

Review

Metacognition in Schizotypal and Related Personality Disorders: A Conceptual Review Informed by the Alternative Model of Personality Disorders

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Abstract

Cluster A personality disorders, including schizotypal, schizoid, and paranoid personality disorders, remain among the least studied forms of personality pathology. Partly due to this lack of research, empirically supported interventions remain limited. Recently, the Alternative Model of Personality Disorders (AMPD) has emerged as a dimensional approach to understanding personality disorders; however, treatment implications remain underdeveloped. We propose that the integrated model of metacognition may offer a clinically actionable framework for conceptualizing and measuring core self- and interpersonal disturbances that are central to the AMPD. In this conceptual review, we consider the following: (1) how the integrated model of metacognition aligns with dimensional models of personality pathology, (2) metacognitive functioning in Cluster A personality disorders with emphasis on schizotypal personality disorder, and (3) metacognitive treatments that could potentially have relevance for these presentations.

Keywords: metacognition; personality disorder; schizotypal; cluster a; alternative model of personality disorders; AMPD; personalized treatment; psychotherapy



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1. Introduction

Personality disorders (PDs) are characterized by a pervasive pattern of self and interpersonal difficulties ([American Psychiatric Association, 2022](#)) and prevalence is estimated to be as high as 12.16% in Western countries ([Volkert et al., 2018](#)). PDs cause significant functional impairment in relationships, education, work, and day-to-day life ([Skodol et al., 2014](#)) that is not specific to any one diagnostic category ([Soeteman et al., 2008](#)). Despite the high prevalence and burden of PDs to individuals and society, treatments are generally not equipped to comprehensively address the range of difficulties people with PDs face. Although Dialectical Behavioral Therapy (DBT) has been established as an effective treatment for borderline personality disorder (BPD), treatments for other personality disorders are not as widely accessible or empirically supported ([Evans et al., 2017](#); [Iliakis et al., 2019](#)). In addition, skills-based approaches that are often more accessible may not be most effective or preferred by every patient (e.g., [Barnicot et al., 2015](#); [Faith et al., 2024](#)).

Traditionally, PDs have been divided into three clusters based on shared clinical presentations, including traits, behaviors, and patterns of thinking. Specifically, Cluster A PDs are known as the “odd-eccentric” group and are characterized by unusual thinking, social difficulties, and distrust/detachment from others. Cluster A PDs include paranoid personality disorder, schizoid personality disorder, and schizotypal personality disorder. Of note, in this paper, we will use the term “Cluster A PDs” to describe this group of disorders, as this categorization is still common in the literature and in clinical language. However, we acknowledge the problems with a categorical diagnostic system and personality disorder clusters.

Cluster A PDs, in particular, are not well-understood, despite having a relatively high global prevalence rate of 3.8% (Winsper et al., 2020). Cluster A PDs additionally may contribute to risk for other disorders. For instance, Cluster A PDs have been regarded as risk factors for the development of more severe mental illnesses, including schizophrenia (Simonsen & Newton-Howes, 2018) and linked to various functional impairments in employment, independent living, and quality of life (McClure et al., 2013). Both pharmacological (Koch et al., 2016) and psychosocial treatments (Cheli et al., 2025) options for Cluster A PDs are limited. This is especially true for paranoid and schizoid PDs as schizotypal PD is generally better understood and researched. Importantly, despite potential stigma, treatment for this group is not contraindicated (Bartak et al., 2011) with one recent meta-analysis reporting that available treatments options were feasible and effective despite being limited (Cheli et al., 2025). Taken together, these findings highlight the need for improved frameworks to better understand complex self and interpersonal disturbances associated with PDs. Dimensional models may offer one avenue for clarifying difficulties and informing personalized treatment approaches.

