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Assessment *The Scale of Perceived Interpersonal Closeness (PICS)*

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The development and piloting of a new scale entitled the Perceived Interpersonal Closeness Scale (PICS) is described. The format of the PICS requires an individual to position other individuals within a circular 'closeness' space in which the distance between these others can be mapped as an ordinal distance rating. By removing the reliance on verbal ratings, the PICS is designed to be easily understood by respondents. The PICS is specifically designed to measure individual perception of interpersonal (socio-emotional) closeness and captures both the individual's actual and ideal sense of perceived closeness and social support. The results illustrate that the scale has satisfactory psychometric properties, including short-term test-retest reliability (median value $r_s = 0.77$), and acceptable face, concurrent and discriminant validity. It is proposed that this instrument is a pan-theoretical and psychometrically sound assessment tool that can be clinically useful, regardless of therapeutic orientation. Copyright © 2003 John Wiley & Sons, Ltd.

INTRODUCTION

During recent decades researchers and clinicians have shown an interest in studying and measuring closeness-related constructs, some of it in this journal (e.g. Timmerman, Emanuels-Zuurveen, & Emmelkamp, 2000). Sarason, Shearin, Pierce and Sarason (1987) defined the common factor underlying measures of perceived social support as 'the extent to which an individual is accepted, loved and involved in relationships in which communication is open' (p. 830). It is suggested that this core factor is interpersonal, socio-emotional closeness, a basic component and function of social support. Closeness, explicitly linked with a closeness-distance model of relationship is a richer and broader term than intimacy (Marks & Floyd, 1996).

So far, theory and research suggest that closeness and social support are essential to the mental health of children and adolescents (Burnett & Demnar, 1996; Sherman & Thelen, 1996) as well as adults (Rathus & O'Leary, 1997; Sarason et al., 1987). They figure in the prevention and treatment of psychological problems and foster meaningful functioning (Milne, 1999). Closeness also helps in establishing protection (Antonucci, 1990), achieving feelings of security (e.g. George & West, 1999; McCarthy, 1999), gratifying various needs (Argyle, 1970), and thus seems necessary for physical and mental health in relationships (Bartholomew, 1990).

Although various theories exist, closeness is still difficult to define (Ridley, 1993). However, various definitions (e.g. Birtchnell, 1997; Jamieson, 1998), components (e.g. Kayser & Himle, 1994; Sherman & Thelen, 1996) and classifications of closeness (e.g. Orlofsky, Marcia, & Lesser, 1973; Schaefer & Olson, 1981) and social support have been offered (e.g. Milne, 1999).

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Nevertheless, the findings suggest that any thorough clinical evaluation should include the assessment of closeness as an aspect of interpersonal functioning. The measurement of closeness-related constructs has, despite difficulties, been widely applied and various methods have been used, for example systematic observations (e.g. Milne & Netherwood, 1997), laboratory studies (e.g. Hindy & Schwarz, 1994), role-playing (e.g. Rusbult, Zembrot, & Gunn, 1982), longitudinal studies (e.g. Rusbult, 1983), multiple informants (e.g. Hindy & Schwarz, 1994), interviews (e.g. Antonucci, 1990), single-item measures (e.g. Bartholomew & Horowitz, 1991), pictorial measures (e.g. Aron, Aron, & Smollan, 1992; Schmiedeck, 1978) and multidimensional questionnaires (e.g. Berscheid, Snyder, & Omoto, 1989b; Power, Champion, & Aris, 1988; Timmerman et al., 2000).

Since experimentally manipulating closeness may be unethical, systematically obtaining verifiable data on close relationships becomes more important. Available standardized assessment measures vary in purpose, dimensionality, background, theoretical orientation (theory-free to theory-based), scoring system (from 'yes-no' to a 9-point scale), length, reliability and validity. It continues to remain a matter of debate as to which instruments and methods are most suitable to use. The best results may be reached by combining methods, but this is a costly solution. A measure that combines the clients' and clinicians' expertise and provides high face/content validity may be the next best alternative.

However, some techniques (e.g. Law's (1998) 'intimacy exercise') paid no attention to psychometric properties or the functional aspect (intensity of closeness) and the under or over-provision of closeness. Other measures have disregarded subjective experiences and replicability (e.g. observations), objective variables (e.g. self-reports), cost (in-depth training of interviewers; longitudinal studies; multiple informants; combining methods), low realism (e.g. role-playing), unnaturalness, longevity of effects, social desirability and ethical issues (e.g. laboratory), poor reliability (e.g. single-item measures), time and energy consumption and suitability for distressed clients (multidimensional, lengthy measures), i.e. practicalities. In addition to these weaknesses, self-report questionnaires usually only focus on *one* relationship, lack free choice, require good literacy skills, are slow to administer and score, and the results are usually difficult for clients to understand.

There is an obvious lack of a short, pictorial,

psychometrically sound measure of interpersonal functioning, with only four such measures available: the Inclusion of Other in the Self (Aron et al., 1992), the Relationship Closeness Scale (Coffman, Levitt, & Guacci-Franco (1993) cited in Levitt, Coffman, Guacci-Franco, & Loveless, 1994; the two based on overlapping circles of the Self and the significant others and being almost identical, one on a 7-point and the other on a 9-point scale), the Personal Sphere Model/PSM (Schmiedeck, 1978) and the Hierarchical Mapping Technique (Antonucci, 1990; the latter two most closely resembling the PICS). However, the first two are impractical if required to relate to more than one significant other. The PSM, a projective test, lacks structure, precision and clarity of measurement, uses psychoanalytical jargon, focuses on lifetime object relationships and has a complex scoring system. The fourth method, being a long structured interview with three concentric circles, and as such mainly used with older adults (Acitelli & Antonucci, 1994; Antonucci & Akiyama, 1987), is impractical, complex and laborious. It focuses on a combination of importance, closeness and support, network size and characteristics, and a limited number (first 10) of people, and provides a limited response range. Neither of these measures provides a validating scale, information about desired (ideal) and thus satisfactory/unsatisfactory closeness, or a list of potential personal and formal relationships that may decrease chance omissions.

To overcome some of these shortcomings of the currently available instruments, a unidimensional, pan-theoretical and methodologically sound instrument with high face/content validity and capable of simultaneously investigating an unlimited numbers of relationships was designed. This article describes the development and evaluation of this new, visually appealing and user-friendly pictorial instrument, designed to be easy and quick to administer, read, score and interpret. The Perceived Interpersonal Closeness Scale (PICS) aims to provide clinically useful data on the structural and functional aspects of perceived actual and ideal interpersonal/socio-emotional closeness (plus the discrepancy between them).

