Clinical Psychology and Psychotherapy
Clin. Psychol. Psychother. **16**, 199–215 (2009)
Published online 8 April 2009 in Wiley InterScience (www.interscience.wiley.com). **DOI**: 10.1002/cpp.613

Assessment

Interrelating Within the Families of Young Psychotherapy Outpatients

Argyroula E. Kalaitzaki,[1,2]* John Birtchnell[3] and Joannis N. Nestoros[4†]

[1] *Department of Preschool Education, School of Education, University of Crete, Greece*

[2] *Social Work Department, Higher Technological Educational Institute of Crete, Greece*

[3] *Institute of Psychiatry, London, UK*

[4] *Department of Psychology, School of Social Sciences, University of Crete, Greece*

Interrelating is a combination of relating to and being related to by another. The Couple's Relating to Each Other Questionnaires (CREOQ) and the Family Members Interrelating Questionnaires (FMIQ) measure negative forms of both self and other relating, across a close/distant and an upper/lower axis. These were used to measure the interrelating between the parents of young adults, and between young adults and their parents, in a sample of young, Greek, psychotherapy outpatients and a comparable sample of non- patients. In a proportion of both samples, the interrelating of the young adults was compared with that of a well sibling. The patients' parents were significantly more distant towards each other than those of the non-patients. The interrelating between the patients and their parents was markedly worse than that between the non-patients and their parents. It was also markedly worse between the patients and their parents than between the siblings and their parents. **Copyright © 2009 John Wiley & Sons, Ltd.**

INTRODUCTION

Within the framework of relating theory (Birtchnell, 1996), relating is the way a person feels or behaves towards others. The theory proposes that relating is motivated by the need to attain one of four states of relatedness, each of which, under appropriate circumstances, carries advantages for the individual. These four states are called closeness, distance, upperness and lowerness. Closeness is the state of being involved; distance is the state of being separate; upperness is the state of relating from a relatively upper position (as a boss towards an employee or a parent towards a child); and lowerness is the state of relating from a relatively lower position (as an employee towards a boss or a child towards a parent). Closeness and distance can be represented as the opposite poles of a horizontal axis, and upperness and lowerness can be represented as the opposite poles of a vertical axis. Between these four poles may be inserted the four intermediate positions (which are also considered to be states of relatedness), each representing a blending of the poles to either side of it. Together, these eight posi-

*Correspondence to: Dr Argyroula E. Kalaitzaki, 08 Kapodistriou Street, Rethymnon 74100, Crete, Greece.
E-mail: arkalaitzaki@edc.uoc.gr

†This article was published online on 8 April 2009. An error was subsequently identified (the name of the third author was previously omitted). This notice is included in the online and print versions to indicate that both have been corrected on 6 May 2009.

tions constitute a theoretical structure that is called the interpersonal octagon (See Figure 1). The eight scales of the measures to be used correspond to the eight positions of the octagon. In all descriptions and tables, the scores are presented starting from the top, and moving around the octagon in a clockwise direction. Each scale is given a two-word name, which for convenience, is reduced to two initial letters. The first word, or letter, refers to the vertical axis and the second refers to the horizontal one. For the four polar positions the word 'neutral' or the letter 'N' is inserted where reference to the other axis would have been. Moving round the octagon, the octants are called upper neutral (UN), upper close (UC), neutral close (NC), lower close (LC), lower neutral (LN), lower distant (LD), neutral distant (ND) and upper distant (UD). The reader is advised to commit these names and initials to memory.

The theory further proposes that people are born with only a disposition to seek the states of relatedness. During the course of maturation, they need to acquire the competence to attain and maintain each of them. Competent relating is described as positive. It promotes harmony in relationships. The ideal is that a person can be competent in any one of the eight positions as and when it is necessary to be so. That which falls short of competent is described as negative. It leads to disharmony in relationships. Negative relating may involve: (1) clinging to one state for fear of becoming caught up in another (like clinging to distance out of a fear of closeness); (2) risking attaining a state, but feeling anxious or hesitant within it (like fearing being rejected); or (3) trying to impose a state upon another or to coerce another into providing it (like always needing to be the one in charge, or always needing to be told what to do). Positive and negative forms of the eight positions of the octagon have been fully defined and described in Birtchnell (1996, 2002a) and are summarized in Figure 1.

An earlier study (Birtchnell & Evans, 2004) showed the negative relating of psychotherapy patients, on a range of scales, to be significantly higher for psychotherapy patients than for non-patients. Another study (Birtchnell, 2002b) showed that, while the scores of patients awaiting psychotherapy did not change significantly over a 9-month period, patients' scores dropped significantly over a course of therapy. While these studies concerned a person's general relating tendencies, the present study will concern a person's relating to a specified other and the person's view of the other's relating to him/her.

A distinction should be drawn here between relating and interrelating: where relating, as it is usually measured, refers to a person's general relating tendencies, interrelating is that which occurs between any two specified people. The assumption being made here is that the way that a person considers that he/she relates to a specified other, or the way he/she considers that the specified other relates to him/her may not necessarily correspond with the way that he/she or the other relates to people in general. In interrelating, a state of relatedness may be either given or received. If one person gives closeness, the other receives it, and if one person gives distance, the other receives it; but if one person relates from an upper position, the other is pushed into lowerness, and if one person relates from a lower position, the other is pushed into upperness. In any interrelating encounter, what one person offers or invites may be accepted or declined by the other. It may also be imposed upon the other.

Since interrelating is the interplay that occurs between any two people, it cannot, of itself, be measured. What can be measured however is how each person considers that he/she relates to a specified other and how each person considers that the specified other relates to him or her. This requires there to be a set of four questionnaires, each of which has scales for measuring either the self-perception or the perception of the other, within the eight positions of the octagon. Together, these questionnaires are called the Couple's Relating to Each Other Questionnaires (CREOQ) (Birtchnell, 2001a). Since, originally, they were designed to assess couples seeking therapy, they measure only negative interrelating.

In a recently published study using the CREOQ (Birtchnell, Voortman, DeJong, & Gordon, 2006), the negative interrelating of couples seeking therapy was shown to be significantly more marked than that of couples from a community sample, on almost all scales of all four questionnaires. In the present study, the CREOQ will be used for a quite different purpose, namely to compare the negative interrelating between the parents of a sample of young, adult, Greek psychiatric outpatients receiving psychotherapy and the parents of a sample of young, Greek adults from a community survey. It is expected that the scores of the parents of the patients will be higher—either because negatively relating parents may have an adverse effect upon these adults or because these psychiatrically disturbed adults may have an adverse effect upon their parents.

