

Characteristics of Empathy in young people measured by the Spanish validation of the Basic Empathy Scale

Manuel Villadangos¹, José Errasti¹, Isaac Amigo¹, Darrick Jolliffe² and Eduardo García-Cueto¹

¹ Universidad de Oviedo and ² University of Greenwich

Abstract

Background: Empathy is a personality feature that can play a major role in predicting the emotional and social functioning of adolescents (Jolliffe & Farrington, 2006). Recent research confirms the existence of two fundamental dimensions embedded within this construct, Affective Empathy (experiencing a congruent emotional response with another person) and Cognitive Empathy (understanding rationally the emotions of another person). The Basic Empathy Scale (Jolliffe & Farrington, 2006) is an up-to-date instrument which has been reported to satisfactorily measure these two dimensions. **Method:** We used a sample of 752 adolescents (339 males, 413 females) aged 14-25 who completed the Spanish adaptation of BES. Results: Confirmatory factor analysis showed that the Spanish adaptation of the scale had the same bi-factorial structure as the original (CFI = .93). This adaptation also showed both satisfactory reliability (Cronbach's alpha coefficient > .92) and discriminant and convergent validity with regard to measurements of Narcissism, Psychoticism and Agreeableness. Females were found to have higher scores than males both in Affective and Cognitive Empathy. Both subscales show a direct significant correlation with age. Conclusions: The evidence suggested that this revised scale possessed good psychometric properties for evaluating empathy in Spanish young people.

Keywords: Empathy, adolescence, adaptation, scale.

Resumen

Características de la empatía en jóvenes medidas con la adaptación española de la Escala de Empatía Básica. Antecedentes: la empatía es una variable de personalidad que predice buena parte del funcionamiento emocional y social de los jóvenes (Jolliffe y Farrington, 2006). La investigación reciente confirma la existencia de dos dimensiones fundamentales en este constructo: la empatía afectiva -capacidad para experimentar una respuesta emocional semejante a la de otra personay la empatía cognitiva —capacidad para comprender racionalmente las emociones de otra persona—. La Escala de Empatía Básica (Jolliffe y Farrington, 2006) es un instrumento que evalúa satisfactoriamente estas dos dimensiones. Método: una muestra de 752 jóvenes (339 varones, 413 mujeres; 14-25 años) completó una adaptación española de la EEB. Resultados: el análisis factorial confirmatorio mostró que la adaptación española de esta escala tenía la misma estructura bifactorial que la original (CFI= .93). Esta adaptación mostró una fiabilidad satisfactoria (alfa de Cronbach>.92), así como validez discriminante y convergente respecto a medidas del Narcisismo, Psicoticismo y Amabilidad. También se encontró una mayor puntuación en Empatía, tanto Afectiva como Cognitiva, en las mujeres frente a los hombres. Ambas subescalas presentan una correlación directa significativa con la edad. Conclusiones: esta escala se confirma como un instrumento en español con buenas propiedades psicométricas para la evaluación de la empatía.

Palabras clave: empatía, adolescencia, adaptación, escala.

Empathy, or the ability to understand and experience the feelings of others (Jolliffe & Farrington, 2006), plays a fundamental role in personal and social development and is believed to be a basic element in facilitating social integration and cohesion within a community (Ware, Hopper, Tugenberg, Dickey, & Fisher, 2008). There is evidence to suggest that empathy is associated with the establishment and maintenance of relationships (Del Barrio, Aluja, & García, 2004), raises the levels of satisfaction in close relationships (Oberle, Schonert-Reichl, & Thomson, 2010), improves the quality of intra-familiar relationships (Henry, Sager,

Received: March 15, 2016 • Accepted: May 6, 2016 Corresponding author: José Errasti Facultad de Psicología Universidad de Oviedo 33003 Oviedo (Spain) e-mail: errasti@uniovi.es & Plunkett, 1996) and reliably predicts social competencies and interests developed into maturity (Allemand, Steiger, & Fend, 2014). In one specific example, subjects who worked as volunteers to support those affected by a natural disaster, or attended to telephone helplines to fundraise for victims, had higher empathy than a comparable control group of non-volunteers (Paterson, Reniers, & Vollm, 2009). On another hand, a lack of empathy is proposed to be characteristic of people who act in an antisocial manner, particularly those who are aggressive (e.g., Eisenberg, & Strayer, 1987) and who commit serious crimes such as sexual assault (Burke, 2001), child abuse (Wiehe, 2003) and other types of violence (Jolliffe & Farrington, 2004).

The theoretical relationship between empathy and behaviour is relatively straightforward. Individuals with high empathy, possessing increased sensitivity or awareness of the emotions of others, are more likely than those with low empathy to respond in a prosocial manner to people experiencing negative emotions such as fear or distress (Stewart, 2015; Carrier, Spradlin, Brunce, & Rosen, 2015).

