

Do parents and children know each other? A study about agreement on personality within families

Luis F. García, Antón Aluja, Óscar García* and Roberto Colom**

University of Lleida, * European University of Madrid and ** Autonomous University of Madrid

The relationships between self-report and observer-rating versions of personality questionnaires within families in the Spanish cultural context were studied. In the first sample, 336 couples rated the personality of one of their children. The children also assessed their own personality. Goldberg's adjectives were administered. In the second sample, 120 university students rated the personality of their parents. Both parents also assessed their own personality. In this case, Goldberg's adjectives and the NEO-PI-R were administered. Results replicate the level of agreement found in other cultural contexts. Correlations were around .40, and the effect size of the mean differences was not large. Children were more accurate than parents, larger agreement coefficients were found for the NEO-PI-R than for Goldberg's adjectives in Sample 2, especially for the Openness factor, and no substantial role for the sex variable was found in either sample. Implications and limitations of the present study are discussed.

Se conocen bien los padres y los hijos? Un estudio sobre el grado de acuerdo en personalidad dentro las familias. Se estudiaron las relaciones entre autoevaluaciones y heteroevaluaciones de cuestionarios de personalidad en contextos familiares españoles. 336 matrimonios evaluaron la personalidad de uno de sus hijos. Al mismo tiempo, cada hijo se autoevaluaba. Se aplicaron los marcadores de Goldberg. En una segunda muestra, 120 estudiantes universitarios evaluaron la personalidad de ambos padres. Al mismo tiempo, ambos padres se autoevaluaron. Se aplicaron los marcadores de Goldberg y el NEO-PI-R. Se replica el grado de acuerdo encontrado en otras culturas, siendo las correlaciones entre autoevaluaciones y heteroevaluaciones de alrededor de 0.40, y con tamaños del efecto de las diferencias de medias no grandes. Se observa que: 1) los hijos son más acertados que los padres; 2) el grado de acuerdo es más alto para el NEO-PI-R que para los marcadores de Goldberg, especialmente en el factor de Apertura a la Experiencia; y 3) la variable sexo no afectó a los resultados. Se discuten las implicaciones y las limitaciones del presente estudio.

The assessment of personality from early childhood to late adolescence is receiving a great effort from personality researchers (Caspi, 1998). These efforts have a twofold origin. The first one is the development of FFM (Five Factor Model) measures adapted to children (e.g., Mervielde, Buyst, & De Fruyt, 1995) and adolescent populations (e.g., John, Caspi, Robins, Moffitt, & Stouthamer-Loeber, 1994). The second one comes from the interest of the within-families sources of variance on children's personalities (Musitu & Garcá, 2004). In this sense, a better understanding of the relationships among parents and their sons/daughters can be gathered by using the third person versions of the personality questionnaires. Markey, Markey, Tinsley and Erickson (2002) found that preadolescents' self-ratings were found to moderately agree with mothers' ratings of their children's personalities, suggesting not only the potential utility of using

other-reports of preadolescent personality but also the appropriateness of using self-reports. This utility has even been demonstrated when unknown observers rated to the person in observational settings (Gosling, Rentfrow, & Swann, 2003).

At the structural level, it is well established that a five-factor structure can be recovered from third person versions of questionnaires irrespective of the kind of observer, parents or teachers (Mervielde et al., 1995; Parker & Stumpf, 1998; Resing, Bleichrodt, & Dekker, 1999). This resemblance at the structural level has also been accompanied by an agreement within families. The levels of agreement reported across the five factors were 0.33 for non-gifted adolescents (Markey et al., 2002), 0.45 for gifted adolescents (Parker & Stumpf, 1998) and 0.43 for college students (Funder, Kolar, & Blackman, 1995). Thus, a better understanding of the personality traits may be obtained when both self- and other-ratings are employed (Van Aken, Van Lieshout, & Haselager, 1996). In fact, the agreement between self-reports and observer-ratings can be used as an indicator of the reliability of individual cases in the studies about recovered memories (Piedmont, McCrae, Riemann, & Angleitner, 2000).

Previous studies about parent-children agreement usually incorporate one of the parents only (e.g., Markey et al., 2002), or

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Correspondencia: Luis F. García

Facultad de Psicología

University of Lleida

25192 Lleida (Spain)

E-mail: lfgarcia@pip.udl.es

a consensus rating of both parents (Parker & Stumpf, 1998). Besides, the questionnaires were reduced versions of the Big-Five measures (especially the NEO-FFI), or scales specifically adapted to measure the Big-Five. On the other hand, the role of the sex variable of the rated person has not been explored. All studies examine the agreement without distinguishing between sons and daughters, or between fathers and mothers.