DOI: 10.1002/cpp

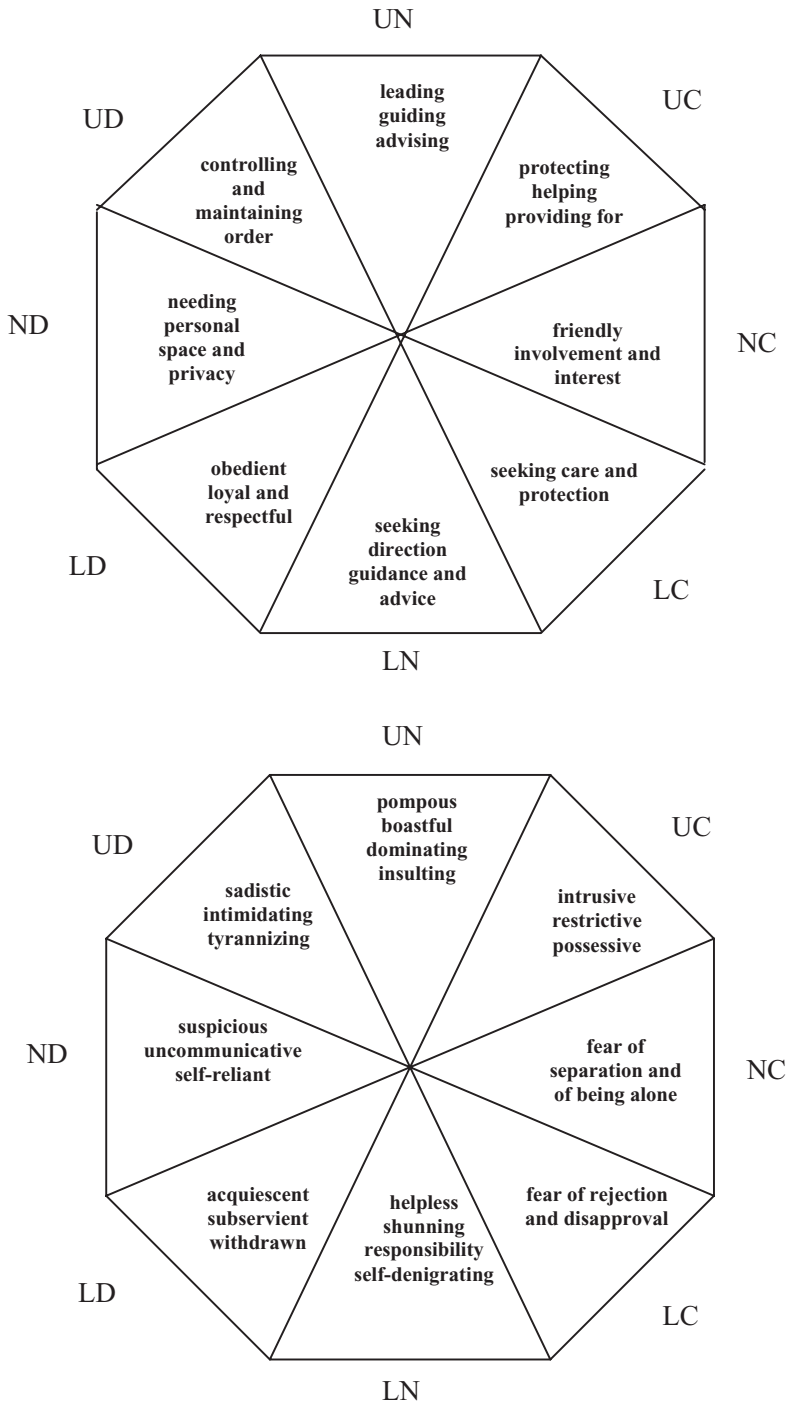

Figure 1. Positive (upper diagram) and negative (lower diagram) forms of relating. The diagrams first appeared in Birtchnell (1994), The Tavistock Institute, reproduced by permission. UN = upper neutral. UC = upper close. NC = neutral close. LC = lower close. LN = lower neutral. LD = lower distant. ND = neutral distant. UD = upper distant

DOI: 10.1002/cpp

The present study will carry these investigations a stage further by also examining the interrelating between the young, Greek, adult patients and non-patients and their respective parents. For the purposes of this study, a small number of the items of the four CREOQ questionnaires were modified in order to make them more appropriate to a young adult/parent relationship. This modified version of the CREOQ will be called the Family Members Interrelating Questionnaires (FMIQ). Although it is very similar to the CREOQ, it is given this name in order to stress its different function. In a way that is comparable to the CREOQ, it will measure both how the young adults consider that they relate to their parents and how their parents consider that they relate to them, and also how each considers that he/she is related to by the other. As with the CREOQ, only negative interrelating will be measured. The expectation is that the parent/patient interrelating scores will be significantly higher than the parent/non-patient scores. It is also expected that the difference between the patients and non-patients will be more marked for young adult to parent interrelating than for parent-to-parent interrelating, for here the young adults will be directly involved with their parents. On the other hand, it would seem as likely that the parents will adversely affect their patients as that the patients will adversely affect their parents. As a further refinement of the study, the interrelating between the patients and their parents will be compared with that between a well sibling of the patients and their parents.

COMPARING RELATING THEORY WITH INTERPERSONAL THEORY

A similarity between the relating theory of the present study and the longer-established interpersonal theory (Kiesler, 1996; Leary, 1957) is fully acknowledged. The eight-position circle of interpersonal theory resembles the octagon of relating theory. There are however important differences between the two theories which have been fully considered elsewhere (Birtchnell, 1994, 1996, 2002b; Birtchnell & Evans, 2004; Birtchnell & Shine, 2000; Birtchnell et al., 2006). Where interpersonal theory carries the implication that adaptive interpersonal behaviour is on a continuum with maladaptive interpersonal behaviour, relating theory considers positive and negative relating to be qualitatively different, which is why, in Figure 1, they occupy separate octagons. However, the interpersonal psychologist, Benjamin (1996), also considered the difference between adaptive and maladaptive relating to be qualitative rather than quantitative. A number of interpersonal psychologists, notably Wiggins (1979), considered that the behaviours from positions from opposite sides of the interpersonal circle should exist in a bipolar relationship. Relating theory would maintain that the positions from opposite sides of the octagon should be viewed independently of each other. A universally competent relater would be capable of relating (positively) according to any one of the eight positions of the octagon, as and when the need arose. Conversely, it should be possible for a person to relate negatively according to any one of the eight positions; and relating negatively in one position should not preclude relating negatively in any other position. From an early stage, interpersonal psychologists (e.g., Carson, 1969) introduced the concept of complementarity. By this they meant that each form of relating should evoke a complementary reaction from the other that leads to a repetition and reinforcement of the original relating act. Dominate, for example, should evoke the response of submission. Orford (1986) maintained that there was no evidence to support these rules. It is unfortunate that interpersonal psychologists do not clearly differentiate between positive and negative relating. Kiesler (1986) and Benjamin (1987) went so far as to propose that a psychotherapist might intentionally make an anti-complementary response in order to break the cycle of reinforcement. Birtchnell (2002a) considered such strategies to be simplistic and argued that if a psychotherapy patient was relating negatively, either in or outside of therapy, the therapist should help him/her to relate more positively.

In the recent Birtchnell et al. (2006) study, comparison was made between a Dutch translation of the CREOQ and an adaptation of the revised interpersonal checklist (ICL-R) (De Jong, van den Brink, & Jansma, 2000), a measure that is based upon the interpersonal circle. To render the ICL-R more comparable with the CREOQ, participants were invited to make judgements concerning both as it applied to themselves and as they considered that it applied to their partners, but of course this adaptation did not record their partners' view and it only referred to their own and their partner's general relating tendency, rather than the way they specifically relate to their partner or they consider that their partner specifically relates to them (which is what the CREOQ measures). Despite these limitations, there were reasonably high and meaning-

DOI: 10.1002/cpp

ful correlations between the scores of the CREOQ and the adapted ICL-R.

THE PRESENT STUDY

The study will be carried out in five stages: (1) the psychometric properties of the Greek translation of the CREOQ and FMIQ will be examined, and the CREOQ couple's interrelating scores of the Greek samples will be compared with those of the English and Dutch samples of the Birtchnell et al. (2006) couples study; (2) the CREOQ scores of the parents of the psychiatric patients and the parents of the non-patients will be compared; (3) the FMIQ adult/parent scores in the families of the patients and the non-patients will be compared; (4) the FMIQ scores of the patients and their parents will be compared with those of a well sibling of the patients' and their parents; and (5) the CREOQ scores will be compared with the FMIQ scores to determine to what extent the way that one parent interrelates with the other resembles the way he/she interrelates with the young adult.

METHOD

Participants

All participants and their families were Greek citizens. Of the 80 non-patients, 17 (21.3%) were men and 63 (78.8%) were women. Their ages ranged from 18 to 52 and they had a mean age of 22.3 (standard deviation [SD] = 8.7) with a median value of 20.5. The majority (92.3%) were single and 66.3% were living with their parents. None currently exhibited psychiatric symptoms. To ascertain this, they answered a number of demographic questions, among which were whether they had in the past, or whether they presently suffered any psychiatric disorder, or received or were receiving psychotherapy, or were hospitalized because of psychiatric symptoms. The same questions were asked for the parents and siblings of both the non-patients and the patients that participated in the study. A small number of the non-patients were psychology students. The remainder were recruited by psychology students from their friends and relations. Students were asked to seek families in which the parents had at least one young adult child. The parents of the non-patients were currently married (92.3%) or separated/divorced (7.7%). However, both of them (80 fathers and 80 mothers) were recruited into the study (See *Procedure*).

Of the 84 psychotherapy patients, 45 (53.6%) were men and 38 (46.4%) were women. Their ages ranged from 18 to 46 and they had a mean age of 28.7 (SD = 7.5) with a median value of 26.5. Fewer (69.4%) were single and 58.3% were living with their parents. All were the patients of one psychiatrist/psychotherapist, who had a particular interest in the psychotherapy of psychotic patients (Kalaitzaki & Nestoros, 2006). The majority (84.5%) were diagnosed by the therapist as being psychotic and the remainder were neurotic, according to Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition criteria. Approximately 60% were considered to be in the acute phase of their condition and a proportion of them were receiving antipsychotic medication. The diagnosis corresponded with their scores on the Revised Symptom Checklist (SCL-90-R) (Derogatis, 1983). In response to the relevant demographic questions, all of them admitted being previously and/or currently psychiatrically disturbed. The parents of the patients were currently married (88.9%) or separated/divorced (11.1%). Both parents (84 fathers and 84 mothers) were recruited into the study (See *Procedure*).

For a proportion of both the non-patients and the patients, a sibling (who was not necessarily of the same gender) was also recruited into the study. The sibling was required not to have psychiatric symptoms, according to the demographics questions referred to above. Sixty-three well siblings of the non-patients (42 men and 21 women) and 48 siblings of the patients (23 men and 25 women) agreed to participate in the study. The mean age of the siblings of the non-patients was 25.2 (SD = 9.1), with a median value of 24.4, and that of the siblings of the patients was 27.4 (SD = 7.6), with a median value of 27.3. Further demographic data are available from the senior author.

