EMOTIONAL FACTORS THAT MEDIATE THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND PSYCHOLOGICAL PROBLEMS IN EMERGING ADULTS

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Abstract

In the last decades, the rates of depression and anxiety in emerging adults have increased compared to other age groups. The aim of the study was to examine the relationship between emotional intelligence and psychological problems, considering the mediating role of emotional factors such as empathy, self-esteem and happiness. The participants were 399 young adults (*M*= 20.38, *SD*= 2.46, 76.9% women) who completed an assessment dossier that included measures of emotional intelligence, empathy, self-esteem, happiness, emotional symptoms and somatic complaints. A cross-sectional design with self-report data was used and structural equation modeling (SEM) with mediation analysis was performed. Emotional intelligence was positively associated with happiness, empathy and self-esteem, and negatively with anxiety, depression, stress and somatic complaints. Happiness was the most relevant mediator in the relationship between emotional intelligence and emotional symptoms. These results stress the need to promote the development of emotional abilities in emerging adults, which fosters happiness and good mental health.

KEY WORDS: emotional intelligence, happiness, empathy, emerging adults, emotional symptoms, self-esteem.

Resumen

En las últimas décadas han aumentado las tasas de depresión y ansiedad en adultos emergentes en comparación con otros grupos de edad. El objetivo del estudio fue examinar la relación entre inteligencia emocional y problemas psicológicos, teniendo en cuenta el rol mediador de los factores emocionales como empatía, autoestima y felicidad. Participaron 399 jóvenes adultos (M=20,38; DT=2,46; 76,9% mujeres) que completaron un dosier de evaluación que incluía medidas de inteligencia emocional, empatía, autoestima, felicidad, síntomas emocionales y quejas somáticas. Se estimó un modelo de ecuaciones estructurales (SEM) con análisis de mediación. La inteligencia emocional se asoció positivamente con felicidad, empatía y autoestima y negativamente con ansiedad, depresión, estrés y quejas somáticas. La felicidad fue la variable mediadora más relevante en

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la relación entre inteligencia emocional y síntomas emocionales. Estos resultados ponen de manifiesto la necesidad de promover el desarrollo de las habilidades emocionales en los adultos emergentes, lo que fomenta un estado de ánimo feliz y una buena salud mental.

PALABRAS CLAVES: inteligencia emocional, felicidad, empatía, adultos emergentes, síntomas emocionales y autoestima.

Introduction

Emotional symptoms can be important indicators of poor psychological adjustment and may be associated with physical and mental health problems. The World Health Organization (WHO) defines mental health as a state of well-being in which individuals realise their abilities and can cope with the normal stresses of life, work productively and contribute to their community, and is related both to mental and psychological well-being (WHO, 2019). Good mental health allows people to manage stress, cope with life's challenges, relate to others and make better decisions.

According to the Spanish National Health Survey 2017 (Ministry of Health, Consumers and Social Welfare [MSCBC] & National Institute of Statistics [INE], 2017), a 1.51 % prevalence of mental health disorders in the adult population (aged 16 years and older) has been reported, with a higher prevalence in females 1.84 % than in males 1.17 %. In Spain, depression and anxiety are among the most frequent chronic diseases, with a 6.7% prevalence, with the highest rates found in women (MSCBC & INE, 2017). Furthermore, WHO (2019) has reported that the basis for lifelong mental health is established in the early years of life, and up to 50% of mental disorders begin in adolescence and early adulthood, before consolidating in adulthood. In particular, emerging adults typically score higher on anxiety, depression, stress and somatic complaints than other age groups (Hicks et al., 2007; Reed-Fitzke, 2020). For this reason, it is particularly relevant to study those protective and emotional variables that impair or influence the mental health of emerging adults.

Considering the health challenges at different stages of human development, it is important to investigate emotional factors to promote mental health in young adults and prevent future problems. Arnett (2000) proposed the existence of a developmental stage other than adolescence and early adulthood. He introduced the term *emerging adults* to refer to the developmental transition between adolescence and adulthood, chronologically situated between the ages of 18 and 25 (although it can be extended to 30). The stage of emerging adulthood is differentiated from other nearby stages by the ongoing exploration of identity and self-focus, instability, optimism towards the future and a feeling of being neither an adolescent nor an adult (Arnett, 2014).