METHOD

Pilot Study and Preliminary Investigations

This involved the examination of the acceptability, clarity and initial face/content validity of the piloted version via trial runs (piloting), relevant

discussions with the participant-volunteers (12 available non-clients and 15 adult mental health clients) and administration of the PICS Face/Content Validity Questionnaire-1 (described below) to 20 colleagues.

Administration of the piloted version showed that the new instrument could be completed easily and within a short period of time (3–7 min). Greater closeness was usually something the respondents desired, indicating that closeness was perceived as positive.

Through the PICS Face/Content Validity Questionnaire-1, colleagues judged the *initial* PICS to be a potentially adequate measure of closeness, with adequate instructions and presentation and 'probably useful' validating questions. No expert saw closeness measured by the PICS to have a negative meaning; the experts judged that the PICS primarily measured 'emotional closeness', 'another person's importance in one's life' and 'socio-emotional closeness/intimacy'. The majority of negative comments concerned the PICS' initially poor and complex instructions.

Following feedback from the pilot study, the piloted version underwent several changes; for example, technical jargon was replaced by more common terms, the troublesome and hence usually ignored request to note 'mixed feelings' and 'serious conflict' was omitted and *feeling close* was explained at the beginning of the instructions.

MAIN STUDY

Participants

Thirty-three individuals (16 colleagues approached and 17 of their AMH clients) took part in the main investigations of the face/content validity of the *final* version of the PICS by com-

pleting the appropriate PICS Face/Content Validity Questionnaires.

The *main participant groups* involved in investigations of the scale's test-retest reliability, normative data, convergent, divergent and discriminative validity are presented in Table 1.

For all groups, the exclusion criteria were: no current psychotic-type illness, learning disabilities or being outside the age range of 18 to 65 years.

There are no significant age differences ($t(115) = 1.410, p < 0.161$, two-tailed, n.s., with Levene's Test for Equality of Variances $F(1, 115) = 1.190, p < 0.278$, indicating equality of variances) or gender differences ($\chi^2(1, n = 117) = 3.273, p < 0.70$, n.s.) between the two validity groups.

Instruments

PICS Face/Content Validity Questionnaires

These *ad hoc* questionnaires were devised to enable raters to examine and rate the adequacy and face/content validity of the *pilot* (PICS Face/Content Validity Questionnaire-1) and the *final* version of the PICS (PICS Face/Content Validity Questionnaire-F for experts and PICS Face/Content Validity Questionnaire-C for clients). Although slightly different, these questionnaires all contained items on a 5-point scale (1–5) about the PICS' components (instructions, presentation, 'validating questions') and possible measurement goal, i.e. closeness (mainly based on Schaefer & Olson's (1981) classification of 'intimacy').

The Miller Social Intimacy Scale (MSIS; Miller & Lefcourt, 1982). This was used to examine the concurrent, convergent validity of the new measure. This is an empirical/pan-theoretical, verbal and

Table 1. Main participants groups

Group	Subgroup	Age	Gender	Description
Reliability Group, $N = 41$	Time 1 (also, the SOS Validity group), $N = 50$ Time 2, $N = 41$	Mean = 31.34 SD = 9.63 Mean = 32.78 SD = 9.32	42 females Eight males 36 females Five males	Adult college students. No refusal. A loss of $N = 9$ (18%) was due to students' non-attendance at college; no significant difference between time 1 and 2
Validity Group, $N = 117$	Clients, $N = 69$ (74 approached, five excluded) Non-clients, $N = 48$ (180 approached, 51 replies, 48 (27%) included)	Mean = 37.75 SD = 11.58 Mean = 40.94 SD = 12.62	39 females 35 males 35 females 13 males	AMH outpatients of 12 therapists in northern England Random, non-mental health patients from three GP surgeries in northern England

multi-item instrument (thus complementary to a pictorial and single-item measure), on a 10- or a 5-point (revised version) scale, that measures social closeness with the closest friend. Six items measure frequency and 11 measure the intensity of this relationship, with higher scores indicating greater amounts of social closeness. To allow easier comparison with the PICS, the term 'spouse' has been replaced by a more current term—'partner'. Also, one question was added to the original 21-item scale to help with identifying where the selected 'closest friend' was placed on the PICS.

The Significant Others Scale (SOS; Power et al., 1988). The SOS was used to further assess the new measure's concurrent, convergent validity. The instrument's 10-item (full grid) version has a 7-point frequency scale and is concerned with actual and ideal social support; the first half of the questions tapped emotional, and the latter half tapped practical social support. The number of significant people remained limited to six. To make the SOS more comparable with the PICS, the instrument was slightly adapted: 'Names of Significant People' was changed into 'Significant People (e.g. partner, best friend, mother)'.

The Symptom Checklist-90-R (SCL-90-R) (Derogatis, 1994). The SCL-90-R was used to examine divergent validity of the new measure. This is a widely-used, 90-item symptom checklist on a 5-point scale designed to measure symptom levels in community, medical and psychiatric populations. It provides information on nine symptom dimensions and three global indices. The routine use of this questionnaire within the Departmental AMH Service for audit purposes was the decisive factor in choosing the SCL-90-R for the study; this was a way of avoiding unnecessary testing of the clients.

The Perceived Interpersonal Closeness Scale (PICS). The PICS is a single-item, pictorial representation measure, developed to tap individual perception of actual (p. 15) and ideal (p. 16) interpersonal/socio-emotional closeness with significant others. (Appendix 1 and 2; the original, colour version is available on request from the first author). The obtained actual and ideal scores and the discrepancy between them were hypothesized to provide a measure of the person's closeness needs and expectations, and the degree to which they have been met.

The auxiliary sections of the PICS are concerned with basic demographic information. Instructions

were kept brief and simple. On the PICS-Actual (step 1) they define 'feeling close' (i.e. a process of involvement with other individuals) and request that the respondent 'select relevant living people' from the list and 'indicate how close' s/he currently feels to them by placing their symbols (e.g. 'P' for a partner) in the appropriate circles around the Self. On the PICS-Ideal (step 2) they differ in that respondents are requested to place the symbols of significant people in the appropriate circles around the Self, according to how close s/he would *ideally* like to feel.