Measures

The CREOQ and the FMIQ were translated into Greek by the senior author, who is an English-speaking Greek. The back translation was performed by a native English person who spoke Greek. Each back-translated item was discussed and compared with the original version. Slight modifications were then made. The translated questionnaires were administered to a few families of psychiatric outpatients, and any ambiguities in the wording after completion of the questionnaire were discussed. This led to further slight modifications.

DOI: 10.1002/cpp

The CREOQ comprises a set of four, 96-item questionnaires. Each item has the four response options of *mostly yes, quite often, sometimes* and *mostly no* which generate a score of 3, 2, 1 and 0, respectively. Each questionnaire is similar in construction to the Person's Relating to Others Questionnaire (PROQ2) which was developed to measure an individual's general, negative relating tendencies (Birtchnell & Evans, 2004; Kalaitzaki & Nestoros, 2003), but since the items of the CREOQ refer both to relating to, and being related to, by a specified other person, they have had to be worded slightly differently. They are based largely upon the kinds of remarks that partners might typically make about one another. As with the PROQ2, the items of each questionnaire contribute to eight scales which correspond to the eight octants of the interpersonal octagon, though the items are distributed randomly throughout the questionnaire. Each scale has 12 items, but only 10 of these refer to negative relating and are scored. The remaining two refer to positive relating and are included only to offer respondents something good to say about themselves or their partner. The maximum score for each scale is 30, so the maximum score for the entire questionnaire is 240. As with the PROQ2, the questionnaires are scored by computer, the computer printout comprising both a numerical list of scores and a graphic representation of scores (see Birtchnell et al., 2006).

In the four questionnaires of the CREOQ, M and W refer to man and woman and S refers to self and P refers to partner. Thus, MS is the man's self-rating and MP is his rating of his partner; and WS is the woman's self-rating and WP is her rating of her partner. Apart from the words denoting gender, the items of the MS and WS are identical and the items of the MP and WP are identical. Although the questionnaires were designed for heterosexual couples, they are adaptable for homosexual couples by selecting the gender-appropriate questionnaires. The questionnaires, together with the scoring instructions, can be downloaded from www.johnbirtchnell.co.uk.

The FMIQ was developed by the authors for a study of the family relations of schizophrenics (Kalaitzaki, 2005). Its items are predominantly the same as those of the CREOQ, though, in a few instances (less than 10 for the self questionnaire and less than 15 for the other questionnaire), the words have been slightly modified to make them more appropriate to the relationship being examined. As with the CREOQ, two questionnaires refer to the respondent's relating to the other family member and two refer to how the respondent feels that the other family member relates to him/her. Each questionnaire has a name that indicates who is making the assessment and who is being assessed. In this, Fa refers to father, Mo refers to mother, So refers to son and Da refers to daughter. The letters Se (short for self) are inserted to indicate that it concerns the person relating to the other. Hence, the self-assessment questionnaires were labelled FaSeSo (father relating to the son), FaSeDa, MoSeSo, MoSeDa, SoSeFa, SoSeMo, DaSeFa and DaSeMo. The being related to questionnaires are labelled FaSo (father's view of son's relating to him), FaDa, MoSo, MoDa, SoFa, SoMa, DaFa and DaMa. If, for example, a father and son are being assessed, the father completes the FaSeSo and the FaSo and the son completes the SoSeFa and the SoFa.

Specimen items for the eight SoSeFa scales are:

UN: *I try to make the decisions for both of us.*
UC: *I try to influence the way he thinks.*
NC: *When he is away from me I feel anxious until he returns.*
LC: *I rely on him more than I should.*
LN: *I look to him for guidance.*
LD: *I try to keep out of his way.*
ND: *When he gets too close to me it makes me feel uneasy.*
UD: *I think I might intimidate him.*

Specimen items for the eight SoFa scales are:

UN: *Needs to be the one in control*
UC: *Tries to control who I go out with*
NC: *Finds it hard to allow me to have time away from him*
LC: *Seems to need me to look after him*
LN: *Not very good at making up his own mind*
LD: *Tries to keep out of my way*
ND: *Keeps me at a distance*
UD: *Bosses me about*

Because the items of the CREOQ and the FMIQ occur in the same sequence, it is possible to use the self-rating and partner-rating scoring programs of the CREOQ to score the FMIQ. Additional programs have been written which organize the scores into a diagrammatic arrangement (see Figures 2a and 2b).

Procedure

All family members completed a short, demographic questionnaire. Each of the two parents

DOI: 10.1002/cpp

of the young adults was then invited to complete one questionnaire concerning how he/she relates to the other, and one concerning how he/she considers the other relates to him/her (CREOQ). Each young adult and each parent were invited to complete a similar pair of questionnaires (FMIQ). In a proportion of the families of both the patients (n = 48) and the non-patients (n = 63), the same procedure was carried out between one sibling of the index case and each parent (FMIQ). Participants were instructed to complete each questionnaire in private and then place it in a sealed envelope. All the questionnaires from each family were then placed in one large envelope. The psychology students distributed and collected the questionnaires personally from the non-patients. The patients and their families were sent their questionnaires through the post, though they returned the envelope with the completed ones to the therapist by hand. In the case of the parents who were separated or divorced, the index case was responsible for distributing and gathering the questionnaires. If any family member returned a questionnaire with more than seven missing responses, that family was eliminated from the study. The final response rate was 81.3% for the non-patients and 88.6% for the patients.

Analyses

All analyses were carried out using version 12 of the SPSS (SPSS Inc., Chicago, IL, USA). The internal reliabilities and inter-scale correlations of the eight scales of the four CREOQ questionnaires and the 16 FMIQ questionnaires were calculated. Correlation matrices of the self-ratings of one partner, or person, against the partner-ratings of the other were also created. For both the CREOQ and the FMIQ, a factor analysis was carried out on the combined self-rating and the combined other-rating questionnaires. These findings will only be summarized. The main features of the analyses will be a detailed comparison of the mean CREOQ scores of the parents of the patients and the non-patients, and the mean FMIQ scores of the patients and non-patients and their parents. Additionally, the FMIQ scores of the patients and their parents will be compared with those of a proportion of the patients' well siblings and their parents. Finally, the CREOQ scores will be correlated with the FMIQ scores. Because of the large number of comparisons, only those differences with a p value of 0.01 or less will be referred to as being significant.

RESULTS

Stage 1. Psychometric Properties of the CREOQ and FMIQ

Internal Reliability

For the non-patients, the mean alpha reliabilities of the four CREOQ questionnaires were above 0.60 for 24 of the 32 scales (i.e., four sets of eight scales), with an overall mean of 0.68 (SD = 0.11). For the patients they were above 0.60 for 28 of the 32 scales, with an overall mean of 0.71, (SD = 0.12). The majority of the Greek alphas were lower than the English ones (mean 0.68, SD = 0.11 versus 0.75, SD = 0.06; t = 3.63, $p < 0.001$), with marked differences on certain scales (e.g., LD of the MP). The Greek alphas were higher than the Dutch ones (Birtchnell et al., 2006) on 18 scales, with the Greeks scoring particularly high on certain scales (e.g., UN of the MP and WP, ND of the WS and UD of the MP and WP). The overall mean of the Greek non-patient sample was higher than that of the Dutch community sample (0.66, SD = 0.08).

For the FMIQ, the mean alphas for the relating to the other scales ranged from 0.60 to 0.81 (mean 0.72, SD = 0.06) for the non-patients and from 0.65 to 0.78 (mean 0.73, SD = 0.05) for the patients. For the being related to by the other scales, the alphas ranged from 0.47 to 0.82 (mean 0.73, SD = 0.13) for the non-patients and from 0.59 to 0.85 (mean 0.77, SD = 0.09) for the patients.

Test–Retest Reliability

The appropriate pair of questionnaires of the FMIQ were readministered to 40 patients and their parents and the four CREOQ to their parents on two occasions at 2–3 months intervals. The differences in mean scores (paired-samples t-test) for the two occasions were not statistically significant.

Comparing the Mean CREOQ Scores of the English, Dutch and Greek Samples

The parents of the Greek non-patients can reasonably be compared with the couples in the English and Dutch community samples (Birtchnell et al., 2006). Whereas in 30 of the 32 comparisons (four questionnaires and eight scales) the English means were higher than the Dutch means, in 31 of the 32 comparisons the Greek means were higher than the English means. Some of these differences were highly significant. In many instances, the means of the two Greek samples were more similar than were those of the Greek samples and the English and Dutch samples.