Alternatively, low-empathy individuals are free to act without the constraints imposed by the vicarious experience or understanding of the emotional consequences of their actions on others (e.g. Feshbach, 1975). The fear, distress, sadness and other negative emotions experienced by others as a result of the individual's antisocial actions are not factored in as a cost or consequence of the transgression, and therefore not inhibitory for present or future antisocial behaviour (Brewer & Kerslake, 2015; Chiou, Chen, & Liao, 2014; Jolliffe & Farrington, 2011). Having the ability to share or understand another's emotions is like having an emergency handbrake to reduce the likelihood of antisocial behaviour, and those with low empathy are proposed to be missing this ability.

In recent year,s a general consensus has emerged, suggesting that the construct of empathy is comprised of two distinctive dimensions, namely affective empathy and cognitive empathy (e.g., Davis, 1980; Jolliffe & Farrington 2004). Affective empathy is typically conceptualised as a trait, and is defined as a susceptibility to experiencing the emotions of another person. Cognitive empathy is typically conceptualised as a mental ability which facilitates the understanding and identification of the emotions of another person (e.g., Jolliffe & Murray, 2012). The separation of cognitive and affective empathy also appears to have support from neuroscientific explorations which have identified that the affective and cognitive components of empathy have different neuronal pathways and associated neuronal substrates (Shirtcliff et al., 2009).

Further support for the bi-factorial nature of empathy comes from research which has demonstrated that cognitive and affective empathy may have different influences on certain behaviours. For example, and in line with expectations, Jolliffe and Farrington (2011) found that adolescent males who reported frequent bullying had significantly lower cognitive and affective empathy compared to those who did not report bullying. However, when the types of bullying were explored, it was found that males who bullied others indirectly (e.g., spreading malicious rumours) had low affective empathy but average levels of cognitive empathy. The authors suggested that cognitive empathy might be a useful attribute for certain types of bullying, allowing bullies to use their emotional knowledge to bully efficiently. This study also found that low affective but not low cognitive empathy typified the bullying behaviour of females.

The study of gender differences in empathy has consistently shown that females have higher empathy than males, and this is especially the case with affective empathy (Albiero, Matricardi, Speltri, & Toso, 2009; Eisenberg & Strayer, 1987; Jolliffe & Farrington, 2006). Explanations for this finding vary from differences in socialisation (e.g., males are raised to be emotionally resilient and stoic, while females are raised to be attuned to the emotions of others) to biased responding, to self-reported empathy questionnaires in line with these stereotypes (e.g., males are expected to respond less emotionally and females are expected to respond more emotionally and bother genders confirm to these expectations; Lennon & Eisenberg, 1987).

There has been relatively limited study of the relationship between empathy and social class (e.g., Cote, Piff, & Willer, 2013). Generally, however, research appears to suggest that those individuals of lower social class might be more empathic, especially

with regards to affective empathy, than those of higher social class (e.g., Kraus, Cote, & Keltner, 2010). As a result, individuals of lower social class are proposed to be more generous, charitable, trusting and helpful than those of higher social class (Piff, Kraus, Cote, Hayden-Cheng, & Keltner, 2010). It is unknown, however, whether the relationship between empathy and social class might exist similarly outside of North America or with younger populations. There is evidence that levels of affective and cognitive empathy might also be influenced by age. Longitudinal research indicates that empathy increases up to late-adolescence and then remains relatively stable in adulthood (Allemand, Steiger, & Fend, 2014; Eisenberg, Morris, McDaniel, & Spinrad, 2009).

Despite the known limitations (e.g., Eisenberg & Fabes, 1990), the most common method of measuring empathy is self-reported questionnaires, and a number of these devices exist. The Basic Empathy Scale (BES) was developed by Jolliffe and Farrington (2006) and is based on the definition of empathy proposed by Cohen and Strayer (1996), that is, the act of understanding and sharing the emotional context of another person. This approach therefore includes both cognitive and affective components, overcoming the limitations of many other scales. For example, Hogan's Empathy Scale (1969) only provides an assessment of cognitive empathy whilst the Questionnaire Measure of Emotional Empathy developed by Mehrabien and Epstein (1972) only measures emotional empathy.

The Davis Interpersonal Reactivity Index (1980), whilst offering a means of measuring both cognitive and affective dimensions of empathy, possesses a number of items which appear to equate empathy with sympathy (Fernández, Dufrey, & Kramp, 2011). There are clear and important differences, however, between these two constructs, in that empathy involves emotional congruence (experiencing/understanding the emotions of a target person), whereas sympathy involves an additional emotional response to the shared emotion (Eisenberg & Strayer, 1987). One could share/understand another's distress (empathy present) and feel concerned about that person (sympathy present). However, one could also share/understand another's distress (empathy present), but believe that the target person deserves their situation, in which case sympathy would not be present. While both empathy and sympathy are important for a full understanding of behaviour, it is important not to equate these two concepts in measurement devices. Additionally, there is evidence that the concept of sympathy may result in demand characteristics, being more likely than measures of empathy to elicit socially desirable responding (Jolliffe & Farrington, 2006).