Emerging adults have different characteristics from those of other evolutionary stages and specific needs that must be addressed. University students constitute a representative part of the emerging adults, with 32.1% of the population between

18 and 24 years old attending Bachelor's and Master's degrees at universities in Spain (Ministry of Science, Innovation and Universities [MICIU], 2019). University can be an opportunity to explore one's identity (Chiang & Hawley, 2013). As well as experiencing the characteristics of their developmental stage, university students have to deal with the challenges of starting a new educational phase. They are faced with different financial, social and family issues, as well as making educational decisions (Moore & Shell, 2017). Students often perceive such events stressful (Cheung et al., 2020).

The literature has highlighted the importance of emotional variables in the wellbeing and mental health of emerging adults. Emotional skills can provide psychological resources that help to cope better with the new responsibilities and stressful adult life situations. One of these variables to be considered is emotional intelligence. It is a longstanding scientific research topic, and there is empirical evidence of its positive impact on well-being (Carmeli et al., 2009; de la Barrera, et al., 2019a; Di Fabio & Kenny, 2016; Guerra-Bustamante et al., 2019; Sánchez-Álvarez et al., 2016) and physical and mental health (Davis & Humphrey, 2012; Gomez-Baya et al., 2017; Weytens et al., 2014; Zeidner & Matthews, 2016). Salovey and Mayer have defined it as "the ability to control our feelings and those of others, to discriminate between them, and to use this information to guide our thoughts and actions" (Salovey & Mayer, 1990, p.295). These authors broadened their theory and proposed the Emotional Intelligence model that consists of four hierarchically ordered skills: perception, facilitation, understanding and emotional regulation, emphasising the importance of the cognitive skills implicit in emotionally intelligent behaviour (Mayer et al., 2016). One of the most widely used El assessment instruments is the Trait Meta-Mood Scale (TMMS; Salovey et al., 1995), which measures a person's perception of their emotional skills. The instrument consists of three subscales: attention, clarity and repair. Emotional attention is defined as the degree to which people believe they pay attention to their emotions and feelings, emotional clarity refers to how people believe they perceive their emotions, and finally, emotional repair refers to the ability of individuals to interrupt and regulate negative emotional states and prolong positive ones (Extremera & Fernández-Berrocal, 2005; p. 103).

Emotional intelligence (clarity and repair) has been positively related to wellbeing indicators such as happiness life satisfaction and negatively related to perceived stress, somatic complaints and emotional symptoms (Bardeen & Fergus, 2020; Guerra-Bustamante et al., 2019; Schoeps, et al., 2019a). The emotional attention dimension has been associated with more somatic complaints (Ballespí et al., 2019; Gascó et al., 2018), symptoms of depression (Gomez-Baya et al., 2017), anxiety and stress (de la Barrera et al., 2019b; Hodzic et al., 2016). Emerging adults face major life changes, which can be stressful (Arnett et al., 2011). For this reason, it is important to understand the role of emotional intelligence when managing emotions.

Besides emotional intelligence, other emotional variables such as self-esteem, happiness, and empathy have an impact on mental health (e.g. de la Barrera et al.,

2019a; Kugbey et al., 2018; Reina & Oliva, 2015). Empathy has been defined as the ability to understand and share the feelings of others (Jolliffe & Farrington, 2006). Rosenberg (1965) has defined self-esteem as a component of self-concept and as a set of thoughts and feelings about one's importance and worth, an overall positive or negative attitude towards oneself. Finally, Ryff and Singer (2003) defined happiness as a positive state of mind that fosters growth and well-being and promotes health due to efforts to improve emotional well-being (Akhtar, 2012). The literature on emotional intelligence has suggested a strong positive relationship between these emotional variables, where emotionally intelligent people have shown greater empathy, higher self-esteem and more happiness (Gardner & Lambert, 2019; Guerra-Bustamante et al., 2019; Sa et al., 2019). More specifically, research has indicated a directly proportional positive relationship between happiness and emotional intelligence (Bardeen & Fergus, 2020; Pulido & Herrera, 2018). In addition, it has been observed that while cognitive empathy is associated with all emotional skills, affective empathy is most notably associated with caring for one's own emotions (Reina & Oliva, 2015). Finally, young people with good emotional skills were also found to have higher self-esteem and adequate psychological adjustment regarding their emotions and behaviour (Gardner & Lambert, 2019: Schoeps et al., 2019b).

