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The Greek version of the Revised Person's Relating to Others Questionnaire (PROQ2-GR): Psychometric properties and factor structure

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The Revised Person's Relating to Others Questionnaire (PROQ2) is a self-administered questionnaire of 96 items for measuring a person's negative relating. Its eight scales correspond to the eight octants of the theoretical structure called the interpersonal octagon, which is based upon the assumption that relating occurs along a horizontal, close–distant axis and a vertical, upper–lower axis. The present study concerns the Greek translation of the questionnaire called the PROQ2-GR. The psychometric properties and the factor structure of the PROQ2-GR were studied in a Greek population sample of 457. The findings were compared with those of an English population sample of 276. All scales showed good internal reliability. Four factors were extracted, representing the four main poles of the interpersonal octagon, with good psychometric properties. The positive correlations between all adjacent scales and the negative correlations between certain pairs of opposite scales are as would be expected in a model of circular ordering. The PROQ2-GR showed a greater degree of bipolarity than the PROQ2. Women were significantly more upper close and neutral close than men. The Greeks had a higher total mean score than the English and had higher mean scores on five out of the eight scales.

The Revised Person's Relating to Others Questionnaire (PROQ2) is a self-report instrument for the assessment of a person's negative relating (Birtchnell, 2002a, 2002b; Birtchnell & Evans, in press; Birtchnell & Shine, 2000). It is based upon the

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relating theory of Birtchnell (1990, 1994, 1996, 1997, 2002a), which proposes that relating to others can be defined within a biaxial model comprising the four poles of two intersecting axes. The horizontal axis concerns closeness seeking versus distance seeking, and the vertical axis concerns relating from above downwards (upperness) versus relating from below upwards (lowerness). By interposing the four intermediate positions of upper close, upper distant, lower close, and lower distant between the four main poles of the two axes, the interpersonal octagon is created. Each intermediate position represents a blending of the characteristics of the two main poles to either side of it. Since all forms of relating are considered to be advantageous, people need to be competent and feel comfortable and secure in relating in every position. This is called 'positive relating'. Relating that falls short of this ideal is called 'negative relating'. Examples of positive and negative relating for each octant are provided in Fig. 1. Birtchnell's relating theory resembles interpersonal theory (Kiesler, 1996; Leary, 1957; Wiggins, 1979) but differs from it in a number of fundamental respects (see, for example, Birtchnell & Shine, 2000).

The PROQ2 was designed to measure negative relating. Its 96 items are distributed among eight scales that correspond to the eight octants of the interpersonal octagon. Each scale includes 10 items. For each octant, two, unscored, positive items have been added to decrease the negative tone of the questionnaire. All items have four responses: 'Nearly always true', 'Quite often true', 'Sometimes true', and 'Rarely true', which carry a score of 3, 2, 1, and 0 respectively. This yields a maximum negative score of 30 per octant and 240 for the entire questionnaire. The questionnaires are scored by computer.

The purpose of the present study is to assess the psychometric properties of the Greek translation of the PROQ2 (the PROQ2-GR) and compare them with those reported for the English version (Birtchnell, 2002; Birtchnell & Evans, in press; Birtchnell & Shine, 2000). The relationship between PROQ2-GR scores and gender, age and geographical location will also be examined.

Method

Participants

The initial sample of our study was 502 participants representative of the Greek population in relation to gender, age, and place of residence (data of the National Statistics Service). Excluding the cases with uncompleted data, 457 participants remained, of whom the mean age was 35.35 ($SD = 16.35$). Two hundred and fourteen were men (46.8%), with a mean age of 36.11 ($SD = 16.98$), and 243 were women (53.2%) with a mean age of 34.53 ($SD = 15.75$). The largest proportion of the participants (38.1%) was from large urban settings (e.g. Athens–Piraeus, Thessaloniki, Patras) and was consistent with the data of the National Statistics Service.