The aim of the present article is to replicate the relationships between self-report and observer-rating versions within families in a different cultural context. It is intended to test if there are similar agreement ratios when the parents or their children rated each other. Thus, we wonder a twofold question: Are parents able to predict the personality of their children? Are children able to detect what is the personality of their parents? Further objectives are to test if different questionnaires measuring the Big-Five could have a similar agreement ratio within families, and if the sex variable plays any role on the agreement observed.

Method

Participants

Two samples were contemplated in the present study. In the first one, 336 couples (Father's mean age: 51.13 [s.d.= 6.17] / Mother's mean age: 48.39 [s.d.= 5.45]) rated the personality of one of their «children» (336 university students: 78 males, and 258 females with a total mean age of 20.35 [s.d.= 5.45]). Also, children assessed their own personality through self-reports. In the second one, 120 university students (17 males, and 102 females. Total mean age of 21.73 [s.d.= 2.54]) rated the personality of his/her parents (Father's mean age: 52.37 [s.d.= 5.63] / Mother's mean age: 49.14 [s.d.= 5.33]). Also, both parents assessed their own personality through self-reports. The approximate percentages of different educational levels reported by fathers and mothers (almost equal in both cases) were: 10% (without formal education), 30% (Spanish Compulsory Education), 15% (Technical or Occupational school), 15% (High-School), and 20% (University level).

Measures

In both samples, Spanish-speaking versions of the 50 Goldberg's adjectives in both self-report and observer-rating versions were administered. Besides, in the second sample, university students and their parents also filled out the Spanish version of the NEO-PI-R (Forms R and S). For sample 1,

reliability coefficients were higher than 0.80 for the five factors irrespective of the kind of the version (self-report or observer-ratings), except for the Openness factor in the self-report version ($\alpha = 0.69$). For the second sample, reliability coefficients are shown in table 1. In general, those values were high, and match those of the Spanish general population (Aluja, García, & García, 2002; García, Aluja, & García, 2005). It deserves to be mentioned that coefficients obtained from the observer-ratings scales were as high as those obtained from self-reports. An empirical result already obtained in other studies using questionnaires in third person (Angleitmer, 2002).

Results

Table 2 shows the descriptives (mean and standard deviation) for both samples in any condition. When comparing the means in independent groups it is necessary to keep in mind the effect size (Cohen, 1962, 1969). The effect size tells us something very different from the p value, which indicates the obtained probability of Type II error in a test of statistical significance. According to Rosenthal (1994), a p value reported as 'statistically significant' does not mean that the effect is large, nor does a p value reported as 'no significant' imply a trivial result. Effect size indexes and conventional values for these are given for operationally defined small (.20), medium (.50) and large effects (.80). Although the paired difference t-test show several significant differences across versions, none reached a effect size of 0.80, and only three reached a effect size larger than 0.50 (0.77 for the N factor in the first sample, and 0.55 and 0.53 for the E and C factors, respectively, for the NEO-PI-R referred to the mother in the second sample). So, means differences are not of great magnitude.

Table 3 shows the correlations between self-reports and observer-ratings versions. All correlations were significant ($p < .001$). In general, values were as high as previous evidences (e.g., Angleitmer, 2002; Markey et al., 2002). For sample 1, parents were more accurate for the E and C factors whereas average coefficients for O and A can be considered low. In general, mothers also demonstrate to be slightly better than fathers in the assessment of their children's personality. Besides, when a daughter is rated, the average correlation for the Five-factors was 0.35 and 0.29 for mothers and fathers, respectively. So, mothers match better with the personality profile reported by the own daughter. However, this difference vanishes when the observed person is their son, being the average correlation in this case around 0.44 for both parents.

Table 1
Reliability coefficients in sample 2 after self-report and observer-ratings versions

Version		NEO-PI-R					Goldberg				
		N	E	O	A	C	N	E	O	A	C
Self-report	Fathers	.86	.81	.83	.80	.88	.82	.82	.81	.86	.80
	Mothers	.87	.82	.74	.74	.81	.78	.86	.72	.76	.77
Observer-ratings	Fathers	.89	.87	.88	.90	.93	.81	.88	.84	.86	.87
	Mothers	.91	.83	.84	.83	.88	.82	.84	.74	.78	.80
Average		.88	.83	.82	.82	.88	.81	.85	.78	.82	.81

Table 2
Descriptives (Mean [M] and Standard deviation [SD] for self-report and observer-ratings versions in both samples

