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RELATIONSHIP BETWEEN THE LEVEL OF KNOWLEDGE IN A SAMPLE OF FACULTY OF NURSING UNDERGRADUATE PROGRAMS AT VARIOUS UNIVERSITIES OF THE SOUTHERN REGION OF PUERTO RICO ABOUT THE THEORY OF EMOTIONAL INTELLIGENCE AND ITS APPLICATION IN THE CLASSROOM

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Abstract. The main objective of the research was to determine the relationship between the levels of knowledge in a sample of faculty of undergraduate nursing programs of several universities in the Southern Region of Puerto Rico about the theory of emotional intelligence and if there is knowledge, how they integrate the concepts of the theory in the classroom. Theoretical contributions on emotional intelligence by Howard Gardner (1993), Reuven Bar-On (1997), Salovey and Mayer (1990) and Daniel Goleman (1995) were used in this research. It was non-experimental, descriptive, of a positivist nature and at the same time quantitative, exploratory, and correlational in nature. The sample consisted of 98 university professors, who taught at the undergraduate level of the nursing area in several institutions of the Southern Region of Puerto Rico. An Ad hoc instrument was used to measure the level of knowledge of nursing faculty about the theory of EI and its implementation in the classroom. The instrument consisted of two parts: the profile of the participant and the scale to measure the level of knowledge about Emotional Intelligence. Among the most significant conclusions are that more knowledge of EI, the less integration of the same in the classroom by the participants and no significant relationship between the level of knowledge of the Theory of EI and the assessment process and the integration of the same in the academic performance of the students.

Keywords: Knowledge, emotional intelligence (EI), faculty, nursing undergraduate program.

RELACIÓN ENTRE EL NIVEL DE CONOCIMIENTO EN UNA MUESTRA DE FACULTATIVOS DE PROGRAMAS SUBGRADUADOS DE ENFERMERÍA DE VARIAS UNIVERSIDADES DE LA REGIÓN SUR DE PUERTO RICO ACERCA DE LA TEORÍA DE INTELIGENCIA EMOCIONAL Y SU APLICACIÓN EN LA SALA DE CLASES

Resumen. La investigación tuvo como objetivo determinar la relación entre el nivel de conocimiento en una muestra de facultativos de programas sub-graduados de enfermería de varias universidades de la región sur de Puerto Rico acerca de la teoría de la inteligencia emocional (IE) y si existiese el conocimiento, cómo integran los conceptos de la teoría en la sala de clase. Se utilizaron los aportes teóricos sobre IE de Howard Gardner (1993), Reuven Bar-On (1997), Salovey y Mayer (1990) y Daniel Goleman (1995). El estudio fue cuantitativo, no experimental, descriptivo, de naturaleza positivista, exploratorio y correlacional. La muestra consistió en 98 profesores universitarios de nivel sub-graduado del área de enfermería en varias instituciones de la Región Sur de Puerto Rico. Se utilizó un instrumento Ad hoc para medir el nivel de conocimiento de estos facultativos acerca de la teoría de IE y su implementación en la sala de clase. El instrumento consistió de dos partes, el perfil del participante y la escala para medir el nivel de conocimiento acerca de la IE. Se encontró que, mientras más conocimiento de IE, menos integración de la misma en la sala de clase de parte de los participantes; por tanto, no existe relación significativa entre el nivel de conocimiento de la Teoría de IE y el proceso de avalúo (assessment) y la integración del mismo en el desempeño académico de los estudiantes en el salón de clases.

Palabras clave: Conocimiento, inteligencia emocional, facultativos, programa sub-graduado de enfermería.

Introduction

Current education allowed a change in the paradigm related to the acquisition of knowledge through cognitive development, making the way to the need that pedagogical practice reinforces the emotional and moral aspects of individuals that intervene in the teaching-learning process. The development of Emotional Intelligence (EI) will transform into a tool that prevents or improves human conflicts (intrapersonal or interpersonal.) Interactions on education will be humanized, allowing the students to be liberated from every aspect that won't allow them to be fully a person. Professionals must be properly prepared to be able to face the challenges that form innovative teaching in the social, historical and paradigmatic context. A transformation on the way of thinking must be made, and teaching must happen trough the development in EI in both the teachers and students, specifically in the nursing field. This profession requires a development of EI when attending patients, teachers, students and the community. People who are emotionally educated feel happier about what they do, and they show these feelings to others.