Both figures consist of a number of concentric circles, with the central one representing the Self. Each represents a different level of closeness with the Self, thus providing a 6-point scale (0–5). All current significant relationships should be placed within this figure, with the closest circle to the Self representing 'fully close' relationships (and scoring 5) and the area outside the outer circle meaning 'distant' (and scoring 0). The circles or levels of closeness (scored between 4 and 1) between these two extremes are 'very close', 'moderately close', 'a little bit close' and 'neither close nor distant'. All categories are displayed within the circles. It also seemed logical to introduce a special category within the Self-area, entitled 'smothered' (and scored 1 if appearing in actual *only*, or 5 if appearing in ideal or both actual and ideal, as it was then assumed to indicate a full closeness). This category may provide relevant qualitative information about an extreme over-provision of 'closeness' (if appearing in actual *only*), i.e. the individual's perception of being simultaneously intruded into and distant. This resembles Aron et al.'s (1992) complete overlapping of two circles, presenting two individuals in uncomfortable 'unseparateness'. If the symbol for the significant other fell between two rating categories, it was scored according to where the majority of the symbol was situated.

Assigning to each participant's choice a scale value (0–5), i.e. computation of total actual and ideal scores and their discrepancies, as well as for each significant other, represents the main scoring system. In the case of over-provision of closeness, i.e. if the ideal score is lower than the actual, the discrepancies are also recoded, i.e. made to equal zero. Similar approaches were taken by Power et al. (1988) and Sternberg and Barnes (1985).

It also contains several questions at the bottom of each page, which aim to check if participants refer to closeness appropriately, i.e. as intended. Closeness is assumed to involve active and open communication, freedom to disagree (Holahan &

Moos, 1983) and express 'negative' emotions (Berscheid, Snyder, & Omoto, 1989a). These concluding questions (concerning openness and disagreement with the person to whom one feels closest) serve as a simple validating scale. There is also a place for comments.

A Flesch Readability Analysis was conducted on the PICS, producing scores of 63.7 (Actual) and 63.1 (Ideal) suggesting that the PICS had an 'average' level of reading ease (Goble, 2000).

Investigative Strategy

The investigation aimed to establish the adequacy, face/content validity and the psychometric properties of the new instrument. To ensure that testing conditions were as intended, the administrators of the instruments (college psychology lecturer, GPs, therapists) received brief instructions on how to administer the measures, maintain neutrality and confidentiality.

All participants were first given an information sheet and a consent form to sign. To enable the responses to be matched, all participants were asked to include the same anonymous code with their completed instruments. To ensure confidentiality no names were required on the instruments, and the completed instruments and the participants' consent forms were usually collected separately and always stored apart.

The instruments were administered to the participant groups as below.

Reliability Group

To calculate test-retest reliability the PICS was administered to adult college students twice, with a 2-3-week gap between these applications. During the first contact they also completed the SOS (Power et al., 1988).

Validity Groups

The SCL-90-R (Derogatis, 1994) was enclosed with the first appointment letter on a routine basis for clinical audit purposes. The instructions in this standard letter asked every client to complete the enclosed questionnaire and to bring it to the first session. (Their SCL-90-Rs were used with codes). At the appointment, consenting clients were given the PICS and the MSIS to complete.

Non-clients were approached by their GP, who briefly introduced them to the study and gave them an information sheet/consent form, a set of instruments to complete in their own time (with

the PICS to be completed first), and a pre-paid envelope.

Analysis Strategy

Qualitative

From the PICS construction, acceptability, clarity and subjective, face/content validity were investigated and incorporated in the PICS development through relevant feedback and, more systematically, through responses on the PICS Face/Content Validity Questionnaires. These responses were rated (thus quantified) and analysed.

Quantitative

The main focus was the calculation of norms (actual, ideal, discrepancies), validity and reliability of the PICS. The (valid) responses were analysed and various estimations carried out using the SPSS v.8.10 (SPSS, 1998).

To achieve satisfactory statistical power without an unjustifiably large sample, the validity group's sample size was determined via GPOWER (Faul & Erdfelder, 1992). Unrelated (one-tailed) *t*-test (discriminative validity) required the highest sample size; for the accuracy mode, medium effect size *d* and alpha = 0.05, the target of 114 (57 + 57) and the actual sample of 117 (69 + 48) participants secured the power of 0.84. For correlations, the same specifications produced the power of 0.95, i.e. 0.96.

As the PICS provides a self-reported estimate, based on an arbitrary scale and with no justifiable equal-interval property, it appears safer to assume that such ratings are at an ordinal level (Coolican, 1990). Subsequently, its test-retest reliability (as well as its correlation with other instruments) were computed using non-parametric correlations (Spearman's rho), whereas a difference between results from clients and non-clients were examined using a non-parametric *t*-test for unrelated samples (Mann-Whitney *U*).

To check the anticipated differences and to justify the separation of the two validity groups, differences between clients and non-clients SCL-90-R global indices were examined using a non-parametric *t*-test for unrelated samples.

To avoid statistically significant results appearing due to chance in multiple explorative analyses, the probability required for significance was adjusted from 0.05 to 0.01. When specific predictions were tested the significance level of 0.05 was considered appropriate.

RESULTS

Qualitative Objectives

Acceptability, Clarity and Face/Content Validity

No participant refused to complete the new instrument, negatively commented on it or reported significant difficulties relating to its completion. The responses from the validating scale indicated that all but one participant appeared to understand and respond appropriately to the questions asked. Both the clients' and the experts' positive ratings of the PICS instructions, presentation, validating scale and general adequacy on the Face/Content Validity Questionnaires provided further confirmation of the instrument's acceptability, clarity, suitability and face/content validity.

Relating to the object of measurement, no client-volunteer saw closeness, as measured by the PICS, to have a negative meaning. The clients judged that the PICS primarily measured emotional closeness ('socio-emotional' was not rated), irrespective of who the significant other was. The experts judged that the PICS primarily measured emotional (from 75 to 83% of the possible/maximum ratings, depending on who was the significant other) and socio-emotional closeness (from 67 to 70% of the possible/maximum ratings). All other listed types of closeness obtained comparatively lower ratings.

Therefore, a substantial agreement was obtained between all parties regarding the new measure's properties, measurement goal (generic, emotional/socio-emotional closeness) and usefulness.

Quantitative Objectives

Descriptive Statistics/Normative Data

Specific indices related to the four most significant others and the total sum of the actual and the ideal as well as 'non-re-coded' and 're-coded' (ideal < actual = 0) discrepancy scores were calculated. (Due to space limitations, only limited data are detailed here; full normative data are available on request from the first author). As anticipated, in all groups ideal scores are higher than actual, and closeness between partners was rated higher than between any other relationships; also, clients' comparatively lower closeness and higher discrepancies were noticeably different.

