia Social and Behavioral Sciences, 1*, 2306-2614. https://doi.org/10.1016/j.sbspro.2009.01.460

Bowen, P., Pilkington, A., & Rose, R. (2016). The relationship between emotional intelligence and well-being in academic employees. *International Journal of Social Science Studies, 4*(5), 1-9. https://doi.org/10.11114/ijsss.v4i5.1487

Boyatzis, R. E., Goleman, D., and Rhee, K. (2000). Clustering competence in emotional intelligence: Insights from the Emotional Competence Inventory (ECI)s. In R. Bar-On and J. D. A. Parker (Eds.), *Handbook of Emotional Intelligence*. (pp. 343-362). San Francisco, CA: Jossey-Bass.

Bradberry, T. (2013, August). The most and least emotionally aware countries. *Forbes*. Retrieved from https://www.forbes.com/sites/travisbradberry/2013/08/17/the-most-and-least-emotionally-aware-countries/amp/

Caruso, D. R., & Mayer, J. D. (1998). *A measure of emotional empathy for adolescents and adults* (Unpublished manuscript). Retrieved from https://scholars.unh.edu/personality_lab/22/

Chan, D. W. (2004). Perceived emotional intelligence and self-efficacy among Chinese secondary school teachers in Hong Kong. *Personality and Individual Differences, 36*(8), 1781–95. http://dx.doi.org/10.1016/j.paid.2003.07.007

Davis, W. (2006). Emotional intelligence as a predictor of career longevity among special education teachers in the Houston County, Georgia, school system (Unpublished doctoral dissertation). Georgia Southern University, Statesboro, Georgia, USA. *Electronic Theses and Dissertations*. Paper 308. Retrieved from: https://digitalcommons.georgiasouthern.edu/etd/308

Dolev, N. & and Leshem, S. (2016). Teachers' emotional intelligence: The impact of training. *The International Journal of Emotional Education, 8*(1), 75-94. Retrieved from: https://www.semanticscholar.org/paper/Teachers'-Emotional-Intelligence%3A-The-Impact-of-Dolev-Leshem/8f486c71edb920242c1b3d2271c3ce5eb31bb5dd

Dong, Q., &Tim, H. (2006). Emotional intelligence, employee trust and job satisfaction. *Competition Forum, 4*(2), 381-388. Retrieved from https://www.questia.com/library/journal/1P3-1268524271/emotional-intelligence-trust-and-job-satisfaction

Dunn, P. (2002). *The impact of starting a new venture on the entrepreneur and their family: Expectation, reality, and willingness to start again*. Paper presented at the Association for Small Business and Entrepreneurship Annual Conference, Reno, NV.

Elias, M. (2006). The connection between academic and social emotional learning. In M. Elias & H. Arnold (Eds.): *The Educator's guide to emotional intelligence and academic achievement* (pp. 4-14). Thousand Oaks, CA: Corwin Press.

Farooq, A. (2003). *Effect of emotional intelligence on academic performance* (unpublished Ph.D dissertation). University of Karachi, Karachi, Pakistan.

Furner, J. & Kumar, D. (2007). The mathematics and science integration argument: A stand for teacher education. *Eurasia Journal of Mathematics, Science and Technology Education, 3*(3), 185-189. Retrieved from: http:// http://www.ejmste.com/

Gardner, H. (2004). *Frames of mind: The theory of multiple intelligences*. New York, NY: Basic Books.

Gignac, G., Palmer, B., Manocha, R., & Stough, C. (2005). An examination of the factor structure of the Schutte Self-Report Emotional Intelligence (SSREI) scale via confirmatory factor analysis. *Personality and Individual Differences, 39*, 1029-1042. http://dx.doi.org/10.1016/j.paid.2005.03.014

Goleman, D. (1995). *Emotional Intelligence: Why it can matter more than IQ*. New York, NY: Bantam Books.

Goleman, D. (1998). *Working with emotional intelligence*. New York, NY: Bantam Books.