EI is considered a concept that belongs to the field of psychology and it has been defined by Gardner (1993), Bar-On (1997), Salovey and Mayer (1990) and Goleman (1995). Sánchez (2013) argued that the contributions made by Gardner (1993) stem from the real interest in non-cognitive aspects of intelligence. Personal intelligences (intrapersonal and interpersonal) are the ones strongly linked to EI. According to Gardner (1993), interpersonal intelligence is the ability to understand other people, and intrapersonal intelligence is the access to your own sentimental life of (2019) MLSER, 3(1), 101-115

affection and emotions. Gardner focused his attention on intelligence, creativity, leadership and work, making theoretical contributions of great impact and applications in different fields.

Other EI model was created by Bar-On (1997), who coined the term "emotional quotient" (EQ) as an analog of intelligence quotient (IQ). This model focuses on five social and emotional skills: intrapersonal skills, interpersonal skills, adaptability, stress management, and state of mind. These have an impact in the capacity of a person to face the requirements of the environment. Also, he conceptualized EI as emotional/social intelligence. This model is divided in two emotional capacities: basic and facilitators. To measure emotional/social intelligence, Bar-On (1997) proposed the Emotional Quotient Inventory (EQ-i).

The third one is the ability model by Salovey and Mayer (1990). This is characterized in four phases of EI and conceives intelligence as the processing of emotional information. These phases are: the regulation of emotions, their understanding and analysis, the facilitating emotion of thought and perception, the evaluation and expression of emotions. The set of skills described below in each of these branches constitutes the definition of EI as an ability to reason with emotions.

The las EI model was made by Goleman (1995), who exposed that people have two minds: one that thinks and other that feels. Both interact to build the mental life of human beings. The mind that thinks is rational, with a mode of understanding, is thoughtful, awake, able to ponder and reflect. Meanwhile, the mind that feels is emotional, impulsive, powerful and illogical. Therefore, the perspective of the EI model by Goleman (1995) was considered mixed and includes cognitive and non-cognitive processes. In addition, this model is composed of dimensions such as self-awareness, self-control, motivation, empathy and social skills.

Literature Review

In their research, Villanueva and Valenciano (2012) indicated that boosting the skills of the student body for an EI is an indispensable task in schools, because today's society faces problems of violence, stress, depression, crime, suicide and drug addiction, among others. For these authors, it is important to incorporate emotional education into the educational curriculum in order to achieve personality development.

In 2012, Merchán and González analyzed the influence of emotional competence on the social climate of a classroom and on the academic performance of students in their study. They wanted to know the degree of emotional competence that teachers possessed and how it could be increased through an intervention. They determined that the emotional and social competence of the experimental group obtained an increase when compared to the control group.

Samayoa (2012) developed an awareness-raising training program to promote and train the emotional competencies of teachers in two public and private secondary schools based on the results of a characterization of the emotional quotient of teachers obtained through self-reports. The sample included 681 secondary education teachers. In this sample, teachers exhibited proper scores in emotional perception and comprehension, but needed to improve their emotional regulation in all dimensions of EI. It was found that teachers were not perceived with a high emotional capacity,

regardless of their gender, age or professional experience. Women had better emotional perception and understanding and higher levels of attention to emotions.

García (2012) assessed the social and pedagogical relevance of an EI program for teachers in Venezuela. The purpose was to recognize the importance of managing emotions in the integral formation of the student, which includes the dominance of skills such as knowledge of your own emotions, emotional self-control, self-motivation, empathy and interpersonal relationships. The results revealed that most of them did not know about EI programs, had very little knowledge of didactic strategies for the development of emotional competencies and not enough time to carry out these activities with students and to train in EI. Also, the need to integrate emotional education into the curriculum and the diversity of EI content and strategies that constitute a tool that can be used in the classroom and provide follow-up of the activities of the EI program made in that classroom was found.

Rodríguez, Caja, Gracia, Velasco and Terrón (2013) conducted a study with 22 teachers from different nursing areas. As a result, teachers showed a high level on satisfaction and initiative and appeared compromised with education.

Aradilla (2013) stated that nurses show a lack of EI skills and do not receive sufficient training. This author investigated 1,544 nursing students and 209 nurses. In this study, students had more attention to their emotions and more difficulty coping with the idea of death, exhibiting high levels of anxiety and fear. The nurses showed higher levels of understanding and emotional management, less anxiety about death and higher levels of self-esteem.

Herrero, Sábado and Gómez (2013), evaluated the psychometric properties of the Trait Meta Mood Scale to examine Perceived Emotional Intelligence (PEI) in the nursing field. The sample contained 1.417 individuals, 1.208 nursing students and 209 nurses. It was confirmed that emotional attention is positively linked with anxiety when thinking about death and the dimension of alexitimia or Difficulty to Identify Feelings (DIF). Meanwhile, the self-esteem dimension was negative.

