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ON THE RELATIONSHIP BETWEEN COLLECTIVISM AND EMPATHY IN THE CONTEXT OF PERSONALITY TRAITS

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Abstract. The current research was undertaken with an aim to provide empirical evidence to the proposed relationship between the constructs of empathy and collectivism. Accordingly, following the hierarchical model of collectivism (Realo, Allik, and Vadi 1997), the study focused upon the relations between collectivistic attitudes and empathy – seen as a multi-dimensional construct consisting of both *affective* and *cognitive* components (Davis 1980). The results showed that links between the collectivistic attitudes and empathy were first and foremost due to correlations between the affective aspect of empathy and the family- and society-related forms of collectivism. To test whether and to what extent the hypothesized relationship between empathy and collectivistic attitudes may be attributed to their relations with Agreeableness, we also examined relations of collectivism and empathy with underlying personality dimensions. The results of multiple regression suggested that at least the affective aspect of empathy has an independent contribution to the prediction of the general collectivism index COL and that the NEO-PI-R domain Agreeableness does not fully explain the relationship between the constructs of collectivism and affective aspect of empathy. Yet, the established empirical relationship between empathy and collectivistic attitudes in our research was somewhat weaker than one would expect on the basis of the relevant theoretical statements – nerely certain forms of collectivistic attitudes appeared to be moderately and selectively related to certain specific manifestations of empathy – the results of our study suggest that empathy, on the whole, cannot be considered as an essential attribute of collectivism, at least at the personal level.

On the Relationship Between Collectivism and Empathy in the Context of Personality Traits

Individualism and collectivism concepts have been in the limelight in cross-cultural psychology since the early 1980s. The constructs have been found to be universal dimensions that can explain and predict a wide range of similarities and differences both within and across cultures (see Oyserman, Coon, and Kemmelmeier

2002; Triandis 1995, for overview). Emerging as a bipolar unidimensional construct in Hofstede's (1980) cultural level study of work-related values, later research has suggested the separate composition of individualism and collectivism constituting two independent factors both at the cultural and individual levels[1] (Freeman 1996; Gelfand, Triandis, and Chan 1996; Rhee, Uleman, and Lee 1996; Triandis et al. 1986; Triandis, Bontempo, Villareal, Asai, and Lucca 1988; Triandis, McCusker, and Hui 1990). Moreover, it has been shown that both individualism and collectivism are most likely multifaceted constructs – each composed of many different subforms (e.g., Hui 1988; Realo, Allik, and Vadi 1997; Triandis et al. 1986). Individualistic and collectivistic tendencies may also considerably vary in regard to different target-groups (Hui 1988; Hui and Triandis 1986; Rhee et al. 1996) and to various domains of social relations (Allik and Realo 1996; Realo et al. 1997). Subsequently, various life situations and social demands may selectively endorse different patterns of individualism and collectivism (Realo et al. 1997).

Generally, individualism and collectivism are seen as characteristics of culture. At the same time, however, the constructs are treated as individual-level phenomena. To distinguish the personality constructs from the cultural, the use of other terms at the individual level, such as *idiocentrism* and *allocentrism* (Triandis, Leung, Villareal, and Clack 1985) has been proposed. In this study, although we observe allocentrism and idiocentrism we will mostly use the terms of collectivism and individualism as elucidated in our previous works (cf. Realo et al. 1997).

Attributes of individualism and collectivism

Both at the cultural and individual levels of research much attention has been paid to the basic attributes of individualism and collectivism in various domains of human existence such as self-perception, attribution, identity formation, perception and expression of emotion and emotional experience, cognition, motivation, communication, etc. (e.g., Triandis 1995, 2001). Yet, only some of these attributes have been obtained on the basis of empirical evidence – many characterizations are rather stereotypic attributions derived either from personal observations or research and writings in various areas of social sciences (Kagitçibasi 1997). Consequently, as suggested by Kagitçibasi (1997) in her comprehensive overview of the topic, more "studies are needed on many of the attributes of Individualism/Collectivism that have been proposed in the literature and as yet have received little empirical support" (p. 14).

