From categories to dimensions to evaluations : assessment of needs and developmental course of children in special educational settings

Manti, E.

Chapter 3

Social and Emotional Detachment in Greece and the Netherlands: a Cross-Cultural Comparison of Psychopathic Traits in Children.

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ABSTRACT

Questions about the international reliability and validity of aspects of psychopathy have been raised for adults, but hardly considered when applying the constructs to children. Our aim was to compare the psychometrics of a new instrument to measure psychopathic traits in children between two countries – the Netherlands and Greece. We also tested the hypothesis that, in both countries, both narcissistic-egocentric and callous-unemotional dimensions would be related to observed behavioural disorders. The Social and Emotional Detachment Questionnaire was used to assess narcissistic-egocentric and callous-unemotional dimensions of personality in representative national and community samples of 4-12 year-old children in the Netherlands and Greece respectively. Parents filled in the questionnaires anonymously and also provided ratings of conduct disorders. A two-dimensional construct of the psychopathic syndrome depicting, respectively, narcissistic and unemotional traits was reliable and valid in both countries, although there was considerable correlation between these two dimensions, which we designated 'social detachment' and 'emotional detachment' respectively. In both countries, the composite of social and emotional detachment was associated with aggressive and antisocial conduct disorders. The reliability, validity and predictive value of this questionnaire must be tested further, for example through multiple informants and longitudinally, but our findings that the tool performs robustly in two very different European countries is encouraging in terms of its potential value as a clinical screening tool and a tool for furthering the understanding of serious behavioural disorders in children.

INTRODUCTION

Both the International and the American classification of mental disorder manuals (ICD and DSM) express caution about diagnosing personality disorder in adolescence, and the DSM-IV specifies that the diagnosis of antisocial personality disorder cannot be made in an individual who is under the age of 18 (American Psychiatric Association, 2001). Nevertheless, there is growing interest in applying the concept of 'psychopathy' to juvenile offenders in correctional institutions. This may be due in part to the rise in violent offending behaviour in the Western world (Office of Juvenile Justice and Delinquency Prevention, 1999), but particularly to increased rates of juvenile arrests (Office of Juvenile Justice and Delinquency Prevention, 1999; Rutter and Smith, 1995; Pfeiffer, 1998; Loeber et al., 1998; Tonry and Bijleveld, 2007). Psychopathy, as measured using the Psychopathy Checklist Revised (PCL-R, Hare, 1991), has been linked to persistent, violent delinquent behaviour (Harris et al., 1991; Hemphill et al., 1998; Serin, 1993). There is evidence that deficits linked to the egocentric and affective characteristics of this syndrome, that are associated with increased risk of antisocial personality disorder in adulthood (Loeber et al., 2002), can be reliably identified in children and adolescents (Salekin R, 2006; Frick et al., 2000).

Although the assessment of psychopathic traits among children and adolescents raises several concerns, especially regarding the developmental appropriateness of this construct and the potential for stigmatization (Salekin R, 2006), the detection of such traits in juveniles may promote early prevention and treatment, and thus reduce future serious offending behaviours (Frick, 2002). Moreover, the study of psychopathic traits in youngsters may offer a better understanding on how psychopathy develops, and improve treatments (Karpman, 1950). In addition, the investigation and assessment of psychopathic traits in youngsters may explain some of the heterogeneity of the disruptive behavioural disorders, and in particular conduct disorder (American Psychiatric Association, 2001a). The identification of psychopathic traits could help clinicians identify a subgroup of conduct disordered youngsters with special needs (Andershed et al., 2002).

Several assessment instruments have been developed to screen psychopathic traits in children and adolescents, such as the Hare's PCL: Youth Version (YV) (Forth et al., 2004), the Psychopathy screening device (Frick, 1998) and the Childhood Psychopathy Scale (Lynam et al., 2005). Most of them are direct descendants of the PCL-R (Hare, 1991; Salekin , 2006) and support the construct of a similar three-dimensional syndrome in children as well as in adults, namely a syndrome with (a) an interpersonal factor with narcissistic traits, (b) an affective factor with unemotional traits and (c) a behavioural factor with

impulsive/irresponsible behaviour (Cooke and Michie, 2001; Farrington, 2005; Frick et al., 2000).