Chiappe and Cuesta (2013) made a research about the EI strengthening of teachers in primary and middle school. These were based on the diagnosis of self-motivation skills, self-knowledge, self-control, empathy and skills. They participated in a virtual learning environment to develop EI and interactions. Among the five categories of analysis were EI self-awareness, self-control, self-motivation, empathy and social skills. The results showed that educators were able to understand and control their emotions and feelings in situations of strong emotional burden, as well as to redirect and prioritize their own thinking, based on their own feelings and emotions and those of others. The research showed that interaction in these collaborative virtual environments contributes to the strengthening of emotional skills related to the ability to perceive, understand and regulate their own emotions and the emotions of others.

Pérez-Escoda, Guiu and Fondevila (2013) evaluated an emotional education program in 92 primary school teachers in three schools in Spain. The program affected the development of the five dimensions: emotional competence, conscience, regulation, autonomy, social competence, life competencies and well-being. The authors concluded that the program produces significant improvements in the development of emotional competence and an increase in regulatory strategies, a better perception of the institutional climate and a significant decrease in teachers' stress.

In Puerto Rico, Flores (2013) realized a case research to know how prepared five directors regarding leadership and the competencies were that EI promotes when dealing with situations present in the school environment. Participants pointed out three competences: motivation, empathy and social abilities. EI competencies were present as a strategy to handle different situations. The author concluded that most participants didn't have a solid base regarding skills and leadership competencies.

Baixeras (2013) described the knowledge, attitudes and practices of the EI in teachers. He concluded that they focused on the students' feeling and not their own.

Enrique (2014), who highlighted the relevance of a good foundational and permanent EI education on teaching staff to improve the educational process of students in a sample of 70 students. The results proved that there were no significant differences regarding specialization field, teacher's typology, gender or students' age, showing an adequate level of EI on different dimensions.

In her research about the education and knowledge of EI among teachers with primary student and strategies used in the classroom, Malagón-Tirado (2014) reveals that half of the participants defined the EI concept as relevant among students and that influences positively the EI on social interactions. Also, the importance of its education regarding EI content was valued.

Millán, García-Álvarez and D'Aubeterre (2014) carried out a study on a sample of 199 university professors, with the aim of confirming the value of EI and the willingness to flow at work as factors of personal protection against different sources of work stress and as promoters of psychological well-being. Among the results, a high level of psychological well-being and the willingness to flow at work were highlighted, obtaining a causal effect on psychological well-being and health promotion.

Valverde (2014) conducted a systematic review of 62 nursing articles and research from January 2002 to December 2012 at the University of Almeria. It concluded that EI helps to initiate the inner knowledge that implies "being a nurse". This leads to professional and personal growth in the nursing staff who provide conflict management tools that help to significantly reduce hostility between nurses.

Hakkak, Nazarpoori, Najmeddin, Mousavi and Ghodsi (2015) investigated the EI effects in socio-mental factors of human resources, with 248 Mellat Bank employees in the Tehran province. It was found that every EI aspects have positive and significant effect about socio-mental factors in the performance of human strength and educational entities.

Casullo and García (2015) analyzed the socio-emotional competencies possessed by 200 teachers in the making in a High School in Argentina, when facing specific vital stressful factors in the teaching profession. Highly valued socio-emotional competencies were motivation, empathy, perception, comprehension, expression and emotional regulation. The authors concluded that the development of socio-emotional competencies represents a needed task in educational context that promote these abilities, that contribute positively to the subjects' personal and social well-being.

Lavega, Costes and Prat (2015) made a research with 99 future PE teachers, an educational experience in emotional conscience trough active games. The findings confirmed that self-evaluation of emotions was predominant, and 8.81% of the total of 296 comments alluded to factors related to their peers that influenced emotional experience.

Cazalla-Luna, Ortega-Álvarez and Molero (2015) analyzed the existence of significant differences between socio-demographical data stablished in each of the PEI and self-concept. 104 students participated. The findings demonstrated the importance for teachers to be aware of the EI's self-concept and to encourage the development of an appropriate self-concept in their classrooms in order to prevent future problems.

Cejudo and López-Delgado (2016) explored the opinion of 196 teachers in Spain about the importance of some of the dimensions that comprise EI's master domain to be a highly competent teacher. Education teachers manifested a higher level of value when asked about the importance of EI. They also showed that EI gained greater recognition of the importance of the dimensions that make up EI's master domain to be a highly competent teacher than their colleagues with low EI levels.