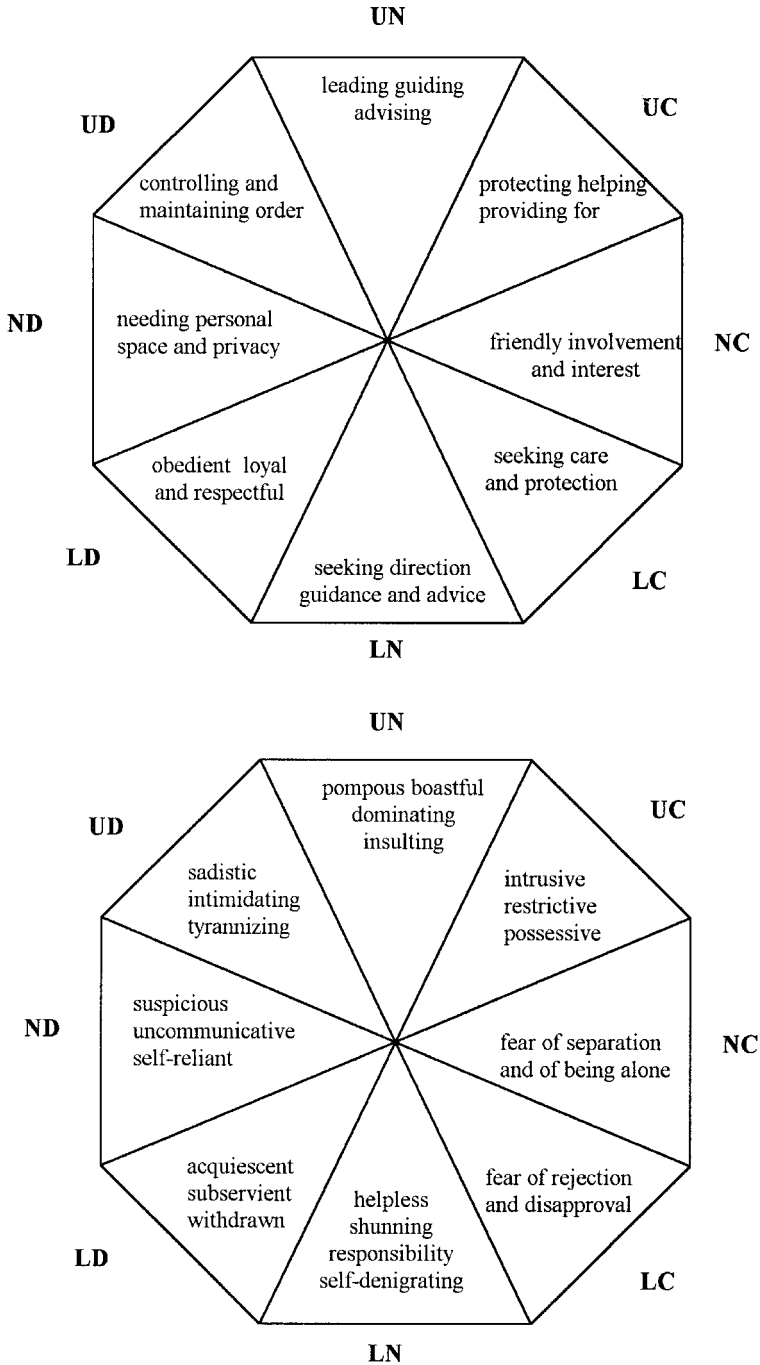

Figure 1. Examples of positive (upper diagram) and negative (lower diagram) relating for each octant. C, D, U, L, and N denote close, distant, upper, lower, and neutral, respectively. From 'The interpersonal octagon: An alternative to the interpersonal circle', by J. Birtchnell, 1994, *Human Relations*, *47*, p. 518 and 524. Copyright 1994 by The Tavistock Institute, Sage Publications. Reprinted with permission.

Instruments—the translation process

The PROQ2-GR was administered to the participants by trained undergraduate students of the Department of Psychology, University of Crete. The demographic information for the participants was collected at the same time.

The PROQ2 was translated into Greek by the authors, who are English-speaking Greeks. Two native English persons were involved in the back-translation. The translation group discussed each back-translated item and compared it with the original version. The back-translation, in general, was satisfactory, and only slight modifications had to be made. Once a preliminary translation of the PROQ2-GR was agreed upon, it was administered to a few psychiatric outpatients by the second author (J. N. N.), who discussed any ambiguities in the wording after completion of the questionnaire. This led to further slight modifications.

Statistical analyses

Statistical analyses were performed using the SPSS statistical package (version 10.0) for Windows 98. Cronbach's alpha was used to assess reliability, and Student's t test for independent samples was applied to compare mean scores. A principal-component analysis was also carried out. Pearson product-moment correlation coefficient r was used as appropriate. A p value of <0.05 was considered statistically significant at a two-tailed level of significance.