The BES has been successfully adapted into a number of different languages including Chinese (Geng, Xia, & Qin, 2012), French (D'Ambrosio, Olivier, Didon, & Besche, 2009; Bensalah, Stefaniak, Carre, & Besche-Richard, 2015), Italian (Albiero et al., 2009), Portuguese (Pechorro, Ray, Salas-Wright, Maroco, & Gonçalves, 2015) and Slovak (Cavojova, Sirota, & Belovicova, 2012). In Spanish, adaptations of this scale have been made in Peru (Merino-Soto & Grimaldo-Muchotrigo, 2015), El Salvador (Salas-Wright, Olate, & Vaughn, 2013), and also in Spain (Oliva, Antolin, Pertegal Rios Parra, Hernando, & Queen, 2011). The results of all these multiple validational tests have confirmed the two-factor solution of Affective and Cognitive Empathy, but in all the previously stated instances, most of the items were removed to facilitate model fit or to seek an adaptation to the culture, vocabulary or linguistic level of the sample.

The BES has also been translated into a version for Spanish children. Sánchez-Pérez, Fuentes, Jolliffe, and González-Salinas (2014) administered a translated version of the BES to a sample of 364 children (182 boys, 182 girls) aged 6-12. A two-factor solution was identified, but three items were removed to facilitate model fit. Additional analyses suggested that older children scored higher than younger children on cognitive empathy, females scored higher than males on affective empathy, and aggression was negatively related to affective empathy but not to cognitive empathy.

The aim of this paper was to attempt to validate the BES for Spanish young people. The current study included those aged 14-25, which is more similar to the age range of the sample used to create the original BES. The existence of the two factors proposed by the authors of the original scale will be studied (Jolliffe & Farrington, 2006). Discriminant and convergent validity of this scale on three personality constructs theoretically related to empathy such as Narcissism, Psychoticism and Friendliness will also be studied. A discriminant negative relationship with Narcissism and Psychoticism and a convergent positive relationship with Friendliness are hypothesized (Barrio, Aluja, & García, 2004). Finally, the relationship of empathy with age will be studied.

Method

Participants

Two samples combined for a total of 752 people aged between 14 and 25, with a mean age of 16.43 years and a standard deviation of 2.74. A total of 339 (45.10%) were male and 413 (54.90%) were female. Table 1 and Table 2 give further details of the sample, showing that most of the sample was of secondary or university age.

Instruments

Socioeconomic status - A socio-cultural and economic level test was used (García-Cueto, Pedrosa, Suárez-Álvarez, & Robles,

		Des	criptio	on of t	Table		Sex a	nd ag	e			
	Age											
	14	15	16	17	18	19	20	21	22	23	24	25
Sex												
Males	118	97	33	19	11	22	11	9	7	5	4	3
Females	117	93	21	24	30	57	21	17	15	10	4	4

Table 2 Description of the sample: level of studies and social class									
	Level of studies		Social class						
	N		N						
Primary	6 (1%)	Lower	45 (14%)						
Secondary	486 (65%)	Lower middle	66 (21%)						
Sixth form (16-18)	23 (3%)	Middle	90 (28%)						
Technical training	84 (8%)	Upper middle	79 (25%)						
University	153 (20%)	Upper	40 (12%)						

2013) to establish the different social classes. This scale has 9 items (e.g. "How many TVs do you have at home?").

Antisocial attitudes and behaviour - The Psychoticism Scale of the Eysenck Personality Questionnaire was used (Eysenck & Eysenck, 1975); this scale has 12 items and measures Eysenck's Psychoticism dimension, namely, interpersonal hostility and lack of empathy (e.g., "Is it better to follow society's rules than go your own way?")

Prosocial attitudes and behaviour - Agreeableness, the Agreeableness Scale from the NEO Five Factors Inventory was used (Costa & McCrae, 1999); this scale has 12 items and measures commitment to other people and concern with social harmony (e.g. "I tend to think the best of people")

Self-focus - Narcissism, the scales of Narcissism-Leadership (11 items, e.g., "I have a natural talent for influencing people") and Narcissism-Exhibitionism (10 items, e.g., "I know that I am good because everybody keeps telling me so") from the Narcissistic Personality Inventory (Raskin & Hall, 1979) were used.