DOI: 10.1002/cpp

Inter-Scale Correlations

Inter-scale correlation matrices for the eight scales of the CREOQ were generated, for each of the four questionnaires, for both the non-patients and the patients. The most striking features of these matrices were the high correlation between each of the four polar scales (NC, ND, UN and LN) and the adjoining intermediate scales. In both samples, the mean of these correlations was significantly higher than that of the remaining correlations. Similar findings have been reported for the English CREOQ and Dutch translation of the CREOQ (Birtchnell et al., 2006). This effect is due to the fact that the intermediate scales represent a blending of the polar scales to either side of them. Sixteen correlation matrices were produced for each of the 16 questionnaires of the FMIQ for the patients' sample, and another 16 for the non-patients' sample. In the patients' sample, in all but one matrix (SoFa), the mean score of the neighbouring scales was significantly higher than that of the remaining ones. In the non-patients' sample, although adjoining mean scores were higher than the remaining ones, they were not significant in seven out of the 16 (FaSo, MoSeS, SoSeF, SoFa, SoMo, MoSeD and MoDa).

Does One Marital Partner's Self-Ratings Correspond with the Other's Partner-Ratings?

With the CREOQ, it is important to determine to what extent the way that one partner relates to another corresponds with the way that the other considers he/she is related to by this partner. The best way to examine this is to correlate one partner's self-scores against the other partner's partner-scores (i.e., MS against WP and WS against MP). If the two do correspond, the highest correlations will occur on the same-named scale of the two questionnaires (e.g., LC of MS and LC of WP). In a correlation matrix, these corresponding scales will occur along the central diagonal. Therefore, the mean of the correlations on this diagonal should be higher than the mean of the remaining correlations. This was in fact the case: for the non-patients, the mean on the MS/WP diagonal was 0.39 (0.07), and that of the remaining correlations was 0.19 (0.15) ($t = 3.80$, $p = 0.000$); and the mean of the WS/MP diagonal was 0.35 (0.08), and that of the remainder was 0.20 (0.14) ($t = 2.99$, $p = 0.004$). For the patients, the mean on the MS/WP diagonal was 0.36 (0.13), and that of the remaining correlations was 0.09 (0.19) ($t = 3.81$, $p = 0.000$); and the mean on the WS/MP diagonal was 0.25 (0.11), and that of the remainder was 0.07 (0.17) ($t = 2.97$, $p = 0.004$).

Does One Family Member's Relating Score Correspond with the Other's Being Related to Score?

With the FMIQ, it is important to determine to what extent the way that the young adult relates to the parent corresponds with the way that the parent considers he/she is related to by the young adult; and the way that the parent relates to the young adult corresponds with the way that the young adult considers he/she is related to by the parent. To take account of the gender of the young adult and the gender of the parent, this involved creating eight correlation matrices for the non-patients and eight for the patients. Of the 16 matrices, using the 0.01 or less criterion, there were only four significant correspondences, two in the non-patient sample (FaSeDa/DaFa and DaSeFa/FaDa) and two in the patient sample (SoSeF/FaSo and DaSeFa/FaDa). Therefore, the correspondences were not as good as for the CREOQ. This would appear to indicate that parents have a better understanding of each other than young adults and their parents do.

Factor Analyses

Because the MS and WS items, and the MP and WP items, are identical apart from the reference to gender, the data for the two self measures and the data for the two partner measures were combined. This provided 160 self-raters and 160 partner-raters in the non-patient sample and 168 self-raters and 168 partner-raters in the patient sample. Combining the two samples provided 328 self-raters and 328 partner-raters. Similarly, for the FMIQ, the data from the self-rating questionnaires (e.g., FaSeS, MoSeS, SoSeF) were combined, as were those from the other-rating questionnaires (e.g., FaSo, MoSo, SoFa). This provided 640 self-raters and 640 other-raters for the non-patient sample, and 672 self-raters and 672 other-raters for the patient sample. Combining the two samples provided 1312 self-raters and 1312 other-raters. For each of the CREOQ and FMIQ, a factorial analysis, rotated using the Varimax algorithm, was conducted and a four-factor solution, consistent with the four main poles of the relating theory was attempted.

The solution of the CREOQ self-raters accounted for 32.49% of the variance ($\alpha = 0.88$), and the factors extracted closely resembled the four major poles

DOI: 10.1002/cpp

of the octagon. They were assigned equivalent names: (1) distant (α = 0.83); (2) a mixture of close and distant items (α = 0.81); (3) lower (α = 0.84); and (4) upper (α = 0.81). The solution of the other-raters accounted for 38.17% of the variance (α = 0.92). The factors were identifiable as: (1) upper (α = 0.91); (2) a bipolar split between distant and upper items (α = 0.88); (3) distant (α = 0.87); and (4) lower (α = 0.81).

In a principal components analysis seeking a four-factor solution for the FMIQ self-rating questionnaires, the four factors, accounting for 33.76% of the variance, were identifiable as: (1) lower; (2) distant; (3) upper; and (4) a mixture of close and upper close. For the other-rating questionnaires the four factors, which accounted for 37.94% of the variance were identifiable as: (1) upper; (2) lower; (3) distant; and (4) mostly close.

Stage 2. The Mean CREOQ Scores of the Parents of the Non-Patients and the Parents of the Patients

The mean self-rating and partner-rating scores of the parents of non-patients and the parents of patients are shown in Table 1. Taking first the self-rating scores: both the patient's fathers and the patients' mothers scored significantly higher than the non-patients' fathers and the non-patients' mothers on lower distance and neutral distance and additionally the patients' fathers scored significantly higher on upper distance. Taking now the partner-ratings, the patients' fathers rated the mothers significantly higher on upper distance, but there were no significant differences in respect of the mothers. To sum up, the patients' parents showed a significant tendency to be more distant

Table 1. Mean scores of the eight scales of the four Couple's Relating to Each Other Questionnaires for the parents of non-patients (n = 80) and the parents of patients (n = 84)

		UN	UC	NC	LC	LN	LD	ND	UD	Total
MS	Non-patient	9.67	10.59	12.22	11.76	14.73	10.17	6.5	9.35	84.97
	SD	5.42	5.39	6.01	6.21	5.33	5.65	5.79	4.95	29.67
	Patients	11.85	12.06	11.31	13.37	14.68	12.56	9.63	12.5	97.97
	SD	6.63	7.01	5.92	6.09	6.56	5.74	7.38	6.39	31.8
	Difference	–2.18	–1.47	0.91	–1.61	0.05	–2.39	–3.13	–3.15	–13
	t	2.15	2.19	1.48	–0.91	1.62	–0.05	2.4	3.13	3.15
	p	0.03	0.17	0.37	0.13	0.96	**0.01**	**0.01**	**0.00**	**0.01**
MP	Non-patients	8.1	12.51	12.33	13.08	11.5	11.35	6.1	8.59	83.56
	SD	7	5.33	6.72	5.54	5.38	4.34	5.86	6.15	30.44
	Patients	11.35	14.27	12.24	13.15	13.5	10.26	8.92	12.55	96.24
	SD	8.81	7.7	7.85	6.9	6.45	5.47	8.06	8.71	42.62
	Difference	–3.25	–1.76	0.09	–0.07	–2	1.09	–2.82	–3.96	–12.68
	t	2.37	1.53	–0.07	0.06	2	–1.28	2.31	3.03	1.98
	p	0.02	0.13	0.94	0.95	0.05	0.2	0.02	**0.00**	0.05
WS	Non-patients	10.27	12.13	11.33	13.28	14.26	11.86	6.95	10.27	90.35
	SD	6.7	5.66	6.06	6.22	5.58	5.54	6.57	5.78	31.06
	Patients	11.26	11.63	11.21	12.94	14.82	14.27	10.4	11.85	98.39
	SD	6.77	5.48	7.49	6.3	6.11	5.67	7.42	6.53	29.77
	Difference	–0.99	0.5	0.12	0.35	–0.57	–2.42	–3.46	–1.59	–8.04
	t	0.86	–0.53	–0.11	–0.33	0.57	2.53	2.92	1.52	1.55
	p	0.39	0.6	0.91	0.75	0.57	**0.01**	**0.00**	0.13	0.12
WP	Non-patients	10.27	11.88	12.32	13.5	11.4	10.82	7.29	9.56	87.05
	SD	5.18	6.46	6.1	6.46	6.03	4.9	6.56	7.54	35.19
	Patients	11.52	10.79	12.1	12.95	11.85	10.55	9.34	12.11	91.21
	SD	8.68	6.29	6.47	5.68	6.32	4.74	7.02	8.83	33.13
	Difference	–1.25	1.09	0.22	0.55	–0.46	0.27	–2.04	–2.55	–4.16
	t	1	–1.01	–0.21	–0.53	0.44	–0.33	1.78	1.81	0.71
	p	0.32	0.32	0.83	0.6	0.66	0.74	0.08	0.07	0.48

MS = man's self-rating. MP = man's partner-rating. SD = standard deviation. WS = woman's self-rating. WP = woman's partner-rating. UN = upper neutral. UC = upper close. NC = neutral close. LC = lower close. LN = lower neutral. LD = lower distant. ND = neutral distant. UD = upper distant. Significant (<0.01) differences are in bold type.

