

7th International Conference on Intercultural Education “Education, Health and ICT for a Transcultural World”, EDUHEM 2016, 15-17 June 2016, Almeria, Spain

## The relationship between psychopathology and emotional intelligence in adolescents and adults

Jose L. Antoñanzas\*

Zaragoza University, Zaragoza 50009, Spain

---

### Abstract

Some authors are convinced that emotional regulation is related with the maintenance, and also with the development, of psychopathological disorders. According to different studies, emotional intelligence (EI) is not a good predictor of psychological disorders in adolescents. We conducted a study with an adolescent and adult population to examine the relation between EI and psychopathological disorders. The TMMS 24 Questionnaire by Salovey and Mayer was used to measure EI, while Pichot's PNP questionnaire was employed to measure subjects' psychopathological trends. The differences between adults and adolescents were significant for both TMMS 24 and PNP.

© 2017 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of the organizing committee of EDUHEM 2016.

*Keywords:* Emotional intelligence, Psychopathological disorders, Adults, Adolescents

---

### 1. Introduction

Emotional intelligence (EI) as a construct has been widely and well studied in recent decades. One of the most important aspects which EI refers to is that related to a subject's well-being. By taking the educational context as the usual place in which adolescents co-exist, many research works have been conducted and have shown that a relationship exists between academic success and performance and EI, as does a relationship with students' mental health (Fernández-Berrocal, Extremera & Palomera, 2008). To better analyse how this concept evolves, we considered the Model of Abilities, proposed by Mayer and Salovey (1997). These authors defined emotional abilities as a set of cognitive skills that mainly act to perceive, use, understand and manage emotions. This allows subjects to

---

\* Corresponding author. *E-mail address:* [jlantonanzas@gmail.com](mailto:jlantonanzas@gmail.com)

better adapt to a given environment, which they do through these four basic abilities, such as perceiving and expressing emotions, emotional facilitation of thinking, emotional understanding, and managing emotions.

To evaluate EI, two types of instruments have been used: self-reports, questionnaires that students answer by reflecting on their perception of their own abilities, and measures of abilities. The most widely used self-report system is that proposed by Salovey, Mayer, Goldman, Turvey and Palfai (1995), the Trait Meta-Mood Scale (TMMS), whose version in Spain is called the Trait Meta-Mood Scale-24 (TMMS-24) (Fernández-Berrocal, Extremera & Ramos, 2003). This scale evaluates three factors of EI: attention to feelings, clarity of feelings and mood repair.

With time many studies about EI have been done, and most have related EI with personality factors and cognitive performance. Some studies have related EI with all kinds of subject's behavioural manifestations, from physical activities, leisure activities and performance in companies in the world of education, to the psychological disorders or mental health problems that individuals may present (Davis & Humphrey, 2012; Teruel, M.P., et al., 2009; Valls, 2007).

A relationship between EI and stress has been demonstrated by several authors (Mikolajczak, Petrides, Coumans, & Luminet, 2009; Salovey, Bedell, Detweiler, & Mayer, 1999) and its relationship with health in general has also been studied. (Martins, Ramalho, & Morin, 2010). One of the most relevant matters of EI is its value as a predictor of mental diseases, and some studies (Goldenberg, Matheson, & Mantler, 2006; Mikolajczak, et al., 2007; Petrides, Pita, & Kokkinaki, 2007; Tsaousis, & Nikolaou, 2005) have shown how EI is negatively related with depression in adults, and also with obsessive phobias (Mikolajczak, Luminet & Menil, 2006). The results obtained herein indicate that the subjects with high and low EI have a different ability to react in general to potentially situations. It is also necessary to emphasise that start with the basis that psychopathology emerges, among other causes, through what is known as “*adeficient regulation process*”, for the type of strategy employed or as a result of poorly developed emotion differentiation (Feldman et al., 2001).

## **2. Method**

### *2.1. Participants*

Our study sample was made up of 350 subjects, specifically adolescents (N=170) and adults (N=180). The ages for adolescents ranged from 17 to 25 years, and the 18-20 age group represented over 70% of adolescents. The mean age was 19.91 years and standard deviation was 2.425. The ages for adults varied from 36 to 50 years (N=90) and from 26 to 35 years (N=62), followed by those over the age of 50 (N=38). This range went from 40 years with a minimum and maximum age of 25 and 65 years, respectively ( $X = 41.79$ ;  $SD = 9.13$ ). Subjects were randomly selected in different adult centres and from the University of Zaragoza. Researchers in psychology passed the tests over a 15-day period.

## **3. Objective**

To know the relations between emotional regulation and mental disorders in adolescents and adults.