Analysis of medians shows clients' lower closeness in terms of total number (e.g. median for clients being 9.0, in comparison to 10.0–13.0 for other groups) and total score (e.g. median for clients being 24.0, in comparison to 32.5–39.0

for other groups). Furthermore, a similar pattern was observed with respect to the four most significant others. Clients' actual closeness with fathers (median = 2), mother (median = 3) and partner and closest friend (median = 4) are exactly one whole number lower than in other groups. Their higher discrepancies, both not-recorded and recorded, are equally obvious, being between 1.35 and 1.44 (for partner, mother and father) and 0.75 (not-recorded), i.e. 0.77 (recorded; closest friend), in comparison to non-clients' discrepancies of 0.38 (partner), 0.51 (mother), 0.77 (father) and 0.19 (closest friend). Analysis of score ranges shows clients' comparatively more extensive range for both actual (concerning closest friends) and ideal (concerning partners) closeness.

Females, particularly those in the client group, rated actual closeness with the four most significant adults slightly higher than their male counterparts. However, no statistical difference was found between gender for actual and ideal specific closeness scores in either of two validity groups (i.e. clients or GP patients). Similarly, no statistical difference was found between gender (females = 39, males = 30), for total actual ($U = 543.5, z = 0.506, p < 0.613$, two-tailed) and ideal ($U = 558.5, z = 0.324, p < 0.746$, two-tailed) numbers of significant others, and total actual ($U = 482.0, z = 1.248, p < 0.212$, two-tailed) and ideal ($U = 558.0, z = 0.327, p < 0.744$, two-tailed) closeness scores in the client group. Equally non-significant differences were found between gender (females = 35, males = 13) for total actual ($U = 200.5, z = 0.628, p < 0.530$, two-tailed) and ideal ($U = 212.0, z = 0.361, p < 0.718$, two-tailed) numbers, and total actual ($U = 208.5, z = 0.441, p < 0.659$, two-tailed) and ideal ($U = 215.5, z = 0.279, p < 0.781$, two-tailed) scores in the GP/non-client group.

The category 'Smothered' was used twice as intended in the client group (2.90%), twice in the reliability group (4.00%) and once in the GP patient group (2.08%).

On the PICS, the client group reported children (ranging from 1 to 5) more frequently (67%) than GP patients (58%) and students (59%), but reported pets (ranging from 1 to 4) less frequently (35%) than the other two groups (46%).

Psychometric Validity

As expected, significant positive correlations were obtained between the PICS results concerning the actual (and also actual plus ideal) closeness with closest friend and the corresponding results on the MSIS, for both a client and a non-client group. Table 2 sets out the findings.

Table 2. Analysis of correlations (r_s) between both the PICS Actual and Actual plus Ideal scores for the closest friend and corresponding results on the MSIS, for clients ($N = 69$) and non-clients/GP patients ($N = 48$)

MSIS—subscale	PICS-Actual			PICS-Actual + Ideal		
	Client group	Non-client group	(Both groups combined)	Client group	Non-client group	(Both groups combined)
MSIS—Frequency	0.60*	0.62*	0.62*	0.63*	0.61*	0.63*
MSIS—Intensity	0.58*	0.62*	0.63*	0.62*	0.60*	0.64*
MSIS—Total	0.61*	0.68*	0.65*	0.62*	0.66*	0.65*

* $p < 0.001$, one-tailed.

Also, as expected, significant positive correlations (median value $r_s = 0.47$), in particular with regard to actual closeness (median value $r_s = 0.64$), were obtained between the SOS *Emotional* Support scores and corresponding PICS scores for partners, closest friends, mothers and fathers. Correlations between normal discrepancies and 'recoded' discrepancies (when $I-A < 0$, then $I-A$ treated as '0') obtained on two instruments for closest friends and ideal closeness for mother are the poorest and are only significant at $p < 0.05$. Table 3 provides these data.

Table 3. Analysis of correlations (r_s) between the PICS scores and the corresponding SOS Emotional Support scores for partners ($N = 38$), closest friends ($N = 40$), mothers ($N = 41$) and fathers ($N = 29$)

Variables	Spearman's rho coefficients			
	Partner	Closest friend	Mother	Father
Actual	0.60*	0.68*	0.68*	0.58*
Ideal	0.48 [†]	0.48*	0.28 [‡]	0.44 [†]
Discrepancy	0.40 [†]	0.30 [‡]	0.56*	0.44 [†]
Discrepancy [§]	n/a	0.29 [‡]	n/a	0.45 [†]

* $p < 0.001$, one-tailed; [†] $p < 0.01$, one-tailed; [‡] $p < 0.05$, one-tailed.

[§]When over-provision (actual > ideal) of closeness exists on the SOS, the difference (actual > ideal) is 'recoded', i.e. is made to have a zero discrepancy.

Concerning the same four significant others, significant, moderate positive correlations (median value $r_s = 0.43$, i.e. $r_s = 0.51$ for actual and $r_s = 0.36$ for ideal closeness) were obtained between the SOS *Practical* Support scores and the corresponding PICS scores. Regarding ideal closeness, one association appears non-significant. Total (emotional plus practical) SOS scores correlate positively and significantly (median value $r_s = 0.50$, i.e. $r_s = 0.61$ for actual and $r_s = 0.41$ for ideal closeness) with the corresponding PICS scores for partners, closest friends, mothers and fathers.

In summary, it appears that the PICS correlates highly with the MSIS and significantly with the SOS, i.e. the concurrent validity is satisfactory. The fact that the PICS actual closeness scores correlate more highly with relevant SOS *emotional* rather than practical support scores adds to the PICS validity as a measure of primarily *emotional* closeness. These differences between the correlations (PICS-SOS Emotional Support scores versus PICS-SOS Practical Support scores), as shown by a test for significant difference between dependent correlations (implemented in a computer program DEPCOR, Crawford, 1998), are statistically significant concerning the actual closeness with partners ($t(35) = 2.243$, $p = 0.016$, one-tailed), closest friends ($t(38) = 2.078$, $p = 0.022$, one-tailed) and mothers ($t = (38) = 1.1921$, $p = 0.031$, one-tailed), and ideal closeness with partners ($t(35) = 2.531$, $p = 0.008$, one-tailed). The differences concerning the actual closeness for fathers ($t(27) = 0.610$, $p = 0.274$, one-tailed), and the ideal closeness for fathers ($t(27) = 0.077$, $p = 0.470$, one-tailed), mothers ($t(38) = 0.191$, $p = 0.425$, one-tailed) and closest friends ($t = (38) = 0.575$, $p = 0.284$, one-tailed) are statistically non-significant.