DOI: 10.1002/cpp

than the non-patients' parents, though the evidence was stronger for fathers.

Stage 3. The Mean FMIQ Scores of the Non-Patients and the Patients

The mean FMIQ scores of the non-patients and patients are presented in Table 2, which is in eight sections; the first four concern the parents' relating to the young adults (considering the sons and the daughters separately) and the young adults' view of the parent's relating to them. The second four concerned the young adults' relating to their parents (again considering the sons and the daughters separately) and the parents' view of the young adults' relating to them. Because of space limitation, only the mean scores are presented in Table 2. The detailed tables and the graphic presentation of the mean scores in octagons are available from the senior author.

The patients' fathers rated themselves significantly higher than the non-patients' fathers on UC towards their sons (i.e., FaSeSo) and on UC, LD and ND towards their daughters (i.e., FaSeDa). UC, in terms of parenting, would amount to possessiveness.

The patients who were sons agreed about the upper closeness, but also rated their fathers (i.e., SoFa) significantly higher on UN, and UD. The patients who were daughters rated their fathers high on upper closeness and neutral distance, and also rated their fathers (i.e., DaFa) as significantly higher on the other two upper scales and on LC and LN. It should be noted here that rating someone as high on upper qualities does not preclude them from being rated high on lower qualities; but the more likely explanation of these apparently conflicting results is that the fathers who were rated high on the upper score were not the same fathers as those who were rated high on the lower score.

The patients' mothers rated themselves significantly higher than the non-patients' mothers on neutral distance towards their sons (i.e., MoSeSo) and on lower distance towards their daughters (i.e., MoSeDa). The patients who were sons viewed their mothers differently. They rated them (i.e., SoMo) significantly higher on the three upper scales. The patients who were daughters also rated their mothers differently. They rated them (i.e., DaMo) significantly higher on neutral distance, and, like the sons, rated their mothers higher on the three upper scales.

The patients who were sons, compared with the non-patients who were sons, showed no significant differences in their relating towards their fathers (i.e., SoSeFa), but they rated themselves significantly higher on neutral distance towards their mothers (i.e., SoSeMo). The fathers rated their sons (i.e., FaSo) significantly higher on the three lower scales, and also on the ND and UD, and the mothers rated their sons (i.e., MoSo) significantly higher on NC, LN and UD. The fact that the fathers viewed their sons as lower is not a consequence of their sons being junior to them. If this were so, then the non-patients' fathers would also rate their sons as lower. These questionnaires measure only negative qualities; and negative lowerness, like being meek and submissive, is an undesirable quality.

The patients who were daughters rated themselves significantly higher on all scales except LN towards their fathers (i.e., DaSeFa), and on all scales except UC and LN towards their mothers (i.e., DaSeMo). Both the fathers' and the mothers' ratings of their daughters were in accord with this.

Certain trends emerged from this analysis: There were many instances of the scores of the patients' families being significantly higher, but no instances of the scores of the non-patients families being so. Both the parents and the sons, but not the daughters, were more inclined to make greater negative judgments about others relating to them than about their relating to others. The daughters were much more inclined to make greater negative judgments about themselves than the sons were. Both the sons and the daughters rated both the fathers and the mothers as being higher on the three upper scales.

Stage 4. Comparing the FMIQ Scores of the Patients and their Parents and of the Well Sibling of the Patients and their Parents

In a proportion of the families of the patients, the FMIQ was also administered to a well sibling and his/her parents. In these analyses, to economize on space, the gender of the parents and the gender of the young adults have been combined. The findings for the patients and their siblings are presented in Table 3. The most striking findings concern the patients' reports of their relating to their parents and the parents' reports of the patients' relating to them. The patients' reports of their relating to their parents were significantly higher than the siblings' reports of this on all but the LN and the ND scales. Similarly, the parents' view of the patients' relating to them was significantly higher than their view of the siblings' relating to them on all but the UC scale.

The patients' reports of the parents' relating to them were significantly higher than the siblings'

DOI: 10.1002/cpp

Table 2. Mean Family Members Interrelating Questionnaires scores for the parents' relating to young adults and the young adults' view of parents' relating to them for the non-patients and the patients

		UN	UC	NC	LC	LN	LD	ND	UD
Father's relating to son (FaSeSo)	Non-patients	6.59	9.59	10.14	10.14	11.45	10	8.45	9
	Patients	9.22	15.37	12.28	10.6	10.57	12.28	10.25	12.25
	t	1.92	3.46	1.5	0.36	–0.63	1.77	1.09	2.14
	p	0.06	**0.00**	0.14	0.72	0.53	0.08	0.28	0.04
Son's view of father's relating (SoFa)	Non-patients	6.63	8.63	8.04	10.33	10.25	10.58	9.21	6.46
	Patients	10.94	12.9	8.05	10.42	8.69	10.25	10.78	12.19
	t	3.05	2.59	0.01	0.06	–1.23	–0.28	1.04	3.84
	p	**0.00**	**0.01**	1	0.96	0.22	0.78	0.3	**0.00**
Father's relating to daughter (FaSeDa)	Non-patients	7.34	8.79	8.13	8.59	10.28	9.15	6.84	9.18
	Patients	9.05	13.3	11	10.92	9.89	12.73	11.11	11.7
	t	1.44	3.56	2.33	2.12	–0.38	3.48	3.44	2.27
	p	0.15	**0.00**	0.02	0.04	0.7	**0.00**	**0.00**	0.03
Daughter's view of father's relating (DaFa)	Non-patients	6.16	8.82	6.44	8.38	6.16	9.67	8.43	7.04
	Patients	11.67	13.67	8.55	12.86	8.69	10.97	11.67	12.09
	t	4.26	4.02	2.06	4.58	3.04	1.43	2.54	3.58
	p	**0.00**	**0.00**	0.04	**0.00**	**0.00**	0.15	**0.01**	**0.00**
Mother's relating to son (MoSeSo)	Non-patients	7.04	11	9.12	9.04	11.5	11.27	6.27	9
	Patients	7.44	14.15	9.96	9.53	10.87	12.72	9.97	10.19
	t	0.31	2.34	0.74	0.4	–0.52	1.39	2.75	0.86
	p	0.76	0.02	0.46	0.69	0.6	0.17	**0.01**	0.39
Son's view of mother's relating (SoMo)	Non-patients	5	9.78	8.48	7.26	8.04	8.91	4.35	5.35
	Patients	9.67	15.42	9.64	10.33	9.72	11.72	7.34	10.64
	t	3.25	3.18	0.71	2.25	1.22	2.11	2.18	3.77
	p	**0.00**	**0.00**	0.48	0.03	0.23	0.04	0.03	**0.00**
Mother's relating to daughter (MoSeDa)	Non-patients	6.46	10.26	10.47	10.63	13.81	9.95	6.52	8.25
	Patients	8.14	12.77	12.19	10.46	13.47	12.93	8.63	10.28
	t	1.67	2.47	1.6	–0.15	–0.33	3.02	2.15	1.92
	p	0.1	0.02	0.11	0.88	0.74	**0.00**	0.03	0.06
Daughter's view of mother's relating (DaMo)	Non-patients	4.32	9.09	7.7	9.77	8.75	10.23	3.19	5.09
	Patients	13.27	15.4	9.73	11.16	7.93	9.96	9.49	13.4
	t	7.46	5.62	1.89	1.26	–0.99	–0.34	6.22	6.63
	p	**0.00**	**0.00**	0.06	0.21	0.33	0.74	**0.00**	**0.00**
Son's relating to father (SoSeFa)	Non-patients	8.88	8.28	5.8	8.32	11.16	10.68	11.12	8.2
	Patients	10.91	8.25	5.98	11.16	11.16	13.39	14.92	11.25
	t	1.34	–0.02	0.14	1.99	0	1.87	2.2	2.08
	p	0.18	0.98	0.89	0.05	1	0.06	0.03	0.04
Father's view of son's relating (FaSo)	Non-patients	6.36	5.77	7.73	7.91	7.86	10.86	7.41	4.59
	Patients	7.81	8.24	9.53	15.16	14.02	15.17	13.07	9.93
	t	1.01	1.44	1.18	4.46	5.57	2.69	4.02	4.74
	p	0.32	0.15	0.24	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**
Daughter's relating to father (DaSeFa)	Non-patients	7.9	5.39	4.78	8.29	11.94	9.08	10.3	7.6
	Patients	11.64	8.02	7.2	13.83	13.44	13.25	14.41	11.34
	t	3.85	3.23	2.5	4.85	–0.48	4.04	3.27	3.85
	p	**0.00**	**0.00**	**0.01**	**0.00**	0.64	**0.00**	**0.00**	**0.00**
Father's view of daughter's relating (FaDa)	Non-patients	5.95	6.44	6.12	9.91	8.57	10.57	8.29	6.3
	Patients	9.17	7.17	7.94	13.39	13.94	13.58	12.53	10.75
	t	2.81	0.65	1.57	2.64	3.94	3.06	2.69	3.57
	p	**0.01**	0.52	0.12	**0.01**	**0.00**	**0.00**	**0.01**	**0.00**
Son's relating to mother (SoSeMo)	Non-patients	8.17	7.21	6.79	8.79	13.33	10.38	8.67	8.38
	Patients	10.87	8.25	9.23	11.33	13.2	12.57	13.48	12.09
	t	1.85	0.8	1.45	1.57	–0.09	1.35	2.56	2.46
	p	0.07	0.43	0.15	0.12	0.93	0.18	**0.01**	0.02
Mother's view of son's relating (MoSo)	Non-patients	7.46	5.35	6.54	11.27	10	12.12	8.65	5.62
	Patients	8.66	6.29	10.69	13.66	14.95	12.94	11.74	11.73
	t	0.84	0.84	3.57	1.65	3.18	0.71	2.23	4.88
	p	0.41	0.4	**0.00**	0.1	**0.00**	0.48	0.03	**0.00**
Daughter's relating to mother (DaSeMo)	Non-patients	7.16	6.25	6.07	9.12	13	9.11	7.49	7.08
	Patients	12.42	8.49	9.59	13.13	12.82	12.08	13.97	13.54
	t	4.83	2.31	3.25	3.79	–0.16	3.1	5.37	5.84
	p	**0.00**	0.02	**0.00**	**0.00**	0.88	**0.00**	**0.00**	**0.00**
Mother's view of daughter's relating (MoDa)	Non-patients	5.77	7.57	6.49	10.48	8.61	11.1	7.87	5.72
	Patients	9.16	6.96	10.82	13.82	13.12	12.82	11.44	10.05
	t	3.32	–0.67	3.67	3.36	4.39	2.18	2.95	3.56
	p	**0.00**	0.51	**0.00**	**0.00**	**0.00**	0.03	**0.00**	**0.00**

UN = upper neutral. UC = upper close. NC = neutral close. LC = lower close. LN = lower neutral. LD = lower distant. ND = neutral distant. UD = upper distant. Significant (<0.01) differences are in bold type.

DOI: 10.1002/cpp

Table 3. Mean FMIQ scores for parents' relating to young adults and young adults' view of the parents' relating to them for the patients (n = 84) and the patients' well sibling (n = 48)

		UN	UC	NC	LC	LN	LD	ND	UD	Total
Parents' relating to young adult	Patient	8.1	12.56	10.76	10.04	11.61	12.38	10.05	10.46	85.97
	SD	6.14	6.94	6.32	5.5	6.03	5.07	6.29	6.77	31.69
	Sibling	6.32	8.54	10.14	10.65	13.65	11.37	8	7.56	76.23
	SD	5.64	5.8	6.15	6.88	6.48	4.88	5.01	4.95	29.58
	Difference	1.79	4.02	0.62	–0.61	–2.04	1.01	2.05	2.89	9.74
	t	2.05	4.68	0.69	–0.63	–2.33	1.4	2.34	3.83	2.16
	p	0.04	**0.00**	0.49	0.53	0.02	0.16	0.02	**0.00**	0.03
Young adult's view of parents' relating	Patient	10.99	13.49	8.37	10.58	8.58	10.45	9.55	11.66	83.68
	SD	9.1	7.83	6.65	6.8	5.51	5.44	7.29	9.22	39.86
	Sibling	7.89	10.07	6.95	8.33	7.96	9.07	6.21	8.33	64.82
	SD	7.15	8.15	6.6	5.82	4.86	4.24	6.39	8.14	35.63
	Difference	3.09	3.43	1.42	2.25	0.62	1.38	3.34	3.33	18.85
	t	2.94	3.07	1.51	2.37	0.8	2.2	3.61	2.59	3.38
	p	**0.00**	**0.00**	0.13	0.02	0.42	0.03	**0.00**	**0.01**	**0.00**
Young adult's relating to parents	Patient	10.97	7.69	6.88	11.35	11.44	12.22	14.1	11.61	86.28
	SD	6.64	5.77	6.95	7.33	7.19	6.89	8.1	6.63	35.7
	Sibling	7.19	5.95	3.08	6.68	10.29	9.81	11.59	7.9	62.49
	SD	5.38	4.21	3.91	5.66	6.34	5.37	7.77	6.15	26.47
	Difference	3.79	1.74	3.8	4.68	1.15	2.41	2.51	3.72	23.78
	t	4.18	2.81	6.16	5.67	1.16	3.08	2.23	4.05	6.12
	p	**0.00**	**0.01**	**0.00**	**0.00**	0.25	**0.00**	0.03	**0.00**	**0.00**
Parents view of young adult's relating	Patient	8.57	7.03	9.15	12.59	12.7	12.78	11.58	10.24	84.65
	SD	6.45	6.1	7.01	7.07	6.78	5.65	7.18	7.1	35.6
	Sibling	5.65	6.25	6.32	8.42	8.15	11.17	8.1	7.03	61.08
	SD	4.14	4.27	453	5.06	4.69	4.39	6.47	5.54	22.88
	Difference	2.92	0.78	2.83	4.18	4.56	1.61	3.48	3.2	23.56
	t	4.55	1.21	4.03	5.48	6.39	2.49	3.5	3.92	6.63
	p	**0.00**	0.23	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**

UN = upper neutral. UC = upper close. NC = neutral close. LC = lower close. LN = lower neutral. LD = lower distant. ND = neutral distant. UD = upper distant. Significant (<0.01) differences are in bold type.

reports of this, on the three upper scales and neutral distance. The parents' reports of their relating to the patients were significantly higher than their reports of their relating to the siblings on the UC and UD scales. The conclusion from these findings is that the significantly high levels of negative interrelating within the patients' families were entirely restricted to that between the parents and the patients. When this exercise was repeated with the non-patients (n = 80) and a sibling other than the one featuring in the previous analyses (n = 63), almost all comparisons were non-significant. The exceptions were on two scales: The sibling's report of their parents' relating to them were significantly higher than the young adults' reports of this, on the UC and the UD scales.

A Computer-Generated Graphic Representation of the FMIQ Scores of an Illustrative Family of a Patient and a Non-Patient

Figures 2a and 2b are the graphic representation of the interrelating within two families including a mother (M), a father (F) and two (adult) children (C1 and C2). The inner circle of octagons concerns how a person considers he/she relates to the other and the outer circle of octagons concerns how he/she considers the other person relates to him/her. For each octagon, the sequence of scores corresponds to the eight octant positions as represented in Figure 1 (lower diagram) and the extent of the shading represents the size of the score. The upper left four octagons represent the interrelating between child 1 and the mother and the upper right four octagons represent the interrelating between child 1 and the father. The lower left four octagons represent the interrelating between child 2 and the mother and the lower four octagons represent the interrelating between child 2 and the father. No interrelating is shown between the mother and the father or between child 1 and child 2. In Figure 2a, both C1 and C2 are non-patients. In Figure 2b, C1 is a patient and C2 is a non-patient. In the family represented in Figure 2a, the interrelating between each of the two (adult) children and their parents