Although most of these instruments that measure psychopathy in youngsters have revealed satisfactory validity and reliability (Forth et al., 2004; Frick, 2002), there is only a little evidence about their factor structure across different settings, genders and ethnic backgrounds (Burns, 2000). Moreover, it is argued that the behavioural dimension of psychopathy largely overlaps with the major disruptive disorders of childhood, including conduct disorder (CD), oppositional defiant disorder (ODD), and attentional deficit hyperactivity disorder (ADHD) as defined by the DSM-IV, (American Psychiatric Association, 2001a; Burns, 2000). Due to this overlap, the existing assessment instruments for children and adolescents have poor discriminating validity with the major disruptive childhood disorders (Burns, 2000). In addition, the adult literature has shown that the components of the behavioural dimension of the psychopathic syndrome are less stable in time than the components of the interpersonal and affective dimensions (Dolan, 2004).

These arguments underline the need to develop an instrument that differentiates the core traits of psychopathy from the disruptive behavioural disorders, that is an instrument that primarily focuses on the narcissistic-egocentric and callous-unemotional dimensions in children and adolescents. An easy to use rating scale covering these two dimensions of psychopathy was recently developed and tested in the Netherlands, with psychometric tests revealing good reliability and construct validity in a Dutch sample of normal children aged 4 to 18 years old (Scholte and Van Der Ploeg, 2007). To avoid stigmatization of youngsters, the terms 'Social Detachment' and 'Emotional Detachment' were proposed to refer to the narcissistic-egocentric and callous-unemotional characteristics respectively.

Given the lack of cross cultural research on this topic (Dolan, 2004) and the importance of understanding the cultural implications for such instruments (Crijnen et al., 1997), the main aim of our study was to determine the cross-cultural reliability and validity of this instrument, in official translation, among Dutch and Greek parents of 4-to-12-year old children from the general population. A second aim was to test the hypothesis that the narcissistic-egocentric and callous-unemotional characteristics in children, just as in adults, are particularly associated with violent and aggressive behaviour.

METHOD

Sample

The parents/caregivers of 2,132 children aged 4-12 years were recruited from the general population of two European countries – the Netherlands and Greece – and participated in our study.

Measurement Instruments

Psychopathic traits: The social and emotional detachment questionnaire (Scholte & Van der Ploeg, 2007) was used as the measure of psychopathic traits in children. It consists of 16 items that are related to the 2 factor structures of the psychopathic syndrome (the interpersonal/egocentric-narcissistic facto and the affective/callous-unemotional factor. Components that refer to adult problem behaviours or overlap with symptoms of disruptive childhood disorders, such as ADHD, CD and ODD were excluded. The items of this questionnaire were developed in accordance with existing literature on the symptoms of psychopathy and existing screening for psychopathy in children and adults (for more detail about the development of this instrument and its psychometric properties in the normal population see Scholte & Van den Ploeg, 2007). Parents were instructed to rate the frequency of symptom occurrence during the previous 6 months on a 5-point Likert scale as follows: 0=not at all, 1=occasionally (from time to time), 2=fairly frequently (monthly), 3=frequently (weekly), 4=very frequently (every day). Some examples of the rated items are: the child has great difficulty fitting in with requests or rules; wants preferably to get his/her way right away; carries on with own wishes and desires at the cost of other people; shows no emotions; does not worry about the consequences of his/her behaviour; shows no remorse.

Conduct disorder (CD): The Disruptive Behavioural Scale (Pillow et al., 1998) was used to assess conduct disorder. The CD sub-scale of this instrument comprises 15 items that refer to aggressive and anti-social behavioural patterns as specified in DSM-IV and ICD-10. In these systems, aggressive behaviour refers to aggression against people, animals and property, while anti-social behaviour refers to deceitfulness, theft and serious violations of rules. As aggression and antisocial behaviour are distinguishable area's of conduct problems that possibly are associated in different ways with the social and emotional dimensions of psychopathy investigated in this study, the CD scale was split up in two parts, namely: a part covering the aggressive behavioural items and a part covering the anti-social behavioural items. The reliabilities of the scales were good in both countries (CD-aggression scale: Dutch version a=0.78, Greek version a=0.83; CD-antisocial scale: Dutch version a=0.78, Greek version a=0.81) (Manti et al., submitted). Some examples of the CD-aggression scale items were: is quick to start fights or is quick to get involved in fights; has physically hurt or injured others; destroys his/her own things or those belonging to others and of the CD-antisocial scale: likes boasting or acting tough; lies or threatens others, e.g. to get things or favours; plays truant or is absent from school. The parents were instructed to rate each

symptom on a five-point Likert scale as follows: 0=not at all, 1=occasionally (from time to time), 2=fairly frequently (monthly), 3=frequently (weekly), 4=very frequently (every day).