Along with several other constructs, **empathy** makes an excellent candidate to the above-mentioned list of attributes of individualism and collectivism composed merely on the theoretical basis. According to Triandis (1994a 1995), on the one

[1] In most recent papers, however, Triandis has claimed that at the cultural level individualism and collectivism are still the polar opposites of each other but orthogonal at the individual level of analysis (Triandis and Suh 2002).

hand, empathy belongs to the list of defining attributes of collectivists. Also, as summarized by Church and Lonner (1998) in their review of the study of personality across cultures, concepts of being attentive and empathic are among personality and value tendencies that have often been associated with collectivism in the theoretical literature. On the other hand, despite the theoretical statements about the relationships between the two constructs, we were not able to find a single research to study that relationship empirically. Accordingly, the current research was undertaken with an aim to provide an empirical evidence to the proposed relationship between the constructs of empathy and collectivism at the individual level.

Theoretical grounds for the relationship between collectivism and empathy

On what basis is the construct of empathy listed as the attribute of collectivism? In this respect, unfortunately, both Triandis (1994a, 1995) and Church and Lonner (1998) give no further explanations. Hence, an attempt will be made to answer this crucial question in the following paragraphs.

Over the decades, empathy has been defined in a number of ways, yet it is possible to detect some recurrent themes. Broadly speaking, the definitions of empathy can be divided into two distinctive groups, emphasizing either the *cognitive* or the *affective* aspects of empathy. From the cognitive perspective, empathy "refers to the attempt by one self-aware self to comprehend unjudgmentally the positive and negative experiences of another self" (Wispé 1986:318). At the same time, many researchers have defined empathy in more affective terms – "as a vicariously induced emotional reaction based on the apprehension of another's state or condition that is similar to the other's emotional state or consistent with the other's situation" (Eisenberg 1988:15) – stressing the emotional facets of empathy. Such a twofold approach to the concept of empathy has forced several researchers and theorists to adopt a view of empathy as a multidimensional construct consisting of both affective and cognitive components (Davis 1980, 1983, 1996).

Taken together, empathy could be described as understanding the others' mental and emotional states and as the concern for the feelings, wants, and needs of other people (cf. Davis 1980). How do these characteristics relate to the individualism and collectivism constructs? From extensive literature on the topic we derived two major themes – recognition and expression of emotions and the nature of self-construals – that may help to cast some light on that issue.

As claimed by several researchers, individualists and collectivists may differ in the experience and expression of positive and negative emotions both within and across cultures (Gudykunst and Ting-Toomey 1988; Markus and Kitayama 1991; Matsumoto 1989; Singelis 1994; Stephan, Stephan, and DeVargas 1996; Triandis 1994b, 1995). The emotions of individualists, for instance, are more self-focused – the expression of emotions (both positive and negative) serves the goal to facilitate personal achievement and maintain the sense of distinctiveness and independence. The emotions of collectivists, on the contrary, tend to be more

socially engaged and other-focused (cf. Kitayama, Markus, and Kurokawa 2000). With an aim to maintain the group harmony and interdependence, it is important for collectivists to recognize and understand the emotions of others, primarily of the ingroup[2] members. Recognition and understanding the emotions, in their turn, appear to be essential attributes of the affective aspect of empathy.

The second reason for listing empathy among the attributes of collectivism may lie in the nature of self-construals (Markus and Kitayama 1991) that has been found to be one of the four basic universal attributes of individualism-collectivism as proposed by Triandis (1995). People with independent self-construals (individualists), view the self as "bounded, unique, stable" and separate from others and social context – it is one's inner attributes and own goals that regulate social behavior. Those with an interdependent self (collectivists) view the self as intertwined with others – they try to be attentive to (close) others' feelings, needs, and unexpressed thoughts, to "read the others' minds." Following the definitions of empathy introduced above, "reading the others' minds" seems to be closely related to the cognitive aspect of empathy.

Agreeableness – a connecting link between empathy and collectivism?