The set of emotional variables has been identified as a protective factor concerning mental health issues such as somatic complaints, depression, stress and anxiety (Bennik et al., 2019; de la Barrera et al., 2019b; Gentzler et al., 2019; Mao et al., 2020; Millgram et al., 2019; Orth et al., 2014). Research suggests that emotional factors may function as mediators of mental health; for instance, previous studies have noted that low self-esteem and low empathy are risk factors for depression in young adults. Moreover, self-esteem has been found to affect anxiety among university students significantly. In contrast, the literature has reported that with higher levels of subjective happiness and life satisfaction significantly decrease depression symptoms, somatic complaints, as well as slightly reduces perceived stress (de la Barrera et al., 2019b; Gentzler et al., 2019; Millgram et al., 2019).

The present study examines the emerging adulthood stage, specifically the group of young adults continuing their education to pursue further professional training. Emerging adults who are pursuing a university degree are often in the process of exploring their identity as young professionals in training (Chiang & Hawley, 2013). Also, in the transition to university and throughout their entire study period, they may experience major life changes and may experience psychological problems such as anxiety, depression and stress as a result of these changes (Cheung et al., 2020). Therefore, university students have distinctive psychological characteristics within the emerging adult developmental stage, and it is important to identify factors that can prevent the onset of emotional problems. Regarding physical and mental health, a high prevalence of anxiety, depression, stress and somatic complaints has been observed in this population. Studies that have considered emotional variables as protective factors to ensure healthy development in this specific group are scarce. That is why the present study aimed to analyse the

relationship between emotional intelligence and emotional symptoms in emerging adults, considering the mediating role of happiness, self-esteem and empathy. Based on previous studies, the following hypotheses have been proposed: 1) emotional intelligence (attention, clarity, repair) positively influences empathy (cognitive and emotional), self-esteem and happiness, 2) empathy, self-esteem and happiness are negatively related to emotional symptoms (depression, anxiety, stress and somatic complaints), and 3) empathy, self-esteem, and happiness are mediating variables in the relationship between emotional intelligence and emotional symptoms.

Method

Participants

A total of 399 students from 11 public and private universities in 4 autonomous communities in Spain participated in the study. The age of the participants ranged between 18 and 29 years (M=20.38; SD=2.46). 76.9% of the participants were female, with 23.1% of the participants being male. The distribution of the sample by academic year was as follows: 157 first-year students (39.9%), 84 second-year students (21.1%), 39 third-year students (9.8%), 111 fourth-year students (27.8%), 4 fifth-year students (1%), 3 sixth-year students (0.8%), and 1 newly graduated student (0.3%). The following inclusion criteria were applied: (a) acceptance of informed consent; (b) university students had to be between 18 and 29 years of age; (c) university students without any previous university degrees.

Instruments

- a) Ad hoc questionnaire of socio-demographic data. Socio-demographic characteristics of participants were measured through an *ad hoc* questionnaire regarding their age and date of birth, gender, degree, university, academic year, and previous university studies.
- b) Trait Meta-Mood Scale (TMMS-24; Salovey et al., 1995), adapted and validated to Spanish by Fernandez-Berrocal et al. (2004). The self-report instrument assesses the abilities of the respondents to be aware of their own emotions, as well as their ability to regulate them. The global scale consists of 24 items assessing three factors: attention, clarity and repair. Participants responded on a five-point Likert scale (1= Strongly disagree; 5= Strongly agree). The reliability of the subscales of attention, clarity and repair in emotional intelligence presents a satisfactory internal consistency in the sample studied which was estimated by Cronbach's alpha coefficient of .87, .91, .85 respectively.
- c) Somatic Complaint List (SCL; Jellesma et al., 2007), adapted and validated to Spanish by Górriz et al. (2015). The self-report assesses the frequency with which people have experienced pain in the last four weeks. It consists of 11 items grouped into a single factor, with three response alternatives (1= Never; 2= Sometimes; 3= Often) that provide an overall score of the frequency of

somatic complaints. Internal consistency in the present study was satisfactory (α = .80).