With respect to divergent validity, as expected clients scored significantly higher than non-clients/GP patients on all three SCL-90-R global dimensions of distress ($U = 230.5$, $z = 7.648$; $U = 287.0$, $z = 7.325$; $U = 284$; $z = 7.331$; all $p < 0.001$, two-tailed). Also, two groups significantly differed with regard to their correlations between the SCL-90-R and PICS discrepancy scores. A lack of homogeneity of variance and normal distribution further justifies both separate treatments of these two groups and non-parametric analysis. To provide consistency with previous studies (e.g. Allan & Gilbert, 1995) parametric *t*-tests, equally significant, were also performed.

As expected, the results show many significant correlation coefficients, ranging from 0.22 to 0.50 (Table 4-I and 4-II).

Table 4-I. Correlations between the PICS-discrepancy scores and SCL-90-R scores for the client group

Dimensions	PICS discrepancies									
	Total scores (N = 65)		Partner (N = 45)		Mother (N = 48)		Father (N = 40)		Closest friend (N = 65)	
	Nm*	R†	Nm*	R†	Nm*	R†	Nm*	R†	Nm*	R†
Somatization	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Obsessive-compulsive	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Positive Symptom Distress Index	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Depression	0.23‡	0.25‡	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.22‡	0.24‡
Phobic anxiety	0.21‡	0.22‡	n.s.	n.s.	0.30‡	0.30‡	n.s.	n.s.	n.s.	n.s.
Global Severity Index	0.23‡	0.24‡	n.s.	n.s.	0.26‡	0.26‡	0.27‡	0.27‡	0.23‡	0.25‡
Anxiety	n.s.	n.s.	n.s.	n.s.	0.26‡	0.26‡	0.37§	0.37§	n.s.	n.s.
Positive symptom total	0.25‡	0.26‡	0.27‡	0.26‡	0.30‡	0.30‡	0.33‡	0.33‡	0.30§	0.33§
Hostility	n.s.	n.s.	0.35§	0.34§	n.s.	n.s.	n.s.	n.s.	0.30§	0.32§
Interpersonal sensitivity	0.31§	0.31§	n.s.	n.s.	0.29‡	0.29‡	n.s.	n.s.	0.43*	0.43*
Psychoticism	0.34§	0.35§	0.32‡	0.31‡	0.32‡	0.32‡	n.s.	n.s.	0.31§	0.33§
Paranoid ideation	0.37	0.38	0.42§	0.42§	0.38§	0.38§	0.32‡	0.32‡	0.30§	0.32§

*Normal, non-recoded discrepancy.

†When over-provision (actual > ideal) of closeness exists, the difference (actual > ideal) is 'recoded', i.e. is made to have a zero discrepancy.

‡p < 0.05, one-tailed; §p < 0.01, one-tailed; ||p < 0.001, one-tailed.

Table 4-II. Correlations between the PICS-discrepancy scores and SCL-90-R scores for the non-client/GP random patient group

Dimensions	PICS discrepancies									
	Total scores (N = 45)		Partner (N = 39)		Mother (N = 34)		Father (N = 29)		Closest friend (N = 47)	
	Nm*	R†	Nm*	R†	Nm*	R†	Nm*	R†	Nm*	R†
Somatisation	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Phobic anxiety	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.43§	0.43§	n.s.	n.s.
Anxiety	0.34§	0.34§	n.s.	n.s.	0.30‡	0.30‡	0.37‡	0.37‡	n.s.	n.s.
Positive symptom total	0.36§	0.36§	0.34‡	0.34‡	n.s.	n.s.	n.s.	n.s.	0.25‡	0.25‡
Obsessive-compulsive	0.39§	0.38§	n.s.	n.s.	0.33‡	0.33‡	n.s.	n.s.	n.s.	n.s.
Global Severity Index	0.40	0.40	0.34‡	0.34‡	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Depression	0.34‡	0.35§	0.34‡	0.34‡	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Paranoid ideation	0.34§	0.36§	0.28‡	0.28‡	0.36‡	0.36‡	0.39‡	0.39‡	0.36§	0.36§
Interpersonal sensitivity	0.35§	0.36§	0.39§	0.39§	0.38‡	0.38‡	0.41‡	0.41‡	n.s.	n.s.
Psychoticism	0.30‡	0.31‡	0.42§	0.42§	0.35‡	0.35‡	0.46§	0.46§	n.s.	n.s.
Hostility	0.50	0.50	0.36‡	0.36‡	0.29‡	0.29‡	n.s.	n.s.	n.s.	n.s.
Positive Symptom Distress Index	0.46	0.47	0.44§	0.44§	n.s.	n.s.	0.49§	0.49§	n.s.	n.s.

*Normal, non-recoded discrepancy.

†When over-provision (actual > ideal) of closeness exists, the difference (actual > ideal) is 'recoded', i.e. is made to have a zero discrepancy.

‡p < 0.05, one-tailed; §p < 0.01, one-tailed; ||p < 0.001, one-tailed.

Table 5. Discriminative validity (client versus non-client/GP random patients group)—Mann–Whitney *U* test statistics for closest friend's, partner's, mother's, father's and total (overall) scores and discrepancies

	Actual	Normal discrepancy [†]	Recoded Discrepancy [‡]
Closest friend	978.5 (-3.941)*	1010.0 (-4.099)*	990.0 (-4.252)*
Partner	469.5 (-4.280)*	567.5 (-3.602)*	552.0 (-3.770)*
Mother	584.5 (-2.770)**	520.5 (-3.607)*	520.5 (-3.607)*
Father	391.0 (-2.788)**	443.5 (-2.112)***	443.5 (-2.112)***
Total (overall)	1069.5 (-3.251)*	1103.5 (-3.070)**	1081.0 (-3.210)*

* $p < 0.001$; ** $p < 0.01$; *** $p < 0.05$. All test are one-tailed.

[†]The figures inside parentheses are the normal asymptotic z-score statistics.

[‡]Negative discrepancies (actual > ideal) recorded as zero.

Regarding the association between the PICS total number of significant others discrepancy and the SCL-90-R scores, only one correlation coefficient (psychoticism, within the client group) is highly significant ($r_s = 0.32$, $N = 65$, $p < 0.01$).

However, as expected, several moderate and highly significant correlations between the PICS discrepancies and the SCL-90-R 'interpersonal variables' scores (paranoid ideation, psychoticism, interpersonal sensitivity and hostility) in both groups further confirm the broader divergent validity of the PICS. These associations indicate that those who have more fully realized their closeness needs, i.e. obtained low ideal–actual discrepancies (typically those higher on the PICS actual closeness) are low in hostility (only in the non-client group), interpersonal sensitivity, paranoid ideation and psychoticism (both groups).