Burrola-Herrera, Burrola-Márquez and Viramontes-Anaya (2016) analyzed the benefit of implementing EI as a tool to favor group integration in a group of third graders of Primary Education in Mexico. The research showed that working with EI in the classroom significantly improved group relationships, promoted respect, and reinforced values such as empathy, tolerance or trust among peers and with the teacher. The existing affective relationship between students and the teacher was improved; the group's own and collective emotions worked directly, fostering empathy and self-control, creating a more harmonious environment.

Body, Ramos, Recondo and Pelegrina (2016) carried out a study with 180 teachers to check if the mindfulness attitude could be transferred to the educational environment, specifically to the teachers, with the intention of increasing the PEI. This was carried out through the Emotional Intelligence Program on Emotional Regulation, also known as PINEP in Spanish. There were significant differences in the PEI when comparing the results before and after the experimental test. PINEP training had an impact on the way teachers relate to their emotions.

Isaza-Zapata and Calle-Piedrahíta (2016) conducted a study with the aim of analyzing IE's profile in a sample of 110 primary school teachers from ten educational institutions in the city of Colombia. It was demonstrated that EI incorporated skills, qualities and competencies that established human behavior in the face of diverse interactions. Teachers reflected competencies that allow them to establish ways of relating to peers, students and the educational community. They manifested the effectiveness of the teaching method used in relation to IE.

Ilaja and Reyes (2016) explored the burnout levels and the EI abilities of 60 professors in the University of Ecuador. A positive relationship between gender and emotional burnout was found, being higher among women.

Barrientos (2016) had the goal of knowing if there was any link between socioemotional competencies of Early Childhood Education teachers and their ability to deal with the social and emotional environment of the classroom. It was found that most had no training regarding EI. Teachers use different methodologies to work on their classrooms. The author concluded that there's a link between the capacities of a teacher to support their students socially and emotionally and to organize pedagogical activities.

Martín-Piñol, Portela-Fontán, Gustems-Carnicer and Calderón-Garrido (2017) analyzed the emotional education on the training of 17 future art teachers in a Spanish university. It was found that most had a higher knowledge on self-emotions. This contributed to the reflection of needing training in the emotional education field, which

improved the reflection on the role that emotions play on art, highlighting the importance of conscience in Emotional Education and the need to work on it and link it with other curricular areas.

Method

This research was quantitative, exploratory, descriptive and correlational. A descriptive questionnaire was used to document and describe the current conditions or attitudes.

Participants

The sample contained 100 university teachers, who taught a nursing undergraduate degree on the southern region of Puerto Rico. The snowball sampling technique was used to collect this sample.

Tool

An Ad hoc instrument to measure the level of knowledge of nursing students about the EI theory and its implementation in the classroom. It had two parts: participant profile and scale to measure the knowledge level about Emotional intelligence. The participant's profile had personal aspects such as gender, age, academic preparation, professional experience in the health area, professional experience as professor, their license and seminars or classes about EI that they've attended. In the second part of the instrument, the TMMS-24 in Spanish was used (Fernández, Alcaide, Domínguez, Fernández-McNally, Ramos, Ravira, 1998), based on the Trait-Meta Mood Scale (TMMS) of the research group Salovey, Mayer, Goldman, Turvey and Palfai (1995).

Procedimiento y análisis de los datos

For data collection a descriptive survey was used, which documents and describes current conditions or attitudes. The following variables were taken into account: Level of knowledge of Emotional Intelligence Theory (independent) and Integration in the classroom (dependent). The statistical analysis used was descriptive and had central trend statistics, percentage, frequency and arithmetic mean. Sociodemographic data were analyzed using descriptive statistics of frequency and percentage. In order to answer the research question, the frequency, the percentage and for the hypotheses inferential statistics were used through the Statistical Program for Social Sciences (SPSS), version 24.0.

Results

The findings of this research were analyzed with 98 questionnaires filled by professors of numerous universities of the southern region of Puerto Rico. They were carried out with the goal of answering the research's question and inference results.

Among the participant's demographical data, the presence of females was higher, being 80% of 42 years or age or older. Academic training in Magistry reached an 84%, specialist license had a 92%, professional experience between 16 and 22 years, a 92%. 68% has continuous education on IE, 87% is familiar with the concept of EI and 76% uses the theory inside the classroom.

The second part of the instrument was based on measuring the knowledge level on IE. 84% pf teachers used the dimension of reflection. 90% established a continuous dialog with the students, and 77% created groups to reflect and argue about personal and relational aspects of the teaching staff. The frequency and percentage of EI intervention between teacher and student showed that 100% of them valued self-esteem, empathy and the capacity to solve conflicts. The frequency and percentage about the relationship teacher-student when implementing EI showed that 100% of them applies this relationship with their own teacher.