- d) Basic Empathy Scale (BES; Jolliffe & Farrington, 2006), adapted and validated to Spanish by Villadangos et al. (2016). This scale consists of 20 items answered on a Likert-type scale with five response options (1= Strongly disagree, 5= Strongly agree). It assesses two factors: emotional empathy and cognitive empathy. Cronbach's alpha coefficient for the current sample was .71 and .77, respectively.
- e) Mood Questionnaire (MOOD; Rieffe et al., 2004), adapted and validated to Spanish by Górriz et al. (2013). The questionnaire assesses the frequency of four mood states: happiness, anger, sadness and fear, during the last four weeks. It is composed of 20 items answered through a Likert-type scale with three response alternatives (1= Never, 2= Sometimes, 3= Often). The reliability of the subscales of sadness, fear, anger and happiness moods shows adequate internal consistency in the sample studied with Cronbach's alpha coefficients of .73, .69, .79, and .87 respectively.
- f) Depression, Anxiety and Stress Scales (DASS-21; Lovibond & Lovibond, 1995), adapted and validated to Spanish by Bados et al. (2005). The reduced version consists of 21 items divided into seven scales assessing the three constructs; in a three-point Likert-type scale (0= Never; 3= Often). Internal consistency is satisfactory in previous studies (Bados et al., 2005), and in the present sample: depression .83, anxiety .74, and stress .83.
- g) Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965), Spanish version by Atienza et al. (2000). The scale consists of 10 items assessing feelings of selfrespect and self-acceptance. The response scale is a four-point Likert-type scale (1= Strongly disagree; 4= Strongly agree). The total score ranges from 10 to 40. Cronbach's alpha for the current sample was .87.

Procedure

Participants were recruited through snowball sampling. An online survey was designed using the LimeSurvey platform. The first step consisted of the study details and the informed consent form. Those students who provided their consent were asked to complete the survey.

Data were collected according to the standards of the Declaration of Helsinki (World Medical Association [WMA], 2013), with approval from the Department of Education, Culture and Sport of the Valencian Community and the Ethics Committee of the Universitat de València. All results were reported following the recommendations of the American Psychological Association (APA) Working Group on Quantitative Research Reporting Standards (Appelbaum et al., 2018).

Data analysis

The SPSS 24 statistical software was used for data analysis. First, descriptive analyses (mean, standard deviation, skewness and kurtosis), frequency analysis and Pearson's bivariate correlations were conducted.

Secondly, complex predictive models were used to understand the potential mediating relationships between variables. Specifically, a predictive full structural equation model was estimated, with analysis of mediating effects (indirect effects). The model was estimated using Mplus 8.3 and robust maximum-likelihood estimation (MLE) to accommodate potential non-normalities in the data. To assess the model's goodness-of-fit, the statistics and indices recommended in the literature (Hu & Bentler, 1999) were used. First, the chi-square statistic (χ^2), the original fit index for structural equation models that assesses the discrepancy between the sample covariance matrices and the estimated model, was calculated. However, additional indices were used given the limitations of the statistic (sample and correlation size, multivariate normality assumption, etc.). Specifically, the comparative fit index (CFI), the root mean square error of approximation (RMSEA) and the standardized root mean squared residual (SRMR).

The CFI is considered acceptable if values are above 0.90, ideally 0.95 (Schermelleh-Engel et al., 2003) RMSEA lower than 0.05 indicates convergence between the model and the analysed data, while values between 0.05 and 0.08 indicate a closer to optimal fit. Hu and Bentler (1999) noted a value of 0.06 as a cutoff criterion. The same interpretation is valid for the SRMR.