Translation of the questionnaire

The translations of the Social and Emotional Detachment Questionnaire and the disruptive behavioural scale into English and Greek were carried out as follows: English Version: The Dutch version of the scale was translated into English language by a native English speaker who was fluent in Dutch and back again into Dutch by an independent translator to maintain precision. Greek version: Two Greek psychologists who were fluent in English and Greek and specialists in child and adolescent studies translated the English version into Greek. In order to ensure that this translation did not dive rge from the original Dutch questionnaire, one special version of the SEQ was pilot tested in a small number of parents (N = 15) who were fluent in both Dutch and Greek languages.

Procedure

School directors of a randomly selected sample of all primary schools in the Netherlands were informed about the study and asked to give a letter to the parents of their pupils. This letter explained the purpose of the research, specified the requested parental contribution and confirmed anonymity. Parents were asked to return written consent to participate in the study. The same procedure was followed in Greece. Here the region of school selection was, however, limited to the areas of Athens and Patras, the first and third biggest urban areas in Greece, holding about one third of the Greek population. Our sample could be reasonably representative, however, as over 60% of the total population of Greece lives in urban areas (NSSG, 2001).

In the Netherlands, the study was part of a larger study to determine the prevalence of developmental disorders in 4-18 year olds (Scholte et al. 2008a; Scholte et al., 2008b). About 5000 randomly selected families received the request to participate, of which 2536 agreed to do so (response rate = 51%). For the purpose of our study, only the children at primary schools were selected, resulting in a sample of 1748 four-to-twelve-year-old Dutch children with a mean age 8.4 (SD=2.1), of whom half were boys and half girls. In Greece, due to time and financial constraints, 800 families with a four-to-twelve-year-old child were randomly selected, of which 384 families agreed to participate (response rate = 48%). The response rate in each country was similar, but low. Fortunately, comparison with the national demographics of both countries confirmed that this had not seriously affected the representativeness of either sample.

Statistical analyses

To assess the reliability of the psychopathic traits scales, two measures were tested: the internal consistency and the item-scale correlations. The internal consistency of the scales was measured, using Cronbach's Alpha. Alpha values above 0.80 indicate a good relationship between the items, especially for rating scales that are used for diagnostic purposes (Meyers and Winters, 2002); item-scale correlations above 0.35 represent satisfactory contributions.

The two factor structure was tested using two confirmatory factor analyses (CFA) for the two samples. It is suggested that $\chi 2$ is a less adequate criterion when the sample size is large (Joreskog and Sorbons, 1993), so the fit indices that were used to assess the 'goodness of fit' of our model were the normed fit index NFI (Bentler and Bonett, 1980), the comparative fit index CFI (Bentler, 1990) and the root mean squared error of approximation RMSEA (Browne and Cudeck, 1993). According to Browne & Cudeck (1993) the RMSEA is acceptable when it is below .08, and, under optimal conditions, all the rest should approach the value of 1. Moreover, because the distribution of psychometric data is generally not normal (Lane et al., 2005), the Robust method of analysis was used, which is recommended for skewed distributions (Bentler, 1990).

A multi-group CFA was conducted to assess the cross-cultural stability of the two factor model (Byrne, 2006). This analysis implies that the population samples from both countries are analyzed simultaneously using the same parameter estimates of the baseline models, thus determining whether the same two factorial constructs are measured in both the population samples (Bentler, 1990).

The association of the psychopathic traits scales with CD was investigated by conducting two regression analyses using the mean number of aggressive and antisocial behavioural symptoms of CD, respectively, as the dependent variables and the mean scores on the two psychopathic trait dimensions as the predictor variables. The interaction of the two psychopathic trait dimensions was also included, by multiplying the centered scores on both the psychopathic trait scales (see for a detailed discussion if this technique (Cohen et al., 2003)). To correct for the influences of age and gender, and for the co-morbidity of aggression and anti-social behaviour, the scores on these variables were also included in the predictor set. Correlations were estimated as insubstantial (.0-.1), small (.1-.3), medium (.3-.5) or large (.5-1.0) according to Cohen's criteria of associations (Cohen, 1988).