The analysis of frequency and percentage on the intrinsic aspects related to the performance of teacher-student reflected that respect to the students and capacity to maintain the decisions taken was present 100% of the time. The analysis of frequency and percentage regarding the participant's EI showed that 30% fully agree on having clear feelings and a lot of energy when they feel happy.

The dimensions of emotional perception, understanding of feelings and emotional regulation of the EI TMMS-24 instrument, obtained a 27% average for each dimension overall.

To test hypothesis #1; there is no significant relationship between the level of knowledge of EI Theory and its integration into the classroom, Pearson's correlational test r was performed. According to the test results (N = 98) = -.212, p = .036, with a p < 0.05 significance, there's a significant relationship between the knowledge level of the EI Theory and its integration in the classroom. However, Pearson's test r showed that the direction of relationship between EI and its integration in the school room was negative (-.212 coefficient.) Establishing that, when analyzing the participants, the higher the IE, the lower the EI integration in the classroom.

To test hypothesis #2; according to the results (N = 98), the only significant correlation was the specialist license that they have as professionals (p =0.000) p < 0.05), therefore, there's a significant link between the EI that teachers have and their professional license. This showed that participants with less professional licenses showed a higher EI.

To test hypothesis #3; results showed significance (N = 98) = -.187, p = .065, p > 0.05, claiming that there's a significant relationship between EI Theory knowledge levels and valuation process, and its integration in the academic performance of students.

To verify differences, the U Mann-Whitney #1 test was used: results were not significant: U de Mann-Whitney (N=98) = 777.000, 739.500, 712.000; p=.979, .720 y .548., p>0.05. Therefore, there are no significant differences in the perception, understanding and regulation of EI between males and females. However, when analyzing the instrument scores ranges of perception, understanding and regulation of EI, it is observed that females had the highest average range.

The Mann-Whitney #2 test was conducted to test any significant differences in perception, understanding and regulation of EI between generalists and specialists. Test results were significant: U de Mann-Whitney #2, (N=98)=156.500, 131.500, 95.500; p=.008, .003 y .001, p<0.05. Therefore, two main significant differences are existent in perception, understanding and regulation of EI among generalists and specialists. It was found that generalists had a higher average range when analyzing the score range.

The Kruskal Wallis test #1 was used to establish significant differences in perception, understanding and regulation of EI among the different age ranges of the participants. Test results were significant in comprehension and regulation: $\chi 2$ (N= 98) = 9.324, 9.314, p= .009, .009, p < 0.05). Therefore, significant differences are present regarding the participant's age in comprehension and EI regulation. Nevertheless, when analyzing the score range, it's proven that the participants between 26 and 34 years of age had a higher average range.

The Kruskal Wallis test #2 was used to test significant differences in perception, understanding and regulation of EI among the different academic training of the participants. Results were not significant: $\chi 2$ (N= 98) = 3.000, 2.270, 3.543, p= .223, .321, .170 (p > 0.05). Therefore, there are no significant differences in perception, understanding and regulation of EI regarding the participant's academic training. Nevertheless, when analyzing the score range of the instruments of perception, understanding and regulation of EI, it's found that other academic training had a higher average range.

Discussion

The research was based on the following question: What's the relationship between the knowledge level about the Theory of Emotional Intelligence that the teachers of the nursing undergraduate program of numerous universities from the southern region of Puerto Rico possess, and its application in the classroom? Through the analysis of these findings it was proven that teachers of the nursing undergraduate program of numerous universities from the southern region of Puerto Rico possess some knowledge about the Theory of Emotional Intelligence, since most underwent continuous education or training on EI on their professional application. The teachers who participated specified trough the instrument that they're familiar with the EI concept and that EI is used as a strategy in the classroom. Also, the teachers of the nursing undergraduate program of numerous universities from the southern region of Puerto Rico use the methodology based on participation and reflection. Also, they establish a continuous dialog with students and debate about personal and relational aspects of the teaching staff. The results of both this research and previous studies highlight the importance and need of implementing EI in the classrooms, since, according to Sánchez (2017) these are the ideal social environments so students can develop their emotional abilities, due to the fact that they socialize with other peers and spend most of their time there. As a positive aspect, they have professionals that may guide them and instill needed values to develop EI in them.