In order to study the reliability of the measures, Cronbach's alpha was calculated for the total number of dimensions included in each scale. Alpha is the most widely used reliability index known to the scientific community for assessing the reliability of tests and scales, with values of 0.70 to 0.79 considered moderate and 0.80 or higher as high reliability (Clark & Watson, 1995).

Results

Descriptive statistics and frequencies

Descriptive statistics for skewness and kurtosis (Table 1) were within an acceptable range of \pm 2, indicating a normal distribution of variables, except for the depression variable (Gravetter & Wallnau, 2017).

Variables	Range	Min-Max	M (SD)	Skewness (SE)	Kurtosis (<i>SE</i>)	
Attention	32	8-40	27.32 (34.38)	-0.17 (0.12)	-0.18 (0.24)	
Clarity	32	8-40	24.85 (40.21)	0.10 (0.12)	-0.52 (0.24)	
Repair	32	8-40	25.61 (36.51)	-0.02 (0.12)	-0.49 (0.24)	
Happiness	2	1-3	2.61 (0.18)	-0.63 (0.12)	-0.88 (0.24)	
Emotional empathy	37	18-55	42.87 (34.00)	-0.72 (0.12)	1.06 (0.24)	
Cognitive empathy	25	20-45	37.97 (19.65)	-0.77 (0.12)	1.19 (0.24)	
Self-esteem	18	16-34	23.81 (5.44)	0.07 (0.12)	0.64 (0.25)	
Somatic complaints	1.64	1.00-2.64	1.48 (0.10)	0.91 (0.12)	0.44 (0.24)	
Depression	38	0-38	3.77 (30.61)	2.61 (0.12)	8.75 (0.25)	
Anxiety	28	0-28	4.02 (25.15)	1.70 (0.12)	3.07 (0.25)	
Stress	32	0-32	8.92 (57.65)	0.83 (0.12)	0.20 (0.25)	

 Table 1

 Mean, standard deviations, skewness and kurtosis

Prevalence analyses were conducted using the DASS questionnaire that measures subclinical emotional symptoms (Bados et al., 2005; Lovibond & Lovibond, 1995). Frequencies were calculated for each severity level according to the cutoff criteria recommended by the original authors: normal, mild, moderate, severe and extremely severe. The results were as follows: 13% of the participants showed depression symptoms, among which 2.6% showed severe or extremely severe symptoms; 21.1% showed anxiety symptoms, among which 5.1% were severe or extremely severe; 19.1% of the participants showed stress symptoms, among which 4.8% were severe. For somatic complaints, study participants presented moderate levels (M= 1.48, SD= 0.10), with scores ranging from 1 to 3.

Relationships between variables

Pearson's bivariate correlation (Table 2) showed that emotional skills (attention, clarity and repair) correlate significantly with the mediating variables. Specifically, clarity and repair were positively related to happiness (*r* between .30 and .42; $p \le$.01). All three emotional skills were positively related to cognitive empathy (*r* between .15 and .32; $p \le$.01), whereas emotional empathy only had a positive relationship with mindfulness (*r* = .38; $p \le$.01). Clarity and repair showed a negative relationship with self-esteem (*r* between -.16 and -.22; $p \le$.01).

Variables	1	2	3	4	5	6	7	8	9	10
1. Attention	-									
2. Clarity	.31**	-								
3. Repair	.14**	.44**	-							
4. Happiness	11	.30**	.42**	-						
5. Emotional empathy	.38**	.10	08	.04	-					
6. Cognitive empathy	.31**	.32**	.15**	.18**	.44**	-				
7. Self-esteem	06	.22**	.16**	.20**	.03	.12*	-			
8. Somatic complaints	.13*	23**	30**	46**	.12*	02	24**	-		
9. Depression	.02	25**	28**	44**	09	22**	20**	.47**	-	
10. Anxiety	.07	22**	20**	32**	.05	09	16**	.50**	.63**	-
11. Stress	.10	17**	18**	26**	.04	-0,04	06	.45**	.57**	.74**

 Table 2

 Correlations between variables studied

Note: *p< .05; **p< .01.