Regarding statistical power, it can be noted that, although the Dutch and Greek samples differ in size, each was large enough for testing our main hypotheses, as, according to Cohen (1988), association or between group tests require a minimum sample size of

about 100 respondents in each group to determine medium sized effects using an alpha set at a level of 0.05 and power of at least 0.80; for a factor analysis a minimum sample size of 300 is recommended (Tabachnich and Fidell, 2001).

RESULTS

General characteristics of the sample

Table 3.1 presents the demographic characteristics of the two samples. There were no statistically significant differences between them except for family composition and the educational level of the parents. Single parent families were more common in the Dutch sample than in the Greek, but the educational level of the Greek parents was slightly higher than that of the Dutch parents.

The demographic characteristics of each study sample were also broadly similar to the general youth population census figures in each respective country (Dutch: CBS, 2003; Greek: NSSG, 2001). The main differences were that younger children were slightly underrepresented in both countries, and in the Greek sample only the parents appeared to be more likely to have reached the higher educational levels than their general population peers. We therefore considered our samples to be broadly representative of their country populations.

Reliability

Table 3.2 presents the internal consistencies of the two dimensions of the social and emotional detachment questionnaire and the combination of the two sub-scales for both the Dutch and Greek data. To determine possible differences in reliability between the younger, the middle and the older children in the four-to-twelve-years age span, Cronbach's alpha was calculated for the whole group and for the three age subgroups separately. These proved to be similar in the two countries, at about or above .85. Moreover, most item-scale correlations were above .35. The latter finding suggests that the items of each scale consistently added to the measurement of the scale constructs in both countries. Thus, the constructs proved to be reliable measures in both countries for all age groups, and cross-cultural reliability was not affected by translation.

Table 3.1 Demographic characteristics of the Dutch and Greek samples

	The Netherlands (N=1748)		Dutch census figures (%) (CBS, 2003)	Greece (N=384)		Greek census figures (%) (NSSG, 2001)	Difference Between the 2 samples
	N	%		N	%		
Children's gender: Male							
Female	876	50%	51%	190	49%	49%	-
	872	50%	49%	194	51%	51%	-
Children's Ages		8.4 (SD=2.1)			8.8 (SD= 2.3)		-
4-6 years	383	22%	33%	82	21%	32%	
7-9 years	696	40%	34%	121	32%	33%	
10-12 years	669	38%	33%	181	47%	35%	
Type of school							
Primary school	1503	86%	100% (including kindergarten)	324	84%	82%	-
Kindergarten	245	14%		60	16%	18%	-
Family Composition:							
2 -Parent Families	1387	80% (95% CI=1.9)	82%	344	90% (95% CI=3)	88%	$\chi^2(1) = 21,6$, $p<.000$
1-Parent Families	282	16% (95% CI=1.7)	16%	31	8% (95% CI=2.5)	8%	$\chi^2(1) = 16.3$, $p<.000$
Other	79	4% (95% CI=1.0)	2%	9	2% (95% CI=1.7)	4%	-
Parents' education							
Lower[1]	468	27% (95% CI=2.1)	29%	58	15% (95% CI=3.6)	27%	$\chi^2(1) = 27.5$, $p<.000$
Middle[2]	839	48% (95% CI=2.3)	49%	212	55% (95% CI=4.9)	51%	-
Higher[3]	441	25% (95% CI=2.0)	22%	112	29% (95% CI=4.6)	22%	-
	Mean (SD)			Mean (SD)			
Parents' Age	39.2 (5)		39 (6.5)	38.6 (5.1)		38.5 (16.2)	-

Notes: [1] without High School (H.S.) diploma; [2] H.S. diploma with or without some extra technical education;[3] Degree from at least a 4-year College-University education;
CI: Confidence Interval; SD: Standard deviation

Table 3.2 Internal consistency of the scales for all ages and split-up for the younger, middle and older age groups