These findings regarding the EI knowledge research are in line with Gardner's (1995) theory of MI in that it facilitates the application of new, motivating, integrative and creative strategies by educators for students. In this way, they may construct broad knowledge schemes, enabling them to acquire a vision of reality that transcends the boundaries of everyday knowledge and brings them closer to wisdom and creative potential. This would speed up the cognitive capacity to solve problems, make decisions, improve forms of behavior, increase self-esteem, develop skills and abilities and have a greater interrelation with the people around you and with yourself. In addition, it is emphasized that the need for instruction regarding the development of formal and informal personal intelligences is the responsibility of society and educators, being them the ones who have the greatest responsibility.

Another study that show similar results to the research is the one by Bar-On (1997), who concluded that teaching and emotion management allow students to use their emotions serving the though process and helps them to rationalize in a smarter way when making decisions. Salovey y Mayer (1990) affirmed as well that the knowledge of EI abilities can be applied to the professional career. He also presented innovative strategies with the goal of increasing each EI ability using different activities. Equally, Goleman (1995) agreed that society and the education system have the needed EI knowledge to educate about the importance of including emotional education on the education process of individuals. Also, he exposed that the role of teachers is key so they can promote cognitive abilities and emotional capacities trough learning. The study made by Villanueva y Valenciano (2012) confirmed that a needed aspect to promote the development of EI in students was that the teacher creates their own EI. In this way, the teacher can also understand their own essential emotions about EI knowledge. Another research with the same point of view is the one made by Valenciano (2012), which concludes that teaching staff is an agent promoter of the knowledge and management of their own students' emotions. The role of the teacher in this process is fundamental, so it is necessary to train them and promote their work on their own EI, as it is a model for the student body. It teaches them to control and manage their emotions through their own pedagogical practice. Also, in Puerto Rico, Flores (2013) endorsed this research, concluding that the participants stated that EI's knowledge is a key piece in solving difficult situations. It helps not to take things on a personal level and to extend that not everyone captures things at the same time and helps to reflect on the importance of using EI in daily life, especially in decision making. This research also agrees with the study made by Millán García – Álvarez y D'Aubeterre (2014), who concluded that, the higher disposition that a university professor has to flow when working, the higher his or her EI. This improves the resilient capacity when facing the lack of discipline of the students and the excessive decision in the teaching activity. Barrientos (2016) agreed that teachers showed capacity and interest in creating discussions and activities in the classroom, in order to promote knowledge and skills of analytical thinking, creativity, problem solving, instructive and reflective conversations with their students, and dialogs, using social and emotional skills.

However, this research is parallel to the study of García (2012) since it concludes that most of the participating teachers were not familiar with EI programs, had very little knowledge of didactic strategies for the development of emotional competencies, and claimed lack of time to carry out these types of activities with students, as well as to participate in continuing education courses at EI.

On the same line, the Malagón-Tirado study (2014) found that participants had no knowledge of EI, contrary to this research. Regardless of this data, they were aware of the importance of EI for them and their students. Nonetheless, even though they had no knowledge, participants applied EI in the classroom, using transversal and playful strategies and vicar learning.

Another study that contrasts with this research is the one made by Martín-Piñol, et al. (2017); they showed a general lack of knowledge regarding EI, both recognizing their own emotions and using educational resources to boost it in future working contexts.

Conclusions

The conclusions extracted from this research can't be generalized to another sample group, since it was limited to a specific region in the south of Puerto Rico and the sample size was valid for the selected region. Also, the collection period was deeply extensive due to the bureaucratic process of the Institutional Review Board (IRB).

This research has practical implications because it describes the knowledge that the teachers of the nursing undergraduate program of numerous universities from the southern region of Puerto Rico possess about the EI Theory and its implications in the classroom. It implies the existence of an inclusive and realistic educational curricula that satisfies the current needs involving teaching staff, parents and students, so they can raise awareness about the fact that real education involves covering the emotional, affective and social potential.

Recommendations

Based on the results of this research, the researcher recommends the following:

- Disseminate the results of this research with the aim of encouraging other educational institutions to integrate EI into their classes, based on activities that promote EI.
- Promote the use of innovative EI activities in universities and students to address diversity and foster mastery of the emotional competencies of the current and future generations.
- Organize professional training workshops so that teachers can acquire and update their knowledge so that they can effectively integrate EI into their classes.
- To develop a teacher profile on the basic skills needed for the labor market that are caused by the impact of EI's integration into the teaching-learning process.
- Incorporate active and meaningful practice-oriented learning activities that promote the interaction of collaborative groups for the development of EI in their classes.
- Assess their own competencies and skills, as well as those of the students, regarding the use and management of EI in their classes.
- Promote the development of competencies, skills, abilities and values about EI
 in students, proposed by the theoretical models used in this research. Make an
 emphasis to students about the ability to reflect and scaffold their peers in and
 out of class.
- Promote other types of research to auscultate the variables used: level of knowledge of EI and integration of EI in the classroom.
- Foster the necessary skills and competences required by students and teachers about EI.
- Develop research lines on innovative strategies that integrate universities and teacher preparation programs.
- Train and update the knowledge of university professors for the effective integration of strategies involving EI.
- Have the necessary tools updated in order to provide an effective educational process.
- Strengthen the emotional competencies of future teachers by designing effective courses based on innovative strategies and the needs of new generations.