In addition, significant correlations were observed between emotional skills and emotional symptoms. In particular, clarity and repair were negatively related to somatic complaints, depression, anxiety and stress (*r* between -.17 and -.30; $p \le .01$). In contrast, the relationship between mindfulness and somatic complaints was positive (*r*= .13; $p \le .05$).

Finally, the results showed that mediating variables significantly correlated with emotional symptoms. Happiness was negatively related to somatic complaints (r= .46; $p \le .01$), while cognitive empathy and self-esteem did so positively (r between .18 and .20; $p \le .05$). Likewise, happiness showed a negative relationship with depression, anxiety and stress (r between -.26 and -.44; $p \le .01$). Cognitive empathy also showed a negative relationship with depression (r= -.22; $p \le .01$). Finally, self-esteem was negatively related to depression and anxiety symptoms (r between -.16 and -.20; $p \le .01$).

Structural models

A fully structural (theoretical) model was proposed. This model aimed to test whether a series of exogenous or initial emotional intelligence variables (attention, clarity and repair) affect depression, anxiety, stress and somatic complaints through a series of mediating variables (empathy, happiness and self-esteem). This first model is shown in figure 1.



Figure 1 Initial model to predict anxiety, depression, stress and somatic complaints

This model states a full mediation. Meaning that emotional intelligence only affects the outcome or response variables through the mediators. When the model was estimated, the fit results were already satisfactory. The chi-square test was statistically significant, and all other fit indices showed that the full mediation model was plausible, $\chi^2(17)=26.73$, p<.001, RMSEA= .04 [90% CI .01-.06], CFI= .99, SRMR= .04. However, several hypothesised relationships were statistically non-significant, so they cannot be considered in the population. They were therefore set to zero, and the model was re-estimated. This modified model fitted the data equally well and was more robust (χ^2 [27]= 43.88, p<.001, RMSEA= .04 [90% CI .02-.06], CFI= .98, SRMR= .05), and is the one that was used. The effect estimates are shown in Figure 2.

The standardised parameter estimators are presented in Figure 2 and Tables 3 and 4. First, attention had a positive direct effect on emotional and cognitive empathy (β between 0.28 and 0.37; p< .001), as well as a negative direct effect on happiness (β = -0.11; p< 0.001). Clarity showed positive direct effects on cognitive empathy and happiness (β between 0.18 and 0.25; p< .001), while repair had only a positive direct effect on happiness (β = 0.36; p< .001).

On the other hand, emotional empathy directly affected somatic complaints (β = 0.12; *p*< .001). Negative direct effects of self-esteem on depression and anxiety symptoms were observed (β between -0.10 and -0.83; *p*< .001). Happiness was the mediating variable that showed negative direct effects on all emotional symptoms (β between -0.18 and -0.46; *p*< .001).

Other valuable information from the model is the indirect effects that can be found in Table 3. Attention had a positive indirect effect on somatic complaints through emotional empathy (β = 0.10; p= .001). Thus, high levels of emotional

attention increase emotional empathy, which results in high levels of somatic complaints. On the other hand, the indirect effects of quality and repair through happiness on emotional symptoms were significant (β between -0.03 and -0.16; *p*<.01). In other words, high levels of emotional clarity and repair increase perceived happiness, which reduces both somatic complaints and symptoms of depression, anxiety and stress.

Figure 2

Final model for predicting anxiety, depression, stress and somatic complaints



The model's predictive ability for each of the response variables was estimated through the corresponding R-squares. Thus, the combination of direct and indirect effects predicts a significant proportion of the variance of somatic complaints (22.6%), of depression symptoms (72.4%), and to a lesser extent of anxiety (9.5%) and stress symptoms (9.4%).