Empathy – the Basic Empathy Scale (Jolliffe & Farrington, 2006) was also used, the aim of the study being to produce a Spanish adaptation of this test. Permission was requested from the authors of the BES scale to adapt the scale to Spanish. The scale was then translated into Spanish by a professional translator. Any suggested modifications were agreed to by the authors. The final version was approved by the translator and a native English speaker with a high level of Spanish. In total, the questionnaire consists of 20 items and uses a 5-point Likert scale answer format ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). It has 9 items related to Cognitive Empathy and 11 items related to Affective Empathy. The adaptation was in line with the guidelines of the International Test Commission (Muñiz, Elosua, & Hambleton, 2013). The final version of the BES in Spanish edition is presented in Table 3.

Procedure

The total sample was made up of two groups, with one group being recruited from 8 secondary schools located in cities of over

Table 3
Items of the Spanish validation of the Basic Empathy Scale

- 01. Las emociones de mis amigos me afectan mucho
- 02. Tras estar con un amigo que está triste por algo, normalmente me siento triste
- 03. Comprendo la alegría de mis amigos cuando algo les sale bien
- 04. Me dan miedo algunos personajes de las películas de miedo
- 05. Me contagio fácilmente de los sentimientos de otra gente
- 06. Me es difícil darme cuenta de cuando mis amigos están asustados
- 07. Me pone triste ver a otra gente llorar
- 08. Los sentimientos de otra gente me dan igual
- 09. Cuando alguien está deprimido normalmente entiendo cómo se sienten
- 10. Normalmente comprendo por qué se asustan mis amigos
- 11. Muchas veces me pongo triste cuando veo cosas tristes en la tele o en el cine
- 12. Me suelo dar cuenta de cómo se siente la gente incluso antes de que me lo digan
- 13. Ver a una persona muy enfadada afecta mis sentimientos
- 14. Normalmente comprendo por qué se alegran mis amigos
- 15. Suelo sentir miedo cuando mis amigos tienen miedo
- 16. Noto rápidamente cuando un amigo está enfadado
- 17. Normalmente me dejo llevar por los sentimientos de mis amigos
- 18. Las desgracias de mis amigos me dejan indiferente
- 19. Normalmente me doy cuenta de los sentimientos de mis amigos
- 20. Me cuesta darme cuenta de cuando mis amigos están contentos

50,000 inhabitants. This resulted in a sample of 432 pupils (233 males and 199 females), with an average age of 14.62 (SD = 0.743) and an age range of 14 to 17 years of age. The other sample group consisted of 320 young people (105 males and 215 female) who were recruited using social networks with first-year Psychology students from the University of Oviedo as a starting point. The age range for this convenience sample was 14 to 25 years of age with an average age of 18.88 (SD = 2.135).

Regarding the first group, authorization and signed consent was obtained, first from the School Council of each school, and then from the pupils' parents. Those pupils who did not return the form with the signed consent of their parents or whose parents refused to allow them to participate in the study were sent to the school library while the study took place. The Basic Empathy Scale, the Narcissism scales and the Socioeconomic Status Questionnaire were administered by the researchers who visited each class. At all times, the confidential nature of the data and the anonymity of the participants was guaranteed. The questionnaires were always administered in a single session, each group coming together in the same classroom. A teacher of the centre was always in the classroom during the application.

Regarding the second group, as well as the Basic Empathy Scale, the Narcissism scales and the Socioeconomic Status Questionnaire, the participants also completed the Agreeableness scale of the NEO-FFI and the Psychoticism scale of the EPQ. Data collection was conducted online and at the same time as the first group and was carried out with computer support.

Data analysis

In order to estimate the reliability of the different tests used, the alpha coefficient for ordinal data was calculated (Elosua & Zumbo, 2008). For the factor analysis of the BES, confirmatory factor analysis was employed, using the polychoric correlation as the input and weighted least squares with mean and variance adjustment (WLSMV) as the estimation method. The M-PLUS programme was used (Muthén & Muthén, 2010). Pearson's correlation coefficient was used to obtain evidence of validity in relation with other variables, and the attenuation errors were corrected. In order to study the differences according to sex, social class and level of studies without increasing the Type 1 error, a MANOVA was carried out.

Results

The results obtained regarding the reliability of the questionnaires can be seen in Table 4. All of the scales showed a

Table 4 Reliability of scales used in the	ne study
Scales	α
Affective empathy	.92
Cognitive empathy	.96
Narcissism-Leadership	.90
Narcissism-Exhibitionism	.92
Agreeableness	.75
Psychoticism	.88
α = Cronbach's alpha coefficient for ordinal data	

high degree of reliability. The internal consistency of the adapted BES, as measured with Cronbach's alpha coefficient, was .96 for Cognitive Empathy and .92 for Affective Empathy. The reliability of the additional measures can also be seen in Table 4.