	Sample 1						Sample 2															
	Self-report		Fathers		Mothers		NEO-PI-R					GOLDBERG										
							Fathers		Mothers			Fathers		Mothers								
			Observer-ratings		Self-report		Observer-ratings		Self-report		Observer-ratings		Self-report		Observer-ratings							
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
N	5.1	1.2	6	1.1	6	1.1	79.8	23.4	74.1	22.6	87.8	24.2	84	25.4	6	1	6.2	1	5.9	1	5.7	1
E	6.4	1.1	6.6	1.3	6.7	1.1	100.5	20.4	104.8	22.1	98.2	20.6	109	18.6	6.3	1	6.5	1.1	6.3	1.1	6.7	.9
O	6.6	.7	6.9	.9	7	.9	89.7	20.5	88.8	22.3	93.4	16.9	91.6	18.2	6.2	1	6.3	1	6.3	.8	6.5	.8
A	7	.9	7.1	1.1	7.2	1.1	129	18.3	122.7	21.7	136.2	15.8	134.5	16.5	7.1	1	7.1	.9	7.4	.7	7.5	.7
C	6.8	1	7.1	1.1	7.2	1.1	136	22.3	137.6	26.1	138	17.7	147.7	18.6	7.3	.8	7.4	1.1	7.7	.6	7.8	.7

Table 3
Correlations between self-reports and observer-ratings in both samples. Data are presented separately for fathers and mothers in sample 1 and for instruments in sample 2. Average correlations are also shown

	Sample 1			Sample 2		
	Fathers	Mothers	Average	NEO-PI-R	Goldberg	Average
N	.30	.39	.35	.47	.42	.45
E	.44	.51	.48	.61	.55	.58
O	.23	.16	.20	.59	.33	.46
A	.28	.29	.29	.46	.35	.41
C	.40	.52	.46	.43	.41	.42
Average	.34	.37	.36	.51	.41	.46

For sample 2, obtained correlations for both father and mother were combined in order to obtain one coefficient for questionnaire and factor (table 3). For Goldberg’s adjectives, results were quite similar to the sample 1, with E, N and C being the traits with a better agreement, and A and O with the worst. However, the agreement is larger for this sample than for the first one. It would suggest that children assess more accurately to their parents than the reverse.

On the other hand, correlations obtained with the NEO-PI-R were higher than those of the Goldberg’s adjectives for the five factors, especially for O and A. This pattern is not attributable to differences on reliabilities since both instruments get similar psychometric properties. Parker and Stumpf (1998) already obtained low coefficients for the Openness factor except for the NEO-FFI. The present study reproduces this pattern.

Regarding the sex of the respondents, the low number of sons for this second sample does not let us to analyze appropriately the role of the sex variable. But, it is possible to explore whom their children more accurately predict. The average correlations for the NEO-PI-R were 0.52, and 0.51 for fathers and mothers, respectively. For Goldberg’s adjectives the values were 0.44, and 0.39 for fathers and mothers, respectively. In this case, the little difference found for the Goldberg’s adjectives is not replicated with the NEO-PI-R.

Discussion

The answer to both questions is affirmative. Thus, students as well as parents predict adequately the personality of their first-degree relatives. The present study replicate previous studies about agreement

between self-reports and observer ratings within families (Markey et al., 2002; Parker & Stumpf, 1998) in the Spanish cultural context.

In spite of the significant differences of the means across questionnaire versions, a careful study of the effect sizes suggests that such differences are not especially relevant. This fact reinforces the view of the high agreement within families. Average coefficients obtained through Goldberg’s adjectives were larger in the second sample. This pattern of results suggests that children were more accurate than parents in their judgments, especially for the Openness factor. Cohort differences on variables such as age, education, and intelligence could play a relevant role on this topic.

The low coefficients for the Intellect factor measured through Goldberg’s adjectives do not extend to the Openness factor from the NEO-PI-R. This result suggests sharp differences between both scales, although they loaded on the same factor when they were analyzed altogether (Aluja et al., 2002), and suggest an effect of the questionnaire in other studies (Parker & Stumpf, 1998). Only the Openness factor obtained from the NEO-PI-R (or its reduced version) would present an agreement ratio between self-report and observer version satisfactory. Another piece of data in supporting of this view was the strong agreement ratio between couples obtained by Costa and McCrae (1988) for the Openness factor using the NEO-PI.

Regarding of the role of the sex variable, sons are more exactly predicted than daughters, and mothers know better their daughters than fathers do. A similar advantage is seen for fathers in sample 2. However, this effect disappears when differences are analyzed through the NEO-PI-R. This fact puts caution on the differences observed for the sample 1.

Finally, the mean age of the «children» samples is a limitation as well as an advantage of the present study. The latter is due to that there are no cognitive handicaps, or lack of knowledge about parents and children, that can bias the judgments about their personalities (Markey et al., 2002). However, it is also a limitation of the present study since our «children» samples are already far from the childhood and adolescence age. On the other hand, the present study presents two disadvantages: 1) the educational level of the sons/daughters. All of them were university students. This characteristic implies a high level in certain psychological characteristics necessary to attain an advanced educational level as, for instance, intelligence and conscientiousness; and 2) no systematic sampling procedure was followed to obtain the present sample, so results of the current study may not be applied to general population.

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