1.1. Models of Personality Disorder

Although still widely used, the categorical diagnostic system of PDs has been critiqued for oversimplifying complex personality presentations, not addressing high comorbidity and heterogeneity of PD diagnoses (e.g., arbitrary cutoffs between “normal” and “abnormal”), and lack of clear treatment implications (Herpertz et al., 2017; Monaghan & Bizumic, 2023). To address these issues, dimensional or hybrid diagnostic models have been proposed as a way to improve research, assessment, and treatment (Morey & Hopwood, 2020; Kramer et al., 2022; Skodol, 2015). In fact, emerging research on personality disorders suggest that a dimensional approach may be more beneficial for informing treatment than a categorical approach (Hopwood et al., 2018; Mulder, 2021; Sharp & Wall, 2021).

The Alternative Model of Personality Disorders (AMPD), Section III of the DSM-5-TR (American Psychiatric Association, 2022) was proposed to outline a dimensional model and ultimately direct treatment. The AMPD is a hybrid categorical and dimensional approach. Criterion A includes self and interpersonal disturbances in personality functioning as core pathology. Criterion B includes five trait domains (negative affectivity, detachment, antagonism, disinhibition, and psychoticism) which encompass twenty-five trait facets that allow for diagnosis of six different personality disorders (schizotypal, antisocial, borderline, narcissistic, avoidant, and obsessive-compulsive PD). Of note, schizotypal PD is the only Cluster A PD to be retained as a distinct diagnosis within this system, potentially due to its more substantial research base and theoretical connection to schizophrenia spectrum disorders. However, other presentations can be represented dimensionally through impairments in personality functioning (Criterion A) and maladaptive trait configurations (Criterion B). For example, schizoid PD may be described primarily in terms of a high level of detachment whereas paranoid PD would be defined by high levels of antagonism and negative affectivity.

Importantly, these dimensional criteria guide individualized treatment by highlighting specific areas of dysfunction rather than focusing on broad diagnostic categories. This

allows for more personalized treatment and the incorporation of existing treatment-based models to provide empirically supported therapies to individuals with PDs. We propose that the integrated model of metacognition offers one such framework. As reviewed in depth below, the integrated model of metacognition aligns conceptually with the AMPD, is well-established in schizophrenia-spectrum disorders, and corresponds with existing empirically supported treatments.

1.2. Current Paper

In this conceptual paper, we review theoretical and empirical literature relevant to understanding PDs through the integrated model of metacognition and AMPD. Although the AMPD is broadly applicable across personality pathology, the present review focuses on Cluster A PDs due to clearer conceptual and empirical links to metacognitive functioning. Within Cluster A presentations, schizotypal PD is emphasized due to comparatively more empirical literature examining schizotypal PD within the AMPD and metacognitive models. We first review the integrated model of metacognition and its conceptual relationship to dimensional models of personality pathology with particular emphasis on the AMPD. Next, we review the existing literature related to metacognitive functioning in Cluster A PDs with emphasis on schizotypal PD. Finally, we consider potential clinical implications, including metacognitively oriented treatments that may have relevance for schizotypal and related personality pathology.

2. Methods

Literature for this conceptual review was identified through searches of PsycINFO and PubMed using combinations of keywords including metacognition, schizotypal personality disorder, schizoid personality disorder, paranoid personality disorder, Cluster A personality disorders, alternative model for personality disorders, AMPD, and metacognitive treatment. A broad search strategy was intentionally employed given limited research focused on the AMPD, metacognition, and schizotypal and related PDs. Reference lists of relevant articles were also reviewed to identify additional sources. Searches were conducted between February 2026 and April 2026 and were limited to English-language articles. No restrictions were placed on publication date or study design in order to capture both foundational and emerging literature relevant to metacognition, personality pathology, and the AMPD.

