



# Trust and Rejection Sensitivity in Personality Disorders

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Published online: 1 July 2019  
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## Abstract

**Purpose of Review** We review recent empirical investigations about two core processes subtending impairments in interpersonal functioning and, more precisely, cooperative behaviors in personality disorders: Trust toward others and rejection sensitivity. The main contributions are about borderline and narcissistic personality disorders but we report a little evidence about other personality disorders too (i.e., avoidant, antisocial, and paranoid personality disorders).

**Recent Findings** Regarding borderline personality disorder, a misinterpretation of situations as threatening seems to be relevant for both trust and rejection sensitivity. With specific regard to narcissistic personality disorder, results suggest rejection sensitivity and distrust to be plausible risk factors for aggressive outbursts.

**Summary** Empirical findings display specific patterns of disturbances in rejection sensitivity and trust dynamics across different personality disorders. Nonetheless, further studies on personality disorders other than borderline or narcissistic personality disorder are needed. A deeper understanding may provide insight for better clinical management of such impairments among patients with personality disorders.

**Keywords** Trust · Rejection sensitivity · Personality disorders · Interpersonal · Social cognition

## Introduction: Interpersonal Impairments and Cooperation in Personality Disorders

According to the Alternative Model for Personality Disorders of the Diagnostic and Statistical Manual of Mental Disorders, disturbances in self- and interpersonal functioning are the core features of personality pathology [1]. The critical role of interpersonal dynamics was recognized since the early conceptualizations of personality pathology [2], with further recent confirmations [3, 4]. Moreover, in the past few decades, some studies highlighted impairments in social cognitive functioning as a significant issue in personality pathology (for reviews, see [5, 6]). Some individuals experience the establishment and maintenance of interactions as overwhelming and cope with this challenge in self-defeating ways that ultimately

compromise the quality of their relationships. In particular, considering that cooperation is a core dimension of social exchanges, individuals struggling with impairments in social functioning might behave in uncooperative ways. Uncooperative behavior is, in fact, a significant predictor of the presence and extent of Personality Disorders (PDs) symptomatology [7].

This review focuses on the empirical investigation of impairments regarding two essential dimensions for the development of cooperative behavior: Trust toward others and feeling of acceptance by others. The lack of trust toward others can be defined as untrustworthiness bias (i.e., the appraisal of "whether others will reject, be dishonest with, negatively judge, or otherwise emotionally hurt" ([8], p. 196). The lack of feeling of acceptance by others refers to rejection sensitivity (i.e., a cognitive-affective disposition to anxiously expect, readily perceive, and overreact to social rejection [9]). We will focus on trust impairments and rejection sensitivity because these two processes seem to play a key role in impairments in cooperation across several PDs. Even if trust and rejection sensitivity have been investigated mainly as distinct processes, research has shown that rejection sensitivity can influence the appraisal of traits and intentions of others [9]. Thus, along this line, recent contributions tested the hypothesis of an

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This article is part of the Topical Collection on *Personality Disorders*

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interplay between trust appraisal and rejection sensitivity in Borderline Personality Disorder (BPD) [10, 11•]. The present review thus aims at examining the role of rejection sensitivity and trust impairments across several PDs, also with a focus on the interplay between rejection sensitivity and trust appraisal in supporting impairments in cooperation.

Although impairments in cooperation are relevant across all PDs, the majority of studies focused on BPD only, since this is by far the best-studied PD (nearly 7,000 articles published since 1987, [12]). Patients meeting criteria for BPD show a tendency to readily perceive social rejection (i.e., rejection sensitivity; [13]) and misinterpret neutral situations as untrustworthy (i.e., untrustworthiness bias; [14]). However, there is still little understanding of the specificity of these impairments for BPD or about their generalizability to other PDs. In this review, we will outline the most significant and recent empirical contributions on the role of rejection sensitivity and untrustworthiness biases and their interplay in personality disorders. Specifically, two literature searches were performed in PsycINFO and PubMed databases: The first using the keyword ‘rejection sensitivity’ AND ‘personality disorder’; the second with ‘trust’ AND ‘personality disorder’. We selected studies published within the past five years. Nonetheless, we selected a few older contributions when these represented the most recent results or because of particular relevance.

Such a review could inform clinical work, since a deeper insight on the processes underlying relational problems in individuals with personality pathology may enable clinicians to better elaborate the therapeutic treatment for PD patients. Relational problems are a prominent sector of psychopathology in individuals meeting criteria for PDs, and both trust toward others and rejection sensitivity are thought to contribute to relationship dysfunctions. For these reasons, our effort to report the most recent and relevant findings on the topic could help to focus on the processes that need to be addressed at a therapeutic level when dealing with the management of relationship dysfunctions with PDs patients.

## Rejection Sensitivity in Personality Disorders

Rejection sensitivity is a cognitive-affective processing disposition to anxiously expect, readily perceive, and strongly react to the mere possibility of rejection in interpersonal situations [9]. High rejection sensitivity can lead to dysfunctional social interactions and maladaptive relational patterns, such as excessive hostility, social withdrawal, or over-accommodation of others (for a review, see [6]). Extreme sensitivity to rejection and characteristic patterns of reacting to the possibility of rejection in daily life are defining criteria for several psychiatric diagnoses, including avoidant PD/social phobia and BPD [1].

## Borderline Personality Disorder

BPD is a severe psychiatric condition marked by chronic instability in multiple areas, resulting in emotional dysregulation, self-harm, impulsivity, and identity disturbance [1]. Disturbed social functioning is considered as the central feature of BPD [3, 11, 15]. Recent meta-analytic findings show a strong association between rejection sensitivity and BPD [16•]. An increase of rejection sensitivity in BPD was found across 19 different studies regardless of the percentage of women, the mean age, the type of measurement for rejection sensitivity and BPD, the publication year, and the continent of data collection. Furthermore, rejection sensitivity has been suggested as a potential risk factor for the development of BPD [17]. Regarding the study of the relationship between rejection sensitivity and BPD, we can delineate three different approaches. The first line of research focuses on the negative emotional reactions to actual social rejection among individuals with BPD. These patients often react to rejecting social situations (perceived or objective) with maladaptive behavioral and negative emotional responses. Rejection sensitivity, by increasing the likelihood of such responses in any rejecting situation, may contribute to the development and maintenance of typical BPD interpersonal difficulties [13, 18]. A recent contribution suggests that self-regulation abilities, such as effortful control, may play a protective role, buffering the association between rejection sensitivity and BPD [19]. When individuals can rely on good regulation abilities, the association between rejection sensitivity and BPD symptoms (mediated by interpersonal distress) is lower.

The second line of research focuses on the hypothesis that BPD individuals might be characterized by a lower sense of belonging even when being included [20]. This may be caused by an expectation for extreme social inclusion driving individuals with BPD to a distorted perception of any normal social context as rejecting (even if not actually rejecting). To verify this hypothesis, De Panfilis and colleagues [21] introduced a novel condition of overinclusion in the Cyberball procedure, which is traditionally used to manipulate social exclusion versus inclusion [22]. They found that BPD individuals experienced negative emotions after both rejecting and including conditions; only in the overinclusion condition, BPD individuals showed levels of negative emotions comparable to those of controls. Participants with BPD seemed to consider their overinclusion as the norm, at the expenses of equal inclusion of the other participants to the ball-toss game, in response to an idealized need for interpersonal belonging. Liebke and colleagues [23••] further tested the hypothesis of a higher threshold for perceiving social inclusion through a novel virtual reality paradigm, the Mannheim Virtual Group Interaction Paradigm, used to induce social acceptance and rejection in a standardized social encounter. Participants with BPD were compared to healthy controls in terms of expectation and

social behavior in a hypothetical social context different from the VR environment. Compared to controls, BPD patients showed a lack of adaptation of the expectation to be accepted in the presence of clear acceptance signals, suggesting alterations during the processing of cues for social acceptance that in turn may contribute to the persistence of a negative view of others throughout different social contexts even when not justified by actual situations.

Finally, the third line of research focused on rejection sensitivity as a possible mechanism through which BPD results in problematic social outcomes. Lazarus and colleagues [24] tested whether rejection sensitivity would mediate the impact of BPD features on social network indicators (i.e., quantity or number of relationships and quality of each relationship) measured after one month. The results suggested that higher BPD features predicted greater rejection sensitivity, which predicted fewer total partners. Rejection sensitivity could be one of the personality characteristics that increase the risk for BPD patients' poor social network. Furthermore, Lazarus and colleagues [25] in a different study investigated whether the type of relationship could play a role. They collected event-contingent recordings of daily interactions with romantic and non-romantic partners of patients with BPD, PDs other than BPD, and mental conditions other than PDs. BPD symptoms predicted heightened hostility and attenuated sadness in response to the perception of rejection and attenuated positive affect in response to perceptions of accepting behaviors only with romantic partners and not with non-romantic partners. High BPD features may thus interfere with the experience of the benefits from positive social feedback particularly when interacting with romantic partners. This pattern may drive individuals with BPD to not reinforce accepting behaviors in their partners, who in turn may reduce these behaviors, thus leading to a vicious cycle. The interplay between BPD features and rejection sensitivity in predicting negative outcomes was also investigated in adolescents. Fontana and colleagues [26] showed that only in adolescents with disturbances in personality organization (i.e., features that are characteristic of BPD), high rejection sensitivity increased the risk to engage in conduct problems. On the contrary, a good level of emerging personality organization acted as a protective buffer between rejection sensitivity and negative behavioral outcomes.

Taken together these results shed light on the significant role rejection sensitivity may have in interfering with building and keeping stable and satisfying relationships in BPD populations across the life span.

### Narcissistic Personality Disorder

Narcissistic Personality Disorder (NPD) consists of a “pervasive pattern of grandiosity (in fantasy or behavior), need for admiration, and lack of empathy” ([1], p. 669). Despite that aggression is not clearly stated in such definition, several

empirical contributions suggested that individuals with NPD are very likely to feel negative emotions and react aggressively following ego-threat [27].

Although maladaptive reactions to rejection may be relevant for a better understanding of violence and aggression in NPD, most research focused on the investigation of such dynamics in BPD patients only. Only a few contributions can be found on the role of rejection sensitivity in narcissism and NPD. Rejected narcissists are very likely to become angry and violent toward others after the experience of social rejection [28]. NPD individuals may try to avoid showing their vulnerability to rejection threats and the tension resulting from such effort may prompt aggressive outbursts. Cascio, Konrath, & Falk [29] found empirical support to the role of rejection sensitivity in NPD pathology in provoking explosive reactions to perceived rejection looking at the neural underpinnings of social exclusion. NPD individuals showed heightened activity in the social pain network in the exclusion condition of Cyberball when explicitly hiding such pain. Such paradox subtending NPD pathology represents the core of many clinical descriptions and may cause hypervigilance toward subtle signals of social exclusion such as others' negative emotions or neutral expressions [21]. Chester and DeWalt [30] investigated the role of the dorsal anterior cingulate cortex (dACC) as a discrepancy detector of the gap between the grandiose and threatened selves in narcissism. Greater aggressive reactions were predicted by the level of NPD features among healthy participants when the situations were construed as neglecting the grandiose self (i.e., high dACC activation). When the discrepancy between grandiose self and threatened-by-rejection self was not perceived (i.e., low dACC activation), narcissistic features did not predict aggressive reactions to rejection. Interestingly, similar alterations during a Cyberball procedure were found in BPD. BPD patients, compared to healthy controls, showed a stronger engagement of the dACC regardless of the exclusion, control or inclusion condition during Cyberball [31]. These results suggest that dACC activation is greater when individuals face difficulties during social encounters regardless of the specific personality pathology. What actually changes across different PDs is the meaning of difficulties during social encounters: For NPD individuals such difficulties occur when they face an ego-threat, while for BPD they occur in every social interactive situation.

However, these results do not allow differentiating between the two main phenotypic expressions of narcissistic pathology, i.e., grandiose and vulnerable narcissism. Grandiose narcissists are explicitly and outwardly immodest, self-promotional, self-enhancing, and entitled, whereas vulnerable narcissists are self-absorbed, entitled, and distrustful of others while presenting psychological distress and fragility [32]. Fossati, Somma & Borroni [33] showed that the experience of ostracism gives an unreal (and unrealistic) sense of being in

control of the exclusion situation only to grandiose narcissism, suggesting different coping strategies by vulnerable narcissism.

In sum, explosive and aggressive reactions to the rejecting situation are related to greater NPD's hypervigilance to rejection. Although all results seem to suggest an increased reactivity to social exclusion in NPD, yet little is known about the mechanism underlying narcissistic responses to social exclusion.

## Psychopathy

Although the clinical diagnosis of psychopathy is not defined as an independent condition in the DSM-5, it is related to the Antisocial Personality Disorder diagnosis (ASPD, [1]). Psychopathy is a multi-facet construct, and it is distinguished from ASPD by two features linked to rejection sensitivity: The lack of emotional sensitivity and social relatedness [34]. Whereas early conceptualizations of psychopathy involved two facets (the affective-interpersonal facet, i.e., lack of empathy, grandiosity, and superficial charm, and the behavioral-lifestyle facet, i.e., irresponsible, antisocial, and impulsive behaviors [35]), Cooke and colleagues [36] proposed a three facet conceptualization, breaking down the affective-interpersonal domain into separate affective and interpersonal facets. Research investigated how these three distinct facets are specifically associated with rejection-related issues.

On the one hand, callous-unemotional traits (the affective dimension of the affective-interpersonal facet) were negatively related to fear of rejection [37]. On the other hand, impulsive-irresponsible (the behavioral-lifestyle facet) and grandiose-manipulative (the interpersonal dimension of the affective-interpersonal facet) traits were positively associated with fear of rejection. To specify the aetiological path toward psychopathy, the authors framed their results in an attachment perspective. They hypothesized that important environmental risk factors for the development of children, such as unavailable, unresponsive, rejecting, neglecting, or abandoning attachment figures, may result in two main outcomes. First, there might be a hyperactivation of the attachment system to seek proximity of attachment figures; this might lead to an increase of fear of rejection from others (the impulsive-irresponsible and the grandiose-manipulative manifestations of psychopathy). Second, when seeking proximity is not perceived as an option, attachment-deactivating strategies might take place to suppress the fear of being rejected (callous-unemotional psychopathy).

Although psychopathic traits constitute a major concern in terms of public health, little research was done to clarify the relevance of rejection sensitivity on the phenomenon.

## Avoidant Personality Disorder

Avoidant Personality Disorder (AvPD) is a clinical condition characterized by low self-esteem and feelings of inadequacy [1]. AvPD individuals typically desire interpersonal contact but find themselves unable to engage in social behaviors because of their fear of social situations. AvPD is commonly compared to BPD because both disorders are linked to relational impairments and rejection sensitivity [38]. At the same time, AvPD and BPD are characterized by unique features. A core feature of AvPD symptomatology is the maladaptive low self-esteem associated with increased rejection sensitivity: The tendency of seeing oneself as "inferior" strengthens concerns about negative social experiences like rejection and thus causes social withdrawal to avoid the pain of anticipated rejection [39]. Berenson and colleagues [40] compared high BPD with high AvPD individuals in terms of the interpersonal attributions occurring after real-life experiences of rejection and acceptance using a daily diary procedure. While BPD attributed rejection to positive qualities of the self, AvPD made more negative self-attributions and more positive other-attributions after rejection experiences. In case of acceptance, BPD showed more negative attributions toward others reading others' acceptance acts as motivated by malicious intentions or weakness, whereas AvPD showed more positive others-attributions and more negative self-attributions.

To sum up, this study shows that individuals with AvPD experience rejection as a confirmation of their sense of inferiority and low self-esteem and show different attributional cognitive styles as compared to BPD individuals and healthy controls.

## Trust in Personality Disorders

Trust is the consequence of a multistage process that results in appraising others' trustworthiness and adapting the behavior toward them consistently. Dysfunctional judgments of others' trustworthiness have been investigated as a plausible cause of interpersonal relationships impairments, one of the most relevant symptoms in PD diagnosis. Trust refers to a general assumption about the good nature of others [41], and distrust to confident negative expectations regarding others' behaviors [42]. Whereas traditionally authors referred to trust as a stable personality trait [43], considering trust as a "behavioral decision" to rely on others enabled researchers to consider it as a dynamic process [44] and to investigate cognitive biases linked to the tendency to judge others as trustworthy or untrustworthy, resulting in trusting or untrusting behaviors.

## Borderline Personality Disorder

One of the main implications of the disturbed social functioning in BPD individuals is the incapability to maintain healthy and satisfying relationships based upon mutual trust. Within a mentalization framework, because of aversive early experiences with primary caregivers, individuals with BPD develop distrustful inner working models that compromise their whole social functioning [45]. This psychodynamic model suggests a significant role of early negative emotional experiences on the expression of the untrustworthiness bias and interpersonal impairments. This model has been supported by physiological data. Jobst and colleagues [46] showed that oxytocin activity (OXT), a neuropeptide traditionally linked to trust dynamics, was altered in BPD patients compared to controls and suggested these alterations as a potential mechanism underlying interpersonal impairments. Furthermore, Jobst and colleagues [46] linked such alterations in OXT activity to disorganized attachment representations.

The investigation of trust within the BPD population mainly focused on the tendency toward a generalized distrust of others resulting in a greater attribution of and sensitivity to others' untrustworthiness, namely the untrustworthiness bias. King-Casas and colleagues [14] used a game theory procedure (i.e., Trust Game), and found that BPD individuals, compared to controls, were more likely to initiate cooperation ruptures and to sustain lower rates of generous gestures to repair such cooperation ruptures. Moreover, Richetin and colleagues [11•] confirmed a main effect of BPD traits on trust appraisal such that individuals with higher BPD features interpreted neutral faces as more untrustworthy. Apart from Richetin and colleagues [11•], other studies addressed the trustworthiness appraisal of faces, all suggesting that, in laboratory paradigms, individuals with heightened BPD traits rate faces as less trustworthy as compared to individuals with low BPD features [8, 47, 48•].

We believe that future research needs to clarify whether such untrustworthiness bias, i.e., the pervasive expectation of others' untrustworthiness, could interfere with the ability to learn whom to trust. It is plausible that biased people could not build trust relationships because they do not learn that they can safely depend on others. To our knowledge, no systematic empirical research exists addressing the investigation of the processes subtending learning to trust others in BPD.

Another line of research considers untrustworthy attitudes as resulting from an interaction between personal characteristics (BPD traits) and the perception one has of the situation. From this point of view, BPD patients' distrust can be considered as resulting from the interaction between dysfunctional personality characteristics and the subjective perception of social situations as triggering. To empirically disentangle the role of the perception of the situation on the appraisal of others' trustworthiness in individuals with BPD, Miano,

Fertuck, Roepke, & Dziobek [48•] designed an ecological investigation of interpersonal trust in romantic relationships. The authors asked heterosexual couples in which the women were diagnosed with BPD and control couples to discuss three different topics (neutral, i.e., favourite films vs. personally threatening, i.e., personal fears vs. relationship threatening, i.e., possible reasons for separation from partner) and to assess their partner's trustworthiness after each discussion. Women with BPD showed lower ratings of partners' trustworthiness after both personally and relationship threatening discussions compared to controls, but not after neutral discussions. These results support the idea of greater sensitivity to untrustworthiness appraisal in BPD patients upon encountering threatening situations.

## Narcissistic Personality Disorder

Kong [49] suggested that narcissists' deflated perception of their counterpart's competence could undermine their trust toward others in negotiation contexts. However, as already mentioned, narcissism is a heterogeneous construct, and different dimensions of narcissism (i.e., grandiose and vulnerable features) could be differently related to trust. For this reason, recent empirical investigations of trust in NPD have focused on Vulnerable and Grandiose Narcissism rather than on Narcissism in general terms.

On the one hand, regarding Vulnerable Narcissism, distrust toward others has been accounted as one of the personality features (together with angry rumination) driving narcissistic vulnerability toward reactive aggression [50]. On the other hand, focusing on Grandiose Narcissism, Kwiatkowska, Jułkowski, Rogoza, Żemojtel-Piotrowska, and Fatfouta [51•] examined the relationship between two facets of trust that are the cognitive bias in the evaluation of others and the self-view as trustworthy, and the main facets of grandiose narcissism [52, 53]. They showed that trust seems to be negatively related to the antagonistic facet of narcissism (i.e., aggressiveness and hostility), positively linked to the communal facet (i.e., tendency toward fulfillment of self-motives through agentic means), and unrelated to the agentic facet (i.e., the assertive features of narcissistic personality). Therefore, only grandiose narcissists high in antagonism might face interpersonal problems.

## Psychopathy

Trust impairments in psychopathy have received little attention from research in social cognition. To our knowledge, there is only one study about psychopathy and trust combining physiological data and trust ratings. Considering that individuals with psychopathy show amygdala dysfunctions [54], and amygdala activity is relevant in face trustworthiness appraisal tasks [55], Richell and colleagues [56] investigated

alterations in trustworthiness appraisal among psychopathic participants. The results showed no impairments in the evaluation of trustworthiness from faces in individuals with psychopathy. Therefore, there is so far, no evidence coming from empirical research about a strong link between the evaluation of trustworthiness and psychopathy.

### Paranoid Personality Disorder

Among personality disorders, Paranoid Personality Disorder (PPD) is one of the least examined and, despite concerns in the psychiatric community regarding this diagnosis, there have been calls for its removal from DSM-5. Although the diagnosis was finally maintained, the main concerns arise from the high diffusion of subclinical paranoia among business people showing subclinical characteristics, such as distrust and suspiciousness [57]. Furnham & Crump [58] examined the correlation between a measure of “scepticism” and the Big Five facet model through NEO-PI-R [59] and showed that the more sceptical people are (subclinical paranoid), the lower they score on trust and compliance. Further research with experimental design on trust dynamics in PPD is needed to understand the specific relationship occurring between trust and PPD.

### Interplay between trust and rejection sensitivity

Although both rejection sensitivity and trust dynamics have been empirically investigated in different personality disorders, the study of their interplay has been elaborated only with specific regard to BPD.

Starting from the associations between BPD and both an untrustworthiness bias and high rejection sensitivity, Miano, Fertuck, Arntz, and Stanley [10] hypothesized that biased trust appraisal in BPD may occur because of a dysfunctional representation of others as rejecting and the self as rejected. Individuals with BPD features might provide lower trustworthiness ratings because of their concerns and anxiety about the possibility of being rejected or abandoned. A full mediation effect of rejection sensitivity on the link between BPD features and lower trust appraisal supported their hypothesis. Richetin, Poggi, Ricciardelli, Fertuck, and Preti [11•] further investigated this mediation effect and showed that only the emotional activation linked to the idea of being rejected (anger and anxiety for rejection), and not the cognitive component (expectation), mediated the effects of BPD traits on the untrustworthiness bias (for the distinction between the rejection sensitivity components, see [60, 61]).

Unfortunately, there is no comparable work within other PDs to investigate whether the propensity to dysfunctional representations of others as rejecting and to emotional

anticipation of rejection as linked to distrust would be observed in other populations than BPD patients.

### Conclusions

With the present contribution, we aimed at reviewing the empirical investigations about two core processes subtending impairments in interpersonal functioning and cooperative behaviors, trust toward others, and rejection sensitivity. Since the empirical works are mostly related to BPD diagnosis and although we reported the most significant empirical contributions on PDs other than BPD (such as NPD, APD, AvPD, PPD, and psychopathy), our review reflects such unbalance [12].

From the different studies, we can draw some conclusions in relation to the different PDs examined. In BPD, rejection sensitivity and untrustworthiness biases seem to lead toward a misinterpretation of situations as threatening and interfere with the possibility to build and keep stable and satisfying relationships with others. Regarding narcissism, results suggest that both rejection in social situations and distrust toward others might provoke aggressive reactions and outbursts and that neural processes might play a role. Moreover, vulnerable and grandiose manifestations need to be considered separately for investigating trust appraisal and rejection sensitivity. Concerning psychopathy, psychopathic traits show no connections with trust dynamics, whereas it seems that rejection sensitivity among psychopaths could follow negative parenting experiences during childhood. Finally, regarding avoidant and paranoid personality disorder, rejection sensitivity seems to contribute to further confirming the sense of inferiority and low self-esteem that characterize AvPD and for PPD, trust appraisal decreases as a function of skepticism of participants (subclinical paranoids).

Considering the relatively modest number of empirical studies on the role of rejection sensitivity and untrustworthiness biases and their interplay in personality disorders, there is undoubtedly the need for further studies to state more firm conclusions. Regarding BPD, further research should be dedicated to understanding whether individuals with BPD have a low threshold to threat cues in social situations and, if present, to examine the precursors of this threshold. One possible factor might be an alteration in the learning process about whom to trust or distrust that has not been extensively examined. To this purpose, the recent technical developments within a virtual reality framework such as the Virtual Maze [62] could be used for assessing the behavioral adjustments toward trustworthy and untrustworthy avatars to inform about specific maladaptive processes in learning to trust others in BPD patients. With specific regard to NPD,

future research should focus on the investigation about whether different phenotypic manifestations of narcissism (vulnerable and grandiose) are related to different strategies for maintaining inflated self-opinions when socially rejected. For example, lower levels of empathy [63], the exploitation of relationships with others for their own ends [64], or aggressive behavior [28] might be frequent within the grandiose phenotype, whereas social withdrawal, avoidance, and overt anger might be more frequent within the vulnerable phenotype [65].

From a general methodological perspective, one should note that most of the studies generalized nonclinical findings to clinical psychopathological manifestation. Data need to be collected from clinical samples to enable a better understanding of the different processes involved. From a theoretical perspective, whereas the authors focused on a general trustworthiness conceptualization, we believe it could be promising to apply the sensitivity concept to trustworthiness similarly to what has been done for frustration, ambiguity, reward, punishment, and rejection [9, 66–68]. For example, sensitivity to rejection conceptualization drove researchers to develop the hypothesis that rejection sensitivity emerges after repeated exposure to rejection. We could elaborate a similar hypothesis regarding the development, after repeated negative trust-related experiences, of an “untrustworthiness sensitivity” with high expectations of untrustworthy situations (cognitive component) and high intensity of emotional reactions to untrustworthiness (emotional components).

Summarizing, despite the relevance of trust and rejection sensitivity dynamics in PDs pathological expression, empirical investigations focused primarily on BPD and NPD, rather than the full range of DSM-defined personality pathology. Empirical findings suggested that different PDs display specific patterns of disturbances in rejection sensitivity and trust dynamics and, given the importance of impairments in such domains in maintaining dysfunctional relationships across all PDs, these deficits should be explored further in future studies. As a general recommendation, we invite future researchers to (i) collect more data coming from clinical populations and (ii) empirically investigate the topics of trust and rejection sensitivity systematically within each PD to provide evidence for the specificities of those in each PD. As a consequence, this would provide information on the processes that need to be addressed in the therapeutic treatments of relationship dysfunctions in PDs patients.

## Compliance with Ethical Standards

**Conflict of Interest** Anita Poggi, Juliette Richetin, and Emanuele Preti each declare no potential conflicts of interest.

**Human and Animal Rights and Informed Consent** This article does not contain any studies with human or animal subjects performed by any of the authors.

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