Hans, A., Mubeen, S., & Al Rabani, R. (2013). A study on emotional intelligence among teachers: a case study of private educational institutions in Muscat. *International Journal of Application or Innovation in Engineering and Management, 2*(7), 359-366. Retrieved from: https://www.ijaiem.org/volume2issue7/IJAIEM-2013-07-25-090.pdf

Hargreaves, A. (1998). The emotional practice of teaching. *Teaching and Teacher Education, 14*(8), 835-854. http://dx.doi.org/10.1016/S0742-051X(98)00025-0

Hargreaves, A. (2001). Emotional geographies of teaching. *Teachers College Record, 103*(6), 1056-80. http://dx.doi.org/10.1111/0161-4681.00142

Hassan, A., & Al-Damen, M. (2016). A comparative study between Oman and Sharjah University students related to shyness and demographic variables. *British Journal of Education, Society and Behavioral Science, 17*(4), 1-13. https://doi.org/10.9734/BJESBS/2016/27590

Hekmatzadeh, M; Khojasteh, L. & Shokrpour, N. (2016). Are emotionally intelligent EFL teachers more satisfied professionally? *International Journal of Applied Linguistics and English Literature, 5*(2), 97-107. http://dx.doi.org/10.7575/aiac.ijalel.v.5n.2p.97

Hsiang, R. (2016). Teachers' mental health: *The relevance of emotional intelligence in burnout and quality of life* (Unpublished Master's thesis). The University of Western Ontario, London, Ontario, Canada.

Huynh, A.C., Oakes, H., Grossmann, I. (2018). The role of culture in understanding and evaluating emotional intelligence. In K. V. Keefer, J. D. Parker, & D. H. Saklofske (Eds.). *Handbook of emotional intelligence in education*. New York, NY: Springer. Retrieved from: https://www.researchgate.net/publication/319622816_The_Role_of_Culture_in_Understanding_and_Evaluating_Emotional_Intelligence

Hyde. A., Dhar. U., & Pethe. S. (2001). *Emotional intelligence scale*, Lucknow, India: Vedant Publications.

Imrani, R. (2004). *Evaluation of emotional intelligence according to individual differences*. (Unpublished Master's thesis). Universiti Utara Malaysia, Sintok, Kedah, Malaysia.

Isen, A.M. (1993). Positive affect and decision making. In. M. Lewis and J. Haviland (Eds.), *Handbook of emotions* (pp. 261–77). New York, NY: Guilford Press.

Jonker, C., & Vosloo, C. (2008). The psychometric properties of the Schutte emotional intelligence scale. SA *Journal of Industrial Psychology, 34*(2), 21-30. https://doi.org/10.4102/sajip.v34i2.689

Joshith, V. P. (2012). Emotional intelligence as a tool for innovative teaching. *I-Manager's Journal on Educational Psychology, 5*(4), 54-60. Retrieved from: https://eric.ed.gov/?id=EJ1102310

Keyser, J. (2013). Emotional intelligence is key to our success [blog post]. *Association for Talent Development*. Retrieved from: https://www.td.org/Publications/Blogs/Management-Blog/2013/06/Emotional-Intelligence-Is-Key-to-Our-Success

Lenka, S. K., & Kant, R. (2012). Emotional intelligence of secondary school teachers in relation to their professional development. *Asian Journal of Management Sciences and Education, 1*(1), 90-101. Retrieved from: http://www.ajmse.leena-luna.co.jp/AJMSEPDFs/Vol.1(1)/AJMSE2012(1.1-09).pdf

Mayer, J. D., & Salovey, P. (1995). Emotional intelligence and the construction and regulation of feelings. *Applied and Preventive Psychology, 4*, 197-208. http://dx.doi.org/10.1016/S0962-1849(05)80058-7

Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey and D. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 3-31). New York, NY: Basic Books.