For the assessment of the PICS discriminant validity, differences in its mean scores between the client and non-client groups were investigated (Mann–Whitney *U*). As the two validity groups differed significantly on all three SCL-90-R global indices, it was assumed that they would also differ significantly in their closeness with significant people.

Results from differing groups (clients versus non-clients) were examined for total score and for the scores of the four most significant adults. Table 5 illustrates the highly significant differences between the two groups' total and specific actual closeness scores and discrepancies. (No significant differences were found between the two groups, regarding actual total numbers of significant others ($U = 1474.5$, $z = 1.010$, $p < 0.312$, two-tailed) and all ideal scores investigated). That only one (2%) non-client but 20 (29%) clients had a total score discrepancy over 10 further illustrates the differences between the two groups.

The results support the hypothesis that there are greater levels of reported total and specific closeness and smaller discrepancies (ideal—actual closeness) within the non-clients group than within the client group.

Taken together, those validity analyses indicate clearly that the PICS has acceptable validity.

Reliability

In order to assess the stability of the PICS a longitudinal design was required. The first administration results were compared with the second administration results, separately for total numbers and scores, a partner, a mother, a father and a best friend.

The test–retest reliability scores (Table 6) show that there is a high level of correlation for the PICS' actual and ideal summary quantitative measures over the administration period of 2–3 weeks. Furthermore, there is a satisfactory positive correlation between specific scores at time 1 and time 2 for actual closeness for all four of the most significant others. Correlation coefficients obtained for ideal closeness are lower, being either good (father), satisfactory (closest friend, partners) or moderate (for mother; $r_s = 0.35$, $N = 36$, $p < 0.05$). The latter result may reflect a genuine tendency within a student population for variation over time concerning ideal closeness with mother, and this is addressed in the Discussion. Interestingly, if actual and ideal closeness for mothers are treated together (Actual + Ideal), the correlation significantly improves ($r_s = 0.68$, $N = 36$, $p < 0.001$). (Other specific summed scores (Actual + Ideal) have reliability scores less different from those presented here).

Overall, the PICS, a single-item measure, provides results that appear to have acceptable

Table 6. Test-retest reliability analysis (r_s) of the PICS actual (A) and ideal (I) scores ($N = 41$)

Variables												
Total no. of significant others		Total score		Partner (N = 32)		Closest friend (N = 38)		Mother (N _A = 35; N _I = 36)		Father (N _A = 30; N _I = 28)		
A	I	A	I	A	I	A	I	A	I	A	I	
r_s	0.90*	0.90*	0.86*	0.83*	0.72*	0.68*	0.72*	0.64*	0.75*	0.35†	0.89*	0.79*

* $p < 0.001$; † $p < 0.05$.

test-retest reliability coefficients, with median value $r_s = 0.77$. The stability of its results is particularly good regarding closeness styles/statuses (total number and scores), and satisfactory for summed (Actual/A + Ideal/I) and actual specific scores, but varied considerably for ideal specific scores.

DISCUSSION

Qualitative Objectives

Acceptability, Clarity and Face/Content Validity

Systematic feedback from all groups on the face/content validity questionnaires and the main participants' positive reactions to the PICS indicates its satisfactory acceptability, clarity and face/content validity. The clients' understanding of the instrument has been further proven by their own definitions of what the instrument measures (e.g. 'degree of closeness'). Relating to the PICS' measurement goal (socio-emotional closeness), it is possible that the difference between ratings of socio-emotional closeness and other types of closeness would have appeared even more prominent if, instead of their descriptions, the types of closeness provided in the questionnaires were labelled (e.g. emotional, sexual). This was avoided in order to prevent any bias that may have resulted from participants' automatic acquiescent responses.

PICS' most Distinguishing Features

The term *socio-emotional* refers to both biological, intrapersonal emotions and social processes. It indicates interpersonal, structural (a number of close people) and functional (intensity of emotional closeness) aspects, as well as the multidimensionality (idiosyncratic element assumed) of the construct. (A unidimensional construct of closeness may not be a theoretically coherent proposition).

Interpersonal problems are seen as a function of frustrated interpersonal goals (Horowitz, Dryer, & Krasnoperova, 1997). Positive ratings of the instrument's adequacy and the few comments obtained about the inclusion of the 'ideal' indicate that the PICS has been perceived as capable of obtaining information on this frustration/deficit via comparing *actual* and *ideal*, i.e. met and expected closeness needs. Experienced closeness that matches the desired is assumed to be more satisfactory than a considerable discrepancy between the two, which may indicate over-provision (rarely seen) or under-provision of closeness and relationship dissatisfaction.

The instrument's *graphical representation* was rated to be 'very adequate' and 'helped to visualize relationships'. This suggests a high level of attractiveness concerning the PICS' pictorial presentation. The PICS' circles are convenient, more economical and richer than unidimensional scales, and give an impression of indefinite variety of qualities and gradations to closeness. They also help to bypass verbal restrictions and enable a great (unlimited) number of relationships to be investigated simultaneously, which has rarely been seen in a single investigation, despite closeness underlying many relationships (Berscheid et al., 1989b). Whilst the PICS is primarily structured to assess conscious awareness of interpersonal closeness, one could speculate that specific aspects of the measure resembling projective techniques (e.g. colourful and interesting graphical representation, semi-structured nature, unlimited and free choices) may facilitate freedom of expression and also tap non-verbal, pre-conscious information sources relating to interpersonal closeness (Aron et al., 1992; Schmiedeck, 1978).

Although some uncertainty has been expressed, the included *validating scale* has been mainly judged positively. These simple validating questions may help in securing a clearer referential framework and checking participants' co-

operativeness/defensiveness, understanding, suitability and views on the prospects of their closest relationship.

Quantitative Objectives

Normative Data

To provide norms and enable comparison and more precise interpretations of the scores, several individual and global scores have been calculated. However, the emphasis should remain on the individual's own optimum level of closeness. The results show that the closest significant others are partners, a result that is consistent with previous findings (Berscheid et al., 1989b; Olson & Schaefer, 1981). But, in contrast to other findings (e.g. Berscheid et al., 1989b), respondents' gender did not appear to be a moderator of subjective estimates on the PICS' socio-emotional closeness. One may speculate that this is because of the multidimensional nature of closeness as measured by the PICS; each gender/individual refers to their own concept of closeness and importance.

Although skewed, the distribution is near to normal (similar to the findings of Berscheid et al.'s (1989b)), exhibits considerable variability and confirms the usefulness of the PICS' 6-point scale. The smallest range of closeness for *closest friend* indicates the voluntary nature of this relationship.