Due to the goodness of fit found, no respecification of the proposed model for studying the bifactorial structure of the BES was necessary. The comparative fit index (CFI) was 0.93, showing a good fit of the data to the dimensional model in terms of relative fit indices, as the value of the root mean square error of approximation (RMSEA) was a bit high: RMSEA = .16, CI $[0.157, 0.166], \alpha = .1; \chi^{2}(190) = 45095.029, p < .001;$ the value of Tucker Lewis Index was TLI =.92. The confirmatory factor analysis corroborated the fact that the two types of empathy also exist in the Spanish population. Furthermore, the factorial weights of the items were all statistically significant (NC = 95%) ranging from .178 to .908 for Affective Empathy, and ranging from .943 to .635 for Cognitive Empathy. Discrimination indices of the items for the scale of Affective Empathy ranged between .746 and .235, and on the scale of Cognitive Empathy, they ranged between .887 and .584.

Both Cognitive Empathy and Affective Empathy showed a significant positive correlation with age (r = .54 and r = .34, respectively, p < .001 in both cases).

In order to test the convergent and divergent validity of the new empathy scale, scores on this measure were compared with theoretically related constructs using Pearson's correlation, having previously corrected the errors of attenuation. The results are consistent with the hypothesis expressed above and are shown in Table 5. Affective Empathy was significantly and inversely related to the Narcissism-Leadership and Psychoticism scales. Alternatively, Affective Empathy was positively correlated with Cognitive Empathy and Agreeableness. Cognitive Empathy showed a similar pattern of results to that of Affective Empathy, with a significant inverse relationship with Psychoticism and a significant direct relationship with the scale of Agreeableness. There were no significant correlations between Cognitive Empathy and the Narcissism scales.

It was considered important to explore how gender might influence the relationships identified between empathy and the related constructs of Psychoticism and Agreeableness. Table 6 shows the results. For males, Affective Empathy was positively correlated with Agreeableness and negatively correlated with Psychoticism, and this pattern of results was similar for Cognitive Empathy. For females, both Affective and Cognitive Empathy were positively and significantly related to Agreeableness, but neither form of empathy was significantly related to Psychoticism.

Table 5	
Results of Pearson correlations between empathy scales and the scales used to	
study convergent and divergent validity	

	Cognitive empathy	Narcissism leadership	Narcissism exhibitionism	Psychoticism	Agreeableness
Affective empathy	.510**	263**	051	211**	.359**
Cognitive empathy		037	006	164**	.342**
** p<.01					

Table 6
Results of Pearson correlations between empathy scales and the scales used to
study convergent and divergent validity by gender

		ales 339	Females n = 413			
	Affective empathy	Cognitive empathy	Affective empathy	Cognitive empathy		
Agreeableness	.302**	.405**	.286**	.370**		
Psychoticism	185**	142*	066	022		

In order to explore the influence of age in these relationships the sample was separated into those 16 and under and those who were 17 years old or older. Table 7 shows the results. The results suggested that the Agreeableness Scale was significantly and positively correlated with Affective and Cognitive Empathy for both age ranges. The Psychoticism Scale was significantly and negatively related both to Affective and Cognitive Empathy, but only amongst those aged 17 or older.

Table 8 shows the extent to which empathy differences identified between males and females might be accounted for by socio-economic status or level of education. The results showed that there were no statistically significant differences in Affective or Cognitive Empathy as a result of socio-economic status or level of studies. However, the gender differences in both forms of Empathy were statistically significant different, being higher for females, even if the size of the effect of these differences was very low ($\eta^2 < .20$). The confidence level used was 95%.

Discussion

This study examined the psychometric properties of the Basic Empathy Scale, and its reliability and validity in a sample of Spanish youngsters. The confirmatory factor analysis confirmed the bifactorial nature of this empathy scale. These results are

$Table\ 7$ Results of Pearson correlations between empathy scales and the scales used to study convergent and divergent validity by age										
		17 or more years old n = 327								
Affective empathy	Cognitive empathy	Affective empathy	Cognitive empathy							
.371**	.396**	.282**	.408**							
029	005	224**	183**							
	16 or less n = Affective empathy .371**	correlations between empathy s dy convergent and divergent val 16 or less years old n = 425 Affective Cognitive empathy empathy .371** .396**	correlations between empathy scales and the sc dy convergent and divergent validity by age 16 or less years old n = 425 Affective empathy Cognitive empathy Affective empathy 371** 396** 282**							

the same as those obtained by Jolliffe and Farrington (2006), distinguishing between affective empathy (the capacity to feel what the other person is feeling) on the one hand and cognitive empathy (the capacity to understand what the other person is experiencing) on the other. Although the two capacities are clearly separable, there is a strong correlation between them. Another noteworthy psychometric property of the Spanish BES was the high degree of internal reliability of each measurement of empathy, also comparable to that of the original scale.