Another connecting link between the constructs of empathy and individualism-collectivism could be agreeableness, which, despite different labels and theoretical perspectives has been long recognized as a basic dimension of personality among personality psychologists (see Graziano and Eisenberg 1997, for a detailed overview). According to Graziano and Eisenberg (1997), agreeableness could be best conceptualized as "a general latent variable that summarizes more specific tendencies and behaviors (e.g., being kind, considerate, likable, cooperative, helpful)" (p. 815). Agreeableness arises as a major dimension both from natural language approach (Goldberg 1981) and psychological questionnaires tradition (Costa and McCrae 1985, 1992). In their operationalization of the five-factor model of personality – the Revised NEO Personality Inventory (NEO-PI-R) – Costa and McCrae (1992) consider Agreeableness as one of the five major domain scales consisting of six more specific facet scales: Trust, Straightforwardness, Altruism, Compliance, Modesty, and Tender-Mindedness. By their definition, "Agreeableness is primarily a dimension of interpersonal tendencies" (Costa and McCrae 1992:15). Out of the six facets of Agreeableness, Tender-Mindedness measuring "attitudes of sympathy and concern for others" (Costa and McCrae 1992:18), is conceptually very closely related to the construct of empathy. Indeed, the NEO-PI Agreeableness has been found to be substantially related to empathy (Hahn and Comrey 1994) measured by the Comrey Personality Scales (Comrey 1970).

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[2] According to Triandis (1995): "Ingroups are groups of individuals about whose welfare a person is concerned, with whom that person is willing to cooperate without demanding equitable returns, and separation from whom leads to anxiety" (p. 9).

Along with the described cognitive approach, several biologically based affective/motivational models of agreeableness exist in the literature (see Graziano and Eisenberg 1997). Yet another perspective on agreeableness involves prosocial behavior, typically defined "as voluntary behavior to benefit another" (Graziano and Eisenberg 1997:808). Existing research appears to suggest that prosocial behavior may have significant dispositional components. Among various personal characteristics (many conceptually related to altruism), empathy (Eisenberg, Fabes, and Miller 1991) as well as perspective-taking ability (Underwood and Moore 1982) have been empirically linked with prosocial behavior. Namely, empathy is often seen as a key determinant of prosocial behavior, which in its turn, "can be conceptualized as a form of agreeableness" (Graziano and Eisenberg 1997:816).

Not only empathy but also collectivism has been found to have its roots in the general personality structure (including agreeableness). One of the few empirical attempts to shed some light on the issue was made by Realo with colleagues (1997) who proposed that the variability of collectivistic attitudes "is determined by a particular combination of general (personality trait-like) and specific (cultural-situational) factors" (Realo et al. 1997:113). With respect solely to collectivism they suggested that collectivism consists of at least three hierarchically interrelated yet clearly distinguishable subforms focused on relations with family (*Familism*), peers (*Companionship*), and society (*Patriotism*) (Allik and Realo 1996). In more precise terms, they showed that the various kinds of collectivism can be distinguished from one another by the type of social relations they are focused on (e.g., family, peers, and society) and united on the basis of trait-like attributes that are based on the Big Five factors Closedness (as opposite to the Openness to Experience) and Agreeableness (Realo et al. 1997) as measured by the NEO Personality Inventory (NEO-PI, Costa and McCrae 1985). In due course, on the average, agreeable and closed individuals tend to be more collectivistic in their relations with other people regardless of the particular type of social relations they are engaged in. At the same time, the magnitude of their collectivistic attitudes depends also on the sociocultural environment and cultural traditions to which they belong.

Aims of the study

In summary, the evidence from both the cognitive and prosocial behavior approach suggests that empathy can be conceptualized as a manifestation of agreeableness. Following the idea that empathy is also seen as an attribute of collectivism, one may expect that both collectivistic attitudes and empathy share a common ground in personality traits via significant relationships with agreeableness. Subsequently, the first aim of our study was to examine the relations between the collectivistic attitudes and empathy in an Estonian sample. On the basis of the theoretical assumptions introduced above, we expected that the collectivistic attitudes will be positively related to empathy. The second aim of this study was to examine the relationship between collectivism and empathy in

the context of other personality dimensions, particularly with the NEO-PI-R domain Agreeableness. Since both collectivism and empathy, as described in previous sections, have been found to be related to Agreeableness in earlier research, we aimed to test whether and to what extent the hypothesized relationship between empathy and collectivistic attitudes may be attributed to their relations with Agreeableness.