Results

Reliability assessment

The item homogeneity of the PROQ2-GR, as measured by Cronbach's alpha, was .87. The alpha reliabilities of the eight scales ranged from .65 to .81 and averaged to .73 (95% CI .69–.77, $SD = .05$; Table 1). Consistent with the results of the English version (Birtchnell & Evans, in press), UC (.81) was the most reliable scale. The least reliable scale for the English sample was the UD (.73), which was the second least reliable scale for Greeks (UD = .69). In certain scales (i.e. NC, LC, and LN), Greek alpha coefficients were lower than the English alpha coefficients. The gender variations observed in the Greek sample, with men's alphas slightly exceeding those of women in the majority of the scales, were in accordance with Birtchnell and Evans' study (in press). For Greek men, the alpha reliabilities of the eight scales ranged from .61 to .87 and averaged to .75 (95% CI .68–.82, $SD = .08$), while those for Greek women ranged from .61 to .78 and averaged to .71 (95% CI .67–.75, $SD = .05$).

Mean scores

From Table 1, it can be seen that the Greek means tend to be higher than the English means. The Greek total mean is significantly higher than the English mean, and the Greek mean is significantly higher on five out of the eight scales. In both samples, the UC

Table 1. Internal reliability and mean scores of Greek and English samples

	UN	UC	NC	LC	LN	LD	ND	UD	Total score
Greek									
α	.75	.81	.65	.73	.76	.74	.74	.69	
M	16.4	20.1	16.4	11.8	11.0	8.8	14.0	14.0	112.5
SD	6.6	6.5	5.7	6.3	6.3	6.5	6.3	5.8	27.0
English									
α	.75	.85	.82	.85	.84	.84	.79	.73	
M	14.3	21.5	11.8	9.5	11.4	9.3	9.6	11.1	98.5
SD	6.0	6.1	6.7	6.8	6.5	6.4	6.1	5.4	26.9
Difference	2.1	− 1.4	4.6	2.3	− 0.4	− 0.5	4.4	2.9	14.0
CI difference	1.1 to 3.1	− 2.4 to − 0.4	3.7 to 5.5	1.3 to 3.3	− 1.4 to 0.6	− 1.5 to 0.5	3.5 to 5.3	2.1 to 3.7	10.0 to 18.0
t	4.3	2.9	9.9	4.6	0.8	1.0	9.3	6.7	6.8
p	<.0001	.004	<.0001	<.0001	.411	.311	<.0001	<.0001	<.0001

scale has the highest mean, and the LD scale has the lowest mean. The greatest difference between the Greek and the English means is on NC and ND.

Factor analysis

A principal-component analysis using an eigenvalue ≥1 criterion yielded 21 components accounting for the 62.72% of the variance. Examination of the scree plot indicated that four factors were dominant, consistently with the theory of the four main poles of human relating (Birtchnell, 1996). A four-factor analysis, rotated using the Varimax algorithm, produced four factors accounting for 33.02% of the variance (Tables 2 and 3). Twenty-three of the 80 items did not load above .4 on any of the extracted components. Only one item presented loadings on two components, one being positive and the other being negative.

Table 2. Rotated component reliabilities for the PROQ2-GR

Components	*E*	% variance	Cronbach's alpha
I. Loweness	9.54	11.93	.86
II. Upperness	7.71	9.64	.82
III. Closeness	5.76	7.21	.71
IV. Distance	3.40	4.25	.76

Seventeen items, clearly representing lower forms of relating (LC, LN, and LD), were allocated to the factor I, along with one UD item with a negative loading. Two NC items were also allocated. In addition, seven lower items, two NC items, and one UC allocated to the first factor did not produce loadings above .4. Factor I included items such as 'It is easy for other people to change my mind' and 'I feel lost when there is no-one to turn to for advise', and can be named Lowerness. Factor II mainly contained upper items (8 UN and 7 UD), along with one NC and one LC item. Two more UN items, one NC and one LD, were also included, although they had a loading below .4. Factor II comprised items, such as 'I can be very critical of other people' and 'I try to arrange things so that people do what I want' and can be named Upperness. Factor III mainly included items, representing the close characteristics of relating (7 UC and 3 NC), along with two negative items on ND and UD each. Seven more items (3 close, 2 distant with negative loading, and 2 LN) with loadings below .4 were also included. Factor III was composed of items such as 'When people I like go away, I long for their return' and 'I get too involved with people I like', and can be named Closeness. Factor IV clearly reflected distant relating and incorporated eight purely ND items. Two LC items with a loading below .4 were also included. Typical items of Factor IV were 'I do not let people get too close to me' and 'I don't trust people very easily', so it can be named Distance. Each of the four factors had adequate internal consistency, ranging from .71 to .86 (Table 2).