## **4. Results**

The attention/perception results showed how half the adults had difficulties feeling and expressing their emotions correctly (50.30%), and 45.80% did so correctly. The rest (3.90%) paid too much attention to them. As for understanding emotions, we define adults as being people who understand and recognise their different moods, and a high percentage (49.70%) suitably understand their moods. Another second large group understand their moods very well (N=52; 34%). Conversely in mood regulation, a very high percentage indicated they do not know how to regulate their moods (66%), and only 34% stated they regulate them correctly.

Regarding the ability to adequately express feelings, most adolescents agree with this EI component (64.40%). It is also worth stressing that 25% of adolescents stated they pay little attention to their feelings and correctly express them (40 subjects, 25%). As for understanding emotions, half the adolescents reported knowing their moods and

recognising their feelings (80 subjects, 50%); 20% do so very well (N=32; 20%). However, a large group of adolescents was found (N=48; 30%) who reported a poor ability to recognise their moods, and a little over half the adolescents stated that have problems regulating their moods (N=88; 55%).

4.1. Psychopathology

Adolescents were grouped into the three PNP dimensions, percentages of normality in both psychotic and paranoid trends, where the highest percentage was obtained for intermediate values (61.50% and 61.90%, respectively). The intermediate values for neurotic trends reached 75.50%.

As Figure 1 illustrates, adults were grouped into the three PNP dimensions as percentages of normality in neurotic, paranoid and psychotic trends, and shows how they form a group that does not generally present psychopathologies.

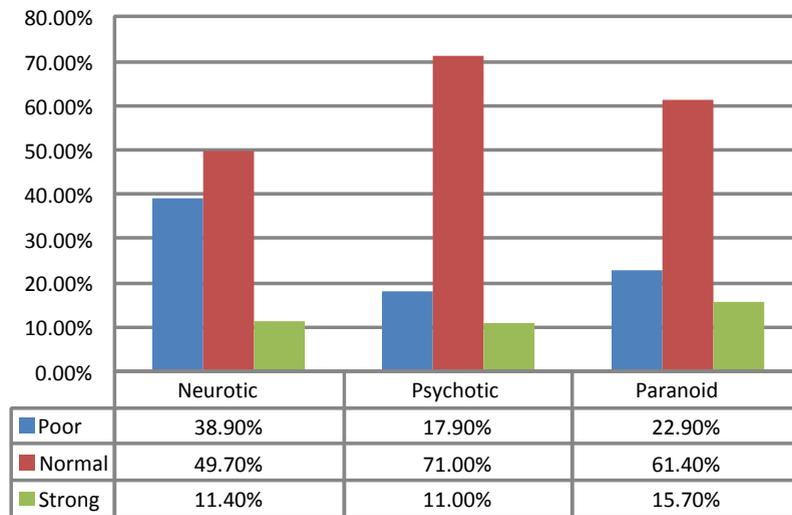


Figure 1. PNP adults

4.2. Differences between adolescents and adults

We found differences in their levels of EI, specifically in Attention to and Clarity of or Understanding Feelings. The differences found for the PNP questionnaire neurotic factor between novel and expert drivers are also stressed (Table 1).

Table 1 Differences between adolescents and adults

|         |            | Mean | X2   |
|---------|------------|------|------|
| TMMS-24 | Attention  | 1.69 | .000 |
|         | Clarity    | 2.03 | .003 |
|         | Regulation | 1.39 | .970 |
| PNP     | Neurotic   | 1.84 | .000 |
|         | Paranoid   | 1.94 | .856 |
|         | Psychotic  | 1.94 | .199 |

## 5. Conclusions

It is worth remembering that growing interest has been shown in recent years in studying the relation between the health/disease process and “positive” variables like EI (Martínez, 2009).

The most recent research works have demonstrated that emotional regulation processes are linked to previous emotion differentiation processes (Feldman et al., 2001). Those who are better able to express their affective experiences can better control and handle their moods. Subjects with poor emotion differentiation have higher psychopathology levels (Petrides, et al., 2010). So we state that emotion differentiation has a strong, but non-specific, effect on psychopathology given its influence on emotional regulation (Silva, 2003). This study indicated that adults seem to better regulate their emotions, which enables them to enjoy better mental health (Bradley, 2000). As adolescents display less emotional regulation, they have a certain tendency to have neurotic-type problems. One of the most important limitations of this study is its sample size, so it will be necessary to extend its sample size and its diversity. Notwithstanding, a relation appears to exist between EI aspects, like emotional regulation, and the existence of certain psychopathologies in some individuals.