Dutch data	**Emotional Detachment**	**Social Detachment**	**Combination of scales**
4-12 years (N=1748)	.85	.83	.88
4-6 years (N=383)	.86	.85	.90
7-9 years (N=696)	.84	.84	.88
10-12 years (N=669)	.85	.83	.89
Greek data			
4-12 years (N=384)	.88	.87	.92
4-6 years (N=82)	.88	.88	.91
7-9 years (N=121)	.88	.89	.93
10-12 years (N=181)	.88	.87	.92

Factorial validity of the questionnaire

The model that was tested in the confirmatory analysis was a two factor model of psychopathy, without the problem behavioural factor, as suggested by Scholte & Van der Ploeg (2007). The two factors were callous-unemotional characteristics and egocentric-narcissistic characteristics.

For the Dutch data, the following fit indices were found: NFI = .94, CFI = .95, RMSEA = .05. For the Greek data the fit indices were: NFI = .92, CFI = .94, RMSEA = .07. These fit indices showed that the specified two factor model that emerged from the confirmatory analysis was satisfactorily representative of the data from each country. The factor loadings of the items of each factor and the correlations between the factors for the Dutch and Greek data are presented in figures 3.1 and 3.2, respectively.

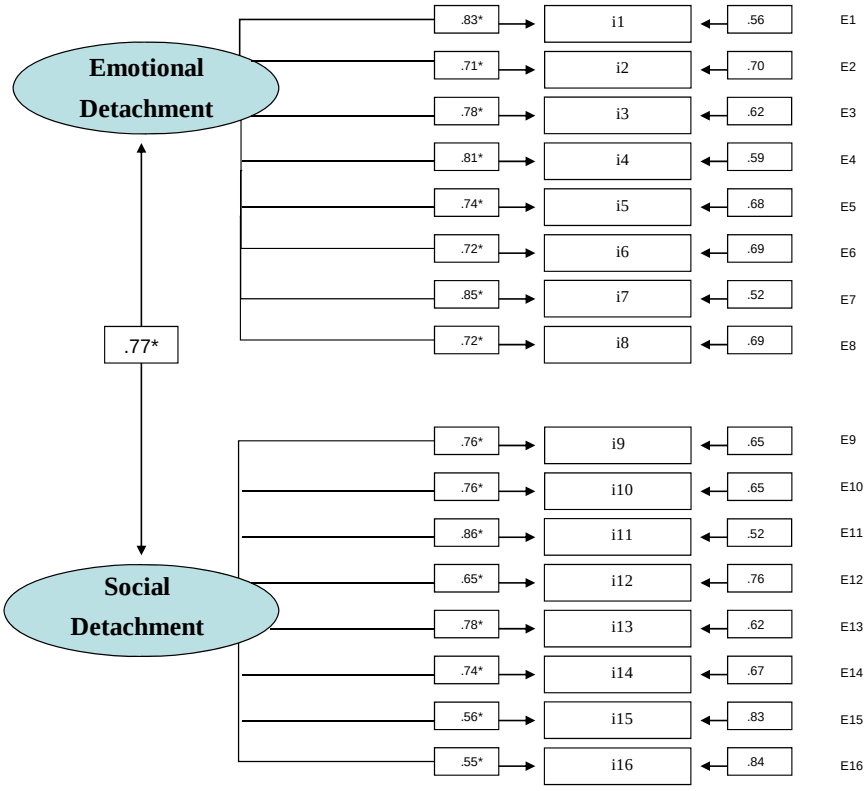

Figure 3.1 Construct Validity of the Social and Emotional Detachment Questionnaire: Dutch data

The correlation between the two factors was high, calling the independence of the factors into question. However, a model with one factor fitted the data less well in both countries (RMSEADutch data=0.09; RMSEAGreek data=0.12), making the model with the two factors the one to be preferred. The relatively high associations between both factors express that both aspects of social and emotional detachment often go hand in hand in children of these age groups in these countries.

Since the single sample results supported the 2-dimentional hypothesized structure of the questionnaire, a multi-sample confirmatory factor analysis was carried out in order to test for variance in the relationships between the Greek and the Dutch samples. The results revealed acceptable fit indices for both samples simultaneously (Robust NFI = .93, CFI = .94, RMSEA = .06), suggesting consistency for both countries, and cross-cultural validity.

