

VU Research Portal

Adolescent Personality Pathology

Tromp, N.B.

2010

document version

Publisher's PDF, also known as Version of record

[Link to publication in VU Research Portal](#)

citation for published version (APA)

Tromp, N. B. (2010). *Adolescent Personality Pathology: A Dimensional Approach*. [PhD-Thesis - Research and graduation internal, Vrije Universiteit Amsterdam]. Ipskamp BV.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

E-mail address:

vuresearchportal.ub@vu.nl



5

**Self- and Parent Report of Adolescent Personality Pathology:
Informant Agreement and Relations to Dysfunction**

Journal of Personality Disorders, in press

Introduction

The assessment of personality pathology relies heavily on self-report, either through questionnaires or (semi-)structured interviews. Despite the well-accepted validity of self-report instruments to assess personality pathology, self-reports may be hampered by the important limitation of not providing an accurate and truthful description of the respondent's personality (Ganellen, 2007). It has been suggested that this limitation is especially valid in clinical populations (Bernstein et al., 1997; Yang et al., 1999). For example, psychiatric patients may be more likely to suffer from a lack of self-insight into their personality characteristics (Bernstein et al., 1997). Similarly, the validity of psychiatric patient-reports may be limited as a result of cognitive impairments, distortions of the self-concept, and a variety of defensive processes often associated with psychopathology (Yang et al., 1999). In addition, the stigma or social undesirability attached to psychopathology possibly results in a denial or underestimation of the symptoms. Following from this line of argument, the validity of reports of patients with severe psychopathology or personality disorders (PD) may be limited or biased to a larger extent than that of reports of patients with mild psychopathology.

Assessment of personality pathology may be more complete and accurate when based on information obtained from multiple sources. Several researchers have argued that for a more comprehensive understanding of PD it may be important to incorporate proxy reports (Clark, 2007; Oltmanns & Turkheimer, 2006; Westen & Shedler, 1999). A multi-informant approach seems especially eligible in the assessment of personality pathology in adolescents. Parents are obvious and often easily available candidates for proxy report. Although some may feel that it is not appropriate or valid to assess personality pathology in adolescence, a growing body of research recognizes its occurrence at young age. Studies have supported its validity as a construct, and high prevalence in both clinical and non-clinical adolescent populations (Chapter 2, 3; Johnson, Bromley, Bornstein, & Sneed, 2006).

A complicating factor in a multi-informant approach in the assessment of personality pathology seems to be that research has indicated that agreement between self- and proxy report on PD criteria and diagnoses (Klonsky, Oltmanns, & Turkheimer, 2002), and on personality traits and temperament (Ready & Clark, 2002) is relatively low in adult populations. Similarly, meta-analytic findings have shown that informant agreement levels in the assessment of child and adolescent psychopathology tend to be low, with a mean correlation between self- and parent report of .25 (Achenbach, McConaughy, & Howell, 1987). Moreover, several studies have indicated that agreement levels are systematically affected by important demographic and clinical variables. For example, consistency between ratings of different informants is less for adolescents compared to children, suggesting that agreement varies across age (Achenbach et al., 1987). In addition, it has been shown that consistency is less for internalizing problems than for externalizing problems (Achenbach et al., 1987; Ready & Clark, 2002). It has been argued that this is due to lower item ratability of internalizing problems. That is, internalizing problems are difficult to judge by an external observer, because they concern internal experiences, beliefs, and feelings and are not highly associated with observable behavior (Ready, Clark, Watson, &

Westerhouse, 2000). It may also be that internalizing problems are difficult to observe, because the actor actively tries to conceal them, whereas externalizing behaviors are difficult to hide, even though the actor would like to conceal them (Van der Ende, 1999). Based on this last argument, it can also be expected that reported levels of internalizing pathology are higher when based on self-report, whereas levels of externalizing pathology are higher when based on proxy report. Little research has investigated gender differences in agreement levels, but the available results suggest that gender does not play an important role in moderating agreement levels (Oltmanns & Turkheimer, 2006).

Although often regarded as a sign of low reliability, the relatively poor correspondence between ratings of different informants suggests that each source, when valid, may contribute unique and important information on personality pathology. Combining information from multiple informants can thus result in an improvement of diagnostic procedures and predictive power to outcome measures (Oltmanns & Turkheimer, 2006; Ready, Watson, & Clark, 2002; Verhulst, Koot, & Van der Ende, 1994). For example, Ready and colleagues (2002) demonstrated the incremental validity of proxy-reported personality in the prediction of patient social behavior.

The aim of the present study was threefold. First, differences in the levels of adolescent personality pathology when assessed through self- versus parent report were investigated. It was hypothesized that levels of internalizing pathology would be higher for adolescent report, whereas levels of externalizing pathology would be higher for parent report. Second, adolescent-parent agreement levels were investigated across different subgroups in the sample and different types of personality pathology. Based on previous research cited above, it was hypothesized that agreement levels would be similar across adolescent gender, and higher for younger compared to older adolescents, outpatient compared to inpatient adolescents, adolescents without compared to adolescents with a PD diagnosis, and for externalizing compared to internalizing pathology. Third, the unique contribution of each informant (adolescent and parent) to variance in adolescent dysfunction was examined. Information on dysfunction on eight domains relevant to personality pathology, including intrapersonal, interpersonal, and school- or work-related problems, was obtained from the primary responsible clinician. Considering previous evidence on the relatively low agreement levels between informants, but the potential validity of each informant if reliable, it was expected that both informants could provide unique contributions to the prediction of dysfunction.