Method

Participants

A total of 121 Estonians (91 women and 30 men) whose age ranged from 16 to 82 with the mean age 25.9 years (*SD* = 11.8) participated in this study. The subjects included both university students and working adults and were recruited on a voluntary basis.

Questionnaires

Collectivistic attitudes. The ESTCOL Scale (Realo et al. 1997) is a 24-item measure of collectivistic attitudes consisting of three 8-item subscales, each of which assesses a specific aspect of collectivism focused on relations with *family* (e.g., "In life, family interests are most important"); *peers* (e.g., "A person can only feel good in the company of others"); and *society* (e.g., "The interests of state outweigh the individual interests of its members"). Responses are given on a 5-point Likert-type scale. A principle component factor analysis of 24 items followed by varimax rotation confirmed the existence of three dominant factors as previously found on the Estonian data (Allik and Realo 1996; Realo et al. 1997) accounting for 47.8% of the total variance. The intercorrelations of the three subscales were r = .47 between *Family* and *Peers* subscales; r = .51 both between *Family* and *Society* and between *Peers* and *Society* subscales (all correlations were statistically significant at p = .000). An examination of differences in scores on the subscales of the ESTCOL Scale and the General Collectivism Index COL (*Family+Peers+Society*) revealed no significant gender differences.

Empathy. An Estonian adaptation (Kastepõld 1998) of the two subscales of the Interpersonal Reactivity Index (IRI) developed by Davis (1980) was used to measure affective and cognitive components of empathy. The adapted measure is a 16-item self-report questionnaire consisting of two 8-item subscales, the Empathic Concern (EC) and the Perspective Taking (PT), respectively. The EC subscale is designed to assess ""other-oriented" feelings of sympathy and concern for unfortunate others" (e.g., "I sympathize with people less fortunate than me") while the PT subscale (e.g., "To understand other person's problems, I always try to imagine myself in his/her situation") measures "the tendency to spontaneously adopt the psychological point of view of others" (Davis 1983:113–114). Respondents were asked to indicate their agreement with the items on a 7-point Likert-type scale. When the 16 items were factored using principal components analysis with varimax rotation, both Cattell

scree test and parallel analysis clearly suggested that two factors should be retained. Two-factor solution, accounting for 55.9% of the total variance, yielded a simple factor structure resulting in all items loading above .55 only on one, intended factor. The subscales were correlated at $r = .32$ ($p = .000$). Women ($M = 41.7$, $SD = 8.9$) scored significantly higher than men ($M = 37.6$, $SD = 9.5$) on the EC subscale, $t(119) = -2.1$, $p < .05$, that is highly consistent with previous studies using self-report questionnaires (see Eisenberg and Lennon 1983, for overview), as well as on the General Empathy Index EMP (EC+PT), $t(119) = -2.5$, $p < .05$.

Personality assessment. To examine the relationships of the collectivistic attitudes and two distinct aspects of empathy with underlying personality dimensions, the Estonian version of the Revised NEO Personality Inventory (NEO-PI-R, Costa and McCrae 1992) was administered to the respondents. The Estonian NEO-PI-R (Kallasmaa, Allik, Realo, and McCrae 2000) is a 240-item questionnaire consisting of five domain scales (each of which contains 6 subscales) designed to measure the five major domains of personality: Neuroticism, Extraversion, Openness to Experience, Conscientiousness, and Agreeableness. Items are answered on a 5-point scale.

Results

The means, standard deviations and internal consistency coefficients (Cronbach alphas) of the scales used in this study are shown in Table 1.

Table 1

Means, Standard Deviations, and Cronbach Alphas of the ESTCOL, the Revised NEO Personality Inventory (NEO-PI-R), and the Interpersonal Reactivity Index (IRI) Scales

Scale	*M*	*SD*	Cronbach Alpha	*N*
ESTCOL subscales				
Family	17.5	7.0	.84	119
Peers	8.4	5.5	.73	120
Society	14.0	7.1	.86	120
COL	40.0	15.9	.90	119
IRI subscales				
Empathic Concern (EC)	40.7	9.2	.89	121
Perspective-Taking (PT)	39.9	8.6	.87	121
EMP	76.6	14.5	.88	121
NEO-PI-R domains				
Neuroticism	89.2	23.3	.91	120
Extraversion	116.7	26.2	.92	120
Openness	124.1	23.6	.90	120
Agreeableness	116.5	20.4	.88	120
Conscientiousness	107.7	24.3	.92	120

Note. COL = General Collectivism Index; EMP = General Empathy Index.

Correlations between the ESTCOL and the IRI Subscales

Table 2 displays the correlations between the three ESTCOL subscales and the two IRI subscales. As expected, the collectivistic attitudes were related to the affective aspect of empathy – the EC subscale was significantly positively correlated with *Family* (r = .30, p < .001) and *Society* (r = .18, p < .05) as well as with the General Collectivism Index COL (r = .27, p < .01). The General Empathy Index EMP showed a moderate positive correlation only with family-related collectivism (r = .22, p < .05) whereas no relationships, quite surprisingly, were found between PT scores and the collectivistic attitudes implying that the tendency to spontaneously adopt the psychological point of view of the others is not related to collectivistic attitudes. Results of the multiple regression analysis (standard) confirmed the findings of the correlation analysis reported above – the EC subscale was the best and the only significant predictor of the COL, β = .29 (p = .002). Altogether, the IRI subscales explained about 8% of the total variance of the COL. While predicting the EMP from the collectivistic attitudes, the three ESTCOL subscales explained 5% of the total variance whereas only *Family* (β = .22, p = .04) subscale made its significant contribution to the prediction of the EMP score.

Table 2

Correlations between the ESTCOL and the Interpersonal Reactivity Index (IRI) Subscales

Scale	PT	EC	EMP
ESTCOL subscales			
Family	.05	.30***	.22*
Peers	–.01	.16	.10
Society	–.02	.18*	.10
COL	.01	.27**	.17

Note. N = 119. PT = Perspective-Taking; EC = Empathic Concern; EMP = General Empathy Index; COL = General Collectivism Index.
***p < .001 **p < .01 *p < .05

To investigate the relationship between the two sets of variables, a canonical analysis was performed. An overall index of the canonical correlation between two sets of variables (i.e., between three measures of collectivism with two measures of empathy) was insignificant, R = .31, χ^2 (6) = 11.77, p = .07. As proposed by Stewart and Love (1968), single index of redundancy was computed by summing up the redundancies of both sets of variables[3]. The total redundancy

[3] The canonical correlations can be squared to compute the proportion of variance shared by the sum scores (canonical variates) in each set. If this proportion is multiplied by the proportion of variance extracted, one arrives at a measure of redundancy, that is, of how redundant one set of variables is, given the other set of variables. It is also possible to compute the redundancy of the first set of variables given the second set, and the redundancy of the second set of variables, given the first set. Because successively extracted canonical roots are uncorrelated, one may sum up the redundancies across all (or only the first significant) roots to arrive at a single index of redundancy.

of the ESTCOL and the IRI subscales was 10.8%. This relatively low figure suggests that only a small amount of the actual variability in the IRI subscales is explained by a set of collectivism measures (and *vice versa*).

Relations between the ESTCOL, the IRI, and the NEO-PI-R scales

The correlations between the three ESTCOL, two IRI subscales and the NEO-PI-R scales are shown in Table 3. In accordance with our previous studies, significant relationships with the COL were found for Openness to Experience and Agreeableness, $r = -.34$ ($p < .001$) and .24 ($p < .01$), respectively. At the level of the NEO-PI-R facet scales, the COL was most strongly and negatively correlated with O6 (Values) and O4 (Actions), and positively with A6 (Tender-Mindedness). In case of empathy, the EMP showed significant positive correlations with Agreeableness and Conscientiousness ($r = .60$ and .31, $p < .001$, respectively) as well as with most of the facet scales of these two and with some facets of the remaining three domain scales. The PT subscale was moderately related to all but one (Extraversion) domain of the NEO-PI-R whereas the EC subscale displayed a strong positive correlation ($r = .63$, $p < .001$) only with Agreeableness and a modest relation ($r = .20$, $p < .05$) with Conscientiousness. A closer look at the relationships between the EC and the NEO-PI-R facet scales revealed that EC was very strongly correlated with all Agreeableness facets, and especially with A6 (Tender-Mindedness), $r = .66$, $p < .001$. This correlation exceeded even the highest correlation (.45) – to say nothing about the average correlation (.33) – among the six facet scales of Agreeableness in the North-American normative sample (Costa and McCrae 1992; Appendix F).

In order to predict the collectivistic attitudes and empathy from the five personality dimensions, a series of forward stepwise multiple regression analyses was performed. First, we attempted to predict the COL from the five NEO-PI-R domain scales. As expected, Openness to Experience ($\beta = -.36$) was the strongest predictor but also Agreeableness ($\beta = .30$) made its additional contribution. Approximately 20% of the total variance of the COL was explained by the five personality dimensions. Next, we predicted the EMP, EC, and PT from the NEO-PI-R domain scales. All domains but one (Extraversion) of the NEO-PI-R made their independent and significant contribution to the prediction of the EMP – Agreeableness ($\beta = .57$), Conscientiousness ($\beta = .31$), Openness ($\beta = .22$), and Neuroticism ($\beta = .17$) – explaining about 45% of its total variance. The information about PT ($R^2 = 28\%$) was equally distributed between three personality dimensions: Openness ($\beta = .33$), Conscientiousness ($\beta = .31$) and Agreeableness ($\beta = .27$). The EC subscale was most strongly related to Agreeableness ($\beta = .66$) but also to Neuroticism ($\beta = .29$), Extraversion ($\beta = .15$), and Conscientiousness ($\beta = .17$), which altogether explained about 45% of its variance.

Table 3

Correlations between the ESTCOL, the Interpersonal Reactivity Index (IRI), and the Revised NEO Personality Inventory (NEO-PI-R) Scales

	ESTCOL				IRI		
Scale	*Family*	*Peers*	*Society*	COL	PT	EC	EMP
NEO-PI-R domain scales							
Neuroticism	.05	.14	.08	.11	–.25**	.01	–.14
Extraversion	.04	–.16	–.13	–.09	.09	.02	.07
Openness	–.38***	–.22*	–.22*	–.34***	.29***	–.01	.17
Agreeableness	.19*	.15	.24**	.24**	.33***	.62***	.60***
Conscientiousness	.26**	–.00	.02	.12	.31***	.20*	.31***
NEO-PI-R facet scales							
N1 – Anxiety	.19*	.05	.16	.17	–.05	.18*	.09
N2 – Angry Hostility	.00	.10	.01	.04	–.26**	–.01	–.16
N3 – Depression	–.02	.12	.08	.07	–.12	–.09	–.13
N4 – Self-Consciousness	.07	.09	.13	.12	–.22*	.02	–.11
N5 – Impulsiveness	–.18	.00	–.01	–.08	–.27**	–.07	–.21*
N6 – Vulnerability	.08	.24*	–.03	.10	–.16	.01	–.09
E1 – Warmth	.08	.01	.01	.05	.21*	.18*	.24**
E2 – Gregariousness	–.00	–.08	–.14	–.09	–.09	–.09	–.11
E3 – Assertiveness	.06	–.12	.01	–.01	.08	.06	.08
E4 – Activity	.11	–.13	–.07	–.03	.10	.06	.10
E5 – Excitement Seeking	–.11	–.19*	–.11	–.16	.02	–.19*	–.11
E6 – Positive Emotions	.04	–.14	–.22*	–.13	.10	.12	.14
O1 – Fantasy	–.29**	–.09	–.15	–.22*	.09	–.04	.03
O2 – Aesthetics	–.07	–.07	.00	–.06	.31**	.12	.26**
O3 – Feelings	–.12	–.15	–.21*	–.20*	.23**	.20*	.27**
O4 – Actions	–.34***	–.26**	–.26**	–.35***	.08	–.10	–.02
O5 – Ideas	–.28**	–.03	–.04	–.15	.33***	–.03	.18*
O6 – Values	–.52***	–.44***	–.39***	–.55***	.10	–.18*	–.05
A1 – Thrust	.00	.01	.11	.05	.24**	.36***	.38***
A2 – Straightforwardness	.16	.12	.20*	.20*	.27**	.42***	.43***
A3 – Altruism	.14	.14	.19*	.19*	.31**	.49***	.50***
A4 – Compliance	.11	.11	.10	.13	.22*	.27**	.30***
A5 – Modesty	.05	.07	.13	.11	.08	.30***	.24**
A6 – Tender-Mindedness	.33***	.18*	.23*	.31**	.24**	.66***	.57*
C1 – Competence	.20*	–.04	.14	.14	.16	.25**	.26**
C2 – Order	.21*	.06	–.08	.08	.15	.05	.13
C3 – Dutifulness	.23*	.01	–.02	.10	.27**	.24**	.32***
C4 – Achievement Striving	.23*	.06	.03	.13	.33***	.20*	.33***
C5 – Self-Discipline	.17	–.06	–.07	.02	.28**	.17	.28**
C6 – Deliberation	.21*	–.05	.10	.11	.25**	.05	.18*

Note. N = 118. IRI = Interpersonal Reactivity Index; PT = Perspective-Taking; EC = Empathic Concern; EMP = General Empathy Index; COL = General Collectivism Index.
$^{***}p < .001$ $^{**}p < .01$ $^{*}p < .05$

Since EC, on the one hand, was significantly related to the COL and both the COL and the IRI subscales (especially EC) were strongly correlated with Agreeableness, on the other hand, an important question arose here: does the EC make any unique contribution to the prediction of the COL, above and beyond what it shares in the prediction with Agreeableness? To measure the independent contribution of EC to the prediction of the COL, the NEO-PI-R domain scale Agreeableness and EC were entered into a standard multiple regression equation. Indeed, after controlling for Agreeableness, the relationship between the COL and EC somewhat lessened – the correlation between EC and the COL decreased from .27 (Pearson zero-order, $p = .002$) to .18 (partial, $p = .05$) – yet the decrease of .09 was not statistically significant ($p = .47$).

Discussion

The main aim of our study was to provide empirical evidence to the hypothetical relationship between the individual-level constructs of empathy and collectivism as suggested by several authors in the cross-cultural literature (Church and Lonner 1998; Triandis 1994a, 1995). Accordingly, our first assumption was that higher collectivism scores will be associated with higher scores of empathy. To our surprise, studying the relationships between the collectivistic attitudes and empathy revealed that the two constructs were only moderately related – the total redundancy of the ESTCOL and the IRI subscales was about 11%. More specifically, the results showed that the relation between the collectivistic attitudes and empathy was first and foremost due to the moderate correlations between the affective aspect of empathy (EC) and the family- and society-related forms of collectivism – the correlations between the "cognitive" empathy (PT) and the three kinds of collectivistic attitudes were all virtually zero. The findings imply that individuals scoring higher on family- and society-collectivism tend also to report somewhat stronger feelings of warmth, compassion, and concern for other people while showing neither tendency to adopt the psychological point of view of others nor to "read the others' minds," i.e., to understand the others' cognitive status or intellectual processes. In general, such distinctive patterns of associations between the two aspects of empathy and the collectivistic attitudes support the multidimensional view of empathy (Davis 1983, 1996) suggesting that EC and PT are related yet conceptually two distinctive aspects of the general empathy construct. However, the lack of relationship between the General Collectivism (COL) and General Empathy (EMP) indices suggests that on the whole, empathy cannot be considered as an attribute of collectivism as only certain forms of collectivism seem to be moderately and selectively related to certain specific manifestations of empathy rather than to the construct of empathy in general.

The distinctive role of family-related collectivism in the relationship between the collectivistic attitudes and EC ($r = .30$, see Table 2) conforms well with

several theoretical developments available in the literature on the study of prosocial behavior. In their article on a *perceived oneness* (perceived self-other overlap) model of empathy-altruism relationship, Cialdini and colleagues (1997) showed that the empathic concern and the perceived oneness are bidirectionally related whereas the perceived oneness arises "as a consequence of exposure to attachment-related cues (e.g., kinship, friendship, and familiarity) that signal relatively high genetic commonality (Cunningham 1986, Holmes and Sherman 1983; Rushton, Russell, and Wells 1984; Wells 1987)" (p. 483). Furthermore, support for our results also comes from studies demonstrating a strong "ingroup favoritism effect" – people tend to allocate greater resources to members of their ingroups (see Brewer 1979; Tajfel and Turner 1985, for reviews). As the family has been found to be one of the most universal and important ingroups across cultures (cf. Triandis 1995), our finding is also in good correspondence with theoretical propositions suggesting that collectivists are inclined to be most cooperative, helpful, and sensitive to the others' needs within their ingroup (e.g., family) while showing little concern for outgroup members (Triandis 1994a, 1995).

The second objective of the current study was to examine the relationships of the collectivistic attitudes and empathy with underlying personality dimensions, especially with Agreeableness. On the basis of previous theory and research we intended to test whether the presumed relationship between empathy and collectivistic attitudes may be attributed to their relations with Agreeableness. The results of our study confirmed earlier findings that collectivistic attitudes are related with two Big Five personality domains – Closedness (opposite to Openness) and Agreeableness – as measured by the NEO Personality Inventories. Also, our tentative assumptions were well supported by the significant positive correlations of Agreeableness with both the affective and cognitive aspects of empathy. The results of the forward stepwise multiple regression analyses showed that nearly half (45%) of the variance of the EMP and EC can be predicted from the five personality dimensions as measured by the NEO-PI-R whereas the corresponding percentages for PT and the COL were almost twice lower, 28% and 20%, respectively. Agreeableness made its independent and significant contribution to the prediction of EC ($\beta = .66$) as well as to the prediction of the EMP ($\beta = .57$), COL ($\beta = .30$), and PT ($\beta = .27$). In general, these findings indicate that empathy is related to personality traits more closely than collectivism. The especially close relationship between the EC subscale of the IRI and the NEO-PI-R Agreeableness suggests, on one hand, that the affective aspect of empathy could well constitute a separate facet of Agreeableness instead of being scattered between the existing six facet scales. On the other hand, as EC was relatively strongly correlated with all the facet scales of Agreeableness (see Table 3), it could be an underlying binding element that ties the facets together.

To check whether the correlation between the COL and EC was actually based on their close relationships with Agreeableness, all three variables were subjected

to a multiple regression analysis. After controlling for Agreeableness in the standard multiple regression equation, the correlation between EC and the COL became smaller (from .27, Pearson zero-order to .18, partial) but the difference between two correlations was not statistically significant. Subsequently, our results showed that EC has also an independent contribution to the prediction of the COL and that the NEO-PI-R domain Agreeableness does not fully explain the relationship between the constructs of collectivism and EC.

Conclusions

As the established empirical relationship between empathy and collectivistic attitudes in our research was somewhat weaker than one could expect on the basis of the relevant theoretical statements – merely certain forms of collectivistic attitudes appeared to be moderately and selectively related to certain specific manifestations of empathy – the results of our study suggest that people scoring high in collectivism do not necessarily understand better the others' mental and emotional states or show more concern for the feelings, wants, and needs of others than people scoring low in collectivism. In other words, our research showed that empathy, on the whole, cannot be considered as an essential attribute of collectivism, at least at the personal level.

In summary, it is important to bear in mind that all measures used in this study were pencil and paper self-report scales and not experiments in real-life conditions. Therefore, further research is needed to prove the relationships between the collectivistic attitudes and empathy conclusively both at the personal and cultural levels.

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