## References

- Berben, M., Sierra, M., & Vivero, M. (2008). Inteligencia emocional y habilidades sociales en adolescentes con alta aceptación social. *Electronic Journal of Research in Educational Psychology*, 6(15), 319-338.
- Bradley S. (2000). *Affect regulation and the development of psychopathology*. New York: Guilford Press, 27-39.
- Davis, S. K., & Humphrey, N. (2012). Emotional intelligence as a moderator of stressor-mental health relations in adolescence: evidence for specificity. *Personality and Individual Differences*, 52(1),100-105.
- Fernández-Berrocal, P., Extremera, N. & Palomera, R. (2008). Emotional intelligence as a crucial mental ability in the educational context. In A. Valle, J. C. Núñez, R.G. Cabanach, J. A. González-Pineda and S. Rodríguez (Eds.). *Handbook of Instructional Resources and Their Applications in the Classroom* (pp. 67-88). New York: Nova Science Publishers, Inc.
- Fernández-Berrocal, P., Extremera, N., & Ramos-Díaz, N. (2003). Inteligencia emocional y depresión [Emotional intelligence and depression]. *Encuentros en psicología Social*, 1(5), 251-254.
- Feldman LB, Gross JJ, Conner T, Benvenuto M. Knowing (2001). What you're feeling and knowing what to do about it: mapping the relation between emotion differentiation and emotion regulation. *Cognition and Emotion* 15, 713-724
- Goldenberg, L, Matheson, K., & Mantler, J. (2006). The assessment of emotional intelligence: A comparison of performance-based and self-report methodologies. *Journal of personality assessment*, 86(1), 33-45.
- Lizeretti, N. P., Oberst, U. E., Chamorro, A. & Fariols, N. (2006). Evaluación de la Inteligencia Emocional en pacientes con psicopatología: resultados preliminares usando el TMMS-24 y el MSCEIT. *Ansiedad y Estrés*. Vol. 12 (2-3), pp. 355-364.
- Martínez, A. E. (2009). *Autoconcepto, motivación académica y estrategias de aprendizaje en estudiantes prosociales y no prosociales de educación secundaria obligatoria*. Tesis Doctoral. Universidad Miguel Hernández. Elche. España
- Martins, A., Ramalho, N., & Morin, E. (2010). A comprehensive meta-analysis of the relationship between Emotional Intelligence and health. *Personality and Individual Differences*, 49(6), 554–564.
- Mayer, J. D. & Salovey, P. (1997). *What is emotional intelligence? In P. Salovey and D. Sluyter (Eds.). Emotional Development and Emotional Intelligence: implications for Educators* (pp. 3-31) New York: Basic Books.
- Mikolajczak, M., Luminet, O., & Menil, C. (2006). Predicting resistance to stress: Incremental validity of trait emotional intelligence over alexithymia and optimism. *Psicothema: Revista de Psicología*, 18, 79-88.
- Mikolajczak, M., Luminet, O., Leroy, C., & Roy, E. (2007). Psychometric properties of the Trait Emotional Intelligence Questionnaire: Factor structure, reliability, construct, and incremental validity in a French-speaking population. *Journal of personality assessment*, 88(3), 338-353.
- Mikolajczak, M., Petrides, K. V., Coumans, N., & Luminet, O. (2009). The moderating effect of trait emotional intelligence on mood deterioration following laboratory-induced stress. *International Journal of Clinical and Health Psychology*, 9(3), 455-477.
- Petrides, K. V., Pita, R., & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *British Journal of Psychology*, 98(2), 273-289.
- Petrides, K. V., Vernon, P. A., Schermer, J. A., Ligthart, L., Boomsma, D. I., & Veselka, L. (2010). Relationships between trait emotional intelligence and the Big Five in the Netherlands. *Personality and Individual differences*, 48(8), 906-910.
- Salovey, P., Bedell, B. T., Detweiler, J. B., & Mayer, J. D. (1999). Coping intelligently. *Coping: The psychology of what works*, 141-164.
- 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. *Emotion, disclosure, and health*, 125, 154.
- Silva J. (2003). Biología de la regulación emocional: su impacto en la psicología del afecto y la psicoterapia. *Terapia Psicológica* 21, 163-172
- Tsaousis, I., y Nikolaou, I. (2005). Exploring the relationship of emotional intelligence with physical and psychological health functioning. *Stress and health*, 21(2), 77-86.
- Valls, F (2007). Inteligencia emocional y asesoramiento vocacional y profesional: usos y abuso. *Infocop online*. Recuperado el 18 de diciembre de 2015 de [http://www.infocop.es/view\\_article.asp?id=1332](http://www.infocop.es/view_article.asp?id=1332).