Table 3

Direct effect Direct effect Total indirect Specific of PV on MV of MV on DV indirect effect effect ΡV MV DV β р β р β р β р .37 <.001 .005 .10 .001 .05 012 Emotional e 12 Cognitive e .23 <.001 ----Complaints Self-esteem ---_ _ _ -.11 .035 - 46 <.001 05 Happiness 044 Emotional e .37 <.001 --02 .070 _ _ Cognitive e .23 <.001 --Depression -.83 <.001 Self-esteem Attention -.11 -.18 Happiness .035 <.001 .02 .070 .37 <.001 .03 .052 Emotional e ----<.001 Cognitive e .23 ----Anxiety Self-esteem -.10 .003 _ _ _ -.11 .035 -.29 03 Happiness <.001 .052 Emotional e .37 <.001 .03 .061 ---Cognitive e .23 <.001 --_ Stress <.001 Self-esteem _ -15 _ _ Happiness -.11 .035 -.27 <.001 .03 .061 Emotional e _ _ .12 .005 -.08 .001 _ _ Cognitive e .25 <.001 _ _ _ Complaints Self-esteem _ _ .001 18 <.001 -.46 <.001 -.08 Happiness .014 Emotional e -.03 -_ ----.25 <.001 Coanitive e --_ Depression Self-esteem -.83 <.001 _ _ -Clarity .18 <.001 -.18 <.001 -.03 .014 Happiness -.05 .003 Emotional e _ _ -Cognitive e .25 <.001 -_ --Anxietv -.10 Self-esteem .003 ----.18 <.001 <.001 Happiness -.29 -.05 .003 Emotional e -.05 .004 _ _ _ .25 Cognitive e <.001 Stress Self-esteem 15 <.001 <.001 .18 <.001 -.27 -.05 004 Happiness 12 .005 -.16 <.001 Emotional e ----Cognitive e ----_ _ Complaints Self-esteem _ . _ . -_ -.46 36 <.001 <.001 -.16 <.001 Happiness Emotional e -.07 .001 ---Cognitive e --_ --Depression Self-esteem -.83 <.001 _ _ --Repair Happiness 36 <.001 -.18 <.001 -.07 .001 -.10 <.001 Emotional e _ -_ -_ Cognitive e _ _ -_ Anxiety Self-esteem -.10 .003 -.10 <.001 <.001 <.001 Happiness 36 -.29 Emotional e -.10 <.001 ------Cognitive e ------Stress Self-esteem 15 <.001 _ _ _ _ -.27 Happiness 36 <.001 <.001 -.10 <.001

Direct and indirect effects of the relationship between emotional intelligence, emotional factors and the four outcome variables

Note: PV= predictor variable; MV= mediating variable; DV= dependent variable; Emotional e= Emotional empathy; Cognitive e= Cognitive empathy.

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Discussion

This study aimed to estimate the mediating effect of happiness, self-esteem and empathy on the relationship between emotional intelligence and emotional symptoms in emerging adults. At this stage, people undergo many emotional, family and work-related changes, which makes it necessary to understand the protective characteristics that promote the development of good mental health and allow them to adapt well to the social demands of this transition between adolescence and adulthood (Kugbey et al., 2018). The university students who participated in the present study appear to be particularly affected by the various changes of this life stage as they reported a high prevalence of subclinical emotional symptoms. 13% of the sample studied showed depression symptoms, 21.1% anxiety symptoms and 19.1% stress symptoms. Lower prevalence rates (6.7% of depression and anxiety) have been reported in previous studies (MSCBC & INE, 2017).

Firstly, it was expected that emotional intelligence (attention, clarity, repair) would positively influence empathy (cognitive and emotional), self-esteem and happiness. The results obtained show that this first hypothesis is partially met. The structural equation model found that high attention to feelings is associated with high emotional and cognitive empathy levels but lower self-perceived happiness. Likewise, the predictive model results indicate that people with high emotional clarity have high levels of cognitive empathy and happiness. Finally, the ability to repair emotional conflicts is only positively associated with perceived happiness. Contrary to what was expected, none of the emotional skills appeared to significantly predict self-esteem according to the structural equation model analysed in the present study sample. These results are in line with previous research indicating that emotional clarity and repair are positively associated with high levels of empathy and a variety of indicators of happiness and well-being (Guerra-Bustamante et al., 2019; Prado-Gascó et al., 2018; Schoeps et al., 2019a). Furthermore, the results support that excessive emotional attention leads to lower happiness levels and increased indicators of psychological distress such as emotional symptoms and perceived stress (Bardeen & Fergus, 2020; de la Barrera et al., 2019b; Hodzic et al., 2016). However, the results of the present study do not confirm those of other studies that have reported a positive relationship between emotional skills and self-esteem (Gardner & Lambert, 2019; Schoeps et al., 2019b).