Mayer, J. D., DiPaolo, M. T. & Salovey, P. (1990). Perceiving affective content in ambiguous visual stimuli: A component of emotional intelligence. *Journal of Personality Assessment, 54*(3-4), 772–81. https://doi.org/10.1080/00223891.1990.9674037

Mehta, A. (2013). A study of how emotional intelligence reduces occupational stress among teachers. *International Monthly Refereed Journal of Research In Management and Technology, 2*, 19–28. Retrieved from: https://www.abhinavjournal.com/images/Management_&_Technology/Feb13/3.pdf

Ministry of Education and The World Bank (2012). *Education in Oman: The drive for quality*. Muscat, Oman: Ministry of Education.

Mishra, S., & Laskar, J. (2013). Emotional intelligence of teachers teaching at secondary and senior secondary schools. *International Journal of Scientific Research, 2*(10), 1-5. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.682.7849&rep=rep1&type=pdf

Mohamad, M., & Jais, J. (2016). Emotional intelligence and job performance: A study among Malaysian teachers. P*rocedia Economics and Finance, 35*, 674-682. https://doi.org/10.1016/S2212-5671(16)00083-6

Ng, K., Wang, C., Kim, D., & Bodenhorn, N. (2010). Factor structure analysis of the Schutte self-report

emotional intelligence scale on international students. *Educational and Psychological Measurement, 70*(4), 695-709. http://dx.doi.org/10.1177/001316440935569.

Nwankwo, B., Obi, T., Sydney-Agbor, N., Agu, S., & Aboh, J. (2013). Relationship between emotional intelligence and job satisfaction among health workers. *Journal of Nursing and Health Science, 2*(5), 19-23. Retrieved from http://www.iosrjournals.org/iosr-jnhs/papers/vol2-issue5/D0251923.pdf?id=8236

Petrides, K. V. (2009). *Technical manual for the Trait Emotional Intelligence Questionnaires (TEIQue)*. London, UK: London Psychometric Laboratory.

Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European Journal of Personality, 15*, 425-448. https://doi.org/10.1002/per.416

Podolsky, A., Kini, T., Bishop, J., & Darling-Hammond, L. (2016). *Solving the teacher shortage: How to attract and retain excellent educators*. Palo Alto, CA: Learning Policy Institute.

Ponmozhi1, D. & Nellaiyapen, N. O. (2014). How does student teachers' emotional intelligence relate to their teaching competencies? *IOSR Journal of Research and Method in Education, 4*(6), 93-96. Retrieved from: http://www.iosrjournals.org/iosr-jrme/papers/Vol-4%20Issue-6/Version-3/M04639396.pdf

Pooja, P., & Kumar, P. (2016). Demographic variables and its effect on emotional intelligence: a study on Indian service sector employees. *Annals of Neuroscience, 23*, 18–24. https://doi.org/10.1159/000443552

Psilopanagioti, A., Anagnostopoulos, F., Mourtou, E., & Niakas, D. (2012). Emotional intelligence, emotional labor, and job satisfaction among physicians in Greece. *BMC Health Services Research*. Retrieved from https://bmchealthservres.biomedcentral.com/articles/10.1186/1472-6963-12-463

Ramana, T. V. (2013). Emotional intelligence and teacher effectiveness—an analysis. *Voice of Research, 2*(2), 18-22. Retrieved from: http://www.voiceofresearch.org/Doc/Sep-2013/Sep-2013_5.pdf

Rastegar, M., & Memarpour, S. (2009). The relationship between emotional intelligence and self-efficacy among Iranian EFL teachers. *System, 37*(4), 700-707. http://dx.doi.org/10.1016/j.system.2009.09.013

Rastegar, M., Razmi, M., & Ghavam, M. (2011). The relationship between emotional intelligence and emotional empathy among Iranian teachers of the Institute of English as a Foreign Language. *International Journal of Psychology, 5*(1), 35–50. Retrieved from http://www.ijpb.ir/article_55524_12744c1f191c6736e589d0f4fb24916e.pdf

Roy, B., Sinha, R., & Suman, S. (2013). Emotional intelligence and academic achievement motivation among adolescents: A relationship study. *Researchers World—Journal of Arts, Science & Commerce, 4*(2), 126-130. Retrieved from: http://www.researchersworld.com/vol4/issue2/Paper_18.pdf

Rust, D. (2014). *Relationship between the emotional intelligence of teachers and student academic achievement* (Unpublished doctoral dissertation). University of Kentucky, Lexington, Kentucky.