This research found overall support for the validity of the Spanish BES. When compared with measures of antisocial attitudes and behaviour and self-focus (as measured by the scales of Psychoticism and Narcissism-Leadership) the results were in line with expectations, with individuals scoring higher on affective and cognitive empathy being significantly less likely to endorse such negative characteristics. These findings are not surprising given the description of Psychoticism (Eysenck & Eysenck, 1987), with reference to individuals who are aggressive, cold and impulsive. Similarly, the characteristic traits of Narcissism include a grandiose perception of one's own importance, a need for excessive admiration and a reluctance to recognize or identify with the feelings and needs of others, clearly not traits of empathic individuals.

Additional support for the validity of the Spanish BES comes from the relationships identified with prosocial attitudes and behaviour (as measured by the Agreeableness Scale of the NEO-FFI) and between cognitive and affective empathy. In both comparisons, the relationships identified were significant and positive, and corroborate the results of other studies which identified similar relationships (Claxton-Oldfield & Banzen, 2010; D'Abrosio et al., 2009; Saarnio, 2010).

Interestingly, while the relationship between empathy and prosocial behaviour was invariant for age and gender, the relationship between empathy and antisocial behaviour was only significant for males and those older than age 17. This likely reflects the well-known relationship between gender, antisocial behaviour and age, with males being significantly more likely to be involved in antisocial behaviour than females, and with the peak age of antisocial behaviour being the late teenage years (e.g., Farrington et al., 2003). In support of this, in this study, gender differences in empathy were very marked and even persisted after controlling for differences in social class.

Two limitations of this study that could easily be corrected in future research should be noted. First, we have worked with two samples that completed the questionnaires in different formats: one of them, on a pen and paper booklet at their school, and one of them through an online form. Only one of the two samples completed the Agreeableness and Psychoticism scales. Second, a small portion of young people who formed the online subgroup was minor and it was not possible to obtain parental consent for

	Differe	nces betwee	en mean Af	fective and Co		ble 8 thy values a	according to	social class,	level of studies	s and sex		
	Social class					Level	l of studies			Sex		
	F	d.f.	p	η2	F	d.f.	P	η2	F	d.f.	p	η2
Multivariate contrast	1.88	8	.061	0.024	0.94	8	.479	0.012	22.38	2	<.001	0.127
Affective empathy	-	-	-	-	-	-	-	-	44.12	1	<.001	0.125
Cognitive empathy	_	_	_	_	_	_	_	_	14.16	1	<.001	0.044

their participation in the study. Despite the small number of young people in this situation and the anonymous nature of the responses, this should be solved in future work.

The Spanish Basic Empathy Scale, therefore, appears to be a useful instrument to measure empathy in adolescents. This tool might also be useful in educational assessment, given that empathy is a key element in establishing satisfactory interpersonal relationships and in regulating prosocial and antisocial behaviour. In this sense, it is important to mention its potential usefulness in intervention programmes aimed at correcting aggressive behaviour such as bullying (van Noorden, Haselager, Cillessen, & Bukowski, 2015) or cyberbullying (Runions, 2013).