Table 3. Item loadings for the PROQ2-GR

No of item/Item	Loading factor I	II	III	IV
Items with a high loading on Factor I (Lowerness) (20 items)				
21 I have a tendency to cling to people (NC)	**.65**	−.01	−.08	−.19
5 I hold on to people too much (NC)	**.63**	.11	−.18	−.09
18 I find it hard to stand up to people (LD)	**.60**	−.04	−.11	.15
96 I let other people organize my life for me (LD)	**.60**	−.07	−.33	−.03
89 Rather than risk criticism, I say nothing (LD)	**.59**	−.04	−.07	.23
56 When there's a confrontation, I back off (LD)	**.59**	−.13	−.02	.19
82 I feel lost when there is no one to turn to for advice (LN)	**.58**	.01	−.02	−.08
8 It is easy for other people to change my mind (LN)	**.58**	−.03	−.07	−.04
51 I leave it to others to make the decisions (LN)	**.57**	−.19	.02	.06
36 I prefer it when someone else is in control (LN)	**.54**	−.27	−.17	.07
62 I tend to look to others for guidance (LN)	**.54**	.03	.14	−.12
34 I don't like to argue with people in case they end up disliking me (LC)	**.53**	.10	.01	.18
14 I am prepared to put up a fight to get what I want (UD)	**−.53**	.18	.42	−.01
22 I let people push me around a lot (LD)	**.52**	−.17	−.23	.19
73 I am willing to go along with whatever other people say (LN)	**.51**	−.22	−.01	.14
3 I easily give in to people (LD)	**.48**	.12	.04	−.09
71 When there's an argument, I tend to give in (LD)	**.47**	−.16	.05	.23
20 I prefer other people to take the lead (LN)	**.45**	−.30	−.12	.16
78 I don't feel I've very much to offer other people (LC)	**.41**	−.02	−.25	.30
10 I can never convince myself that people really love me (LC)	**.41**	.12	−.23	.29
Items with a high loading on Factor II (Upperness) (17 items)				
90 Getting my own is very important to me (UD)	−.03	**.70**	−.03	.10
91 I can be very critical of other people (UN)	−.09	**.58**	−.08	.04
67 I find it hard to tolerate people standing between me and what I want (UD)	−.04	**.57**	.11	.15
69 I try to arrange things so that people do what I want (UN)	.01	**.57**	−.02	.12
60 I feel uncomfortable if things are not done the way I want them (UN)	.05	**.56**	.18	.14
19 I like to be the one in control (UN)	−.34	**.55**	.19	−.06
30 It annoys me when people will not do what I expect of them (UN)	.02	**.54**	.20	.05
32 I tend to get back at people who offend me (UD)	−.01	**.53**	−.33	.07
54 I get annoyed if people stand in my way (UD)	−.10	**.53**	.22	.18
15 I like being held and make a fuss of (NC)	.20	**.50**	−.06	−.11
49 When I tell people what to do, I expect them to do it (UN)	.08	**.50**	.01	.14
59 I am inclined to put people in their place (UD)	−.18	**.50**	.01	.01