Salim, S., Nasir, R., Arip, M., & Mustafa, M. (2012). The role of emotional intelligence on job satisfaction among school teachers. *The Social Sciences, 7*(1), 125-129. Retrieved from http://medwelljournals.com/abstract/?doi=sscience.2012.125.129

Salovey, P., Bedell, B., Detweiler, J., & Mayer, J., (1999). Coping intelligently: Emotional intelligence and the coping process. In C. R. Snyder (Ed.), *Coping: The Psychology of What Works* (pp.141-164). New York, NY: Oxford Psychology Press.

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

Schaefer, L., Long, J. S., & Clandinin, D. J. (2012). Questioning the research on early career teacher attrition and retention. *Alberta Journal of Educational Research, 58*, 106-121. Retrieved from: https://www.ajer.ca

Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C., & Dornheim, L.

(1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences, 25*(2), 167–177. Retrieved from: https://www.recercat.cat/bitstream/handle/2072/48144/TFC-GALVEZ-2010-Annexos.pdf?sequence=2

Sergio, R., Dungca, A., & Ormita, L. (2015). The demographic variables and emotional intelligence as correlates of work values: A cross-cultural examination towards organizational change. *Journal of Economics, Business and Management, 3*(2), 167-175. Retrieved from http://www.joebm.com/index.php?m=content&c=index&a=show&catid=40&id=459

Smithers, A., & Robinson, P. (2003). Factors affecting teachers' decisions to leave the profession. Research report No. 430. *Center for Education and Employment Research, University of Liverpool*. Liverpool, England: University of Liverpool.

Sulaiman, S. (2013). Emotional intelligence, depression and psychological adjustment among university students in the Sultanate of Oman. *International Journal of Psychological Studies, 5*(3), 169-181. Retrieved from http://www.ccsenet.org/journal/index.php/ijps/article/view/28212

Stone-McCown, K., Jensen, A. L., Freedman, J. M., & Rideout, M. C. (1998). *Self-science: The emotional intelligence curriculum*. San Mateo, CA: Six Seconds.

Tapper, J. (2018). Burned out: Why are so many teachers quitting or off sick with stress? *The Guardian*, Retrieved from: https://www.theguardian.com/education/2018/may/13/teacher-burnout-shortages-recruitment-problems-budget-cuts

Thornqvist, N. (2011). *Emotional intelligence and burnout among teachers in a rural Florida school district* (Unpublished Master's thesis). University of Florida, Gainseville, Florida.

Trivedi, S., & Shakya, A. (2014). Emotional intelligence of prospective teachers with reference to certain biographical factors. *IOSR Journal of Humanities and Social Science, 19*(12), 43-49. Retrieved from http://iosrjournals.org/iosr-jhss/papers/Vol19-issue12/Version-5/H0191254349.pdf

Tsaousis, I., & Nikolaou, I. (2005). Exploring the relationship of emotional intelligence with physical and psychological health functioning. *Stress and Health, 21*(2), 77-86. https://doi.org/10.1002/smi.1042

Watt, H., & Richardson, P. (2007). Motivational factors influencing teaching as a career choice: Development and validation of the FIT-Choice scale. *Journal of Experimental Education, 75*(3), 167-202. Retrieved from: http://faculty.edfac.usyd.edu.au/projects/FIT/articles/Watt&Richardson_JXE2007.pdf

Yoke, L., & Panatik, S. (2016). School teachers' emotional intelligence in relation to demographic characteristics and job outcomes. *International Business Management, 10*(6), 858–864. Retrieved from http://medwelljournals.com/abstract/?doi=ibm.2016.858.864

Zakrzewski, V. (2013). Why Teachers need social-emotional skills. *Greater Good Magazine: Science-Based Insights for a Meaningful Life*. The Greater Good Science Center, University of California, Berkeley. Retrieved from http://greatergood.berkeley.edu/article/item/why_teachers_need_social_emotional_skills.