References

- Aradilla, A. (2013). *Inteligencia emocional y variables relacionadas a en enfermería*. Tesis Doctoral. Universitat de Barcelona.
- Aradilla-Herrero, A., Tomas-Sabado, J., & Gomez-Benito, J. (2013). Perceived emotional intelligence in nursing: psychometric properties of the Trait Meta-Mood Scale. *Journal of Clinical Nursing*. doi: 10.1111/jocn.12259
- Baixeras, P. (2013). *Gestión emocional: conocimientos de los docentes y propuestas didácticas* (Tesis de Maestría). Universidad de Valladolid, España. Retrieved from https://uvadoc.uva.es/bitstream/10324/3123/1/TFG-B.165.pdf
- Barrientos, A. (2016). *Habilidades sociales y emocionales del profesorado de educación infantil relacionadas con la gestión del clima de aula* (Tesis Doctoral). Universidad Complutense de Madrid, España. Retrieved from http://eprints.ucm.es/40450/1/T38117.pdf
- Bar-On, R. (1997). *The Emotional Quotient (EQ-i): A Test of Emotional Intelligence*. Toronto: Multi-Health Systems.
- Body, L., Ramos, N., Recondo, O., & Pelegrina. M. (2016). Desarrollo de la Inteligencia Emocional a través del programa mindfulness para regular emociones (PINEP) en el profesorado. *Revista Interuniversitaria de Formación del Profesorado*, 87(30.3), 47-59.
- Burrola-Herrera, J. I., Burrola-Marquez, L., & Viramontes-Anaya, E. (2016). Inteligencia emocional e integración grupal en el aula: dos consideraciones en la formación docente. *Ra Ximhai*, 12(6), 165-176.
- Cassullo, G. L., & García, L. (2015). Estudio de las Competencias Socio Emocionales y su Relación con el Afrontamiento en Futuros Profesores de Nivel Medio. *Revista Electrónica Interuniversitaria de Formación del Profesorado*, 18(1), 213-228. doi: 10.6018/reifop.18.1.193041
- Cazalla-Luna, N., Ortega-Álvarez, F., & Molero, D. (2015). Autoconcepto e inteligencia emocional de docentes en prácticas. *Revista Electrónica de Investigación y Docencia* (REID), *14*, 151-164.
- Cejudo, J., & López-Delgado, M. (2016). Importancia de la inteligencia emocional en la práctica docente: un estudio con maestros. *Psicología Educativa*, 23(1), 29–36. doi: 10.1016/j.pse.2016.11.001.
- Chiappe, A., & Cuesta, J. C. (2013). Fortalecimiento de las habilidades emocionales de los educadores: interacción en los ambientes virtuales. *Educ. Educ. 6*(3), 503-524. Retrieved from http://www.redalyc.org/html/834/83429830006/
- Enrique, P. (2014). *La inteligencia emocional en el profesorado de educación infantil y primaria* (Tesis de Maestría). Universidad de Valladolid, España. Retrieved from https://uvadoc.uva.es/bitstream/10324/5847/1/TFG-B.534.pdf
- Fernández Berrocal, P., Alcaide, R., Domínguez, E., Fernández-McNally, C., Ramos, N. S., Ravira, M. (1998). Adaptación al castellano de la escala rasgo de metaconocimiento sobre estados emocionales de Salovey et al.: datos