Table 3. *Continued*

No of item/Item	Loading factor I	II	III	IV
26 I can be quite ruthless when I need to be (UD)	−.03	**.48**	−.30	.14
86 I try not to let others get the upper hand (UN)	−.19	**.48**	−.07	.20
40 I have to come out on top (UN)	−.17	**.48**	−.08	.03
43 I do not let people get away with insulting me (UD)	−.01	**.46**	.03	.18
25 I have a dread of being rejected (LC)	.35	**.46**	.19	.03
Items with a high loading on Factor III (Closeness) (12 items)				
74 I can't say 'No' when it comes to helping other people (UC)	.01	−.07	**.69**	.10
70 I can't just stand by when I realize that someone needs help (UC)	−.17	.04	**.69**	.05
37 Caring for others is something which comes naturally to me (UC)	−.03	.07	**.68**	−.07
28 I cannot resist trying to help those in need (UC)	−.06	.00	**.68**	.08
7 I derive pleasure from looking after others (UC)	−.01	.01	**.66**	.01
57 I want to reach out to people in trouble (UC)	.06	.08	**.62**	.02
29 When people I like go away I long for their return (NC)	−.04	.15	**.57**	.01
44 People know they can always turn to me for help (UC)	−.09	.18	**.55**	−.03
41 I get too involved with people I like (NC)	−.18	.30	**.55**	−.04
81 I tend to bully people (UD)	.26	.22	**−.49**	−.05
64 I can't help fussing over someone I feel close to (NC)	.09	.29	**.45**	.07
58 I don't take too much notice of other people (ND)	.11	.22	**−.44**	.11
Items with a high loading on Factor IV (Distance) (8 items)				
94 I do not let people get too close to me (ND)	.11	.14	−.15	**.64**
92 I prefer to keep people at a safe distance (ND)	.02	.13	.06	**.61**
55 I don't trust people very easily (ND)	.00	.31	.02	**.61**
53 I don't like others to know too much about me (ND)	.01	.22	.09	**.58**
23 I tend to keep my feelings to myself (ND)	.13	.11	.03	**.57**
75 I don't like to be too involved with people (ND)	.00	.05	.04	**.53**
63 I find it best to keep out of other people's way (ND)	−.13	−.03	.18	**.48**
1 I keep myself to myself (ND)	.32	.11	−.05	**.44**

Table 4 shows the mean scores for each of the four PROQ2-GR factors. The mean total score for the factor III (Closeness) was significantly higher for women than for men, $t(372.54) = -5.95$, $p < .001$. Age was significantly negatively correlated with Factor I (Lowerness), $r = -.13$, $p < .01$, and positively correlated with Factor III (Closeness), $r = .23$, $p < .001$, and Factor IV (Distance), $r = .17$, $p < .001$.

In comparison with the English results (Birtchnell & Evans, in press), the Greek study

Table 4. PROQ2-GR mean scores for Factors I, II, III and IV

	Lowerness (Factor I)	Upperness (Factor II)	Closeness (Factor III)	Distance (Factor IV)
Men				
M	19.21	25.72	21.91	12.12
SD	12.62	11.41	7.36	5.96
CI	17.51 to 20.91	24.18 to 27.26	20.92 to 22.90	11.32 to 12.92
Women				
M	19.07	27.28	25.48	12.36
SD	10.31	10.26	5.10	5.66
CI	17.77 to 20.37	25.99 to 28.58	24.84 to 26.13	11.65 to 13.08
Difference	0.14	− 1.56	− 3.57	− 0.24
CI	− 2.00 to 2.28	− 3.56 to 0.43	− 4.75 to − 2.39	− 1.31 to 0.83
t	.13	− 1.54	− 5.95	− .44
p	.90	.12	< .001	.66

failed to produce eight components, in correspondence to the eight octants of the interpersonal octagon. Moreover, only 57 items out of 80 presented loadings above .4, and they were allocated to the four factors extracted (present study), compared with the 69 items distributed to the eight components (Birtchnell & Evans, in press). However, only one item of the present study presented complex loadings, compared with six in the English study.

Inter-octant correlations

Table 5 presents the inter-octant correlation coefficients of the PROQ2-GR. All pairs of adjoining octant scales were positively correlated. On the vertical axis, the overlap between the neutral and distant scales was marked, as evidenced by the very high correlations between UN and UD (.64) and LN and LD (.65), but the distinction between the neutral and close scales was clearer: UN and UC being .22 and LN and LC being .42. Where UD and UC were not statistically correlated, LD and LC were highly correlated (.52). Negative correlations were found between several pairs of scales, indicating a degree of bipolarity. This was particularly so between upper and lower scales, e.g. UN and LN (− .17), UN and LD (− .15), UD and LD (− .11), UD and LN (− .12), and UC and LC (− .02; *ns*). There was also a diagonal negative correlation between UC and LD (− .19).