References

- Albiero, P., Matricardi, G., Speltri, D., & Toso, D. (2009). The assessment of empathy in adolescence: A contribution to the Italian validation of the "Basic Empathy Scale". *Journal of Adolescence*, 32, 393-408.
- Allemand, M., Steiger, A. E., & Fend, H. A. (2014). Empathy Development in Adolescence Predicts Social Competencies in Adulthood. *Journal* of *Personality*, 83(2), 229-241.
- Del Barrio, V., Áluja, A., & García, L. F. (2004). Relationship between empathy and the Big Five personality traits in a sample of Spanish adolescents. *Social Behavior and Personality*, 32(7), 677-682.
- Bensalah, L., Stefaniak, N., Carre, A., & Besche-Richard, C. (2015). The Basic Empathy Scale adapted to French middle childhood: Structure and development of empathy. *Behavior Research Methods*, 1-11.
- Brewer, G. & Kerslake, J. (2015). Cyberbullying, self-esteem, empathy and loneliness. *Computers in Human Behavior*, 48, 255-260.
- Burke, D. M. (2001). Empathy in sexually offending and non-offending adolescent males. *Journal of Interpersonal Violence*, 16(3), 222-233.
- Carrier, L. M., Spradlin A., Brunce, J. P., & Rosen, L. D. (2015). Virtual empathy: Positive and negative impacts of going online upon empathy in young adults. *Computers in Human Behavior*, 52, 39-48.
- Cavojova, V., Sirota, M., & Belovicova, Z. (2012). Slovak validation of the Basic Empathy Scale in pre-adolescents. *Studia Psychologica*, 54(3), 195-208.
- Chiou, W. B., Chen, S. W., & Liao, D. C. (2014). Does Facebook promote self-interest? Enactment of indiscriminate one-to-many communication on online social networking sites decreases prosocial behavior. *Cyberpsychology, Behavior, and Social Networking*, 17(2), 68-73.
- Cohen, D., & Strayer, J. (1996). Empathy in conduct-disordered and comparison youth. *Developmental Psychology*, 32(6), 988-998.
- Claxton-Oldfield, S., & Banzen, Y. (2010). Personality characteristics of hospice palliative care volunteers: The "Big Five" and empathy. American Journal of Hospice and Palliative Medicine, 27(6), 407-412.
- Costa, P. T., & McCrae, R. R. (1999). Inventario de Personalidad NEO Revisado (NEO PI-R). Inventario NEO Reducido de Cinco Factores (NEO- FFI) [NEO Personality Inventory Revised (NEO PI-R). Reduced NEO Five Factors Inventory (NEO-FFI)]. Madrid: TEA.
- Cote, S., Piff, P. K., & Willer, R. (2013). For whom do the ends justify the means? Social class and utilitarian moral judgment. *Journal of Personality and Social Psychology*, 104(3), 490-503.
- D'Ambrosio, F., Olivier, M., Didon, D., & Besche, C. (2009). The basic empathy scale: A French validation of a measure of empathy in youth. *Personality and Individual Differences*, 46(2), 160-165.
- Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology*, 10, 85.
- Eisenberg, N., & Fabes, R. A. (1990). Empathy: Conceptualization, measurement, and relation to prosocial behavior. *Motivation and Emotion*, 14(2), 131-149.
- Eisenberg, N., Morris, A. S., McDaniel, B., & Spinrad, T. L. (2009). 8 Moral cognitions and prosocial responding in adolescence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (pp. 229-265). New York: John Wiley & Sons.
- Eisenberg, N., & Strayer, J. (Eds.) (1987). Critical issues in the study of empathy. In *Empathy and its development* (pp. 3-16). Cambridge: Cambridge University Press.
- Elosua, P., & Zumbo, B. (2008). Coeficientes de fiabilidad para escalas de respuesta categórica ordenada [Reliability coefficients for ordinal response scales]. Psicothema, 20(4), 896-901.

- Eysenck, H. J., & Eysenck, S. B. (1975). Manual of the Eysenck Personality Questionnaire. London: Hodder and Stoughton.
- Eysenck, H. J., & Eysenck. M. W. (1987). Personalidad y diferencias individuales [Personality and Individual Differences]. Madrid: Pirámide.
- Farrington, D. P., Jolliffe, D., Hawkins, J. D., Catalano, R, E, Hill, K. G. & Kosterman, R. (2003). Comparing delinquency careers in court records and self-reports. *Criminology*, 41, 933-958.
- Fernández, A. M., Dufey, M., & Kramp, U. (2011). Testing the psychometric properties of the Interpersonal Reactivity Index (IRI) in Chile: Empathy in a different cultural context. *European Journal of Psychological Assessment*, 27(3), 179-185.
- Feshbach, N. D. (1975). Empathy in children: Some theoretical and empirical considerations. *The Counseling Psychologist*, *5*, 25-30.
- Cueto, E. G., Pedrosa, I., Álvarez, J. S., & Fernández, A. R. (2013) Evaluación del nivel social en población española: creación de un instrumento de medida [Evaluation of the social level in Spanish population: Creation of a measuring instrument]. REMA, 18(2), 1-11.
- Geng, Y., Xia, D., & Qin, B. (2012). The Basic Empathy Scale: A Chinese validation of a measure of empathy in adolescents. *Child Psychiatry* and Human Development, 43(4), 499-510.
- Henry, C. S., Sager, D. W., & Plunkett, S. W. (1996). Adolescents' perceptions of family system characteristics, parent- adolescent dyadic behaviors, adolescents' qualities and empathy. *Family Relations*, 45(3), 283,292
- Hogan, R. (1969). Development of an empathy scale. *Journal of Consulting and Clinical Psychology*, 33(3), 307-316.
- Jolliffe, D., & Farrington, D. P. (2004). Empathy and offending: A systematic review and meta-analysis. Aggression and Violent Behaviour, 9(5), 441-476.
- Jolliffe, D., & Farrington, D. P. (2006). Development and validation of the Basic Empathy Scale. *Journal of Adolescence*, 29(4), 589-611
- Jolliffe, D., & Farrington, D. P. (2011). Is low empathy related to bullying after controlling for individual and social background variables? *Journal of Adolescence*, 34(1), 59-71.
- Jolliffe, D., & Murray, J. (2012). Low *Empathy and Offending*. In R. Loeber & B. C. Welsh. The Future of Criminology. Oxford: Oxford University Press.
- Kraus, M. W., Cote, S., & Keltner, D. (2010). Social Class, Contextualism, and Empathic Accuracy. *Psychological Science*, 21, 1716-1723.
- Lennon, R., & Eisenberg, N. (1987). Gender and age differences in empathy and sympathy. In N. Eisenberg & J. Strayer (Eds.), *Empathy* and its development (pp. 195-218). Cambridge: Cambridge University Press
- Mehrabian, A., & Espstein, N. (1972). A measure of emotional empathy. *Journal of Personality*, 40(4), 525-543.
- Merino-Soto, C., & Grimaldo-Muchotrigo, M. (2015). Validación estructural de la Escala Básica de Empatía (Basic Empathy Scale) modificada en adolescentes: un estudio preliminar [Structural Evaluation of Basic Empathy Scale modified in adolescents: A preliminary study]. Revista Colombiana de Psicología, 24(2), 261-270.
- Muñiz, J., Elosua, P., & Hambleton, R. K. (2013). Directrices para la traducción y adaptación de los tests: segunda edición [International Test Commission Guidelines for test translation and adaptation: Second edition]. *Psicothema*, 25(2), 151-157.
- Muthén, L. K., & Muthén, B. O. (2010). *Mplus User's Guide. Sixth Edition*. Los Angeles, CA: Muthén & Muthén.