- preliminares. Libro de Actas del V Congreso de Evaluación Psicológica, 1:83-84
- Flores, B. (2013). Prácticas en el liderazgo educativo y la Inteligencia Emocional: Una alternativa ante los retos sociales en las escuelas públicas de Puerto Rico (Tesis Doctoral). Universidad del Turabo, Gurabo, Puerto Rico.
- García, B. M. (2012). Pertinencia de un programa de Inteligencia Emocional dirigido a docentes de la segunda etapa de la escuela básica en Venezuela. *Revista de Investigación*, 36(76), 113-131.
- Gardner, H. (1993). *Multiples Intelligences*. New York: BasicBooks, Traducción española en Editorial Paidós
- Goleman, D. (1995). Inteligencia Emocional. Por qué es más importante el cociente intelectual. Buenos Aires: FURESA.
- Hakkak, M., Nazarpoori, A., Najmeddin Mousavi, S., & Ghodsi, M. (2015). Investigating the effects of emotional intelligence on social-mental factors of human resource productivity. *Journal of Work and Organizational Psychology*, 31, 129–134.
- Ilaja, B., & Reyes, C. (2016). Burnout and emotional intelligence in university professors: implications for occupational health. *Psicología desde El Caribe*, 33(1).
- Isaza-Zapata, G. M., & Calle-Piedrahíta, J. S. (2016). Un acercamiento a la comprensión del perfil de la Inteligencia Emocional. *Revista Latinoamericana de Ciencias Sociales, Niñez y Juventud*, 14(1), 331-345.
- Lavega, P., Costes, A., & Prat, Q. (2015). Educar competencias emocionales en futuros profesores de Educación Física. *Revista Interuniversitaria de Formación del Profesorado*, 83(29.2), 61-73.
- McMillan, J. H., & Schumacher, S. (2011). *Investigación Educativa, una introducción conceptual* (Quinta ed.). (J. Sánchez Baides, Trans.) Madrid: Pearson Addison Wesley.
- Malagón-Tirado, F. (2014). Conocimiento del profesorado de Infantil sobre Inteligencia Emocional (Tesis de Maestría). Universidad Internacional de la Rioja, España. Retrieved from http://reunir.unir.net/bitstream/handle/123456789/2299/Malagon-Tirado.pdf?sequence=1
- Martín-Piñol, C., Portela-Fontán, A., Gustems-Carnicer, J., & Calderón-Garrido, D. (2017). Arte y educación emocional: una propuesta en la formación inicial de maestros. UTE. *Revista de Ciències de l'Educació*, (1), 6-20.
- Merchán, I. M., & González, J. (2012). Análisis de la eficacia de un Programa de Inteligencia Emocional con profesores de Badajoz y Castelo Branco. *Campo Abierto*, 31(1), 51-68.
- Millán, A. C., García-Álvarez, D. J., & D'Aubeterre, M. E. (2014). Efecto de la inteligencia emocional y flujo de trabajo sobre estresores y bienestar psicológico: análisis de ruta en docentes. *Revista Colombiana de Psicología*, 23(1), 207-228. Retrieved from http://www.redalyc.org/html/804/80431219013/

- Pérez-Escoda, N., Guiu, G. F., & Fondevila, A. (2013). Evaluación de un programa de educación emocional para profesorado de primaria. *Educación XXI*, 16.1, 233-254. doi: 10.5944/educxx1.16.1.725
- Rodríguez, R. M., Caja, M., Gracia, P., Velasco, P. J., & Terrón, M. (2013). Inteligencia Emocional y Comunicación: la conciencia corporal como recurso. *Revista de Docencia Universitaria*, 11(1), 213-241.
- Salovey, P., & Mayer, J. D. (1990). *Emotional intelligence. Imagination, Cognition and Personality*, 9(3). 185-211.
- Salovey, P., Mayer, J. D., Goldman, S. L., Turvey, C., Palfai, T. P. (1995). *Emotional attention, clarity, and repair: Exploring emotional intelligence using the Trait Meta-Mood Scale*. Pennebaker (Ed.) Emotion, disclosure and health, Washington: American Psychological Association, 125-154.
- Samayoa, M. (2012). La inteligencia emocional y el trabajo docente en educación básica (Tesis Doctoral). Universidad Nacional de Educación a Distancia, Madrid, España. Retrieved from http://espacio.uned.es/fez/eserv/tesisuned:Educacion-Mlsamayoa/Documento.pdf
- Sánchez, C. (2017). *La importancia de la inteligencia emocional en la escuela*. Retrieved from https://www.printfriendly.com/p/g/XbeLHi
- Sánchez, G. (2013). *Las emociones en la práctica enfermera* (Tesis Doctoral). Universidad Autónoma de Barcelona, España. Retrieved from http://www.tdx.cat/bitstream/handle/10803/284050/gsr1de1.pdf;sequence=1
- Valverde, S. (2014). *Inteligencia Emocional en el trabajo de enfermería* (Grado en Enfermería). Universidad de Almería, España. Retrieved from http://repositorio.ual.es:8080/bitstream/handle/10835/2702/Trabajo.pdf?sequen ce=1&isAllowed=y
- Villanueva, R., & Valenciano, G. (2012). El papel de la maestra en la promoción de dos competencias de la inteligencia emocional de niñas y niños de quinto grado. *Revista Electrónica EDUCARE*, 16(3)

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