Saleh Al-Busaidi is an Associate Professor of English as a foreign language at the College of Education, Sultan Qaboos University (SQU), Sultanate of Oman. He served as the Director of the Language Centre at SQU (2010-2016). He currently teaches BA and MA courses and supervises and examines MA and PhD students at SQU and abroad. He received his BA in TEFL at SQU in 1995, his MA in TEFL at the University of Exeter, UK in 1997, and his PhD in Curriculum Studies at the University of Illinois Urbana-Champaign, USA in 2003. Dr. Al-Busaidi has participated in many national and international conferences and symposia. He has also published journal articles and books on areas related to English language teaching and learning. His main research interests are: learner autonomy, curriculum and material development, study/academic skills, academic readiness, language acquisition and program evaluation.

Said Aldhafri is an Associate Professor of Educational Psychology and the director of Social Observatory, TRC, Oman. Said completed his Ph.D. at UBC, Canada in 2006. He has (co-) authored 70 referred journal articles, four books, 5 book chapters, and 130 conference papers. He received many academic awards including Sultan Qaboos Award for Culture and Science, Shoman's Research Award in Jordon, and the G. M. Dunlop Award for the best doctoral thesis in Canada, Educational Psychology, 2006 from the CAPS.

Marwa Alrajhi, MA, Evaluation and Measurement, is a Research Assistant in the Student Counselling Centre, Sultan Qaboos University, Oman. She has a bachelor degree in education/ English and a master degree in psychological evaluation and measurement. Her research interest is students' self-concept, personality, motivation, scale construction and validation. She has authored and (co-) authored 14 referred journal articles and she has presented in 22 international conferences. She has won two research awards at national and regional levels.

Hussain Alkharusi is the Dean of Admissions and Registration at Sultan Qaboos University and an Associate Professor of Measurement and Evaluation in the Department of Psychology in the College of Education. His research interests include educational assessment, student motivation, and scale development. His teaching areas include educational assessment, educational research, and educational statistics.

Badar Alkharusi currently serves Director General at Human Resources Development Directorate, Ministry of Education, Oman. He holds a Bachelor of Education and a Master of Education from Sultan Qaboos University. In 2011, he finished his PhD in education from Curtin University, Western Australia. He worked as a teacher and educational researcher. He also served as Deputy Director of the Technical Office for Studies and Development, Assis at the Ministry of Education, Oman . His research interests focus on educational reform, career guidance, and on issues related to the theory and practice of citizenship education.

Professor Abdullah Ambusaidi is a Professor of Curriculum and Teaching Methods of Science and Director of Humanities Research Centre at Sultan Qaboos University. He holds a PhD from the University of Glasgow in 2000 in the field of Science Teaching. He supervised more than 80 master's and doctorate degrees in the field of science teaching, and discussed more than 60 master's and doctoral dissertations. He has more than 95 papers published in Arab and international journals in the field of science teaching. He has seven books in teaching science in particular and teaching in general. He also participated in writing chapters on teaching science, environmental and health education in both Arabic and English. He has co-authored of two books on teaching science translated from English to Arabic. He works as a consultant and trainer for many educational projects including TAMAM Project (school-based reform) and Green Schools Initiative. He presented several papers and attended more than 40 conferences and seminars locally, internationally and internationally in the field of science education and sustainable development. Prof. Ambusaidi is a member of the editorial board of several educational journals at the local, Arab, and international levels.

Khoula Alhosni has worked as an Educational Supervisor for mathematics teachers in the Ministry of Education in Oman for 20 years. She holds a degree of Doctor of Philosophy in Mathematics Education from Curtin University from Western Australia and a Master's degree in curriculum and methods of teaching mathematics from Sultan Qaboos University. Her research interests are: teaching quality, teacher professional development and students' achievement and engagement.