Significantly lower actual closeness with both parents observed in the client group could be interpreted within an attachment model (e.g. McCarthy, 1999); for example, it could be speculated that limited interpersonal closeness may be associated with insecure attachment (often stemming from less than adequate parenting). Also, that the client group had more *children* but less *pets* (as a source of social support) than other groups may indicate that pet owners and childless couples are less stressed (non-clients) but other explanations are possible: only childless non-clients could find time to respond to the study or attend college classes.

Psychometric Validity

Selecting the MSIS, which tapped individuals' closest relationship, seemed to be a logical step in the initial examination of the PICS' measurement goal. The closest friend/person (often a partner, similar to Berscheid et al.'s (1989b) findings) selected on the MSIS and the PICS was frequently the same person; this in itself is evidence of the

PICS' validity. The best association was obtained between the MSIS' Total and relevant PICS' results, indicating that, relating to friendship closeness, the PICS tended to be a measure of global rather than a more specific (frequency versus intensity) closeness. In the client group, the best correlation was obtained between the MSIS scores and sums of the PICS' actual and ideal score for friend ($C_f_p = \text{Actual} + \text{Ideal}$). This measurement, provisionally labelled potential closeness, may be the best predictor of future closeness, as both actual and ideal are likely to be important factors in the future course of the relationship. The MSIS was administered after the PICS-Ideal. This may have caused an effect of order; it may be that some clients continued expressing their wishful rather than real closeness on the MSIS.

The PICS' closeness overlaps more with the SOS' emotional than practical support; lower correlations regarding ideal closeness may indicate that the PICS' 'ideals' are more intangible. The difference in the number of significant people reported on the SOS (restricted to up to six) and the PICS (mean = 13) provides firm evidence that the PICS provides relevant information about significant but distant individuals and invites respondents to be free and open.

The SCL-90-R scores were selected to demonstrate validity on a broader measure and to show that the PICS' closeness did not overlap in unpredicted areas (divergent validity). In general, the PICS' discrepancies correlated with the SCL-90-R levels of 'interpersonal' distress (paranoid ideation, psychotism, interpersonal sensitivity, hostility). These findings are consistent with logical thinking (e.g. vulnerability to insecurity) and previous research (Loucks, 1980, cited in Marshall, 1989). However, in the client group hostility does not correlate with the PICS' total score discrepancy. This may suggest that the clients suppressed their anger/hostility and/or presented themselves to potential therapists more favourably. In the non-client group, the PICS' discrepancy for closest friend failed to correlate with the SCL-90-R psychotism, hostility and interpersonal sensitivity. This may be explained by the voluntary and less demanding nature of this social relation. In the same group the PICS' total score discrepancies moderately correlate with all SCL-90-R dimensions, except somatization and phobic anxiety; this suggests that those lower in closeness are more vulnerable and prone to mental health problems, but not to somatization and simple phobias.

The results on discriminant validity are consistent with previous findings (e.g. Sherman & Thelen, 1996) and suggest that closeness is negatively associated with the need for psychological help. The two groups significantly differ (Table 5) and different norms for them are provided. However, the two groups did not differ in terms of the number of significant people on the PICS and PICS' ideal scores. It seems that they all wish to have similar (high) levels of closeness.

By using various sources that differed from the PICS (e.g. multi-item, verbal) and cumulatively demonstrating face/content, convergent, divergent and discriminant validity, *construct validity* has been ensured to a certain degree. It has been further established by people's familiarity with the construct and a clear referential framework, accomplished by a definition of the measurement goal in the PICS' instructions and the PICS' validating questions. Although this is primarily an empirical, pan-theoretical instrument, its findings may be linked to and interpreted in the context of several popular theoretical frameworks. For example, the results resemble Schmiedeck's (1978) findings and are consistent with the *convoy model* (Antonucci and Akiyama, 1987; Levitt, Coffman, Guacci-Franco, & Loveless, 1994). Furthermore, PICS' scores and discrepancies may be interpreted in Eriksonian, i.e. Orlofsky et al.'s (1973) terms of closeness statuses (intimate, pre-intimate, isolate, stereotyped), or within the attachment theory model and its two, three (Hazan & Shaver, 1987) or four (Bartholomew, 1990) attachment styles, or may indicate Rathus and O'Leary's (1997) types of dependency (e.g. exclusive, anxious/ambivalent). However, these plausible links require empirical validation.

Reliability

Because of their relatively young age, subsequent engagement in the development of close relationships (Berscheid et al., 1989b) and experiences of some transitions (mature students), the sample was quite specific and possibly less stable in their current relations. On the other hand, their awareness of the purpose of the test-retest exercise and an exam-like ambience (college) may have invited the 'correct' (the same) answers and increased the test-retest reliability coefficients. The results show that reliability varied as a function of relationship type; actual closeness with parents (in particular with fathers) appears the most stable. One explanation is that parents, in particular mothers, are always there; also, fathers, being less close (as

obvious from presented norms), may be less subject to closeness changes. These results coincide with other findings (e.g. Berscheid et al., 1989a), suggesting that the longest relationships were family ones. The unsatisfactory reliability correlation coefficient for ideal closeness with mothers may reflect young people's changing views of the world, ambivalence and separation anxiety regarding such a close figure. In addition, several methodological factors may have influenced this finding, such as the small sample size, the abstract nature of ideal closeness, and the proximity of a college holiday (i.e. encounters with mothers) to time 1 testing.

Re-testing in 2–4 weeks has been the usual practice (e.g. Aron et al., 1992; Berscheid et al., 1989b). For a single-item measure, the test-retest reliability is very satisfactory. The results indicate that the PICS could be both a reliable (totals scores/numbers, i.e. structure/social network) and sensitive instrument (closeness with specific people), measuring both closeness trait/style/status (stable) and state (changeable). Two aspects of closeness (Marshall, 1989) and the 'network size' stability over time (Antonucci, 1990) have already been recognized.

Limitations of the Study

There is much speculation concerning the accuracy of the paper and pencil method, subjective self-report measures and the meanings of Likert scales results (Oppenheim, 1992). Furthermore, it is impossible to assert whether the proper meaning of the questions has been conveyed by a questionnaires' format, or how well a single variable can capture the reasons as to why some individuals share a close circle. As a single-item measure with six categories, the PICS compromises its sensitivity, but more subtle differences would be costly and unnecessary and no longer natural and communicable in common encounters. Also, it may be that a pictorial, single-item measure and the direct questioning minimizes the loss of information, of the kind that may happen in complex coding, quantification and decoding. Nevertheless, interpretation of the PICS' results would benefit from a psychological approach and from clinical experience.