DOI: 10.1002/cpp

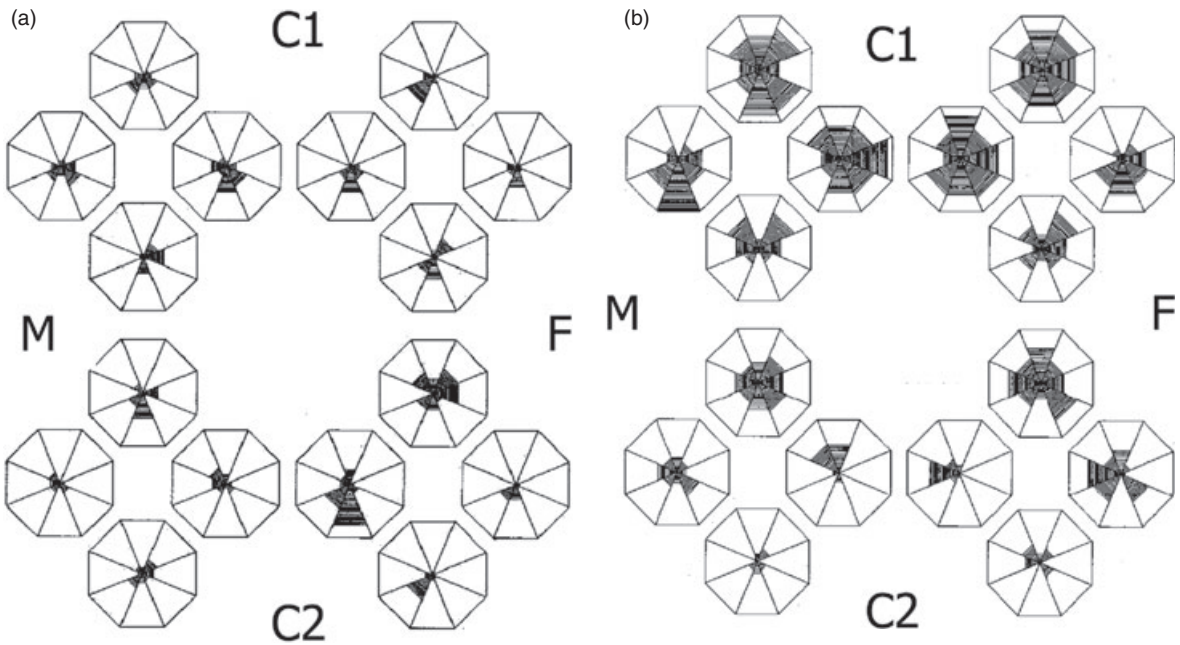

Figure 2. (a) The Family Members Interrelating Questionnaires (FMIQ) scores of an illustrative family of a young, male non-patient (C1) and his sibling (C2). (b) The FMIQ scores of an illustrative family of a young, male patient (C1) and his sibling (C2). The C stands for the child [1, either for the non-patient in figure (a) or the patient in figure (b) and 2, for his sibling] and the M and F stand for the mother and the father, respectively

is similar. In the family represented in Figure 2b, the negative relating between the patient and his parents is much more extreme than that between the non-patient and his parents.

The patient in Figure 2b registered extremely high levels of negative relating both of his relating towards his parents and of his parents towards him. Both his parents rated themselves as negatively upper towards him and experience him as negatively lower towards them. These parents also related negatively towards their other child but the other child did not experience them in this way and did not relate negatively towards them.

Stage 5. Is There Any Correspondence Between the Parents' CREOQ Scores and their FMIQ Scores?

In order to determine whether there were similarities between the negative interrelating between the parents and the negative interrelating between the parents and the young adults, the scores on the scales of each of the four CREOQ questionnaires were correlated against those on the scales on the equivalent FMIQ questionnaires. As with the self-relating and the other-relating correlations described in Stage 1, the corresponding scales of the questionnaires being compared were located along the central diagonal of the correlation matrix. Hence, the mean of the diagonal scores was compared with the mean of the remaining scores. For the non-patients, the mean diagonal scores were consistently and significantly higher than the remainder on seven of the eight comparisons (MS against FaSeSo and FaSeDa, WS against MoSeSo and MoSeDa, MP against FaSo and FaDa and WP against MoSo and MoDa). For the patients, this was the case for only two comparisons (WS against MoSeSo and MoSeDa). This would indicate that how the non-patients' parents interrelated with each other was predominantly similar to how they interrelated with their adult children, but for the patients' parents such similarity was less evident. This presumably is because the parents interrelated in a more negative way between themselves and their child than they did between themselves.

DOI: 10.1002/cpp

DISCUSSION

Previous studies have focused upon the retrospective assessment of family relationships in samples of patients and non-patients, the assumption being that unsatisfactory relationships with parents in childhood predispose individuals to psychiatric disorder in later life (Bowlby, 1977). There was some confirmation of this in two community studies: In a sample of 40–49-year-old women, a significant association was demonstrated between present neurotic symptomatology and the recall of early discord between parents and a poor early relationship with a mother but not with a father (Birtchnell, Evans, & Kennard, 1988); and in a sample of 25–34-year-old depressed women, but not in a comparable sample of non-depressed women, there was a recall of poor maternal care (Birtchnell, 1988). This was confirmed by the depressed women's recollection of low maternal care and high overprotection scores on the Parental Bonding Instrument (Parker, Tupling, & Brown, 1979), a retrospective measure of parental behaviour in childhood. With studies of this kind, there is always the possibility of the selective recall of early experiences by the patient as a way of explaining her present condition, though it is relevant that, in both these studies, the link was made only with the mother.

In the present study, we were concerned not with past relating but with present interrelating of patients and non-patients; and we were not just relying upon the young adult's view; we also have the view of the parents. We were not so much concerned with the possible effect of the parents' relating upon the onset or the continuation of the condition as with the overall picture of patients' involvement with their parents. Over 80% of the patients were psychotic and mainly schizophrenic. Claridge (2006) observed that '. . . schizophrenia, like any other psychological disorder, results from genetically determined disposition, interacting with family and social influences, and modified by other personality and cognitive factors' (pp. 657–658).

The recently developed FMIQ, which is a modification of the longer-established CREOQ, was used in this study to measure adult/parent interrelating. There is no previous study of its psychometrics for comparison with the present findings, which were in general satisfactory. The four polar scales of both the FMIQ and the CREOQ were easily identified by the factor analysis. The Greek four-factor solution for the CREOQ was less clearly defined than the English one (Birtchnell et al., 2006). A confirmatory factor analysis would be expected to provide support for most the eight-factor structure of the measures, as it did with the PROQ3, the short version of the PROQ2 (unpublished data).

The English and the Greek psychometrics of the CREOQ compared well, though there were some differences. Most of the octant scale reliabilities for both the Greek samples were significantly lower than those of the English ones. They more closely resembled the Dutch ones (Birtchnell et al., 2006). A possible explanation for this is the difficulty in translating the English items into Greek or Dutch equivalents. The validity of both the CREOQ and the FMIQ was confirmed with the inter-scale correlations of each measure. The CREOQ correlations were consistent with the English ones (Birtchnell et al., 2006). The FMIQ correlations of the non-patients were in general lower than those of the patients and of the CREOQ, indicating either that the non-patients had greater difficulty than the patients differentiating between the qualities that each octant scale represented (which seems unlikely) or that the FMIQ includes items with high commonalities. Since the FMIQ is based upon the CREOQ, it seems that adult/parent interrelating is qualitatively different from that between the couples. If this is so, then perhaps more items of the FMIQ need to be replaced or rephrased in order to increase its validity.

The study was prompted by the very striking differences that had been observed between the negative interrelating (as measured by the CREOQ) of couples seeking couple therapy and couples from a community sample (Birtchnell et al., 2006). It was not considered likely that the parents of the patients would demonstrate evidence of a relationship problem since they had no psychiatric disorder themselves and they were not seeking therapy; as it happened, both the fathers and the mothers of the patients, when compared with those of the non-patients, did rate themselves significantly higher on neutral distance and lower distance, and also the fathers did rate the mothers significantly higher on upper distance. It was not surprising that these differences between the two sets of parents were not as marked as those between the therapy couples and the non-therapy couples in the Birtchnell et al. (2006) study, but they did indicate that the patients' parents were not as close as those of the non-patients. Whether this was a contributing cause or a consequence of the patients' difficulties we are not in a position to say.

DOI: 10.1002/cpp

It is a feature of the Greek culture that young adults remain in close contact with their parents. In fact, the majority of both samples were unmarried (69.3% of the patients and 92.3% of the non-patients) and high proportions were still living with their parents (58.3% of the patients and 66.3% of the non-patients). This made the present samples particularly suitable for a study of this kind, though it also carries the caveat that the findings of the study may not be generalizable to samples from other cultures. It was considered important for the present analyses that the data concerning fathers and mothers and sons and daughters should be examined separately. Although this made the presentation of data much more complicated, we considered it important to examine the possibility that sons and daughters might interrelate differently with their respective parents. For this reason, it was unfortunate that there were so few sons in the non-patient sample (17). This may also have had an effect on some of the tests of significance.

When the 0.01 or less criterion of significance was adopted, there was no instance of the non-patients scoring significantly higher than the patients in any of the 128 patient/non-patient comparisons that were made, but, in the same number of comparisons, there were 56 instances of the patients scoring significantly higher than the non-patients. The fact that 33 of these differences concerned the parents' view of the patients' relating to them would indicate that this was not simply a consequence of the distorted perception of the patients as a consequence of their psychiatric condition. The findings of the study suggest that more attention should be paid to the family relationships of young, psychotherapy patients, both at the assessment stage and during the course of therapy.

Were There Differences in Gender?

Despite the small number of sons in the non-patient sample, there were significant differences between the patients and the non-patients in 17 of the 64 comparisons in which the son was involved. There were no significant differences concerning the son's ratings of his relating to his father, but there were five significant differences concerning the father's rating of the son's relating to him. These concerned the three distant scales and the three lower scales (the LD scale being common to both); so the father was concerned about the son's distance and the son's submissiveness. There was only one significant difference concerning the son's rating of his relating to his mother, but three concerning the mothers' view of the son's relating to her. The sons rated both their parents as being high on the three upper scales, but the parents did not confirm this.