According to the second hypothesis of this study, empathy, self-esteem and happiness were expected to be related to somatic complaints, depression, anxiety and stress. The results partially confirm this hypothesis, showing different prediction patterns depending on the mediating variable. The structural equation model indicated that emotional empathy positively impacts somatic complaints, meaning that emerging adults with higher emotional empathy seem to present more psychosomatic problems. On the other hand, cognitive empathy does not significantly predict emotional symptoms. Additionally, results indicated that people with high self-esteem suffer lower depression and anxiety symptoms. Finally, according to the structural equation model analysed, happiness is the predictor variable that significantly impacts all emotional symptoms. Therefore, university students who perceive themselves as happier show fewer somatic complaints and fewer depressive, anxiety and stress symptoms. Previous studies support these results, pointing out that low self-esteem, low empathy and low happiness levels are risk factors for the development of psychological symptoms (Bennik et al., 2019; de la Barrera et al., 2019a; Gentzler et al., 2019; Mao et al., 2020; Millgram et al., 2019; Orth et al., 2014).

The third hypothesis was that empathy, self-esteem, and happiness are mediating variables in the relationship between emotional intelligence and emotional symptoms. This hypothesis has been partially confirmed. Spillover analyses indicate that emotional empathy mediates the relationship between emotional attention and somatic complaints. Thus, high levels of emotional attention increase emotional empathy, which results in high levels of somatic complaints. Moreover, happiness mediates the association of emotional clarity and repair with emotional symptoms. So, high levels of emotional clarity and repair increase perceived happiness, reducing somatic complaints and symptoms of depression, anxiety and stress. In contrast, the results indicate that cognitive empathy and self-esteem are not significant mediators of the relationship between emotional intelligence and emotional symptoms. These findings are in line with previous research, which suggests that happier people experience less psychological distress in the form of depression, anxiety and stress (Kugbey et al., 2018).

The present study's findings contribute to the literature on the benefits of emotional variables and the prevention of psychological problems in emerging adults. In summary, people with high emotional skills are more capable of empathising with others and experience happiness more frequently. At the same time, they are also better at reducing their unpleasant feelings, which reduces symptoms of anxiety, depression and stress, as well as somatic complaints. The results make it worth highlighting the mediating role of happiness in enhancing the positive effects of emotional intelligence on mental health. Emotionally intelligent people appear to be happier and have better emotional health, projecting their positive mood, which helps others feel better.

This study is not without limitations. Firstly, the sample was limited to the university context only. Also, most of the participants in the study were from the first and second academic years, with a lower proportion in the higher academic years. In order to generalise these results, it would be advisable to replicate the study with a larger and more representative sample of emerging adults, including different academic years and qualifications, as well as those who are employed, unemployed and non-university students. Another limitation refers to the exclusive use of self-reports to assess the variables. Hence, the subjectivity of the responses of emerging adults has been noted, and it would be necessary to complete this information with some objective evidence, such as, for example, longitudinal measurements taken at different periods. This would allow for causality studies and identify the variables that influence emerging adults' mental health more precisely.

In conclusion, this study provides new findings to the existing literature by highlighting the mediating role of happiness between emotional intelligence and emotional symptoms in emerging adults. For this reason, effective tools should be designed to help emerging adults develop good emotional skills in order to increase their happiness and, at the same time, reduce emotional problems (anxiety, depression, stress and somatic complaints). This study contributes to the research on mental health in emerging adults, as this population has different needs and characteristics compared to other developmental stages such as adolescence and adulthood (Arnett, 2000). To date, the effects of emotional intelligence on well-being variables have been studied, but few studies have provided evidence on the benefits of emotional factors as a whole on psychological problems.

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