In the attempt to address the study aims, a methodological issue was accounted for. It is well-known that Axis I psychopathology and PDs frequently co-occur (Clark, 2007; Zimmerman, Rothschild, & Chelminski, 2005). As a result, dysfunction observed in combination with personality pathology may in fact be caused by co-occurring Axis I pathology. The present study examined whether personality pathology affects dysfunction above and beyond the effects accounted for by Axis I pathology.

Method

Participants

The sample consisted of 110 adolescents (35% male; mean age 15.6 years; $SD = 2.1$; range 12 to 22 years), who were referred to youth mental health services for inpatient (56%) or outpatient treatment in one of four collaborating centers in The Netherlands. Adolescents were referred for various reasons, not specifically for personality pathology. PD symptoms (including those for Depressive and Passive-Aggressive PD listed in the appendix of the *DSM-IV*) were assessed with the Structured Clinical Interview for *DSM-IV* Personality Disorders (SCID-II; First, Spitzer, Gibbon, & Williams, 1997). Research has indicated that structured clinical interviews can be used to assess PDs among adolescents in a reliable and valid manner (Brent et al., 1993). In the present study, identical diagnostic thresholds as defined for adults were applied. A PD was diagnosed in 44% of the sample. The prevalence rates for individual PDs were: Avoidant 17%, Dependent 3%, Obsessive-Compulsive 9%, Passive-Aggressive 6%, Depressive 23%, Paranoid 10%, Schizotypal 0%, Schizoid 4%, Histrionic 0%, Narcissistic 1%, Borderline 16%, and Antisocial 16%.

Axis I disorders, assessed with the Structured Clinical Interview for *DSM-IV* Axis I Disorders (SCID-I; First, Spitzer, Gibbon, & Williams, 1996) and the attention-deficit/hyperactivity (ADHD), oppositional defiant (ODD), and conduct disorder (CD) modules of the Schedule for Affective Disorders and Schizophrenia for School-Age Children Present and Lifetime Version (K-SADS-PL; Kaufman et al., 1997), were present in 75% of the sample at the time of assessment. The prevalence rates for Axis I disorders were: ADHD 7%, ODD 11%, CD 7%, mood disorder 52%, anxiety disorder 38%, psychotic disorder 17%, substance use disorder 10%, somatoform disorder 5%, and eating disorder 15%. The exclusion criteria were an IQ-score below 80, current risk of suicide, diagnosis of autism at intake, current psychotic behavior, diagnosed neurological deficiency, and brain damage in the past.

Measures

All adolescents completed the Dimensional Assessment of Personality Pathology – Basic Questionnaire for Adolescents (DAPP-BQ-A). This self-report questionnaire assesses 18 lower-order dimensions of personality pathology, that can be organized into four higher-order dimensions (Emotional Dysregulation, Dissocial Behavior, Inhibitedness, and Compulsivity). Principal components analysis on the lower-order DAPP-BQ-A dimensions in a large sample of referred and nonreferred adolescents resulted in a two-dimensional structure representing Internalizing and Externalizing traits (see Table 5.1; Chapter 2). The 290 items are scored on a Likert-type scale, ranging from 1 (*very unlike me or not applicable*) to 5 (*very like me*). The DAPP-BQ-A was translated and adapted from its adult predecessor, the DAPP-BQ (Livesley & Jackson, 2009). The DAPP-BQ-A has been shown to be a reliable and valid instrument to assess personality pathology in adolescent clinical and non-clinical samples (Chapter 2). Moreover, its dimensions have shown significant, substantial, and conceptually meaningful relations to PD symptoms as described in the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV, APA,*

2000; Chapter 3), and afforded significant and substantial improvement over dimensions of normal personality in describing PD symptoms in an adolescent referred sample (Chapter 4). In the present sample, Cronbach's alphas ranged from .68 for Restricted Expression to .97 for Self Harm (mean .87)

The adolescents' parents (18% male) provided information on the adolescent's personality pathology using a parent version of the DAPP-BQ-A, which was identical to the adolescent version, except for the actor of each item (third-person instead of first-person format). Cronbach's alphas of the parent version ranged from .77 for Intimacy Problems to .96 for Self Harm (mean .89).

Clinicians completed the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1990, 1994) that was designed to assess the most severe level of dysfunction during the previous three months in eight domains in children and adolescents. Dysfunction is operationalized as the extent to which the problems interfere with functioning in each domain. A total of 157 descriptions of behavior and emotions describe difficulties in functioning in the domains of Moods/emotions (i.e., ability to regulate emotional life; 21 items), Self-harmful behavior (i.e., extent to which the youth can cope without resorting to self-harmful behavior or verbalizations; 7 items), Thinking (i.e., ability to use rational thought processes; 14 items), role performance at School/work (i.e., ability to function in a group educational environment; 35 items), at Home (i.e., ability to observe rules and perform age-appropriate tasks; 20 items), and in the Community (i.e., ability to respect the rights of others and their property and to act lawfully; 17 items), Behavior towards others (i.e., appropriateness of daily behavior; 23 items), and Substance use (i.e., substance use and the extent to which it is inappropriate and disruptive; 20 items).

For each domain, the items are organized and scored into four levels of severity of dysfunction: *minimal or no dysfunction* (0), *mild* (10), *moderate* (20), and *severe* (30). To allow for correlation and regression analyses with the domain scores, which range across four levels in at most ordinal fashion, scores were dichotomized into low (*no to mild*) and high (*moderate to severe*) dysfunction. This cutoff was decided on by the authors of the current study because items at the level of *no or mild dysfunction* indicate problem behaviors that can easily be corrected and remain without consequences, whereas items at the level of *moderate or severe dysfunction* indicate serious disturbances or disruptions that interfere with the adolescent's functioning. Careful conceptual consideration of the items showed that the domains can be organized into an internalizing domain (Moods/emotions, Self-harmful behavior, and Thinking) and an externalizing domain (role performance at School/work, Home, and Community, Behavior towards others, and Substance use).

Several psychometric studies have provided evidence for the satisfactory internal consistency, test-retest and interrater reliability, and construct, criterion, and predictive validity (Hodges, Doucette-Gates, & Liao, 1999; Hodges & Wong, 1996, 1997). The Dutch version of the CAFAS has been meaningfully related to measures of quality of life and psychopathology in adolescents (Bastiaansen, Koot, & Ferdinand, 2005; Bastiaansen, Koot, Ferdinand, & Verhulst, 2004). In the present study, the CAFAS was completed by the primary responsible clinician

(psychiatrist or psychologist) after two months of extensive diagnostic procedures during which information was gathered from all relevant informants and sources, including adolescents, parents, and all members of the multi-disciplinary clinical team, previous documentation, diagnostic instruments, and observation. The clinician evaluates all 157 items and scores, for each domain, the most severe level of functioning. Clinicians were trained by the authors of the present study in rating the CAFAS using example demonstration vignettes, and were blind to data on personality pathology collected by the authors. Overall dysfunction scores, computed by summing scores across the eight domains, ranged from 10 to 140 ($M = 62.9$, $SD = 31.1$), indicating that levels of overall dysfunction varied between ‘no noticeable dysfunction’ to ‘needs intensive treatment’.

Procedure

Adolescents and parents completed the DAPP-BQ-A at home or at the mental health centre in paper-and-pencil format (74% and 68%, respectively) or via internet. Adolescent and parent gender, and adolescent age were equally distributed across the two format groups. Some differences in scores on DAPP-BQ-A dimensions between the format groups were found for adolescents and parents, indicating significantly higher scores for the paper-and-pencil group (effect sizes d ranged from .41 to .57). For the most part, these differences did not seem to represent systematic methodological effects, since ANOVA's showed that the effects were attributable to the scores of inpatients and their parents, the large majority of whom (89% and 69%, respectively) used paper-and-pencil format. Subsequently, structured interviews to assess Axis I disorders (SCID-I and K-SADS-PL) were administered at the mental health centre. In addition, instruments to assess demographic characteristics, normal personality traits, *DSM-IV* PDs, IQ, and childhood trauma were administered but not used for the present study. After completing all assessments, adolescents received a voucher worth €15,- as acknowledgement of their participation. Approximately two months after intake, clinicians completed the CAFAS without having insight into the DAPP-BQ-A scores. Study procedures were approved by the Dutch Central Committee on Research involving Human Subjects.

Results

Adolescent-Parent Agreement

Mean Level Differences. First, mean level differences in personality pathology reported by adolescents and parents were compared using T-tests (Table 5.1). Parents reported significantly ($p < .05$) higher levels of Affective Instability (Cohen's $d = .26$), Restricted Expression ($d = .21$), Callousness ($d = .31$), Rejection ($d = .32$), Oppositionality ($d = .32$), and Narcissism ($d = .30$). Adolescents reported higher levels of Intimacy Problems ($d = .58$), and Compulsivity ($d = .25$).

Intraclass Correlation Coefficients. Intraclass correlation coefficients (ICC) for consistency in a two-way random effects model were calculated for all convergent and discriminant lower-order

dimensions. The resulting matrix of correlations between adolescent and parent reports³ was examined using the multitrait-multi-informant procedure (cf., Campbell & Fiske, 1959). ICCs for agreement between convergent dimensions ranged from -.20 for Intimacy Problems to .72 for Self Harm ($M = .45$; Table 5.1), with significant ($p < .01$) and positive values for all dimensions, except Intimacy Problems. Mean convergent ICCs for lower-order dimensions within the same higher-order dimension were $|.47|$ for Emotional Dysregulation, $|.54|$ for Dissocial Behavior, and $|.30|$ for Inhibitedness. No mean was calculated for Compulsivity, since this dimension consists of only one lower-order dimension. ICCs for agreement between discriminant dimensions ranged from -.34 (adolescent-reported Stimulus Seeking with parent-reported Compulsivity) to .53 (adolescent-reported Stimulus Seeking with parent-reported Conduct Problems), with a mean value of .12. Mean discriminant ICCs for lower-order dimensions within the same higher-order dimension were $|.24|$ for Emotional Dysregulation, $|.35|$ for Dissocial Behavior, and $|.13|$ for Inhibitedness. The mean discriminant ICC across different higher-order dimensions was $|.12|$.

Subgroups. Subsequently, significant adolescent-parent agreement levels on convergent dimensions were compared across different types of personality pathology. The mean significant agreement levels for internalizing ($M = .49$; excluding the non-significant ICC for Intimacy Problems) and externalizing dimensions ($M = .50$) of personality pathology did not differ substantially. Moderated multiple regression analyses were used to examine the effects of subgroup membership on self-parent agreement. In these regressions, parent-reported dimensions were the dependent variable, and the convergent self-reported dimensions, subgroup, and their interaction were the independent variables. Results for gender showed a significant ($p < .05$) moderating effect only for agreement on Stimulus Seeking ($\beta = .56$), indicating that agreement was higher for boys. For referral status, significant interaction effects were found for Anxiety ($\beta = .74$), Restricted Expression ($\beta = 1.05$), Oppositionality ($\beta = .93$), and Narcissism ($\beta = .81$), all indicating that agreement was higher for outpatients. For PD status, a significant interaction effect was found for Suspiciousness ($\beta = 1.00$), indicating that agreement was higher for adolescents with a PD. No significant interaction effect of age was found for any of the dimensions.

Personality Pathology and Dysfunction

Univariate Correlations. Partial correlations between each CAFAS domain and overall score and each DAPP-BQ-A dimension were computed separately for adolescent and parent report, controlling for gender, age, and the presence of any Axis I disorder (Table 5.2). For the domains, this was accomplished through hierarchical logistic regression analyses, in order to account for the fact that the domains were dichotomized and to be able to control for all covariates. These analyses yielded values for Nagelkerke's R^2 , of which the square roots were taken to arrive at correlation coefficients. The direction and significance of the relation were determined by the

³ The multitrait-multi-informant correlation matrix can be obtained from the author.

Table 5.1 - Descriptive statistics and adolescent-parent agreement on DAPP-BQ-A dimensions

DAPP-BQ-A dimensions	Adolescent		Total sample		Gender		Age		Referral Status		PD Status	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	boys	girls	<16 yrs	≥16 yrs	in-patient	out-patient	PD	non-PD
Internalizing												
<i>Emotional Dysregulation</i>												
Submissiveness	40.9	13.7	41.1	11.8	.38	.61	.42	.57	.33	.63	.56	.40
Cognitive distortion	41.3	14.6	40.6	11.8	.24	.44	.37	.52	.36	.52	.41	.39
Identity problems	47.1	11.4	49.8	14.2	.38	.43	.46	.50	.38	.55	.57	.30
Affective Instability	48.7	14.2	52.3*	13.1	.44	.40	.55	.47	.39	.52	.44	.38
Anxiety	50.2	17.0	46.2	12.8	.37	.43	.46	.48	.28	.64	.57	.35
Social avoidance	45.7	14.8	47.3	13.4	.57	.56	.61	.50	.45	.61	.64	.44
Suspiciousness	36.7	11.7	34.5	10.0	.26	.17	.23	.28	.23	.06	.40	-.11
Insecure attachment	44.3	15.6	44.0	14.4	.38	.53	.44	.60	.41	.70	.56	.49
Self Harm	30.3	17.5	26.6	14.1	.73	.68	.75	.67	.71	.61	.70	.56
<i>Inhibitions</i>												
Restricted expression	46.8	8.79	50.0**	12.0	.20	.55	.34	.46	.24	.50	.53	.27
Intimacy problems	41.1***	9.21	35.8	8.8	.02	-.23	-.07	-.27	-.22	-.24	-.29	-.17
<i>Compulsivity</i>												
Compulsivity	43.6**	11.5	39.1	13.4	.49	.61	.50	.57	.48	.68	.73	.41
Externalizing												
<i>Disocial Behavior</i>												
Stimulus seeking	46.0	12.3	44.8	15.1	.75	.67	.73	.66	.68	.70	.74	.59
Callousness	34.0	11.9	40.0*	14.7	.61	.38	.52	.43	.47	.42	.63	.29
Rejection	42.1	11.8	48.0***	13.5	.52	.39	.39	.50	.44	.38	.44	.34
Conduct problems	32.3	13.3	30.9	11.1	.68	.48	.58	.56	.51	.44	.58	.39
<i>Emotional Dysregulation</i>												
Oppositionality	45.5	11.8	49.9*	13.5	.42	.47	.37	.55	.22	.64	.52	.39
Narcissism	41.3	12.6	45.1*	12.5	.26	.41	.44	.48	.23	.60	.36	.41
Mean ICC					.43	.44	.45	.47	.37	.50†	.50*	.34

Note: Total sample size N = 110. Sample sizes for the subgroups were: boys, n = 38; girls, n = 72; <16 yrs, n = 58; ≥16 yrs, n = 52; inpatient, n = 62; outpatient, n = 48; PD, n = 48; non-PD, n = 61. PD = personality disorder. †p < .10; *p < .05; **p < .01; ***p < .001.

sign and significance, respectively, of the regression coefficient. All significant correlations reached a medium ($>.30$) or large ($>.50$) effect size according to Cohen's (1988) criteria. Of the 21 significant correlations between Internalizing domains and either adolescent- or parent-reported Internalizing dimensions, 43% replicated across both reports. Of the 11 significant correlations between Externalizing domains and either adolescent- or parent-reported Externalizing dimensions, 91% replicated across both reports. For dysfunction in the domains Community significant correlations with DAPP-BQ-A dimensions were found only for adolescent report, whereas for dysfunction in the domains School/work and Thinking significant correlations were found only for parent report. Overall dysfunction was significantly related to Affective Instability, Suspiciousness, Self Harm, Stimulus Seeking, Callousness, and Conduct Problems for both adolescent and parent report. Parent report provided additional significant positive correlations with Overall dysfunction for Cognitive Distortion, Identity Problems, Oppositionality, Social Avoidance, Restricted Expression, and Rejection, and a negative correlation for Compulsivity.

Regression Analyses. Additional logistic multiple hierarchical regression analyses were conducted with the CAFAS domain scores as dependent variable. The adolescent- and parent-reported DAPP-BQ-A dimensions that showed significant univariate correlations with the domain were entered as predictors. Regression coefficients were evaluated to see which dimensions uniquely contributed to the regression models, net of the effects of gender, age, and the presence of any Axis I disorder (Wald statistic significant at $p < .05$). The results of the regression analyses (Table 5.3) showed that DAPP-BQ-A dimensions explained significant proportions of variance in all CAFAS domains, above and beyond the effects accounted for by Axis I psychopathology. Increments ranged from 10% for Community to 67% for Self-harmful behavior. Across the eight domains, self- and parent-reported DAPP- BQ-A dimensions predicted an average of 36% of variance. Self-reported Self Harm significantly ($p < .05$) contributed to variance in Moods/Emotions and Self-harmful Behavior. In addition, self-reported Suspiciousness and low parent-reported Compulsivity contributed to variance in Self-harmful Behavior. Furthermore, parent-reported Cognitive Distortion contributed to variance in Thinking, parent-reported Conduct Problems to variance in Home, self-reported Callousness to variance in Community, and self-reported Rejection and low parent-reported Compulsivity to variance in Behavior towards others.

To examine the associations of adolescent- and parent-reported DAPP-BQ-A dimensions with the overall CAFAS score, linear multiple hierarchical regression analyses were conducted. Table 5.3 shows that DAPP-BQ-A dimensions explained a significant proportion of variance (31%), above and beyond the effects accounted for by Axis I psychopathology. Adolescent-reported Conduct Problems, and parent-reported Self harm, Social Avoidance, and low Identity Problems significantly ($p < .05$) contributed to variance in Overall dysfunction.

Table 5.2 - Correlations between CAFAS domain and overall scores and adolescent- and parent-reported DAPP-BQ-A dimensions

DAPP-BQ-A dimensions	CAFAS scores										Overall ^b	
	Internalizing					Externalizing						
	Moods/ emotions	Self-harmful behavior	Thinking	School/ work	Home	Community	Behavior towards others	Substance use				
Internalizing												
<i>Emotional Dysregulation</i>												
Submissiveness	A .56**	.42	.34	-.29	-.43**	-.48	-.29	-.31	.04			
	P .49	-.38	.24	-.29	.31	-.42	.30	-.20	.08			
Cognitive distortion	A .52	.47*	.38	-.29	-.33	-.50	.30	.17	.14			
	P .52	.41	.49**	.31	.34	-.43	.30	-.16	.27**			
Identity problems	A .57**	.53**	.32	-.29	-.39*	.41	.31	-.17	.18			
	P .57**	.51**	.32	.33	.31	-.48	.30	-.21	.31**			
Affective Instability	A .57**	.53**	.21	.29	-.34	-.43	.22	.22	.24*			
	P .50	.44*	.25	.35	.43**	-.45	.44*	-.15	.34***			
Anxiety	A .57**	.51**	.27	-.29	-.45**	-.43	-.29	-.21	.06			
	P .54*	.43	.27	.30	.30	-.50	-.29	-.33	.11			
Social avoidance	A .60**	.48*	.26	.31	-.36	-.45	-.29	-.29	.17			
	P .58**	.41	.44*	.41**	.31	-.47	.31	-.41*	.36***			
Suspiciousness	A .54*	.47*	.26	.30	-.30	.41	.34	.26	.26**			
	P .55*	.48**	.28	.36*	.37	-.42	.30	-.21	.37***			
Insecure attachment	A .52	.46*	-.23	.29	-.32	-.50	-.29	-.20	.08			
	P .53*	.39	-.24	.31	.33	-.44	.29	-.38*	.10			
Self Harm	A .65***	.80***	.23	.29	-.30	-.42	-.31	.31	.34***			
	P .61***	.67***	.28	.34	.35	.41	.29	.23	.48***			
<i>Inhibitedness</i>												
Restricted expression	A .53	.49**	.25	-.29	-.33	-.45	.29	.15	.13			
	P .51	.42	.35	.29	.34	-.44	-.31	-.19	.21*			
Intimacy problems	A .53	.40	-.21	.29	.30	-.42	.30	.16	.13			
	P .49	-.38	.21	.29	.33	-.42	-.29	-.19	.06			
<i>Compulsivity</i>												
Compulsivity	A .53	-.41	.22	-.29	-.37	-.46	.30	-.19	-.15			
	P .49	-.47*	.21	-.30	-.36	-.41	-.46*	-.35	-.28**			

Table 5.2 - continued

		Moods/ emotions	Self-harmful behavior	Thinking	School/ work	Home	Community	Behavior towards others	Substance use	Overall
Externalizing										
<i>Discocial Behavior</i>										
		A	.42	-.21	.31	.38*	.43	.45*	.35*	.31**
		P	.41	-.23	.29	.48**	.51	.41*	.34*	.29**
		A	-.38	-.21	.30	.43**	.52*	.45**	.21	.19*
		P	.37	.21	.33	.56***	.46	.51**	.21	.38***
		A	-.39	.21	.30	.41*	.41	.52**	.28	.16
		P	.37	-.25	.35	.47**	-.41	.51**	.24	.25*
		A	.43*	-.22	.31	.51***	.44	.53**	.47**	.41***
		P	.38	-.22	.32	.64***	.50	.52**	.36*	.43***
<i>Emotional Dysregulation</i>										
		A	.49	.23	.33	-.31	.41	.32	-.16	.18
		P	.41	.21	.36*	.39*	-.44	.38	.16	.29**
		A	-.38	.22	.29	-.31	-.42	.30	-.17	-.02
		P	.37	.21	-.29	.34	-.42	.40*	.18	.03

Note. All analyses controlled for gender, age, and presence of any Axis I disorder. A = Adolescent, coefficients in bold print; P = Parent. ^a Square root of Nagelkerke's R². ^b Partial correlation coefficient. * $p < .05$; ** $p < .01$; *** $p < .001$.

Table 5.3 - Multiple hierarchical regressions of CAFAS domain and overall scores on selected adolescent- and parent-reported DAPP-BQ-A dimensions

CAFAS domain	Step. Predictors	Nägelkerke's R ²	block χ^2	df	Significant DAPP-BQ-A predictors ^a (<i>b</i>)
Moods/emotions	1. gender and age	.11	9.19*	2	
	2. any Axis I disorder	.24	12.49***	1	
	3. DAPP-BQ-A	.51	31.42**	13	Self Harm (.07)
Self-harmful behavior	1. gender and age	.05	3.58	2	
	2. any Axis I disorder	.14	6.67**	1	
	3. DAPP-BQ-A	.80	72.51***	16	Self Harm (.44), Suspiciousness (-.29), Compulsivity (-.23)
Thinking	1. gender and age	.04	1.67	2	
	2. any Axis I disorder	.04	0.11	1	
	3. DAPP-BQ-A	.31	12.07**	2	Cognitive Distortion (.10)
School/work	1. gender and age	.07	5.74	2	
	2. any Axis I disorder	.08	1.03	1	
	3. DAPP-BQ-A	.19	10.04*	3	none
Home	1. gender and age	.04	2.76	2	
	2. any Axis I disorder	.09	4.34*	1	
	3. DAPP-BQ-A adolescent	.60	51.31***	13	Conduct Problems (.18)
Community	1. gender and age	.16	6.45*	2	
	2. any Axis I disorder	.17	0.21	1	
	3. DAPP-BQ-A	.27	3.92*	1	Callousness (.07)
Behavior towards others	1. gender and age	.08	4.75	2	
	2. any Axis I disorder	.08	0.10	1	
	3. DAPP-BQ-A	.56	32.91***	11	Rejection (.18), Compulsivity (-.10)
Substance use	1. gender and age	.00	0.03	2	
	2. any Axis I disorder	.02	1.04	1	
	3. DAPP-BQ-A	.48	22.63***	6	none
	Step. Predictors	R ² (adj)	ΔF	df	Significant DAPP-BQ-A predictors ^a (β)
Overall dysfunction	1. gender and age	.01	1.63	2, 107	
	2. any Axis I disorder	.09	9.99**	1, 106	
	3. DAPP-BQ-A	.40	3.89***	19, 87	Conduct Problems (.36), Self Harm (.40), Social Avoidance (.36), Identity Problems (-.40)

Note. Multiple hierarchical logistic regression analyses for eight CAFAS domains and multiple hierarchical linear regression analysis for Overall dysfunction. Reported R² coefficients present the proportion of variance explained by all predictor variables after forced block entry. df = Degrees of freedom. *b* = Logistic regression coefficient (*p* < .05). β = Standardized regression coefficient (*p* < .05). ^a Self-reported dimensions appear in bold. * *p* < .05; ** *p* < .01; *** *p* < .001.

Discussion

The present study examined adolescent-parent agreement on dimensions of adolescent personality pathology in a sample of 110 youngsters referred to mental health services. In addition, it investigated the contributions of both self- and parent reports of adolescent personality pathology in predicting dysfunction as reported by the primary responsible clinician, while controlling for several important covariates, including Axis I psychopathology. Despite moderate agreement between self- and parent reports, the results indicated that both self- and parent reported dimensions of personality pathology accounted for unique variance in dysfunction. The findings support a multi-informant approach in the assessment of personality pathology in adolescents. Using multiple informants could result in a more comprehensive understanding of adolescent personality pathology, and may improve diagnostic procedures and intervention strategies.

Adolescent-Parent Agreement

For several dimensions, the results supported the hypothesis that adolescents would report higher levels of internalizing pathology, whereas parents would report higher levels of externalizing pathology (Van der Ende, 1999). Levels of the internalizing dimensions Intimacy Problems and Compulsivity were higher for adolescent reports, and levels of the externalizing dimensions Callousness, Rejection, Oppositionality, and Narcissism were higher for parent reports. Parent report also yielded higher levels for the internalizing dimensions Affective Instability and Restricted Expression. The former may be regarded as a more observable form of internalizing pathology, with clear mood swings and strong emotional reactions to external stimuli, and therefore not necessarily limited to the perception of the adolescent.

Agreement between adolescent- and parent-reported Intimacy Problems was non-significant, and negative, for the total sample and all subgroups. It may be that in adolescents, Intimacy Problems represents a multi-dimensional construct. Adolescents and parents may take different perspectives on the problems associated with intimacy and close relationships that this dimension intends to capture. This seems to be underscored by the fact that adolescents and parents reported significantly different levels of Intimacy Problems. Previous research in adolescents has demonstrated low internal consistency and low test-retest reliability for this lower-order dimension, suggesting that it cannot be assessed reliably at this age (Chapter 2). Intimacy Problems, as a dimension of personality pathology in adolescents, may need further investigation.

For all other dimension of personality pathology, the present findings showed significant agreement levels for adolescent and parent report, with a mean ICC of .45. Investigation of the agreement levels across different types of pathology and different subgroups within the sample, did not yield many significant outcomes, suggesting that agreement is not systematically moderated by type of pathology, gender, or age. Although these findings are roughly similar to previous findings on the small and variable moderating role of gender (Oltmanns & Turkheimer, 2006), they run counter ideas expressed and empirical findings reported in previous literature that

agreement would be less for internalizing compared to externalizing psychopathology and less for adolescents compared to children (Achenbach et al., 1987; Ready & Clark, 2002; Van der Ende, 1999). With respect to age, Klonsky and colleagues (2002) reported a positive correlation between age and self-informant concordance in a quantitative review of studies in adults (with mean age ranging from 19 to 43 years). More studies with more variability in age, preferably including childhood to geriatric samples, are needed before the effect of age can be described with more certainty.

With regard to the severity of psychopathology, it has been argued that psychopathology may negatively influence self-awareness. Hence, it has been suggested that agreement would be lower for adolescents with more severe psychopathology, as indicated in the present study by inpatient status or presence of a PD. As expected, inpatient adolescents showed lower agreement than outpatient adolescents on Anxiety, Restricted Expression, Oppositionality, and Narcissism, whereas differences in the opposite direction were not observed. However, analyses of the moderating effect of PD status did unexpectedly not demonstrate higher agreement for those without a PD. Instead, agreement on Suspiciousness was higher for those with a PD. The relatively high values for the ICCs in the PD-subgroup may have been caused by the larger variance (Levene's test significant at $p < .05$) of several adolescent-reported dimensions in this subgroup compared to the non-PD-subgroup. An earlier study examining subgroup differences in reported personality traits (Ready & Clark, 2002) found no significant differences between adult inpatients and outpatients, and adults with and without a PD. Future studies, ideally with larger subsample sizes and more equal distribution of participants over the comparison groups, may be able to shed a more definitive light on the influence of the severity of psychopathology on self-reports of personality pathology.

Although almost all correlations between convergent adolescent- and parent-reported dimensions reached significance, the majority indicated only moderate agreement according to Cohen's criteria (Cohen, 1988). This indicates that there is a considerable amount of disagreement between adolescents and parents. Moderate agreement does not necessarily suggest, however, that information from one or both informants is invalid or incorrect. The adequate to good internal consistencies for both self- and parent report seem to indicate that both informants are able to provide reliable information. Taken together, the findings seem to suggest that both informants could provide a unique contribution when using their DAPP-BQ-A scores as diagnostic tool.

Personality Pathology and Dysfunction

In addition to adolescent-parent agreement on personality pathology, the present study examined relations between adolescent- and parent-reported dimensions of personality pathology and domains of dysfunction. The correlation pattern for the externalizing CAFAS domains with the externalizing DAPP-BQ-A dimensions seems to show a better replication across adolescent and parent report (91%) than the pattern for the internalizing CAFAS domains with the internalizing DAPP-BQ-A dimensions (43%). This finding runs counter the comparable agreement levels for internalizing and externalizing dimensions found in the present study.

However, it may be in line with the idea that convergence could be higher for more observable traits and hence, with previous research showing higher convergence for externalizing pathology (Achenbach et al., 1987; Ready & Clark, 2002; Ready et al., 2000).

The regression analyses predicting dysfunction by dimensions of personality pathology yielded several interesting results. First, when self- and parent-reported dimensions are entered into the regression model simultaneously, dimensions originating from both informants appeared as unique contributors to explained variance in dysfunction. The value of the multi-informant approach in the assessment of personality pathology is thus demonstrated. Moreover, for several domains, despite the fact that reports of both informants on a dimension were entered into the regression model simultaneously, only one of them emerged as a unique significant predictor. For Moods/emotions and Self-harmful behavior, both self- and parent-reported Self Harm were included, but only self-report contributed significantly. Similarly for Self-harmful behavior, self-reported Suspiciousness emerged as a significant predictor whereas parent report did not. Conversely, both self- and parent-reported Conduct Problems were used as predictors for dysfunction at Home, but only the contribution of parent report reached significance. For Behavior towards others, only self-reported Rejection contributed significantly. And finally, for Overall dysfunction, self-reported Conduct Problems and parent-reported Self Harm emerged as significant predictors. These results could be interpreted as indications of the superior validity of one of the two informants. However, it apparently depends on the domain of dysfunction and on the type of personality pathology that is assessed which of both perspectives is more valid, the perspective of the adolescent or that of the parent. Again, the value of a multi-informant approach is thus underscored.

Another finding of interest is that Conduct Problems and Self Harm seem to be relatively important in understanding dysfunction associated with personality pathology. Both adolescent- and parent-reported Conduct Problems and Self Harm contributed to variance in dysfunction in several domains and Overall dysfunction. Since both Conduct Problems and Self Harm are highly correlated with borderline PD symptoms (Chapter 3), this finding may point to the dysfunctional nature of borderline personality traits, as indicated by more severe levels of dysfunction on several CAFAS domains. Parent-reported low Compulsivity contributed to variance in dysfunction in two domains: Self-harmful behavior, and Behavior towards others. High levels of Compulsivity may be associated with efficient inhibitory control, resulting in refrainment of expressing aggressive and impulsive behavior towards others and the self. Parent-reported Identity Problems emerged as a unique negative predictor of Overall dysfunction, despite a positive univariate correlation. This is most likely due to a net suppressor effect.

No significant univariate relations were found between parent-reported dimensions of personality pathology and the domain of Community. This may suggest that parents have insufficient information in terms of adolescents' delinquent behavior, and can hence not contribute to the prediction of dysfunction in this domain. On the other hand, no significant univariate relations were found between adolescent-reported dimensions and the domains of Thinking and School/work. Parent-reported Cognitive Distortion did contribute significantly to variance in Thinking. To assess dysfunction in adolescents' use of rational thought processes,

parent information thus seems indispensable. None of the parent-reported dimensions significantly contributed to variance in School/work. Thus, parents do not seem to provide valuable information for the assessment of adolescent dysfunction in a group educational environment. Another source of information (e.g., the teacher) may be necessary.

Limitations

A limitation of the present study regards the operationalization of the external criterion of dysfunction. Since the domain scores of the CAFAS originally range across four levels in at most ordinal fashion, it was necessary to dichotomize the domain scores into low and high dysfunction to allow for correlation and regression analyses. The logistic regression analyses may have suffered from a loss of information, resulting in the appearance of less unique predictors. In addition, the CAFAS may not be the ideal instrument to assess functioning, since it forces the clinician to choose for each of the eight domains one behavioral characteristic that represents the most severely impaired functioning. Consequently, the adolescent is not rated on all items within a domain, resulting in relatively narrow descriptions of functioning for each domain. On the other hand, considering the large possibility of severe dysfunction in the present clinical sample, the CAFAS may be one of the best instruments to assess domain-specific dysfunction in adolescents (Canino, Costello, & Angold, 1999).

Another potential limitation concerns the analyses examining the contribution of self- and parent report to the description of dysfunction. The results may have been influenced by bias favoring parent-reported DAPP-BQ-A dimensions. Clinician report may have shown more similarities to parent report than to adolescents' self-report. First, both the clinician completing the CAFAS and the parent completing the DAPP-BQ-A may have consulted with the adolescent. Second, externalizing problems outnumber internalizing problems in the CAFAS. With externalizing problems being more visible to external observers, reports by clinicians and parents, both external observers, may be more similar. However, clinicians' reports on dysfunction were not only based on information from adolescents and parents. Important other sources of information were members of the multi-disciplinary clinical team, previous documentation, diagnostic instruments, and observation.

A final limitation concerns the regression analyses which, due to power restrictions, included a limited set of predictor variables, selected based on the significance of the univariate correlations between dimensions of personality pathology and domains of dysfunction. Future studies using larger samples may be able to detect meaningful relations that remained uncovered in this study due to limited variance in some dimensions and domains.

Implications

Despite these limitations, several important implications can be derived from the present findings. Arguably the most important implication concerns the implementation of a multi-informant approach to assess adolescent personality pathology. Information on adolescent personality pathology provided by both the adolescent and parent contributed to the understanding of its association with dysfunction. Hence, this study provided empirical evidence

in support of suggestions to include proxy reports in the assessment of personality pathology (Clark, 2007; Oltmanns & Turkheimer, 2006; Westen & Shedler, 1999). Gathering information from parents may provide a valuable contribution to understanding adolescent personality pathology and its associated dysfunction. Using information from multiple sources may extend the clinician's view on the adolescent's psychopathology and hence, improve decision making on diagnostic and intervention issues.

Another result with implications for diagnostic procedures concerns the validity of the DAPP-BQ-A as an instrument to assess dimensions of personality pathology in adolescent samples. The matrix of correlations between adolescent- and parent-reported dimensions of personality pathology, as examined following the multitrait-multi-informant procedure proposed by Campbell and Fiske (1959), showed that, on average, convergent ICCs ($M = .45$) were stronger than discriminant ICCs ($M = .12$), and discriminant ICCs within the same higher-order dimensions ($M = .30 - .54$) were stronger than discriminant ICCs across different higher-order dimensions ($M = .13 - .35$). Thus, the results provided additional evidence for the convergent and discriminant validity of the DAPP-BQ-A. Together with earlier evidence on the reliability and other forms of validity of this instrument (Chapter 2, 3), it shows that the DAPP-BQ-A can be used to assess dimensions of personality pathology in adolescent populations.

A final implication is worth noting from methodological as well as diagnostic and intervention perspectives. Considering the frequent co-occurrence of personality pathology and Axis I disorders, the present study investigated whether personality pathology showed relations with dysfunction above and beyond the effects accounted for by Axis I psychopathology. The results demonstrated that adolescent- and parent-reported dimensions of personality pathology indeed showed incremental validity. This is especially remarkable given the fact that 75% of the sample qualified for an Axis I disorder, and that after controlling for gender and age, the presence of an Axis I disorder accounted for significant amounts of variance in dysfunction. In addition, the finding is remarkable given the fact that the participants in the present study were not selected based on the presence of personality pathology. From a methodological point of view, this indicates that studies addressing the relation between adolescent personality pathology and functioning should control for the presence of Axis I disorder, if possible. Conversely, given the large amount of variance in functioning accounted for by adolescent and parent report of personality pathology, investigators of the relationship between adolescent Axis I psychopathology and functioning should realize that Axis I problems do not provide all information.

From the point of view of intervention strategies and diagnostic procedures, these findings could also be of significant value. When interventions focus only on Axis I psychopathology, some aspects of dysfunction may not improve in those adolescents with co-occurring personality pathology. Therefore, it seems important for diagnostic procedures in adolescent clinical settings not only to include assessment of the more prominent Axis I psychopathology, but to simultaneously assess personality pathology. If personality pathology is present, interventions should include treatment of these problems in order to reduce dysfunction to the largest extent possible.

CHAPTER 5 *Informant Agreement*

To conclude, the present study demonstrated the value of a multi-informant approach, emphasizing the importance of both adolescent and parent report in order to arrive at a comprehensive understanding of adolescent personality pathology. The use of multiple informants may improve diagnostic procedures and intervention strategies. In addition, the DAPP-BQ-A seems a valid and reliable instrument to assess dimensions of adolescent personality pathology, both when used as a self-report and as a proxy report instrument.