There were more than twice as many (39) significant differences between the patients and non-patients in respect of the daughter's interrelating, but this may have been due to the larger sample size. In contrast with the sons, there were 13 out of a possible 16 scales on which a daughter's relating to her parents was significantly higher for the patients than for the non-patients. Also there were 12 out of a possible 16 scales on which the parent's view of the daughter was significantly higher for the patients.

Comparing Patients with Their Well Siblings

It was an added bonus that 48 of the patients and 63 of the non-patients had well siblings (though not necessarily of the same gender) who were willing to participate in the study, and that the patients' and the non-patients' parents were willing to complete the questionnaires in relation to the siblings as well as to the index case (Table 3). This way it was possible to determine whether the parent's interrelating with the index cases differed from his/her interrelating with the sibling. As with the main study, again using the 0.01 or less criterion of probability, in the families of the non-patients, there was no instance of the parent's interrelating with the index case being significantly worse than his/her interrelating with the sibling; though there were two instances of the sibling's view of the parent being significantly worse than the index case's view of the parent. In the patients' families, the patient's score was significantly worse than the sibling's in 19 of the 32 comparisons. (By worse here we mean that the score was higher.) While there were only two instances of a parent scoring significantly higher in his/her relating to the patient, there were seven instances of the parent's view of the patient's relating to him/her being significantly higher. On the other hand, there were six instances of the patient scoring significantly higher in his/her relating to the parent, and four instances of the patient scoring higher in his/her rating of the parent relating to him/her. Thus, the parents were more inclined to view the patient's relating as negative than to view their own relating as negative.

DOI: 10.1002/cpp

Limitations of the Study

This was an opportunistic study and was dependent upon one particular therapist's willingness to make his patients and their families available for investigation. The study samples were rather small and it was unfortunate that there were so few men in the non-patient sample. However, a high proportion of the non-patients' siblings were men and they could as easily have been in the non-patient sample. Since there were no significant differences between the non-patients and the non-patients' siblings (in Table 3), the results would probably have been no different had the number of men been higher. It is acknowledged that the proportion of young adults in both samples who were unmarried and/or living with their parents was high. While this is a reflection of the Greek culture, it could have contributed to the striking findings. It would be informative to repeat the study in a different culture. It was a disadvantage that the patients comprised both neurotic and psychotic patients. It would have been preferable had they been more homogeneous and if the samples had been larger. While the participants seemed able to cope with completing sometimes several quite long questionnaires, it would be an advantage for us to have used shorter versions.

The Relevance of the Questionnaires for Psychotherapy

While it is necessary to conduct studies of this kind, the value of measures such as the CREOQ and the FMIQ lies in the assessment of individual patients, within the setting of their families, in individual couple and family therapy (Birtchnell, 2001b). They provide a pointer to possible areas of interpersonal difficulty and a means of charting progress through the course of therapy. While the questionnaires are long, the items are brief and relevant, and patients do not normally object to completing them. A shorter version of the CREOQ does exist, but it has yet to be evaluated. Since the items of the CREOQ and the FMIQ are so similar, it would also be possible to produce a shorter version of the FMIQ. Because of the large number of scales, it is essential to have a computer program for scoring them and for presenting the results in graphic form. This way the findings can be presented within a single diagram. A program for doing this is available from the authors. The same program is suitable for scoring both the CREOQ and the FMIQ. The graphic representation of the scores can be shown to the patients and possibly also to the patients in the company of their parents. A similar procedure has previously been adopted with the graphic representation of CREOQ scores in couple therapy (Birtchnell et al., 2006).

ACKNOWLEDGEMENTS

The authors wish to thank Dr Joannis N. Nestoros, Professor at the University of Crete, for assistance in the recruitment of the sample of the patients and their families, and the psychology students for assistance in the recruitment of the sample of the non-patients and their families. We also acknowledge the contribution of Bill Birtchnell for designing the software for the graphic representations of the two families presented in Figure 2.

REFERENCES

Benjamin, L.S. (1987). Use of the SASB dimensional model to develop treatment plans for personality disorders. 1. Narcissism. *Journal of Personality Disorders*, *1*, 43–70.

Benjamin, L.S. (1996). A clinician-friendly version of the interpersonal circumplex: Structural analysis of social behaviour (SASB). *Journal of Personality Assessment*, *66*, 248–266.

Birtchnell, J. (1988). Depression and family relationships: A study of young, married women on a London housing estate. *British Journal of Psychiatry*, *153*, 758–769.

Birtchnell, J. (1994). The interpersonal octagon: An alternative to the interpersonal circle. *Human Relations*, *47*, 511–529.

Birtchnell, J. (1996). *How humans relate: A new interpersonal theory*. Hove, East Sussex: Psychology Press.

Birtchnell, J. (2001a). The Couple's Relating to Each Other Questionnaires. In J. Touliatos, B.F. Permutter, & G.W. Holden (Eds) *Handbook of family measurement techniques* (2nd ed.). Thousand Oaks, CA: Sage.

Birtchnell, J. (2001b). Relating therapy with individuals, couples and families. *Journal of Family Therapy*, *23*, 63–84.

Birtchnell, J. (2002a). *Relating in psychotherapy: The application of a new theory*. Hove, East Sussex: Brunner-Routledge.

Birtchnell, J. (2002b). Psychotherapy and the interpersonal octagon. *Psychology and Psychotherapy: Theory, Research and Practice*, *75*, 349–363.

Birtchnell, J., & Evans, C. (2004). The Person's Relating to Others Questionnaire (PROQ2). *Personality and Individual Differences*, *36*, 125–140.

Birtchnell, J., Evans, C., & Kennard, J. (1988). Life history factors associated with neurotic symptomatology in a rural community sample of 40–49-year-old women. *Journal of Affective Disorders*, *14*, 271–285.

Birtchnell, J., & Shine, J. (2000). Personality disorders and the interpersonal octagon. *British Journal of Medical Psychology*, *73*, 433–448.

DOI: 10.1002/cpp

Birtchnell, J., Voortman, S., DeJong, C., & Gordon, D. (2006). Measuring interrelating within couples: The Couples' Relating to Each Other Questionnaires (CREOQ). *Psychology and Psychotherapy: Theory, Research and Practice*, *79*, 339–364.

Bowlby, J. (1977). The making and breaking of affectional bonds. I. Aetiology and psychopathology in the light of attachment theory. *British Journal of Psychiatry*, *130*, 201–210.

Carson, R.C. (1969) *Interaction concepts of personality.* Chicago, IL: Aldine.

Claridge, G. (2006). Divided selves as nervous types. Lecture delivered to the British Psychological Society Annual Conference in Cardiff, reproduced in *The Psychologist*, *19*, 656–658.

De Jong, C.A.J., van den Brink, W., & Jansma, A. (2000). ICL-R: *Handleiding bij de vernieuwde Nederlandse versie van de Interpersonal Checklist (ICL).* Sint-Oedenrode, the Netherlands: Novadik.

Derogatis, L.R. (1983). *SCL-90-R: Administration, scoring and procedures manual-II* (14–15). Towson, MD: Clinical Psychometric Research.

Kalaitzaki, A.E. (2005). *Family and Schizophrenia*. PhD thesis, University of Sunderland.

Kalaitzaki, A.E., & Nestoros, J.N. (2003). The Greek version of the Revised Person's Relating to Others Questionnaire (PROQ2-GR). *Psychology and Psychotherapy: Theory, Research & Practice*, *76*, 301–314.

Kalaitzaki, A.E., & Nestoros, J.N. (2006). Ameliorating interrelating within families of psychotic persons: An integrative approach. In E. O'Leary & M. Murphy (Eds), *New approaches to integration in psychotherapy* (pp. 256–279). London: Brunner—Routledge.

Kiesler, D.J. (1986). Interpersonal methods of diagnosis and treatment. In J.O. Cavenar (Ed.), *Psychiatry* (Vol. 1, pp. 1–23). Philadelphia, PA: Lippincott.

Kiesler. D.J. (1996). *Contemporary interpersonal theory and research: Personality, psychopathology and psychotherapy.* New York: Wiley.

Leary. T. (1957). *Interpersonal diagnosis of personality*. New York: Ronald.

Orford, J. (1986). The rules of interpersonal complementarity: Does hostility beget hostility and dominance, submission? *Psychological Review*, *93*, 365–377.

Parker, G., Tupling, H., & Brown, L.B. (1979). A parental bonding instrument. *British Journal of Medical Psychology*, *52*, 1–10.

Wiggins, J.S. (1979). A psychological taxonomy of trait-descriptive terms: The interpersonal domain. *Journal of Personality and Social Psychology 37*, 395–412.

DOI: 10.1002/cpp