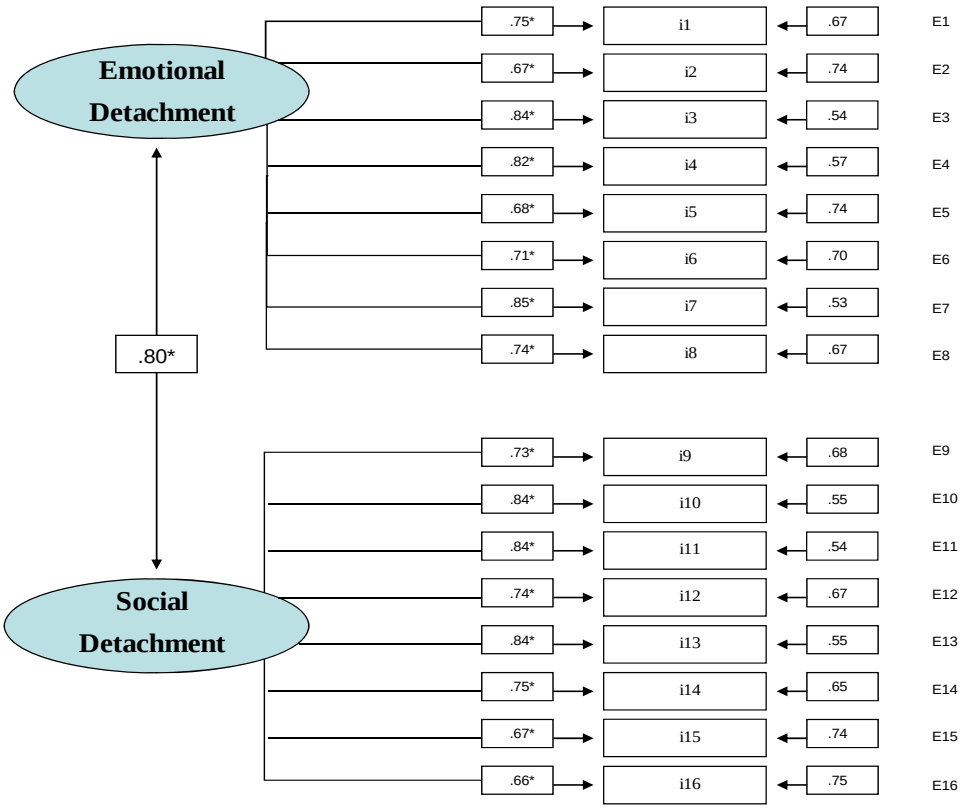

Figure 3.2 Construct Validity of the Social and Emotional Detachment Questionnaire: Greek data

Psychopathic traits and conduct disorder

The relationship between the two psychopathic trait scales measuring social and emotional detachment and the symptoms of conduct disorder was investigated by two separate regression analyses. The aggressive and the antisocial behavioural symptoms of conduct disorder were the dependent variables and the egocentric, unemotional and the interaction of these two dimensions were the main predictor variables; to correct for the possible influences of age and gender, these factors were also included as predictor variables in both analyses; to correct for the co-morbidity of aggression and anti-social behaviour, respectively, anti-social behaviour was also included as a predictor variable when using aggressive behaviour as the independent variable, and vice versa. Analyses of residuals and of multi-collinearity of predictors suggested that the assumptions for the

regression analyses were sufficiently met (Tabachnick and Fidell, 2001; Field, 2005). Table 3.3 presents the results.

Table 3.3 Associations between unemotional and egocentric psychopathic trait dimensions and aggressive and anti-social behaviour

Dependent variable:	**Dutch data**		**Greek data**	
Predictor variables:	CD: Aggressive behaviour (N=1748)	CD: Anti-social behaviour (N=1748)	CD: Aggressive behaviour (N=384)	CD: Anti-social behaviour (N=384)
I. Unemotional dimension	0.11[1]	0.13	-0.03	0.07
II. Egocentric dimension	0.05	**0.57***	-0.07	**0.50***
III. Interaction of I & II	**0.22***	-0.01	**0.35***	-0.01
IV. Aggressive behaviour	**-**	**0.25***	-	**0.39***
V. Antisocial behaviour	**0.41***	-	**0.59***	-
VI. Age	0.01	0.04	-0.01	0.02
VII. Gender	0.03	-0.02	-0.05	-0.07
Variance explained (R^2)	0.50	0.69	0.60	0.72

[1] The figures reflect the standardised coefficient β. * The coefficients that are significant ($p < 0.01$) and substantial ($\beta > 0.2$)

The β-coefficients in both samples show that aggressive behaviour was primarily associated with the variable measuring the antisocial behaviour (Dutch β=0.41, Greek β=0.59) and the interaction between the egocentric-narcissistic and the callous-unemotional characteristics in both countries (Dutch β=0.22, Greek β=0.35). Table 3 further shows that in both samples antisocial behaviour was primarily associated with egocentric characteristics (Dutch β=0.57, Greek β= 0.50), and to a lesser extend with aggressive behaviour (Dutch β=0.25, Greek β= 0.39).

DISCUSSION

A two-dimensional construct covering the non-behavioural dimensions of psychopathy - the narcissistic-egocentric and the callous-unemotional traits respectively - has been proposed for screening children through parental reports of their characteristics and associated behavioural symptoms. To avoid stigmatization, the terms 'Social Detachment' and 'Emotional Detachment' were introduced to refer to these characteristics (Scholte and Van der Ploeg, 2007). The results of measuring psychopathy in adults may vary from one country to another (Cooke and Michie, 2001). This has been much less clear in relation to children and adolescents (Dolan, 2004) and our data provide a step towards greater clarity.

The two-dimensions of social and emotional detachment were internally reliable and cross-culturally stable in a direct comparison of pre-pubertal children in the Netherlands and in Greece. This is in line with earlier studies supporting a two-dimensional structure of the psychopathic syndrome in adolescents and in children (Brandt et al., 1997; Forth A.E., 1995; Lynam, 1997; Scholte and Van der Ploeg, 2007), but these studies had not taken direct account of cross cultural issues. Although more cross cultural and longitudinal validation studies are needed, our findings suggest that clinicians in both countries could use such parental ratings with confidence in preliminary screening of narcissistic-egocentric and callous-unemotional traits in children.

The investigation of the associations between the two dimensions of social and emotional detachment and the aggressive and antisocial symptoms of conduct disorder showed that, in both countries, parental reports about co-existence of narcissistic-egocentric and callous-unemotional characteristics in children were associated with aggressive behaviour in children, while the presence of only narcissistic-egocentric characteristics in the children was associated with anti-social behaviour. This suggests that it is valid to consider these two dimensions of psychopathy separately as well as together.

Limitations and Implications

Our results were based exclusively on parental ratings, so we suggest that more cross-cultural research is needed in order to confirm that multiple types of informants, for example adding teachers, would produce similar results. Furthermore, we did not test predictive validity of the questionnaire in multiple cultures, so future longitudinal studies are needed to determine whether the psychopathic traits in children are stable over time

and whether the existence of social and emotional detachment in children actually predicts future behavioural problems.

In addition, it should be kept in mind that the study was conducted among non-clinical samples of children. Further investigation of the psychometric properties of these scales among clinical populations and populations of juvenile offenders would give a more complete picture of international validity. Finally, our results apply mainly to pre-pubertal children (4 to 12 years). Further international research among older population groups is needed before generalisations can be made.

We emphasise that in our work we were not measuring psychopathy or implying a finding of psychopathy among children. Rather we were evaluating two scales which can be derived from use of parental ratings derived from elements of two PCL-R factors, and which may yield potentially useful clinical information about the internal life of children with serious behavioural difficulties.

Our findings are indicative of the possibility that clinicians could use this tool to assist assessment of children at high risk of major conduct problems in order to plan prevention and/or treatment strategies. Some studies have shown that children and adolescents with signs of psychopathic traits can benefit much from continued and extended treatment (Harris and Rice, 2006; Salekin et al., 2001). This makes early detection of signs of psychopathic traits among children and adolescents important. An advantage of the questionnaire is that it assesses traits that reflect the core aspects of personality independently of observing disruptive acts (Burns, 2000).

It is, however, important to note that our study also showed that in children the associations between the narcissistic-egocentric, the callous-unemotional and the aggressive and antisocial behavioural characteristics of conduct disorder are complex. Clinicians must take such complexity into account when diagnosing and treating children with difficult behaviour.