PROQ2-GR mean scores and gender

From Table 6 it can be seen that women tended to have higher mean scores than men, the mean total scores being 116.14 ($SD = 24.89$) and 107.78 ($SD = 28.40$), respectively, $t(455) = -3.35$, $p < .001$. Women had higher mean scores in all scales

Table 5. Inter-octant correlation coefficients of the PROQ2-GR

Octants	UN	UC	NC	LC	LN	LD	ND	UD
UN	1.0							
UC	.22***	1.0						
NC	.33***	.35***	1.0					
LC	.23***	− .02	.34***	1.0				
LN	− .17***	− .04	.28***	.42***	1.0			
LD	− .15***	− .19***	.19***	.52***	.65***	1.0		
ND	.32***	.02	.03	.49***	.09*	.19***	1.0	
UD	.64***	.05	.22***	.26***	− .12**	− .11*	.34***	1.0

*$p < .05$; **$p < .01$; ***$p < .001$.

except LD and ND, but only the differences on UC and NC were statistically significant, $t(408.19) = -6.14$, $p < .001$ and $t(455) = -5.87$, $p < .001$, respectively. In the English (Birtchnell & Evans) study, there was no significant difference in total scores or on the NC scale. The English women also had a significantly higher score on UC, but the English men had a significantly higher mean score than the women on ND.

PROQ2-GR scores correlated with age

There was no significant correlation between age and total score, but age was positively correlated with UN ($r = .10$, $p < .05$), UC ($r = .23$, $p < .01$), and ND ($r = .14$, $p < .01$), and negatively correlated with LN ($r = -.11$, $p < .05$) and LD ($r = -.11$, $p < .05$), suggesting that people become more upper and less lower with age.

Relation between residence and PROQ2-GR responses

The mean total score for village residents was 111.15 ($SD = 24.88$), while the mean total score for city residents was 112.87 ($SD = 27.62$), but the difference was not statistically significant. Octant scores were not statistically differentiated between the two residential groups.

Discussion

The PROQ2 has been increasingly used in the UK since its introduction in 1995. It has proved its worth in the assessment of men with personality disorder (Birtchnell & Shine, 2000) and in the evaluation of patients seeking psychotherapy. The latter have been shown to have significantly higher mean scores on six of the eight scales and, of course, a significantly higher total score (Birtchnell & Evans, in press). Such scores have been shown to fall significantly over the course of psychotherapy (Birtchnell, 2002). The

Table 6. Mean PROQ2-GR scale scores for men and women separately

	UN	UC	NC	LC	LN	LD	ND	UD	Total score
Men	16.1	18.2	14.8	11.3	10.6	8.8	14.1	13.9	107.8
SD	7.0	6.9	5.6	6.5	6.5	7.4	6.5	6.0	28.4
Women	16.7	21.8	17.8	12.1	11.3	8.7	13.7	14.2	116.1
SD	6.2	5.6	5.4	6.1	6.0	5.6	6.1	5.6	24.9
Difference	− 0.6	− 3.6	− 3.0	− 0.7	− 0.7	0.2	0.4	− 0.3	− 8.4
CI difference	− 1.8 to 0.6	− 4.8 to − 2.5	− 4.0 to − 2.0	− 1.9 to 0.4	− 1.8 to 0.5	− 1.0 to 1.4	− 0.7 to 1.6	− 1.4 to 0.8	− 13.3 to − 3.5
t	− 0.98	− 6.14	− 5.87	− 1.22	− 1.18	0.30	0.74	− 0.54	− 3.35
p	.327	.000	.000	.222	.237	.765	.458	.592	.001

primary purpose of producing a Greek version is to enable its use to spread to Greece, but there is also value in examining how it performs in a different culture.

The main thrust of this Discussion should be to examine how closely the English and the Greek psychometrics and factorial structures compare. In general, they compare well, though there are some areas of divergence. The internal reliability of the PROQ2-GR was good (.87), although the octant scale reliabilities were slightly lower (ranging from .65 to .81, $M = .73$). Those reported for the English version were .73–.85, $M = .81$ (Birtchnell & Evans, in press) and .77–.86, $M = .82$ (Birtchnel & Shine, 2000). The UC scale had the highest internal reliability (.81), and this was also the case for the Birtchnell and Evans study, but not for the Birtchnell and Shine study. The NC scale had the lowest internal reliability (.65), but this was not the case for the two English studies (.82 and .81). No test–retest reliability was possible, but Birtchnell (2002b) demonstrated that the scores of patients awaiting psychotherapy did not change significantly over a 9-month period. The study includes no test of validity, since there is no Greek translation of a comparable measure.

Since the PROQ2-GR is based upon Birtchnell's relating theory, demonstrating that the extracted factors correspond with the eight octants of the octagon would provide confirmation of this underlying theory. Failure to do so may not necessarily disconfirm the theory, since there may have been deficiencies in either the original selection of items or in the translation of these items into Greek, or the original items may contain phrases that Greeks do not readily understand. A factor analysis of the PROQ2-GR items yielded a solution of four factors, which correspond closely to the four main poles of the interpersonal octagon. The internal consistency of the scores based on these four factors was very good. A principal-components analysis of the PROQ2 items (Birtchnell & Evans, in press) from a non-patient sample yielded eight factors, six of which strongly supported the UN, UC, NC, LN, LC, and ND scales, the remaining two factors being diffused among a number of scales. Where the four factors of the present study accounted for 33.02% of the variance, the eight factors of the Birtchnell and Evans study accounted for 45.7% of the variance. It might be mentioned that a similar analysis by Birtchnell and Evans of items from a psychotherapy sample was less successful, with only five scales being strongly supported—LC being the one not supported this time. With the PROQ2-GR, 23 items failed to load above .4 on any of the Varimax-rotated components, compared with only 11 items with the PROQ2.

It is encouraging that in both the PROQ2-GR and the PROQ2, the four neutral scales were supported, for these represent the poles of the two axes, which form the basis of relating theory and therefore the interpersonal octagon. The four intermediate scales are of lesser importance, since the octants from which they were derived represent a blending of the qualities of the polar octants to either side of them, and therefore they are secondary. It is an important finding in both the English and the present study that the opposite poles of each of the two axes were identified as separate factors. This is in agreement with the central principle of the relating theory that it is desirable to relate positively in both poles of both axes. A consequence of this is that it is possible to relate

negatively in both poles of both axes, and that relating negatively in one pole does not preclude relating negatively in the opposite pole. This finding contrasts with that in studies of interpersonal circle-based questionnaires (Kiesler, 1996) that the first factor from a factor analysis is a bipolar vertical one, sometimes called DOM, and the second factor is a bipolar horizontal one, sometimes called LOV. In fact, in most of these studies, the very first factor, called a general factor, comprises items from a range of scales (Wiggins, Steiger, & Gaelick, 1981); but no such factor emerged from either the English study or the present study.

Bipolarity is considered to be a central feature of interpersonal circle-based measures, and Wiggins (1979) in particular intentionally constructed his scales so that they were bipolar. Thus, high negative correlations are normally observable between scales from opposite sides of the circle. Because all the scored items of the PROQ2 are considered to describe forms of negative relating, varying degrees of positive correlation, particularly between scales that represent neighbouring octants, are only to be expected; and this is the case in the present study and in the studies of Birtchnell and Shine (2000) and Birtchnell and Evans (in press). All of the negative correlations were between upper and lower scales, the highest being between UN and LN (− .17) and UN and LD (− .15). The UN–LN result was similar in both the English studies. The modest UD–LD negative correlation (− .11) was higher in the Birtchnell and Shine study (− .24) and much higher in the Birtchnell and Evans study (.35), suggesting a conceptual difference between the two cultures. There was no evidence of bipolarity between closeness and distance, though in the Birtchnell and Evans study, there was a low negative correlation between NC and ND (− .15).

The mean total score was significantly higher for the Greeks than for the English, and the Greeks scored significantly higher on five of the eight scales. Greek women had a significantly higher mean total score and scored significantly higher on UC and NC. They also had a higher mean score on Factor III (mainly close items). In the Birtchnell and Evans study the women non-patients did not have a higher mean total score or a higher NC score, but the men had a significantly higher ND score. Thus, Greeks tend to relate more negatively than the English, and Greek women relate more negatively than Greek men. In both countries, women tend to be more negatively close.

In conclusion, the Greek version of the PROQ2 performs sufficiently similarly to the English version for it to be used in Greek studies of relating. There appear to be only minor differences between the relating tendencies of Greek and English people.

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