The combination of guaranteed anonymity/confidence, direct contact, awareness of the investigation's aim and specific context (such as the participants' current semi-dependent status and possible social desirability), may have contributed

to a high response rate (and even to the obtained findings) in the student and the client validity groups. A relatively low response rate (27%) for the GP patient group is not surprising; postal questionnaires have been associated with poor return rates (Oppenheim, 1992). The involvement of respected and influential GPs fell short of expectations. The request for signed consent, i.e. names and signatures, and the lengthy SCL-90-R may have prevented many GP patients replying; the pre-Christmas atmosphere may have added to response rate problems.

Conclusion and Future Directions

In summary, the study provides preliminary psychometric support for the PICS. This brief, economical, highly flexible and thus non-intrusive single-item pictorial scale appears to be a practical, well-accepted, valid and reliable self-report instrument of structure (who), function/strength (how much) and realization of closeness needs with an unlimited number of significant others. In clinical practice, it could be used to assess total and specific provision of closeness (e.g. under-provision, over-provision, enmeshment, marital discord) and availability of social support and relevant changes.

Further avenues for exploration include the associations between significant people and their locations in the circles' segments (Schmiedeck, 1978), and associations between the PICS' scores and variables such as fear of closeness, loneliness, coping strategies, couple matching and life satisfaction.

Replication on a wide range of people (thus securing a good basis for comparisons between cultures) and the instrument's predictive powers/validity (e.g. in predicting therapeutic interpersonal goals), i.e. its sensitivity to changes (e.g. in dating status), should be investigated in future research. Also, the PICS may be adapted for people with learning disabilities and youngsters (e.g. providing a 'how-to-do-it-example') or its instructions could request different types of (probably compensatory) closeness. Also, a computer program could replace the existing scoring sheet and provide the PICS' 'closeness profiles' (concerning both significant individuals and groups). Finally, constant revision of the concept 'closeness' is needed, as new determinants (personalities, circumstances, ideologies) and meanings may be identified.

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APPENDIX 1

PICS – Actual																			
Name: Age Gender Date Identification Code																			
<p>Feeling close refers to being listened to, understood by, able to share feelings and to talk openly with another person. From the list below, please select relevant living people and indicate how close you currently feel to them (or, if applicable, smothered by them) by placing their symbols in the appropriate circles below, around the Self.</p> <p>Then answer the questions at the bottom of the page and <i>continue overleaf</i>.</p> <table border="0"> <tr> <td>P=Partner (P₂=Other Partners)</td> <td>S_{1,2, etc.}=Sister</td> <td>R_{1,2, etc.}=Relative</td> <td>O_{1,2, etc.}=Others</td> </tr> <tr> <td>M=Mother (M_s=Stepmother)</td> <td>B_{1,2, etc.}=Brother</td> <td>FF_{1,2, etc.}=Female Friend</td> <td>If applicable, please add:</td> </tr> <tr> <td>F=Father (F_s=Stepfather)</td> <td>Gm_{1,2}=Grandmother</td> <td>MF_{1,2, etc.}=Male Friend</td> <td>Ad=Dog, Ac=Cat, Ao=Other pets</td> </tr> <tr> <td>C_{1,2, etc.}=Children</td> <td>Gf_{1,2}=Grandfather</td> <td>W_{1,2, etc.}=Colleague (Mn=Manager)</td> <td>Hp_{1,2, etc.}=Helping Professional</td> </tr> </table>				P=Partner (P₂=Other Partners)	S_{1,2, etc.}=Sister	R_{1,2, etc.}=Relative	O_{1,2, etc.}=Others	M=Mother (M_s=Stepmother)	B_{1,2, etc.}=Brother	FF_{1,2, etc.}=Female Friend	If applicable, please add:	F=Father (F_s=Stepfather)	Gm_{1,2}=Grandmother	MF_{1,2, etc.}=Male Friend	Ad=Dog, Ac=Cat, Ao=Other pets	C_{1,2, etc.}=Children	Gf_{1,2}=Grandfather	W_{1,2, etc.}=Colleague (Mn=Manager)	Hp_{1,2, etc.}=Helping Professional
P=Partner (P₂=Other Partners)	S_{1,2, etc.}=Sister	R_{1,2, etc.}=Relative	O_{1,2, etc.}=Others																
M=Mother (M_s=Stepmother)	B_{1,2, etc.}=Brother	FF_{1,2, etc.}=Female Friend	If applicable, please add:																
F=Father (F_s=Stepfather)	Gm_{1,2}=Grandmother	MF_{1,2, etc.}=Male Friend	Ad=Dog, Ac=Cat, Ao=Other pets																
C_{1,2, etc.}=Children	Gf_{1,2}=Grandfather	W_{1,2, etc.}=Colleague (Mn=Manager)	Hp_{1,2, etc.}=Helping Professional																
<p>With regard to the person above to whom you are closest:</p> <p>1/ do you talk to them openly: a/Never, b/Sometimes, c/Generally, d/Always? (Please, circle.)</p> <p>2/ do you disagree with them: a/Never, b/Sometimes, c/Often, d/Always? (Please, circle.)</p> <p>Any comments:</p>																			

APPENDIX 2

PICS – Ideal

2

Name: Age Gender Date Identification Code

Still referring to closeness as described on the previous page, from the list below please **select** relevant living people and indicate **how close you would ideally like to feel** to them by placing their symbols in the appropriate circles below, around the Self. Then answer the questions at the bottom of the page.

P=Partner (P₂=Other Partners)	S_{1,2, etc.}=Sister	R_{1,2, etc.}=Relative	O_c=Clergyman, O_{1,2, etc.}=Others
M=Mother (Ms=Stepmother)	B_{1,2, etc.}=Brother	FF_{1,2, etc.}=Female Friend	If applicable, please add:
F=Father (Fs=Stepfather)	Gm_{1,2}=Grandmother	MF_{1,2, etc.}=Male Friend	Ad=Dog, Ac=Cat, Ao=Other pets
C_{1,2, etc.}=Children	Gf_{1,2}=Grandfather	W_{1,2, etc.}=Colleague (Mn=Manager)	Hp_{1,2, etc.}=Helping Professional



With regard to the person above to whom you would like to be closest:

1/ would you expect to talk to them openly: a/Never, b/Sometimes, c/Generally, d/Always? (Please, circle.)
 2/ would you expect to disagree with them: a/Never, b/Sometimes, c/Often, d/Always? (Please, circle.)
 3/ Is this closeness achievable: a/Impossible, b/Hardly Possible, c/Quite Possible, d/Easy? (Please circle.)

Any comments: