

J Pers. Author manuscript; available in PMC 2013 July 01.

Published in final edited form as:

J Pers. 2013 April; 81(2): 155–170. doi:10.1111/j.1467-6494.2012.00794.x.

Self-Other Knowledge Asymmetries in Personality Pathology

Erika N. Carlson,

Department of Psychology, Washington University in St. Louis

Simine Vazire, and

Department of Psychology, Washington University in St. Louis

Thomas F. Oltmanns

Department of Psychology, Washington University in St. Louis

Abstract

Objective—Self-reports of personality provide valid information about personality disorders (PDs). However, informant-reports provide information about PDs that self-reports alone do not provide. The current paper examines if and when one perspective is more valid than the other in identifying PDs.

Method—Using a representative sample of adults 55 to 65 year of age (N= 991; 45% males), we compared the validity of self- and informant- (e.g., spouse, family, or friend) reports of the FFM traits in predicting PD scores (i.e., composite of interviewer, self-, and informant-reports of PDs).

Results—Self-reports (particularly of neuroticism) were more valid than informant-reports for most internalizing PDs (i.e., PDs defined by high neuroticism). Informant-reports (particularly of agreeableness and conscientiousness) were more valid than self-reports for externalizing and/or antagonistic PDs (i.e., PDs defined by low agreeableness, conscientiousness). Neither report was consistently more valid for thought disorder PDs (i.e., PDs defined by low extraversion). However, informant-reports (particularly of agreeableness) were more valid than self-reports for PDs that were both internalizing and externalizing (i.e., PDs defined by high neuroticism and low agreeableness).

Conclusions—The intrapersonal and interpersonal manifestations of PDs differ, and these differences influence who knows more about pathology.

Keywords

self-knowledge; accuracy; personality disorder; assessment; personality traits

We have all met someone who does not seem to understand the negative impact his personality has on others. Of course, we have also probably met someone whose personality affects her in ways that we do not see or understand. Who knows the most about a person's level of personality pathology - the self or others? The main goal of this paper is to answer this question. With a representative sample of middle-aged adults, we compare self-reports to informant-reports (e.g., spouse, family, or friend) of Five-Factor Model (FFM) personality traits to determine which perspective is a more valid predictor of personality disorders (PDs).

The current investigation will reveal whose perception is a better predictor of PDs as well as who knows more about specific aspects of PDs. That is, we compare the validity of self- and informant-reports as predictors of PDs by taking both an idiographic (i.e., a profile of traits) and nomothetic (i.e., each FFM trait individually) approach. Such an investigation is needed for at least two reasons. First, research and clinical assessments of PDs are often based exclusively on self-report measures (Oltmanns & Turkheimer, 2009). A clear demonstration that self-reports are not always more valid or informative when it comes to identifying PDs might encourage the use of informant-reports in research and in practice. In particular, an investigation of who knows the most about specific aspects of personality pathology might inform the development of the PD classification system under consideration for the new Diagnostic and Statistical Manual of Mental Disorder 5 (DSM-5). Second, the current study extends past work on asymmetries in self-and other-knowledge of personality by revealing whether these asymmetries also exist for PDs (e.g., Vazire, 2010; Vazire & Carlson, 2011; Vazire & Mehl, 2008). In fact, the current study provides a strong test of self- and otherknowledge asymmetries because the informants in our sample have known targets for approximately 30 years and are likely to have accurate perceptions of targets but are also likely to see the targets in ways that are similar to how the targets see themselves (Furr, Dougherty, Marsh, & Mathias, 2007; South, Oltmanns, Johnson, & Turkheimer, 2011; Watson, Hubbard, & Wiese, 2000).

The following sections outline evidence that self-reports do not tell the whole story when it comes to identifying personality pathology. First, we review evidence that the self and others perceive unique, but valid, aspects of personality. Next, we review research that outlines self-other knowledge asymmetries in normal personality. Based on these findings, we make predictions about which perspective - the self or others – is a more valid predictor of specific PDs and then test those predictions in a large, representative sample.

The Self and Others Perceive Different Aspects of Personality Pathology

Self-other agreement for normal personality is strong (e.g., mean r = .40, Vazire & Carlson, 2010; see also Connelly & Ones, 2010) but 'moderate at best' for personality pathology (e.g., mean r = .26; Oltmanns & Turkheimer, 2009). Why is self-other agreement for pathological traits lower than for normal traits? Intuitively, the most likely explanation is that self-reports are more biased for pathological traits than for normal traits (e.g., selfenhancement drives the disagreement; John & Robins, 1993). Also, PDs are generally egosyntonic (Hirchfeld, 1993), meaning people with personality pathology believe that their pathological characteristics are acceptable or even desirable; thus, they may not describe themselves in negative ways (Carlson, 2011). However, self-reports of pathological characteristics do sometimes provide valid information and are not always overly positive (Carlson, Vazire, & Oltmanns, 2011; Klonsky, Oltmanns, & Turkheimer, 2002). Another possibility is that informants' perceptions are especially biased for pathological traits (Leising, Erbs, & Fritz, 2010; Oltmanns & Turkheimer, 2006). Yet informants' ratings have been shown to be quite valid, making it unlikely that low self-other agreement is due purely to informants' biases (e.g., Carlson et al., 2011; Furr et al., 2007; South, Oltmanns, & Turkheimer, 2005; Vazire, 2006; 2010).

A more compelling explanation for low self-other agreement is that the experience of personality pathology is different for the self than it is for others (Achenbach, Krukowski, Dumenci, & Ivanova, 2005; Fiedler, Oltmanns, & Turkheimer, 2004; Mosterman & Hendriks, 2011). Evidence for this explanation comes from work showing that self- and other-reports reflect different aspects of the same pathological trait (Clifton, Turkheimer, & Oltmanns, 2004; Clifton, Turkheimer, & Oltmanns, 2005). For example, Clifton and his colleagues (2004) found that the way people described themselves on a paranoid PD scale

corresponded weakly to peers' descriptions of paranoid traits (r = .11), but this was because paranoid individuals described themselves as angry and hostile whereas their peers described them as cold and detached. Thus, personality pathology manifests itself in different ways for the self than for others.

More evidence that the self and others perceive distinct aspects of personality pathology comes from research that measures how much unique information informant-reports provide about personality pathology above and beyond self-reports (Miller, Pilkonis, & Clifton, 2005; Miller, Pilkonis, & Morse, 2004). For example, Miller and his colleagues (2004) found that a close other's perception of the FFM traits provided incremental validity over a psychiatric patient's self-report of the FFM when predicting PD scores. Similarly, recent work suggests that peer reports of pathology provide incremental validity in predicting important life outcomes, such as occupational success (e.g., Fiedler et al., 2004), health (e.g., Kneip et al., 1993), and psychopathology (e.g., Klein, 2003). In fact, research in health psychology shows that close others' reports of personality problems (e.g., hostility) are better predictors of health problems (e.g., coronary artery disease) than are self-reports (Smith et al., 2008). Thus, others perceive aspects of personality pathology that the self does not perceive, or will not report.

In sum, self-other agreement for personality pathology traits tends to be lower than for normal traits due to the fact that the self and others perceive different aspects of personality pathology. Given that both perspectives provide unique information about pathology, some researchers have encouraged the inclusion of informant-reports in research and assessment (e.g., Ganellen, 2007; Oltmanns & Turkheimer, 2009). One such example is a study by Mosterman and Hendriks (2011) that explored the role of self-other agreement in pathology. Results suggested that higher self-other agreement on FFM traits between psychiatric outpatients in therapy and close others was associated with having less personality pathology (e.g., less hostility). Yet, such work does not address an important question: given discrepancies between self- and informant-reports, whose perception should we trust?

Asymmetries in Self- and Other-Knowledge of Personality

Despite the fact that the self witnesses thoughts, feelings, and behavior across time and contexts, others often know more than the self knows about normal personality traits (Hofstee, 1994; Hogan, 1998; Vazire, 2010; Vazire & Carlson, 2010, 2011; Vazire & Mehl, 2008). The Self-Other Knowledge Asymmetry (SOKA) model (Vazire) proposes that the self and others know about different aspects of personality and that these asymmetries in knowledge are based on asymmetries in information and motivation. In terms of informational asymmetries, the self has privileged access to thoughts and feelings whereas others are more able to observe patterns of behavior. Consequently, the self should be more accurate about traits that describe unobservable thoughts and feelings whereas others should be more accurate about traits that describe observable aspects of personality. In terms of motivational asymmetries, the self is motivated to distort potentially evaluative information (e.g., self-enhance, self-verify; Robins & John, 1997; Swann, 1997) whereas others are less motivated to distort evaluative information. Consequently, the self should be less accurate than others about evaluative traits.

In a preliminary test of the SOKA model, Vazire (2010) found that, as predicted, a) self and others are equally accurate about external, nonevaluative traits (e.g., talkative, dominance), b) the self is more accurate about internal, nonevaluative traits (e.g., anxiety, self-esteem), and c) others are more accurate about internal, evaluative traits (e.g., creativity, intelligence). Although Vazire did not examine self-versus other-knowledge of external, evaluative traits (e.g., agreeableness, conscientiousness; John & Robins, 1993), past work

has shown that people's self-knowledge of their agreeable behavior is poor (Gosling, John, Craik, & Robins, 1998) suggesting that self-knowledge for this domain of personality is weak as well. Thus, in terms of normal traits, people seem to have self-knowledge about internal and external, nonevaluative traits, such as neuroticism and extraversion, but there are considerable blind spots in self-knowledge for internal and external, evaluative traits such as intellect, agreeableness, and conscientiousness.

Asymmetries in Self- and Other-Knowledge of Personality Pathology

Vazire's (2010) SOKA model was tested on normal personality traits, but the model has implications about self- and other-knowledge asymmetries in personality pathology as well. Specifically, the self should be more accurate about PDs defined by low observability and low evaluativeness, others should be more accurate about PDs defined by high observability and high evaluativeness, and both perspectives should be equally accurate about PDs defined by high observability and low evaluativeness.

How can PDs be described in terms of observability and evaluativeness? Currently, the DSM-IV-TR (American Psychiatric Association, 2000) groups the 10 PDs into three clusters: Cluster A, which includes odd or eccentric PDs (paranoid, schizoid, and schizotypal PDs), Cluster B, which includes dramatic, emotional, or erratic PDs (antisocial, borderline, histrionic, and narcissistic PDs), and Cluster C, which includes anxious or fearful PDs (avoidant, dependent, and obsessive compulsive PDs). However, this classification scheme was based on clinicians' intuitive judgments instead of on empirical data. Thus, the cluster classification has been criticized for its lack of empirical support and for other practical issues, such as comorbidity of PDs across clusters (i.e., individuals diagnosed with multiple PDs from different clusters; Livesley & Jang, 2000; South & DeYoung, 2012; Widiger, 2007).

In an effort to better classify pathology, recent work has investigated alternative, empirically based classification schemes. One approach bases classification of PDs on their shared features as well as pathological features shared with other forms of psychopathology (e.g., mood, anxiety, and substance abuse disorders; Røysamb et al., 2011). One of the most recent, empirically supported classification models groups the 10 PDs into four categories: internalizing (i.e., negative affect), externalizing (i.e., poor inhibition), antagonism (i.e., callousness or antipathy), and thought disorder (i.e., odd or eccentric thinking and behaving; Kotov et al., 2011). Table 1 shows how each of the 10 PDs were classified within these categories. Notably, PDs within the DSM clusters do seem to belong to the same categories. Cluster A PDs were classified as thought disorders, Cluster B PDs were classified as externalizing and/or antagonistic PDs, and Cluster C PDs were classified as internalizing PDs. However, Kotov and colleagues did find that borderline PD was classified as an antagonistic and internalizing PD and paranoid was classified as an internalizing, antagonistic, and thought disorder PD.

As shown in Table 1, these four categories of psychopathology can be described in terms of the observability and evaluativeness, which allows for clear predictions about who knows the most about each PD. Specifically, the internalizing category includes PDs that are low in observability and evaluativeness (e.g., anxiety), the externalizing and antagonistic categories include PDs that are high in observability and evaluativeness (e.g., irresponsible, disagreeable), and the thought disorder category includes PDs that are not particularly evaluative but are both low (i.e., odd thinking) and high (i.e., odd behavior) in observability. Based on these principles, we make four broad predictions which are outlined in Table 1. We predict that: a) self-reports will be more valid than informant-reports for internalizing PDs, b) informant-reports will be more valid than self-reports for PDs that are externalizing and/or antagonistic PDs, c) self- and informant-reports will be equally valid for thought

disorder PDs, and d) self- and informant-reports will be equally valid for PDs that are both internalizing and antagonistic.

We will test our four predictions by examining the relative validity of self- and informantreports of FFM traits as predictors of personality pathology. Many lines of work have demonstrated that PDs can be described in terms of extremely high or low scores on various FFM traits (Bagby, Sellborn, Costa, & Widiger, 2008; Lynam & Widiger, 2001; Miller, Lynam, Widiger, & Leukefeld, 2001; Miller et al., 2010; Samuel & Widiger, 2008; 2010; Trull, Widiger, & Burr, 2001; Widiger, 2011; Widiger & Mullins-Sweatt, 2010). For example, avoidant PD is characterized by extremely high neuroticism and very low extraversion (Lynam & Widiger, 2001). Using the FFM conceptualization of PDs, we will investigate the relative validity of self-and informant-reports by taking both an idiographic, or profile-based approach, and a nomothetic, or trait-based approach. Similar to past work (e.g., Miller et al., 2004), we compute profile similarity indices, or prototype similarity scores, between Lynam and Widiger's (2001) expert generated PD prototype profiles and self-report and informant-report profiles. The self-and informant-profile correlations will be used as measures of self- and informant-perceptions of each PD, respectively (e.g. a self profile consistent with avoidant PD is used as a self-rating of avoidant PD). Lynam and Widiger developed these prototypes by asking PD experts to describe the prototypical case of a person with a given PD using several descriptors for each of the 30 FFM facets (i.e., facet labels from the NEO-PI-R manual). For each item, experts described the prototypical person on a 1 (extremely lower than the average person) to 5 (extremely higher than the average person) scale. A total of 120 experts provided ratings which were compiled into 10 FFM prototype profiles. Thus, a self-report prototype similarity score for paranoid PD will indicate the extent to which a person's self-report across the FFM facets reflects the prototypical individual with paranoid PD. Using these prototype similarity scores, we will compare self- and informant-report profiles for each PD to test our predictions outlined in Table 1.

We will also take a nomothetic approach by comparing the relative validity of self- and informant-reports of each FFM trait as predictors of the 10 PDs. For example, we will predict avoidant PD from both self- and informant-reports of the neuroticism facet 'anxiety.' Using this approach, we examine whose perceptions across all 30 FFM facets are generally more valid predictors of PDs. We predict that the pattern across the PDs will reflect the predictions outlined in Table 1. For example, for avoidant PD, we predict that self-reports of the 30 facets will be more valid than informant-reports.

We also predict that self-other-knowledge asymmetries will be especially salient for defining features of each PD. Conceptual and empirical work linking FFM traits to PDs suggests that the four categories of PDs outlined in Table 1 share defining FFM traits. As shown in Table 1, internalizing PDs are defined by high neuroticism, externalizing and/or antagonistic PDs are defined by low agreeableness and/or conscientiousness, thought disorder PDs are defined by low extraversion, and borderline and paranoid (i.e., PDs that are both internalizing and antagonistic) are defined by high neuroticism and low agreeableness (Lynam & Widiger, 2001, Samuel & Widiger, 2008; Trull & Widiger, 1997; Widiger, Trull, Clarkin, Sanderson, & Costa, 2002). Thus, we predict that the relative validity of self- and informant-reports of defining FFM traits will show the same pattern outlined in Table 1. For example, self-reports of neuroticism will be stronger predictors than informant-reports for internalizing PDs, whereas other-reports of agreeableness will be stronger predictors than self-reports for antagonistic PDs.

Method

This study is part of the ongoing St. Louis Personality and Aging Network (SPAN) study, a representative, prospective cohort study of adults between the ages of 55 and 64 living in the St. Louis area (see Oltmanns & Gleason, 2011). Potential participants were excluded if they were psychotic at the time of the study, reported life-threatening illnesses, unable to read the informed consent statement aloud, or planning to relocate outside of the St. Louis area.

Participants

Target participants (N= 991; 45% males) were paid \$60 for their time. Approximately 63.1% of targets were Caucasian, 30.1% were Black or African American, .4% were Middle Eastern, .4% were biracial, .2% were Native American, .1% were East Asian or Pacific Islander, and 5.7% did not specify their ethnicity. Targets were asked to identify someone who knew them well-enough to provide an accurate description of their personality, preferably someone who lived with them (or someone they spoke to at least once a month and saw face-to-face at least once a year). Ninety percent of targets provided an informant who completed the personality assessment. Current analyses include results for targets whose informant did respond (N= 991; 28% males). Approximately 47.8% of informants were spouses or romantic partners, 27.5% were family members (e.g., siblings, children), 22.4% were friends, and the rest (2.3%) were neighbors, coworkers, or identified themselves as 'other.' On average, targets knew informants for more than 30 years (M= 31.92, SD= 15.17).

Measures

NEO-Personality Inventory-Revised (NEO PI-R)—Targets and informants described the target person's personality using the NEO PI-R, a 240-item measure of the Five Factor Model (FFM) that measures the five major domains of personality and the six facets that define each domain (Costa & McCrae, 1992). Targets rated the extent to which each item described their own personality, and informants rated the extent to which each item described the target's personality. Items were rated on a 1 "*Strongly Disagree*" to 5 "*Strongly Agree*" scale. The internal consistency reliabilities were acceptable (average $\alpha = 0.72$ self; .78 informants). Self-other agreement was in the expected range (r = 0.23 to .57).

Multisource Assessment of Personality Pathology (MAPP)—Targets and informants described pathological aspects of the target's personality using the MAPP, which is comprised of 79 items based on the features of the 10 PDs listed in the DSM-IV (Okada & Oltmanns, 2009). Items were constructed by translating the DSM-IV criteria into lay language (i.e., by removing psychopathological jargon). Targets rated their own personality whereas informants rated the target's personality using a scale 0 "I am [He/She is] never like this (0% of the time)" to 4 "I am [He/She is] always like this (100% of the time). "The internal consistency reliabilities were acceptable (average $\alpha = .68$ self; .74 informants).

Semi-Structured Interview for DSM-IV Personality (SIDP)—Targets completed the SIDP-IV (Pfohl, Blum, & Zimmerman, 1997), a semi-structured clinical interview that examines pathological behavior and traits using 101 open-ended questions that correspond to the diagnostic criteria for 10 forms of PD. The person's score is based heavily on the content of the person's answers and, in part, on the interviewer's observation of the interviewee's behavior (e.g., facial expressions, posture). Notably, for some personality problems, the interviewer will not detect the presence of the PD if the interviewee does not acknowledge symptoms of that disorder. For this reason, interview scores are probably more similar to self-report than to informant reports (Oltmanns & Turkheimer, 2006).

Interviews were conducted by trained research assistants and clinical graduate students. Interviews were video-recorded, and 265 tapes were randomly selected to be viewed by another member of the team who provided a second diagnosis. The overall rater reliability was .67 and ranged from .53 for paranoid PD to .86 for avoidant PD which is similar to reliability estimates for PD diagnoses in other studies (e.g., Clark, 2007). Based on these interviews, 9.5% of participants met criteria for at least one form of PD and 1.8% met threshold criteria for personality disorder not otherwise specified, which is consistent with epidemiological studies (e.g., Lenzenweger, 2008). Among these participants, 80% met criteria for one PD, 17% met criteria for two PDs, and 3% met criteria for three PDs. SIDP mean scores were computed to create a dimensional scale. The reliabilities of the SIDP scales were acceptable (avg. $\alpha = .67$).

Personality Disorder Composite (PDC) Scores—Our criterion measure for each of the 10 DSM-IV PDs was a composite of standardized MAPP self- and informant-report scores and SIDP-IV interview scores. This approach recognizes that each source (i.e., interviewers' ratings, self- and informant- reports) has its own strengths and weaknesses and is akin to "best estimate" diagnoses that are based on information combined across several sources (Bucholz, et al., 2006; Pilkonis, Heape, Ruddy, & Serrao, 1991). The reliabilities of PDC scales were acceptable (average $\alpha = .78$).

Analyses

We examined the relative validity of self- and informant perceptions in two ways. First, we compared how much unique information self- and informant-reports provided about each PD by simultaneously entering self- and informant-reports as predictors of PDC scores in multiple regressions (separately for each PD). Squared semi-partial correlations (i.e., ΔR^2) for each perception reveals how much unique variance each perception explained in PDC scores and the standardized beta-weights reveal the strength and the direction of this relationship. Second, we examined which perception was more strongly associated with each PDC score by statistically comparing the Pearson correlations between self-reports and PDC scores to the correlations between informant-reports and PDC scores separately for each PD (i.e., Kenny, Kashy, & Cook, 2006, p. 124). For example, self-reports are more valid predictors of paranoid PD if the correlation between self-reports and paranoid PDC scores is stronger than the correlation between informant-reports and PDC scores. This analysis is a statistically rigorous test and essentially answers the question, which perception is best?

Using these two analytic procedures, we examined the relative validity of self- and informant-reports using both an idiographic (i.e., profile-based) and a nomothetic (i.e., trait-based) approach. The profile-based approach measures the match between personality perceptions (i.e., a 30 facet profile) and a prototype that describes the 'typical' person with a given PD, and then correlates these profile scores with the criterion measure for each PD (i.e., the PDC score). These correlations reveal which profile score, self or informant, is best at predicting each PDC score. The trait-based approach examines the direct relationship between personality perceptions of each facet and each PDC score, which reveals whose perception of each trait is more informative and valid for each PD. Thus, these two approaches are conceptually different tests of self- and other-knowledge asymmetries in personality pathology.

For the idiographic approach, we computed self and informant profile prototype similarity (PPS) scores for each PD. PPS scores reflect the intraclass correlation (i.e., double-entry) between a rater's 30 FFM facet profile and Lynam and Widiger's (2001) expert generated PD profiles. We computed 10 self- and 10 informant-PPS scores for each participant that

ranged from -1 to 1. For further analyses, scores were transformed using Fisher's r-to-z transformation. We examined the predictions outlined in Table 1 by predicting PDC scores (separately for each PD) from self-PPS and informant-PPS scores to compare how much unique information each perspective provided, and by statistically comparing the raw correlations between self-PPS and PDC scores to the raw correlations between informant-PPS and PDC scores.

For the nomothetic approach, we predicted PDC scores (separately for each PD) from self-and informant-reports of each FFM factor and facet. For example, we predicted paranoid PDC scores from self- and informant-reports of neuroticism. We also compared the strength of the correlation between PDC scores and self-reports of traits to the correlation between PDC scores and informant-reports of traits. To test the predictions outlined in Table 1, we used a Wilcoxon Signed Ranks Test to compare the self and informant pairs of beta-weights and pairs of correlations. For example, for paranoid PD, we compared the absolute value of the 30 self-report beta-weights to the corresponding informant-report beta-weights to determine which perspective provided more information overall. To test our predictions about which perspective was more informative and valid for defining PD features, we also examined each trait separately. For example, we examined whether self- or informant-reports of the factor neuroticism were more informative for avoidant PD, and we statistically compared the self-PDC score correlation with the informant-PDC score correlation to see if one was significantly stronger than the other.

Results

Prediction 1: Self-reports Are More Valid than Informant-reports for Internalizing PDs

As predicted, Table 2 shows that self-PPS scores were descriptively more informative and that self-PPS scores were also a better predictor of (i.e., more strongly associated with) avoidant and dependent PDs (t(988) = 3.40, p < .001; t(988) = 2.69, p < .01, two-tailed) than were informant-PPS scores. Self- and informant-PPS scores together only explained 2% of the variance in obsessive-compulsive PDC scores suggesting that neither PPS score was a particularly valid predictor.

Table 3 shows the relative validity of self- and informant-reports of the FFM facets for internalizing PDs. Were self-reports of the 30 facets generally more informative and more strongly associated with PDC scores than were informant-reports? Wilcoxon Signed Ranks Tests of the difference between self and informant beta-weights and correlations with PDC scores across facets showed that self-reports were generally more informative (Z = -3.34, p < .01) and valid (Z = -3.16, p < .01) for avoidant PD, but neither perspective was more informative or valid for dependent PD (Z = -1.10, p = .92, Z = -.53, p = .60) or for obsessive-compulsive PD (Z = -1.16, p = .25, Z = -1.38, p = .17).

Were self-reports of neuroticism (i.e., defining FFM trait for internalizing PDs) more valid than informant-reports? The left panel of Figure 1 suggests that self-reports of the factor neuroticism were generally more informative than were informant-reports for internalizing PDs, and the right panel shows that self-reports of neuroticism were significantly more strongly associated with avoidant PDC scores than were informant-reports. Table 3 shows a similar pattern among neuroticism facets for avoidant PD. Figure 1 also shows that together, self- and informant-reports of neuroticism were less informative for obsessive-compulsive PD ($R^2 = .09$) than for other PDs (e.g., avoidant $R^2 = .39$). Thus, neuroticism may be less defining for this PD which might explain why self-reports of neuroticism were not more valid.

Prediction 2: Informant-reports are More Valid than Self-reports for Externalizing and/or Antagonistic PDs

Table 2 shows that across the three PDs in the externalizing and/or antagonistic category, informant-PPS scores were not generally more informative than were self-PPS scores. However, informant-PPS scores were a better predictor of antisocial PDC scores than were self-PPS scores, t(988) = -2.25, p = .03, two-tailed.

Table 4 shows the relative validity of self- and informant-reports of the FFM facets for predicting PDs in the externalizing/antagonistic category. Were informant-reports of the 30 facets generally more informative and more strongly associated with PDC scores than were self-reports? Wilcoxon Signed Ranks Tests showed that, indeed, informant-reports were generally more informative (i.e., stronger standardized beta-weights) and valid (i.e., stronger correlations) for antisocial (Z = -4.09, p < .001; Z = -3.91, p < .001), histrionic (Z = -2.20, p = .03; Z = -2.10, p = .04), and narcissistic (Z = -2.37, p = .02; Z = -2.63, p < .01) PDs.

Were informant-reports of agreeableness and conscientiousness (i.e., the defining FFM traits for externalizing/antagonistic PDs) more valid than self-reports? The left panel of Figure 2 suggests that informant-reports of the factors agreeableness and conscientiousness were more informative (i.e., larger informant ΔR^2) than self-reports, and the right panel suggests that informant-reports were also generally more strongly associated with PDC scores than were self-reports. Table 4 shows that these differences were observed at the facet level for all three PDs.

Prediction 3: Self- and Informant-reports are Equally Valid Predictors of Thought Disorder PDs

Table 2 shows that, in contrast to our prediction, self-PPS scores were more strongly associated with schizoid PDC scores than were informant-PPS scores, t(988) = 3.36, p < 0.01, two-tailed. However, as predicted, there were no differences for schizotypal PD.

Table 5 shows the relative validity of self- and informant-reports of the FFM facets. Wilcoxon Signed Ranks Tests across the facets showed that, for schizoid PD, neither perspective was more informative or valid (Z = -.09, p = .93; Z = -.11, p = .91) but that for schizotypal PD, informant-reports were more informative and valid than self-reports (Z = -2.84, p < .01; Z = -2.69, p < .01).

Were self- and informant-reports of extraversion (i.e., the defining FFM trait for thought disorder PDs) equally valid? The left panel of Figure 3 suggests that, indeed, self- and informant-perceptions of the factor extraversion were equally informative, and the right panel suggests that neither perspective of extraversion was more valid. Table 5 showed the same pattern of results at the facet level. Notably, Table 5 suggests that the major differences between self- and informant-reports for schizotypal PD (i.e., significant Wilcoxon Signed Ranks Tests) were perceptions of agreeableness and conscientiousness.

Prediction 4: Self- and Informant-reports are Equally Valid Predictors of PDs that are Internalizing and Antagonistic

Table 2 shows that, as predicted, neither PPS score was more informative or more strongly associated with PDC scores for PDs in the internalizing and antagonistic category.

Table 6 shows the relative validity of self- and informant-reports of the FFM facets for PDs in this category. In contrast to our prediction, Wilcoxon Signed Ranks Tests across the facets showed that informant-reports were more informative and valid than self-reports for

both paranoid PD (Z = -3.17, p < .01; Z = -3.10, p < .01) and borderline PD (Z = -3.58, p < .001; Z = -3.61, p < .001).

Were self-reports of neuroticism more valid than informant perceptions for these PDs, and were informant-reports of agreeableness more valid than self-reports (i.e., the defining FFM traits for these PDs)? Figure 4 suggests that self- and informant-reports of the factor neuroticism were equally valid, but that informant-reports of the factor agreeableness were generally more valid than self-reports for both PDs. Table 6 shows that these results were observed at the facet level as well.

Discussion

Who knows more about personality pathology – the self or others? Taken together, results provide some support for our four hypotheses. First, as predicted, self-reports were more valid than informant-reports for most internalizing PDs (i.e., avoidant, dependent), particularly self-reports of neuroticism. These results were especially robust for avoidant PD. Second, as predicted, informant-reports were more valid than self-reports for externalizing and antagonistic PDs, particularly informant-reports of agreeableness and conscientiousness. These results were especially robust for antisocial PD. Third, results were inconsistent with respect to the prediction that self- and informant-reports were equally valid for thought disorder PDs. Specifically, nomothetic (but not idiographic) results supported our prediction for schizoid PD, and idiographic (but not nomothetic) results supported our prediction for schizotypal PD. Fourth, idiographic results, but not nomothetic results, supported our prediction that self- and informant-reports were equally valid for PDs that were both internalizing and externalizing. Moreover, in contrast to our prediction, both perspectives of neuroticism were equally valid; however, as predicted, informant-reports of agreeableness were more valid than self-reports for these PDs. In sum, results provided some support for the predicted self-other-knowledge asymmetries in personality pathology outlined in Table 1.

Notably, idiographic and nomothetic results revealed different patterns of findings for some PDs. These approaches answered conceptually independent questions - the idiographic, or profile-based approach, measured which 'match' between a PD prototype and self- or informant-reports predicted PDC scores best, whereas the nomothetic, or trait-based approach, measured which perspective predicted PDC scores best for each FFM trait. One explanation for the different pattern of results is that the prototypes attempt to capture a fairly heterogeneous construct with a single profile which limits the validity of the prototypical profile for all individuals. For instance, one individual with borderline PD might exhibit identity and self-harm symptoms whereas another borderline individual might exhibit interpersonal problems (e.g., anger). Future research might investigate whether results replicate with different prototype-matching methods.

Interestingly, while we did identify self-other-knowledge asymmetries in personality pathology, we also found that, when considering pathology overall, both perspectives were equally valid. For example, averaged across the ten PDs, self- and informant-PPS scores provided roughly the same amount of unique information (mean self-PPS $\Delta R^2 = .06$; informant-PPS $\Delta R^2 = .05$) and were equally valid (mean self-PPS r = .42; informant-PPS r = .40) predictors of PDs. Thus, self- and informant-reports provided information that the other perspective did not provide and neither perspective was better overall. Similarly, at the factor level, Figure 5 shows that self- and informant-reports of neuroticism, extraversion and openness also provided equal amounts of unique information about PDs overall (e.g., neuroticism: mean self and informant $\Delta R^2 = .06$). However, this figure also shows that informant-reports of agreeableness and conscientiousness were more informative than were

self-reports (e.g., agreeableness: mean self ΔR^2 = .03, informant ΔR^2 = .08). Similar results were found with respect to the raw correlations between PDC scores and self- and informant-reports of FFM trait. For example, across the 60 facet pairs of correlations between PDC scores and self- and informant-reports of a given FFM trait (i.e., six facet pairs per trait, across 10 PDs) the correlations between PDC scores and informant-reports of agreeableness (Z = -6.22, p< .001) and conscientiousness (Z = -3.44, p = .001) were stronger than the corresponding self-correlations. Thus, in addition to identifying self-other knowledge asymmetries for specific PDs, we also found self-other knowledge asymmetries for aspects of personality pathology overall.

We believe that these findings have at least three important implications. First, researchers and practitioners have much to learn from informants when it comes to identifying personality pathology. In particular, informant-reports of agreeableness and conscientiousness (i.e., communal traits) tend to provide a great deal of information about PDs that self-reports alone do not provide. We hope that future research explores self-other asymmetries in personality pathology based on other aspects of personality, such as behavior (e.g., Jones & Miller, 2012; Vazire & Mehl, 2008) or explicitly pathological traits. Second, our findings are especially relevant for the development of the DSM-5. In particular, these findings add to the growing body of evidence that the dimensional approach (i.e., FFM) can adequately describe categorical PDs (e.g., Miller et al., 2010). In terms of the FFM, our results replicate past work showing that perceptions of neuroticism (mean $R^2 = .21$), extraversion (mean $R^2 = .09$), agreeableness (mean $R^2 = .16$), and conscientiousness (mean $R^2 = .09$) are informative predictors of PDs, whereas perceptions of openness (mean $R^2 = .09$) 02) are not particularly informative (Lynam & Widiger, 2001; Samuel & Widiger, 2008). Perhaps more importantly, Figures 1 through 5 highlight the utility of including informantreports in the development of diagnostic criteria and assessment tools (e.g., Huprich, Bornstein, & Schmitt, 2011). Third, the current findings extend research regarding asymmetries in self- and other-knowledge of personality traits. Given that informant-reports are inexpensive and easy to obtain (Vazire, 2006) we hope that future research explores informant-reports in the context of personality pathology further. For example, future work could compare informants across contexts (e.g., friends, family members, romantic partners) or compare self-selected versus non-selected informants (Leising et al., 2010). Unfortunately, one important limitation of the current study is the use of a single informant who did not provide self-ratings. Thus, we know little about the unique biases each informant may have had (i.e., perceiver effects; Ready, Clark, Watson, & Westerhouse, 2000; Srivastava, Guglielmo & Beer, 2010; Wood, Harms, & Vazire, 2010). Ideally, researchers and practitioners should collect and average multiple informant-reports in order to reduce the influence of each informant's idiosyncratic biases (Hofstee, 1994). However, the same criticism can be leveled against self-reports, and there is no easy fix for selfreports.

In sum, self and others perceive unique aspects of personality pathology suggesting that a more complete understanding of personality pathology must take into account both perspectives. Furthermore, understanding how and why these self-other knowledge asymmetries emerge will have important implications personality assessment and for self-knowledge. We hope that future research and practice explores these asymmetries further.

Acknowledgments

This research was supported by the National Institute of Mental Health (NIMH: Grant No. 1RO1-MH077840-01; Thomas Oltmanns) and the National Science Foundation (NSF: Grant No. BCS-1025330; Simine Vazire). We would also like to thank Andrew Erhart, Amber Graham, Sarah Heuckeroth, John Slochower, and Latoya Smith and for their helpful comments.

References

Achenbach TM, Krukowski R, Dumenci L, Yivanova M. Assessment of adult psychopathology: Metaanalyses and implications of cross-informant correlations. Psychological Bulletin. 2005; 131:361–382. [PubMed: 15869333]

- American Psychiatric Association. Diagnostic and statistical manual of mental disorder. 4. Washington, DC: Author; 2000.
- Bagby RM, Sellbom M, Costa PT Jr, Widiger TA. Predicting Diagnostic and Statistical Manual of Mental Disorder-IV personality disorder with the five-factor model of personality and the personality psychopathology five. Personality and Mental Health. 2008; 2:55–69.
- Bucholz KK, Nurnberger JI, Kramer JR, Hesselbrock VM, Schuckit M, Bierut LJ. Comparison of psychiatric diagnoses from interview reports with those from best-estimate procedures. Journal of Studies on Alcohol. 2006; 67:157–168. [PubMed: 16536140]
- Carlson EN. Honestly arrogant or simply misunderstood? Narcissists' awareness of their narcissism. Self and Identity. in press.
- Carlson EN, Vazire S, Oltmanns TF. You probably think this paper's about you: Narcissists' perceptions of their personality and reputation. Journal of Personality and Social Psychology. 2011; 101:185–201. [PubMed: 21604895]
- Clark LA. Assessment and diagnosis of personality disorder: Perennial issues and an emerging reconceptualization. Annual Review of Psychology. 2007; 58:227–257.
- Clifton A, Turkheimer E, Oltmanns TF. Contrasting perspectives on personality problems: Descriptions from the self and other. Personality and Individual Differences. 2004; 36:1499–1514.
- Clifton A, Turkheimer E, Oltmanns TF. Self- and peer perspectives on pathological personality traits and interpersonal problems. Psychological Assessment. 2005; 17:123–131. [PubMed: 16029099]
- Connelly BS, Ones DS. An other perspective on personality: Meta-analytic integration of observer' accuracy and predictive validity. Psychological Bulletin. 2010; 136:1092–1122. [PubMed: 21038940]
- Costa, PT.; McCrae, RR. Professional manual for the NEO Personality Inventory (NEO-PI-R) and NEO Five Factor Inventory (NEO-FFI). Odessa, FL: Psychological Assessment Resources; 1992.
- Fiedler ER, Oltmanns TF, Turkheimer E. Traits associated with personality disorders and adjustment to military life: Predictive validity of self and peer reports. Military Medicine. 2004; 169:207–211. [PubMed: 15080240]
- Furr RM, Dougherty DM, Marsh DM, Mathias CW. Personality judgment and personality pathology: Self-other agreement in adolescents with conduct disorder. Journal of Personality. 2007; 75:629–662. [PubMed: 17489894]
- Ganellen RJ. Assessing normal and abnormal personality functioning: Strengths and weakness of self-report, observer, performance-based methods [Special issue]. Journal of Personality Assessment. 2007; 89:30–40. [PubMed: 17604532]
- Gosling SD, John OP, Craik KH, Robins RW. Do people know how they behave? Self-reported act frequencies compared with on-line codings by observers. Journal of Personality and Social Psychology. 1998; 74:1337–1349. [PubMed: 9599447]
- Hirchfeld RM. Personality disorders: Definition and diagnosis. Journal of Personality Disorder. 1993; (Suppl 1):9–17.
- Hofstee WKB. Who should own the definition of personality? European Journal of Personality. 1994; 8:149–162.
- Hogan R. Reinventing personality. Journal of Social and Clinical Psychology. 1998; 17:1–10.
- Huprich SK, Bornstein RF, Schmitt TA. Self-report methodology is insufficient for improving the assessment and classification of Axis II personality disorders. Journal of Personality Disorders. 2011; 25:557–570. [PubMed: 22023295]
- John OP, Robins RW. Determinants of interjudge agreement on personality traits: The FFM domains, observability, evaluativeness, and the unique perspective of the self [Special issue]. Journal of Personality. 1993; 61:521–551. [PubMed: 8151500]

Jones S, Miller JD. Psychopathic traits and externalizing behaviors: A comparison of self- and informant reports in the statistical prediction of externalizing behaviors. Psychological Assessment. 2012; 24:255–260. [PubMed: 21875220]

- Kenny, DA.; Kashy, DA.; Cook, WL. Dyadic data analysis. New York, NY: Guilford Press; 2006.
- Klein DN. Patients' versus informants' reports of personality disorders in predicting 7 1/2-year outcome in outpatients with depressive disorder. Psychological Assessment. 2003; 15:216–222. [PubMed: 12847782]
- Klonsky ED, Oltmanns TF, Turkheimer E. Informant-reports of personality disorders: Relation to self-reports and future research directions. Clinical Psychology: Science and Practice. 2002; 9:300–311.
- Kneip RC, Delamater AM, Ismond T, Milford C, Salvia L, Schwartz D. Self-and spouse ratings of anger and hostility as predictor of coronary heart disease. Health Psychology. 1993; 12:301–307. [PubMed: 8404804]
- Kotov R, Ruggero CJ, Krueger RF, Watson D, Yuan Q, Zimmerman M. New dimensions in the quantitative classification of mental illness. Archives of General Psychiatry. 2011; 68:1003–1011. [PubMed: 21969458]
- Leising D, Erbs J, Fritz U. The letter of recommendation effect in informant ratings of personality. Journal of Personality and Social Psychology. 2010; 98:668–682. [PubMed: 20307137]
- Lenzenweger MF. Epidemiology of personality disorders. The Psychiatric Clinics of North America. 2008; 31:395–403. [PubMed: 18638642]
- Livesley WJ, Jang KL. Toward an empirically based classification of personality disorder. Journal of Personality Disorders. 2000; 14:137–151. [PubMed: 10897464]
- Lynam DR, Widiger TA. Using the five-factor model to represent the DSM-IV personality disorders: An expert consensus approach. Journal of Abnormal Psychology. 2001; 110:401–412. [PubMed: 11502083]
- Miller JD, Lynam DR, Widiger T, Leukefeld C. Personality disorders as extreme variants of common personality dimensions: Can the Five Factor Model adequately represent psychopathy? Journal of Personality. 2001; 69:253–276. [PubMed: 11339798]
- Miller JD, Maples J, Few LR, More JQ, Yaggi KE, Pilkonis PA. Using clinician-rated Five-factor model data to score the DSM-IV personality disorders. Journal of Personality Assessment. 2010; 92:296–305. [PubMed: 20552504]
- Miller JD, Pilkonis PA, Clifton A. Self- and other-reports of traits from the Five-Factor Model: Relations to personality disorders. Journal of Personality Disorder. 2005; 19:400–419.
- Miller JD, Pilkonis PA, More JQ. Five-factor model prototypes for personality disorders: The utility of self-reports and observer ratings. Assessment. 2004; 11:127–138. [PubMed: 15171460]
- Mosterman RM, Hendriks AAJ. Self-other disagreement in personality assessment: Significance and prognostic value. Clinical Psychology & Psychotherapy. 2011; 18:159–171. [PubMed: 21110408]
- Okada M, Oltmanns TF. Comparison of three self-report measures of personality pathology. Journal of Psychopathology and Behavioral Assessment. 2009; 31:358–367. [PubMed: 20454642]
- Oltmanns, TF.; Gleason, MEJ. Personality, health, and social adjustment in later life. In: Cottler, LB., editor. Mental health in public health: The next 100 year. New York: Oxford University Press; 2011. p. 151-179.
- Oltmanns, TF.; Turkheimer, E. Perceptions of self and other regarding pathological personality traits. In: Krueger, RF.; Tackett, JL., editors. Personality and psychopathology. New York: Guilford; 2006. p. 71-111.
- Oltmanns TF, Turkheimer E. Person perception and personality pathology. Current Directions in Psychological Science. 2009; 18:32–36. [PubMed: 20539833]
- Pfohl, B.; Blum, N.; Zimmerman, M. Structured interview for DSM–IV personality (SIDP-IV). Washington, DC: American Psychiatric Association Press; 1997.
- Pilkonis P, Heape CL, Ruddy J, Serrao P. Validity in the diagnosis of personality disorder: The use of the LEAD standard. Psychological Assessment. 1991; 3:46–54.
- Ready RE, Clark LA, Watson D, Westerhouse K. Self- and peer-related personality: Agreement, trait ratability, and the 'self-based heuristic'. Journal of Research in Personality. 2000; 34:208–224.

Robins, RW.; John, OP. The quest for self-insight: Theory and research on accuracy and bias in self-report. In: Hogan, RT.; Johnson, JA.; Briggs, SR., editors. Handbook of personality psychology. New York, NY: Academic Press; 1997. p. 649-679.

- Røysamb E, Kendler KS, Tambs K, Ørstavik RE, Neale MC, Reichborn-Kjennerud T. The joint structure of DSM–IV Axis I and Axis II disorders. Journal of Abnormal Psychology. 2011; 120:198–209. [PubMed: 21319931]
- Samuel DB, Widiger TA. A meta-analytic review of the relationships between the five-factor model and DSM-IV-TR personality disorders: A facet level analysis. Clinical Psychology Review. 2008; 28:1326–1342. [PubMed: 18708274]
- Samuel DB, Widiger TW. Comparing personality disorder models: Cross-method assessment of the FFM and DSM-IV-TR. Journal of Personality Disorder. 2010; 24:721–745.
- Smith TW, Uchino BN, Berg CA, Florheim P, Pearce G, Hawkins M, Yoon H. Associations of self-reports versus spouse ratings of negative affectivity, dominance, and affiliation with coronary artery disease: Where should we look and who should we ask when studying personality and health? Health Psychology. 2008; 27:676–684. [PubMed: 19025262]
- South, SC.; DeYoung, NJ. Personality Disorders: Theory, Research, and Treatment. 2012. Behavior genetics of personality disorders: Informing classification and conceptualization in DSM-5. Advance online publication
- South SC, Oltmanns TF, Johnson J, Turkheimer E. Level of agreement between self and spouse in the assessment of personality pathology. Assessment. 2011; 18:217–226. [PubMed: 21220382]
- South SC, Oltmanns TF, Turkheimer E. Interpersonal perception and pathological personality features: Consistency across peer groups. Journal of Personality. 2005; 73:675–691. [PubMed: 15854010]
- Srivastava S, Guglielmo S, Beer JS. Perceiving other' personalities: Examining the dimensionality, assumed similarity to the self, and stability of perceiver effects. Journal of Personality and Social Psychology. 2010; 98:520–534. [PubMed: 20175628]
- Swann WB Jr. The trouble with change: Self-verification and allegiance to the self. Psychological Science. 1997; 8:177–180.
- Trull, TJ.; Widiger, TA. SIFFM: Structured interview for the five-factor model of personality, professional manual. Odessa, FL: Psychological Assessment Resources; 1997.
- Trull TJ, Widiger TA, Burr R. A structured interview for the assessment of the Five-Factor Model of personality: Facet-level relations to the Axis II personality disorders. Journal of Personality. 2001; 69:175–198. [PubMed: 11339795]
- Vazire S. Informant reports: A cheap, fast, and easy method for personality assessment. Journal of Research in Personality. 2006; 40:472–481.
- Vazire S. Who knows what about a person? The self-other knowledge asymmetry (SOKA) model. Journal of Personality and Social Psychology. 2010; 98:281–300. [PubMed: 20085401]
- Vazire S, Carlson EN. Self-knowledge of personality: Do people know themselves? Social and Personality Psychology Compass. 2010; 4:605–620.
- Vazire S, Carlson EN. Other sometimes know us better than we know ourselves. Current Directions in Psychological Science. 2011; 20:104–108.
- Vazire S, Mehl MR. Knowing me, knowing you: The accuracy and unique predictive validity of self-ratings and other-ratings of daily behavior. Journal of Personality and Social Psychology. 2008; 95:1202–1216. [PubMed: 18954202]
- Watson D, Hubbard B, Wiese D. Self-other agreement in personality and affectivity: The role of acquaintanceship, trait visibility, and assumed similarity. Journal of Personality and Social Psychology. 2000; 78:546–558. [PubMed: 10743880]
- Widiger TA. An empirically based classification of personality pathology: Where we are now and where do we go. Clinical Psychology: Science and Practice. 2007; 14:94–98.
- Widiger TA. Integrating normal and abnormal personality structure: A proposal for DSM-5. Journal of Personality Disorder. 2011; 25:338–363.
- Widiger TA, Mullins-Sweatt SN. Clinical utility of a dimensional model of personality disorder. Professional Psychology: Research and Practice. 2010; 41:488–494.
- Widiger, TA.; Trull, TJ.; Clarkin, JF.; Sanderson, C.; Costa, PT, Jr. A description of the DSM-IV personality disorders with the five-factor model of personality. In: Costa, PT., Jr; Widiger, TA.,

editors. Personality disorders and the five-factor model of personality. 2. Washington, DC: American Psychological Association; 2002. p. 9-99.

Wood D, Harms P, Vazire S. Perceiver effects as projective tests: What your perceptions of other say about you. Journal of Personality and Social Psychology. 2010; 99:174–190. [PubMed: 20565194]

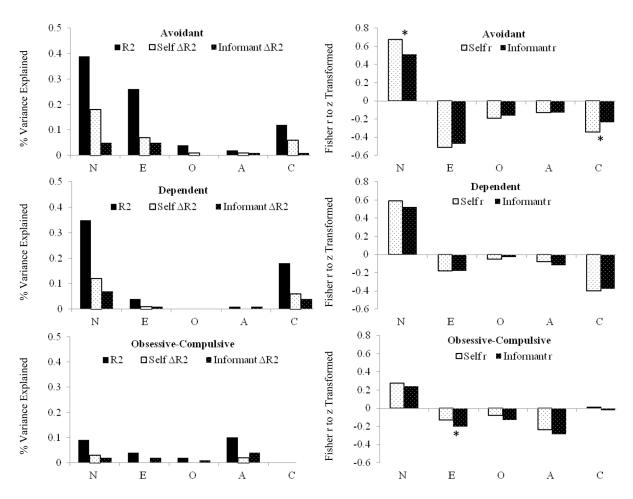


Figure 1. The amount of unique information (i.e., ΔR^2) self- and informant-reports of the FFM factors explain in internalizing PDs and the relative strength of the correlations between PDC scores and self- and informant-reports of FFM factors. The left panel shows results from multiple regression analyses where self- and informant-reports of a given FFM factor were simultaneously entered as predictors of PDC scores. The right panel shows the correlations between PDC scores and self- and informant-reports of a given FFM facet. Asterisks reflect a significant difference between correlations (p < .01, two-tailed).

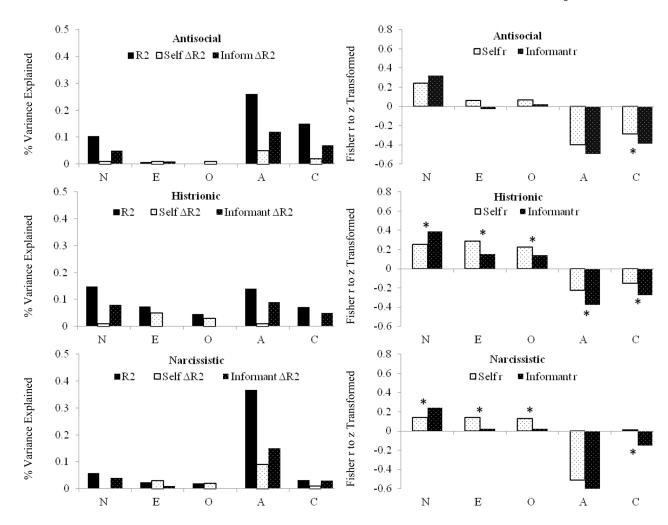


Figure 2. The amount of unique information (i.e., ΔR^2) self- and informant-reports of the FFM factors explain in externalizing and antagonistic PDs and the relative strength of the correlations between PDC scores and self- and informant-reports of FFM factors. The left panel shows results from multiple regression analyses where self- and informant-reports of a given FFM factor were simultaneously entered as predictors of PDC scores. The right panel shows the correlations between PDC scores and self- and informant-reports of a given FFM facet. Asterisks reflect a significant difference between correlations (p < .01, two-tailed).

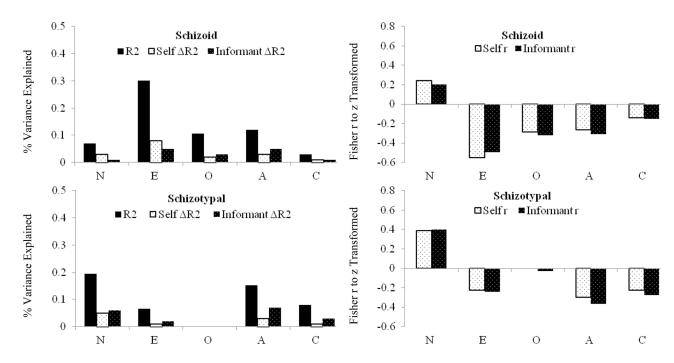


Figure 3. The amount of unique information (i.e., ΔR^2) self- and informant-reports of the FFM factors explain in thought disorder PDs and the relative strength of the correlations between PDC scores and self- and informant-reports of FFM factors. The left panel shows results from multiple regression analyses where self- and informant-reports of a given FFM factor were simultaneously entered as predictors of PDC scores. The right panel shows the correlations between PDC scores and self- and informant-reports of a given FFM facet. Asterisks reflect a significant difference between correlations (p < .01, two-tailed).

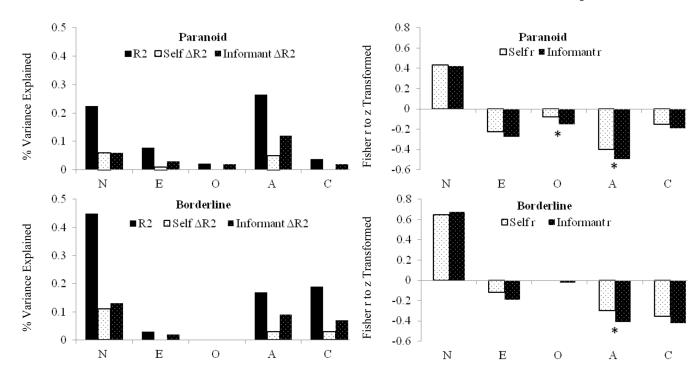


Figure 4. The amount of unique information (i.e., ΔR^2) self- and informant-reports of the FFM factors explain in internalizing/antagonistic PDs and the relative strength of the correlations between PDC scores and self- and informant-reports of FFM factors. The left panel shows results from multiple regression analyses where self- and informant-reports of a given FFM factor were simultaneously entered as predictors of PDC scores. The right panel shows the correlations between PDC scores and self- and informant-reports of a given FFM facet. Asterisks reflect a significant difference between correlations (p < .01, two-tailed).

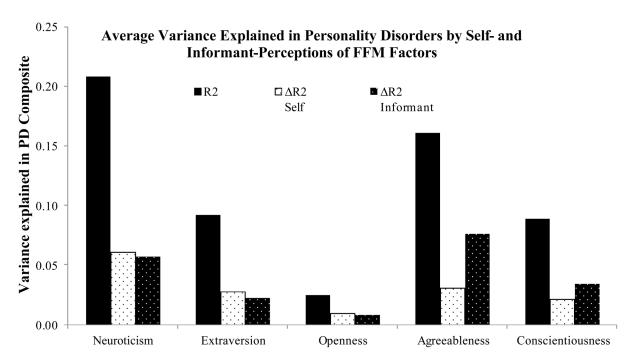


Figure 5. Average amount of variance explained by self- and informant-reports of the FFM factors across the 10 PDs. R^2 = the average amount of variance self- and informant-reports of a given FFM factor explain together in PDs. ΔR^2 Self = the average amount of unique variance self-reports of a given FFM factor explain in PDC scores. ΔR^2 informant = the average amount of unique variance informant-reports of a given FFM factor explain in PDC scores.

Table 1

Self-Other-Knowledge Asymmetry (SOKA) Model-Based Predictions about the Relative Validity of Self- and Informant-Reports of Personality Disorders (PDs)

an.	Describer of the contract	Comment of Man	Observ	ability	Observability Evaluativeness	iiveness	A D A
Si .	rsychopamology caregory	Collinoir Frix Frances	Low	Low High Low		High	Accuracy r redictions
Avoidant			>		>		
Dependent	Internalizing	High Neuroticism	>		>		Self > Informant
Obsessive-Compulsive			>		>		
Antisocial				>		>	
Histrionic	Externalizing/Antagonistic	Externalizing/Antagonistic Low Agreeableness/Conscientiousness		>		>	Informant > Self
Narcissistic				>		>	
Schizoid	Thought	Low	>	>	>		-3-1 31-0
Schizotypal	Disorder	Extraversion	>	>	>		Sell = Informant
Paranoid		High Neuroticism	>	>	>	>	7
Borderline	Internanzing & Antagomstic	Low Agreeableness	>	>	>	>	Sen = mormant

Note. Antisocial PD was categorized as externalizing and antagonistic (histrionic and narcissistic PDs were antagonistic only). Paranoid was classified as a thought disorder PD as well as internalizing and antagonistic. Kotov et al. (2011) excluded avoidant PD from analyses due to high comorbidity with social phobia, which loaded strongly onto the internalizing category. We have grouped avoidant PD among internalizing PDs for prediction purposes. The FFM descriptions are based on prototypes developed by Lynam and Widiger (2001), Trull and Widiger (1997), and Widiger et al. (2002). Categories can be both high and low in observability if some of the PDs within that category are high and others are low (the same is true for evaluativeness).

NIH-PA Author Manuscript

Table 2

Self- and Informant Profile Prototype Similarity (PPS) Scores as Predictors of Personality Disorder Composite (PDC) Scores

Carlson et al.

	Correlations among	ong Self-PPS, Informant-PPS, and PDC Scores	and PDC Scores		Multiple	Multiple Regression (DV: PDC Scores)	PDC Scores)	
	Self-PPS r with PDC	Informant-PPS r with PDC	Self-Informant PPS	Self-PPS $oldsymbol{eta}$	Informant-PPS $oldsymbol{eta}$	Self-PPS ΔR^2	Informant-PPS ΔR^2	Overall R ²
Internalizing								
Avoidant	* <i>F</i> S	* 49.	*65:	, *	.23	*12	* 40.	.36*
Dependent	* 13.	.23	.52*	.26*	<i></i> ≠ 60°	* 50·	.01	*01.
Obsessive-Compulsive	.13 *	* 60:	.53	.11*	.03	.01*	00.	.02
Externalizing/Antagonistic								
Antisocial	* 43	* 4 <u>6</u> *.	.53	.23 *	.37*	* 40.	*10	*87:
Histrionic	* 141	.38	*85:	*87:	.22	*50°	* 80.	.20*
Narcissistic	* 74.	* 64.	.53*	*62:	.33 *	*90°	* 80.	.30*
Thought Disorder								
Schizoid	* 04.	.31*	*85:	.33 *	.13*	* 20.	* 10.	.17*
Schizotypal	.38*	.36*	.55	.26*	.22	* 50.	.03 *	*81.
Internalizing/Antagonistic								
Paranoid	* 45.	* ****	*46	.30*	.34 *	* 20.	*01.	.30*
Borderline	.56*	*85:	* 49.	.37*	* 04.	*10	.12 *	.43

Note. N= 991.

p < .01. ^{7}p < .05,

Self-Informant PPS = correlation between self-PPS and informant-PPS scores. Bold and underlined self-PPS correlations were significantly stronger than informant-PPS correlations: avoidant (988) = 3.40, p < .001; dependent $\ell(988) = 2.69$, p = .007; schizoid $\ell(988) = 3.36$, p < .001, two-tailed. Underlined informant-PPS correlations were marginally stronger than self-PPS correlations: antisocial $\ell(988) = -2.25$, p = .03, two-tailed.

Table 3

Self- and Informant-Reports of FFM Facets as Predictors of Internalizing PDs

Inf. r Self p Inf. p R² Self r Inf. r Self p Inf. p R³ Self r Inf. r Self p Inf. p R³ Self r Inf. r Self p Inf. r Inf. r			A	Avoidant				Dε	Dependent				Obsessi	Obsessive Compulsive	ulsive	
Self r Inf. r Self p Inf. p R2 Self r Inf. r Self p .45 * .41 * .33 * .26 * .25 * .42 * .40 * .30 * .39 * .26 * .34 * .13 * .16 * .36 * .37 * .30 * .54 * .46 * .42 * .25 * .34 * .44 * .34 * .54 * .46 * .42 * .25 * .34 * .44 * .34 * .54 * .46 * .42 * .25 * .34 * .44 * .34 * .25 * .16 * .22 * .34 * .44 * .34 * .34 * .47 * .40 * .37 * .26 * .27 * .43 * .19 * .19 * .47 * .40 * .37 * .26 * .27 * .28 * .19 * .18 * .47 * .40 * .37 * .26 * .27 * .28 * .19 * .18 * .47 * .40 * .37 * .26 *		r with	PDC	Multip	le Regre	ssion	r with	PDC	Multipl	e Regres	ssion	r with	r with PDC	Multip	Multiple Regression	ssion
45* 41* 33* 26* 25 42* 40* 30* 39* 26* 34* 13* 16 36* 27* 30* 54* 46* 42* 25* 34 47* 44* 34* 54* 46* 42* 25* 34 47* 44* 34* 25* 46* 52* 33* 50 43* 40* 34* 25* 16* 22* 38* 50 43* 40* 34* 47* 40* 37* 26* 27 50* 49* 34* 47* 40* 37* 26* 27 50* 49* 36* 47* 40* 37* 26* 27 50* 49* 36* -35* -30* -26* -16* 11 -06 01 -09* -05* -45* -42* -25* -25* -25* -28* -19*<		Self r	Inf. r	Self β		\mathbb{R}^2	$\operatorname{Self} r$	Inf. r	Self β	Inf. β	\mathbb{R}^2	$\operatorname{Self} r$	Inf. r	Self β	Inf. β	\mathbb{R}^2
39* .26* .34* .13* .16 .36* .27* .30* 54* .46* .42* .25* .34 .47* .44* .34* .64* .52* .32* .36 .34* .40* .34* .25* .16* .22* .38* .50 .43* .40* .34* .25* .16* .37* .26* .37* .26* .49* .34* .47* .40* .37* .26* .37* .40* .34* .47* .40* .37* .26* .37* .40* .34* .47* .40* .37* .26* .37* .40* .34* .47* .40* .37* .26* .37* .40* .34* .47* .40* .37* .27* .20* .40* .36* .35* .30* .26* .17* .10* .00* .11* .12* .10*	z	* 45	* 14.	.33 *	.26*	.25	.42	*04.	.30*	.27*	.23	.25*	.21*	.20*	.12*	.07
54 46* 42* .25* .34* .44* .34* 64* .52* .33* .50 .43* .40* .34* 25* .16* .22* .33* .50 .43* .40* .34* 25* .16* .27* .28* .19* .34* 47* .40* .37* .26* .27* .28* .19* .34* 35* 32* 26* 27 26* .49* .36* 35* 32* 26* 27 29* 49* .36* 35* 30* 26* 16* 14 06 01 09* 18* 05 18* 05 29* 25* 25* 25* 25* 28* 18* 07 18* 07 07 07 07 07 07 07 07 07 07 07 07 07 07	N2	*30	.26*	.34	.13*	.16	*36	.27*	.30*	.15*	.15	*62.	.27*	.22*	*61.	11.
44 .52* .33* .50 .43* .40* .34* 25* .16* .22* .08* .06 .27* .28* .19* 47* .40* .37* .26* .27 .50* .49* .34* 35* .40* .37* .26* .27 .50* .49* .36* 35* .40* .37* .26* .27 .50* .49* .36* 35* .40* .37* .26* .27 .20* .49* .36* 35* 30* .26* .27 .20* .49* .36* 35* 32* 26* .16* .14 .06 .01 .09* .09 13* 13* 13* 17* .03 .02 .23* .09 13* 10* .00 .00 .01 .11* .12* .14* 13* 10* .00 .00 .01	N3	* 45 <u>:</u>	*94.	* 24.	.25*	.34	* 74.	, *	.34*	.28*	.28	.24	*81.	.20*	*60°	90.
25 .16* .22* .08 f .06 .27* .28* .19* 47* .40* .37* .26* .27 .50* .49* .36* 35* 32* 26* 20* .15 08 f 08 f 05 35* 30* 26* 16* .14 06 .01 09 f 45* 42* 26* 16* .14 06 .01 09 f 45* 42* 25* 25* .25 28* 29* 18* 29* 25* 25* .25 25* 29* 18* 11* 18* 03 17* .03 02 03 03 .00 36* 32* 27* 21* .01 .01 .02 .01 .01 .02 13* 10* 04 .02 .01 .01 .01 .02 .01 .01	X	,	.52*	.52*	.33*	.50	* 43	*04.	.34*	.28*	.26	.20*	.16*	.17*	.10*	.05
47* 40* .37* .26* .27 .50* .49* .36* 35* 32* 26* 20* .15 08† 08† 05 35* 32* 26* 16* .14 06 .01 09† 45* 42* 26* 15* .10 18* 09 18* 29* 25* 22* 15* .10 15* 19* 08† 29* 25* 22* 15* .10 19* 08† 29* 25* 22* 15* .10 19* 18* 11* 18* 03 17* .07 07 03 .00 04 01 04 .02 .01 01 .07 .01 .07 13* 10* 10* 04 .02 .01 01 .07 .01 .07 .07 .01 .07	N5	* *	*91.	.22*	,08 [†]	90.	.27 *	*87:	*61.	.21*	11.	.10*	90.	*60.	.00	.01
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	9N	* 47	*04.	.37*	.26*	.27	.50*	*64.	.36*	.35*	.35	.16*	.20*	.10*	.17*	.05
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	E1	35*	32*				087	08 ₹	05	05	.01	15*	22*	06	*61	.05
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	E2	35*					90	.01	09	90.	00.	22	25*	12*	18	.07
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	E3	45*	42	32*	25*		28	29	*81	19*	Ξ.	01	02	00.	02	00.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	E4	29*	25	22*	15*		15*	19	08₹	15*	90.	.03	03	.05	05	00.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	E5	*111	***************************************	03	17*	.03	02	03	00.	03	00.	01	90	.02	07 †	00.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	E6	36*	32	27*	21		12*		07	14	.03	16*	23*	07 7	20	90.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0 [01	01	01	00.	00.	.11*	.12	,07 [†]	.10*	.02	01	90	.01	90	00.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	02	13*	10*			.02	.01	01	.00	02	00.	02	06	.00	07	00.
27*24*20*15* .0922*1917*22*16*18*07 .0517*1214*11*0412* .02 .0104 .000628*28*20*20* .1113*15*09*07*050603 .0010*12*07*	03	03	* 60	00.	* 60		*21.	60:	*11.	.05	.00	,07 [†]	11	*12	15*	.02
22 *16 *18 *07	04	27	24		15	60:	22*	19	17*	12	90.	27	26*	19	18	.10
11* 04 04 .00 06 28* 20* .11 13* 15* 09* 07* 05 06 03 .00 10* 12* 07*	05	22*	16*	18*		.05	17*	12	14	04	.03	90.	90.	.02	.05	00.
28 *28 *20 * .1113 *15 *09 *07 †050603 .0010 *12 *07 †	90	* 11	04	12*		.01	04	00.	90	90.	00.	18	18	11	12*	.00
07 [†] 05 06 03 $.00$ 10 [*] 12 [*] 07 [†]	A1	28*	28	20*	20	Ξ.	13*	15*	* 60	*11	.03	23*	32*	13*	27*	.12
	A2	07		90	03	00.	10*	12*	07 †	11*	.00	*60	16*	05	14*	.03

Self Inf. PDC Multiple Regression r with PDC Multiple Regression r with PDC Multiple Regression Self Inf. PGC Self Inf. PGC Multiple Regression r with PDC Multiple Regression Self Inf. PGC Self Inf. PGC Self Inf. PGC Multiple Regression -2.1 ** 16 ** 18 ** 12 ** .06 08 ** .01 13 ** Self ** Inf. PGC Inf. PGC 19 ** 19 ** 19 ** 19 ** 19 ** 19 ** 19 ** 19 ** 19 ** 19 ** 19 ** 19 ** 11 ** 11 ** 19 ** 18 ** 19 ** 19 ** 19 ** 18 ** 19 ** 19 ** 11 ** 11 ** 11 ** 11 ** 11 ** 11 ** 11 **		A	Avoidant				De	Dependent				Obsessive Compulsive	e Compu	ulsive	
Inf. self b Inf. b Rs off r Inf. r Self b Inf. r Inf. r	r with	PDC	Multip	le Regres	sion	r with	PDC	Multipl	e Regres	sion	r with	PDC	Multipl	le Regres	sion
16* 18* 12* .06 09* 06 08* .01 13* 21* 09* 06 03 04 09* 01 09 .01 24* 23* 18* .05 02 04 09* 01 09 .01 14* 05 08† 02 07 02 07 05 0 14* 05 08† 02 03 02 07 05 0 14* 05 25* 33* 36* 36* 24* 1 08* 09 01 0 12* 11* 06 2 24* 11* 08* 03 04 09* 01 09* 01 09* 09* 01 09* 01 09* 01 09* 01 09* 01 09* 01 09* 01	Self r	Inf. r	Self β	Inf. β	\mathbb{R}^2	Self r	Inf. r	Self β	Inf. β	\mathbb{R}^2	Self r	Inf. r	Self β	Inf. β	\mathbb{R}^2
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	21*	16*	18*	12*		087			*80		13*	21		19*	.05
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	05	90	03	05	00.	04	*60		09	.01	24	23*	18*	16*	.08
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	* 12	.05	*21.	.01	.01	.01	07		087		*60	* 41		13*	.02
25*33*12* .1535*35*26*24* .1708†0308†08†12*11*06 .0219*21*11*15* .05 .0501 .09†14*17*09* .0525*24*19*18* .09 .01 .00 .0225*17*17* .0825*29*16*22* .10 .15* .08† .14*24*34*09* .1540*36*30*23* .2012*11*08†08†11* .0222*30*14*26* .11 .03 .01 .03	01	087		*60		.05	02	.07	05	00.	12*	21		20*	.05
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	***************************************	25*	33*	12*		35*	33*	26*	24*	ı	08		08	00.	0.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	14	12*	11*		.02	19*	21*	11*	15*		.05	01	,60°	90	9.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	20*	14	17*	*60		25*	24*	19*	18*		.01	00.	.02	00.	90.
24^{*} 34^{*} 09^{*} $.15$ 40^{*} 36^{*} 30^{*} 23^{*} $.20$ 12^{*} 11^{*} 08^{7} 14^{*} 08^{7} 11^{*} $.02$ 22^{*} $\frac{30}{30^{*}}$ 14^{*} 26^{*} $.11$ $.03$ $.01$ $.03$	25	25*	17*	17*		25*	29*		22*		.15*	,08 [†]	*41.	.02	.02
14^{*} 08^{7} 11^{*} $.02$ 22^{*} $\frac{30^{*}}{30^{*}}$ 14^{*} 26^{*} $.11$ $.03$ $.01$ $.03$	38	24	34*	*60		40*	36*	30*	23*	.20	12*	*11	087	07	.02
	11*	14*	087	11*	.02	22*	<u>30</u> *	14*	26*		.03	.01	.03	00.	90.

Note. N = 991.

Bold and underlined correlations between self-reports (informant-reports) and PDC scores are significantly stronger than informant-reports (self-reports), p < .01. Underlined only correlations between selfreports (informant-reports) and PDC scores are marginally stronger than informant-reports (self-reports), p < .05, two-tailed.

Table 4

Self- and Informant-Reports of FFM Facets as Predictors of Externalizing/Antagonistic PDs

. w	r with PDC	Multip	Multiple Regression	sion	r with PDC	PDC	Multip	Multiple Regression	sion	r with PDC	PDC	Multip	Multiple Regression	ssion
Selfr	r Inf. r	Self β	Inf. β	\mathbb{R}^2	$\operatorname{Self} r$	$\mathrm{Inf.}r$	Self β	Inf. β	\mathbb{R}^2	Self r	Inf . r	Self β	Inf. β	\mathbb{R}^2
N1 .10*	* 60.	±80°	90.	10:	.17*	.21*	* 60.	.17*	50.	*11.	*21.	.07	[≠] 80.	.02
N2 .30*	* 68:	*81.	.32*	.17	*87:	**	.16*	.32*	.16	.27 *	*35	.16*	.28	14
N3 .22*	* 24*	*41.	*81.	.07	.22*	.28	*11.	.23 *	60.	.10*	.15*	.04	.13*	.02
N4 .08 [†]	÷ 80.	90.	90.	.01	* 60.	*81.	.03	.17*	.03	.00	.07	01	.07 [†]	00.
N5 .28*	*98	.16*	*62.	.15	.27*	*37	.15*	.31*	.15	.15*	*25	90.	.22*	90.
N6 .16*	*42.	.07	.21*	90.	.14	*8	.02	.32*	1.	.01	*8	087	.22*	90.
E111	*20	03	19	.04	. <u>16</u> *	02	.21*	*111*	.03	10*	22*	00.	23*	.05
E202	05	.02	90	00.	.15*	.13*	*111.	.07	.02	00.	03	.02	04	00.
E3 10^*	.03	.12	03	.01	*	*11.	*42:	02	.05	* *	*61.	.25*	90.	.08
E4 .03	02	.05	05	00.	***************************************	,08 [†]	*61.	01	.03	* 40	*01.	*61.	.01	9.
E5 .27*	* 29	.17*	.22*		.25*	* 62.	*31.	.22	.10	.21*	.22	*41.	.16*	90.
E603	16	.05	***************************************	.02	.17	.03	.20*	90	.03	00:	<u>16</u> *	.08 [†]	20*	.03
01 .15*	* 40.	* 60°	.16*	50.	.22*	.27*	*41.	.22*	60:	.15*	*21.	*11.	*11.	.03
02 –.01	06	.05	09	00.	.16*	.13*	.13*	.05	.03	90.	00.	.05	03	00.
o3 <u>.09</u> *	00.	.10*	04	.01	*37	.23*	.34*	*21.	.15	.17	03	.20*	10*	.03
04 .01	04	.04	90	00.	.03	02	.05	05	90.	03	*60	.01	*60	.01
05 .04	.03	.03	.00	00.	<i>↓</i> 80°	.01	.10*	04	.01	*8	* 60°	*81.	00.	.03
06 .01	04	90.	07	00:	.05	06	.12	12*	.01	.01	_ <u>08</u> [†]	.07	12*	.01
A122	*29	13*	**24	.10	90	16	00:	16*	.03	19*	***************************************	10*	24	60.
A2	*	ę	4	ì										

Multiple Regression r with PDC Multiple Regression r with PDC Self p Inf. p R² Self r Inf. p R² Self r 17* 30* .14 06 26* .00 26* .07 25* 18* 35* .20 22* 38* 09* 35* .15 32* 13* 30* .13 25* 15* 30* .14 48* 04 21* .05 .04 11* .11* 16* .02 18* 04 24* .09 08* .06 .05 18* 07* 17* .04 09* .02 10* .01 .05 13* 32* .14* 14* 28* 06 26* .08 04 01 20* .04 09* .07 10* .01 .19* 15* 25* .07 <th></th> <th>A</th> <th>Antisocial</th> <th></th> <th></th> <th></th> <th>Ħ</th> <th>Histrionic</th> <th></th> <th></th> <th></th> <th>Na</th> <th>Narcissistic</th> <th></th> <th></th>		A	Antisocial				Ħ	Histrionic				Na	Narcissistic		
Inf. r Self p Inf. p R2 Self r Inf. p R2 Self r Inf. p R2 Self r =.34* 17* 30* .14 06 26* .00 26* .07 25* =.42* 18* 35* .20 22* 38* 09* 35* .15 32* =.24* 18* 30* .13 25* 35* 15* 30* .14 48* =.23* 04 21* .05 04 11* .11* 16* .02 18* 23* 04 25* 04 14* 14* 14* 16* .05 18* 24* 10* 04 04 09* 06* 10* .01 .05 24* 11* 14* 14* 14* 10* 10* .01 .19* 24* 15* 22* 07 <td< th=""><th>r with</th><th>PDC</th><th>Multip]</th><th>le Regres</th><th>sion</th><th>r with</th><th>PDC</th><th>Multipl</th><th>e Regres</th><th>sion</th><th>r with</th><th>PDC</th><th>Multipl</th><th>Multiple Regression</th><th>sion</th></td<>	r with	PDC	Multip]	le Regres	sion	r with	PDC	Multipl	e Regres	sion	r with	PDC	Multipl	Multiple Regression	sion
34* 17* 30* .14 06 26* .00 26* .07 25* 42* 18* 35* .20 25* 38* 09* 35* .15 32* 34* 18* 30* .13 25* 35* 15* 30* .14 48* 23* 04 25* .34* .11* .11* 16* .02 18* 24* 10* 24* .09 08* 25* .01 25* .06 .05 20* 17* .04 09* .02 10* .01 .05 .06 .05 24* 01 24* .04 09* .06 26* .08 .00 10* .09 24* 01 02* .04 09* .06 10* .10* .10* .10* 24* 10* 25* .10*	Self r	Inf. r	Self β	Inf. β	\mathbb{R}^2	Self r	Inf. r	Self β	Inf. β	\mathbb{R}^2	Self r	Inf. r	Self β	Inf. β	\mathbb{R}^2
42* 18* 35* .20 25* 38* 09* 35* .15 32* 34* 13* 30* .13 25* 35* 15* 30* .14 48* 23* 04 21* .04 11* .11* 16* .02 18* 28* 10* 24* .09 08* 25* .01 25* .06 .05 20* 07* 17* .04 04* 09* .02 10* .01 .05 36* 13* 32* .14* 14* 28* 06 26* .08 04 21* 01 20* .04 08* .10* 12* .01 .19* 05* 33* 15* 26* .15* 22* 07 18* .05 05* 34* 19* 37* 36* 41* 19* 37* 10* 10* 10*	24*	34*					26*	00.	26*		25*	*41	17*	37	.19
34 13 20 $.13$ 25 35 15 30 $.14$ 48 23 04 21 $.05$ $.04$ 11 16 $.02$ 18 28 10 24 $.09$ 08 25 $.01$ 25 $.06$ $.05$ 20 07 17 $.04$ 04 09 $.02$ 10 $.01$ $.05$ 34 13 32 $.14$ 28 06 26 $.08$ 04 21 01 20 $.04$ 08 06 26 $.08$ 01 21 10 20 $.04$ 08 07 12 $.01$ 19 23 15 26 $.15$ 22 07 18 $.05$ 05 23 19 37 22 37 19 35 14	31*	***************************************	18*	35*		22*	38	* 60	35*		32*	* 14.	*61	34*	.20
28 04 21* .05 .04 11* .11* 16* .02 18* 28* 00* 21* .09 08* 25* .01 25* .06 .05 20* 07* 17* .04 04 09* .02 10* .01 .05 36* 13* 32* .14* 28* 06 26* .08 04 21* 01 20* .04 08* .10* 12* .01 .19* 33* 15* 26* .16* 07 18* .05 05 43* 19* 37* .22* 41* 19* 35* .20 14*	22*	34	13*	30*		25*		15*	30*		48*	55	34*	* 44	4.
28* 10* 24* .09 08* 25* .01 25* .06 .05 20* 07* 17* .04 04 09* .02 10* .01 .05 36* 13* 32* .14 14* 28* 06 26* .08 04 21* 01 20* .04 08* .04 08* .10* 12* .01 .19* 33* 15* 26* .15* 22* 07 18* .05 05 43* 19* 37* 22 30* 41* 19* 35* .20 14*	13*	23		21	.05		11	*11.	16*		18*	32*	06	29*	.10
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	19*	28				087	25*	l	25*	ı		* 60	*01.	13*	.02
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	16*	20*	07 †			04	*60		10*		.05	05	*11.	10*	.01
$\frac{21}{33}^{*} 01 20^{*} .04 .04 087^{*} .10^{*} 12^{*} .01 \frac{.19^{*}}{19^{*}} .05 .01 \frac{.19^{*}}{19^{*}} .05 .05$ $\frac{43}{19}^{*} 19^{*} 37^{*} .22 30^{*} 41^{*} 19^{*} 35^{*} .20 14^{*}$	23*	<u>36</u> *	13*	32*		14*	28*		26*			<u>21</u> *	.03	22*	9.
33* 15* 26* .12 15* 22* 07 18* .05 05 43* 19* 37* .2 30* 41* 19* 35* .20 14*	10*	21		20*	90.	.00	08 [↑]	.10*	12*		* 419	.00	*22	90	9.
43*19*37* .2230*41*19*35* .2014*	27*		15*	26*		15*	22*	07	18*			15*	.02	15*	.02
	31*	<u>43</u> *	19	37*		30*	* 41	19*	35*		.14*	<u>29</u> *	06	27*	.08

Note. N = 991.

Bold and underlined correlations between self-reports (informant-reports) and PDC scores are significantly stronger than informant-reports (self-reports), p < .01. Underlined only correlations between selfreports (informant-reports) and PDC scores are marginally stronger than informant-reports (self-reports), p < .05, two-tailed.

Table 5

Self- and Informant-Reports of FFM Facets as Predictors of Thought Disorder PDs

		Schizoid	oid				Schizotypal	typal		
	Correlation	Correlations with PDC	Multip	Multiple Regression	sion	Correlation	Correlations with PDC	Multip	Multiple Regression	ssion
	Self r	Inf. r	Self β	Inf. β	\mathbb{R}^2	Self r	Inf. r	Self β	Inf. β	\mathbb{R}^2
Z	*30	.13*	.18*	.05	.04	*31	.24	.25*	.13*	11.
N2	.20*	.22*	*41.	.17*	90.	.33*	.37*	*22	.28	.17
N3	.26*	*61.	.21*	* 60°	.07	.36*	.35*	.25*	.23*	.17
X 4	.20*	.16*	.17*	*01.	.05	* 7Z.	.28	.20*	.21	11.
N5	90.	.04	.05	.02	00.	.17*	.23*	.10*	*61.	90.
9N	.21*	.20*	*31.	*41.	90.	* TZ:	.33*	.17*	.26*	.13
E1	53*	48*	39	30*	.35	30*	29*	21	20*	.12
E2	46*	45	31*	28*	.27	**24	24	16*	16*	.07
E3	26*	19*	21*	087	.07	12*	15*	90	12*	.02
E4	26*	23*	20*	13*	.08	13*	* 41.–	087	10*	.02
E5	10*	16*	04	14*	.00	,08 [†]	90.	90.	.03	00.
E6	43	38*	32*	24*	.23	18*	19	12	14*	.05
01	12*	13*	087	10*	.00	.10*	.13*	.05	*11.	.02
02	19	24	087	20*	90.	.05	03	.10*	09	.01
03	23*	33 *	13*	28*	.12	[≠] 80.	02	.10*	06	.01
04	25*	29*	16*	22*	.10	11*	15*	90	12*	.02
05	17*	13*	14*	90	.03	.01	.02	00.	.02	00.
90	20*	15*	16*	90	.04	14*	*111-	12*	05	.02
Α1	39*	40*	28*	30*	.23	43 *	42	32*	29*	.26
A2	08	16*	04	15*	.02	13*	***************************************	087	21	90.
A3	31*	33 *	25*	27*	.16	23 *	29	17*	26*	.11
A4	11*	17*	05	15*	.03	***************************************	*29	087	26*	60:

		Schizoid	pid		1		Schizotypal	typal		
	Correlation	Correlations with PDC	Multip	Multiple Regression	sion	Correlations with PDC	s with PDC	Multip	Multiple Regression	sion
	Self r	Inf. r	Self β	Inf. β	₹2	Self r	Inf. r	Self β	Inf. β	\mathbb{R}^2
A5	.03	* 60	⁷ LO.	11*	.01	08	22*	01	21*	.05
9Y	18*	25*	*60	22*	.07	90	13*	01	13*	.02
CI	*27	18*	23*	10*	80.	27*	28*	19	21*	.1
C2	03	07 †	.01	07	00.	13*	14*	08	10*	.02
C3	16*	17*	12*	13*	9.	21*	25*	* 4.17	21*	.08
2	* 60	15*	03	13*	.02	04	14*	.03	15*	.02
CS	15*	15*	10*	11*	.03	23*	25*	15*	19	.08
92	.04	05	90.	07	00.	10*	***************************************	03	23*	90:

Note. N = 991.

p < .05

p < .01.

Bold and underlined correlations between self-reports (informant-reports) and PDC scores are significantly stronger than informant-reports (self-reports), p < .01. Underlined only correlations between self-reports (informant-reports) and PDC scores are marginally stronger than informant-reports), p < .05, two-tailed.

Table 6

Self- and Informant-Reports of FFM Facets as Predictors of Internalizing and Antagonistic PDs

		Paranoid	oid				Borderline	rline		
	Correlation	Correlations with PDC	Multip	Multiple Regression	sion	Correlation	Correlations with PDC	Multip	Multiple Regression	ssion
	Self r	Inf. r	Self β	Inf. β	\mathbb{R}^2	Self r	Inf. r	Self β	Inf. β	\mathbb{R}^2
Z	.37*	*62:	.30*	.15*	.15	*24.	.38*	.31*	.25*	.22
N2	.42*	* 94.	*87:	.36*	.28	.52*	.53*	.36*	.39*	.39
N3	.36*	.32*	.27 *	*61.	.16	.55*	.54*	.38	.35*	.40
X	.32*	.30*	* 47:	.21	1.	.35 *	.36*	.26*	.27 *	.19
N5	*81.	*61.	.12	*41.	.05	.35 *	.41*	.23*	.31*	.21
9N	.25 *	.32*	.15*	.26*	.12	* 44.	*15.	*62:	*04.	.33
E1	31*	35*	19*	27*	.15	16*	23 *	07	20*	90.
E2	24	25*	14	17*	80.	12*	12*	087	07	.02
E3	10*	11*	90	07 7	.01	−.08 [†]	15*	01	15*	.02
E4	* 60	*60	90	90	.01	* 60	12*	04	10*	.01
E5	.05	.01	90.	02	00.	.13*	.13*	.10*	,08 [†]	.02
E6	21*	*29	*11	25	60:	18*	25*	* 60	21*	.07
01	.02	00.	.00	00.	00.	*11.	.16*	90.	* 41.	.03
02	04	10*	.03	11*	.01	00.	03	.01	03	00.
03	± <u>707</u>	05	.10*	*80	.01	*81.	80.	.17*	.03	.03
04	18*	22*	*111	***************************************	90.	15*	18*	10*	13*	9.
05	90	* 60	02	087	.01	08	90	90	03	00.
90	16*	19*	087	15	.00	90	07 7	03	05	00.
Α1	51*	54*	35*	40	.39	31*	36*	20*	29*	.17
A2	19*	30	12*	27*	.10	22*	29*	15	25*	.10
A3	23 *	37*	16*	33*	.16	***************************************	*29	12*	26*	.10
A4	31*	*	19	33 *	.19	31*	* 40	19	33*	.19

		Paranoid	oid				Borderline	line		
	Correlation	Correlations with PDC	Multip	Multiple Regression	sion	Correlation	Correlations with PDC	Multip	Multiple Regression	ssion
	Self r	Inf. r	Self β	Inf. β	${f R}^2$	Self r	Inf. r	Self β	Inf. β	\mathbb{R}^2
A5	10*	23 *	03	22*	.05	05	22*	.02	23*	.05
A6	12*	26*	02	25*	.07	02	17 *	.03	18	.03
CI	22*	20*	17*	14*	90.	35*	39*	24	30*	.20
C2	02	05	.01	05	00.	15*	17*	09	12*	.03
C3	17*	22*	12*	18*	90.	27*	35*	18*	29*	.15
2	.01	[≠] 80.−	.05	10*	.01	*11	22 *	01	22*	.05
CS	18*	20*	11*	15*	.05	34*	38*	22*	28*	.18
92	08 ₹	17*	03	16*	.03	31*	43	19*	37*	.22

Note. N = 991.

p < .05

p < .01.

Bold and underlined correlations between self-reports (informant-reports) and PDC scores are significantly stronger than informant-reports (self-reports), p < .01. Underlined only correlations between self-reports (informant-reports) and PDC scores are marginally stronger than informant-reports), p < .05, two-tailed.