- Oberle, E., Schonert-Reichl, K. A., & Thomson, K. C. (2010). Understanding the link between social and emotional well-being and peer relations in early adolescence: Gender-specific predictors of peer acceptance. *Journal of Youth and Adolescence*, 39, 1330-1342.
- Oliva, A., Antolín, L., Pertegal, M. A., Ríos, M., Parra, A., Hernando, A., & Reina, M. C. (2011). *Instrumentos para la evaluación de la salud mental y el desarrollo positivo adolescente y los activos que lo promueven* [Instruments for evaluating mental health and positive adolescent development and ways that promote it]. Sevilla: Consejería de Salud de la Junta de Andalucía.
- Paterson, H., Reniers, B., & Vollm, B. (2009). Personality types and mental health experiences of those who volunteer for helplines. *British Journal of Guidance and Counselling*, 37(4), 459-471.
- Pechorro, P., Ray, J. V., Salas-Wright, C. P., Maroco, J., & Gonçalves, R. A. (2015). Adaptation of the Basic Empathy Scale among a Portuguese sample of incarcerated juvenile offenders. *Psychology, Crime & Law*, 21(7), 699-714.
- Piff, P. K., Kraus, M. W., Cote, S., Cheng, B. H., & Keltner, D. (2010). Having less, giving more: The influence of social class on prosocial behavior. *Journal of Personality and Social Psychology*, 99(5), 771-784.
- Raskin, R. N., & Hall, C. S. (1979). A narcissistic personality inventory. Psychological Reports, 45(2), 590.
- Runions, K.C. (2013). Toward a conceptual model of motive and self-control in cyber-aggression: Rage, revenge, reward, and recreation. *Journal of Youth and Adolescence*, 42(5), 751-771.
- Saarnio, P. (2010). Big five personality traits and interpersonal functioning in female and male substance abuse therapists. Substance Use and Misuse, 45(10), 1463-1473.

- Sánchez-Pérez, N., Fuentes, L. J., Jolliffe, D., & González-Salinas, C. (2014). Assessing children's empathy through a Spanish adaptation of the basic empathy scale: Parent's and child's report forms. Frontiers in Psychology, 5, 1438.
- Shirtcliff, E. A., Vitacco, M. V., Graf, A. R., Gostisha, A. J., Merz, J. L., & Zahn-Waxler, C. (2009). Neurobiology of empathy and callousness: Implications for the development of antisocial behavior. *Behavioral Sciences and the Law*, 27(2), 137-171.
- Salas-Wright, C. P., Olate, R., & Vaughn, M. G. (2013). Assessing empathy in salvadoran high-risk and gang-involved adolescents and young adults: A Spanish validation of the Basic Empathy Scale. *International Journal of Offender Therapy and comparative Criminology*, 57(11), 1393-1416.
- Stewart, S. H. (2015). Commentary: Do motivations for using Facebook moderate the association between Facebook use and psychological well-being? Frontiers in Psychology, 6, 1483.
- Van Noorden, T. H., Haselager, G. J., Cillessen, A. H., & Bukowski, W. M. (2015). Empathy and involvement in bullying in children and adolescents: A systematic review. *Journal of Youth and Adolescence*, 44(3), 637-657.
- Ware, N. C., Hopper, K., Tugenberg, T., Dickey, B., & Fisher, D. (2008).
 A theory of social integration as quality of life. *Psychiatric Services*, 59(1), 27-33.
- Wiehe, V. (2003). Empathy and narcissism in a sample of child abuse perpetrators and a comparison sample of foster parents. *Child Abuse* and Neglect, 27(5), 541-555.