Searches were conducted to identify literature addressing three areas relevant to the present review: (1) metacognition in relation to dimensional models of personality pathology (e.g., “metacognition” AND “alternative model of personality disorder”), (2) metacognitive functioning in schizotypal and related personality disorders (e.g., “schizotypal personality disorder” AND “metacognition” or “schizoid personality disorder” AND “metacognition”), and (3) metacognitive treatments that may have relevance for schizotypal and related personality pathology (e.g., “schizotypal personality disorder” AND “metacognition” AND “treatment” or “cluster a personality disorder” AND “metacognition” AND “treatment”). Articles were included if they were empirical or theoretical in nature and directly relevant to the three aims of the review. Articles were excluded if they did not address metacognition, the AMPD, or schizotypal and related personality pathology, or if they did not meaningfully inform the conceptual aims of the present review. Although literature related to paranoid and schizoid PDs was reviewed and included where available, the present paper primarily emphasizes schizotypal PD due to its comparatively larger empirical and theoretical literature base.

As a conceptual review, the goal of this approach was to synthesize theoretical and empirical literature relevant to understanding schizotypal and related PDs through the AMPD and metacognition, rather than to provide an exhaustive or systematic evaluation

of all available studies. We chose a conceptual review for its flexibility and ability to be used to contribute to theory, identify gaps in the literature, and offer a critique of existing literature (Hulland, 2020). Accordingly, the search strategy was intentionally flexible and iterative, with final sources prioritized based on relevance to the aims of the review, theoretical contribution, and clinical applicability. This included foundational empirical and theoretical work related to metacognition and personality pathology. Given the limited literature examining metacognition in Cluster A PDs, particularly outside schizotypal PD, some conceptual inferences were drawn from broader PD and schizophrenia-spectrum research. As such, conclusions regarding mechanisms and treatment implications should be considered preliminary.

3. The Integrated Model of Metacognition and the AMPD

The integrated model of metacognition proposes that metacognition includes a spectrum of cognitive activities, ranging from the ability to identify discrete thoughts or emotions to the ability to integrate complex narratives into a broader, evolving personal life narrative (Lysaker et al., 2020a; Lysaker & Klion, 2017). This model includes four interacting, yet distinct domains: self-reflectivity, understanding the mind of the other, decentration, and mastery. Self-reflectivity is defined as the capacity to understand the self in increasingly complex and integrated ways. This may range from the ability to identify a specific thought or emotion to the ability to integrate multiple narratives into a cohesive and evolving sense of self. Higher levels of self-reflectivity may contribute to a more cohesive and integrated understanding of the self, reflecting intact identity processes. Understanding the mind of the other is similar to self-reflectivity but relates to metacognitive ability pertaining to a specific other (e.g., partner, coworker). For example, understanding the mind of other ranges from being able to identify that others have distinct thoughts and emotions to understanding a specific other in an increasingly complex way which includes making guesses about their intentions and integrating narratives into one's understanding of the other. Higher levels of understanding the mind of the other may contribute to improved relationships and interactions with others. Decentration is the ability to see one's community as a collective of individuals with unique histories, thoughts, desires, and experiences. Importantly, decentration allows individuals to interpret events as unrelated to oneself. Without intact decentration, a person may predominately focus on oneself and believe that all noteworthy events are related to oneself. Finally, mastery is the capacity to use metacognitive knowledge about the self, others, and the wider world to understand and respond to psychosocial challenges. Mastery may range from passive strategies (e.g., engaging in gross avoidance) to more active strategies (e.g., changing one's thoughts about a psychosocial challenge) to integrative strategies (e.g., using unique metacognitive knowledge about the self to respond to challenges). Mastery can help a person know how to face challenges effectively in the flow of life.

Metacognition is similar to several important constructs, including mentalization, social cognition, and narrative identity; however, key differences exist (see Lysaker et al., 2021 for a full review of similarities and differences). For example, mentalization research posits that difficulties forming ideas about self and others stem from differing attachments, while metacognition research conceptualizes that difficulties forming ideas about self and others stem from fragmentation of thought and experience. Importantly, this fragmentation is not understood as restricted to a specific developmental period, but rather as a process that may arise throughout the lifespan when experiences such as trauma, interpersonal adversity, or severe mental illness disrupt the capacity to integrate thoughts, emotions, and experiences. Social cognition is a broader construct which includes discrete skills or abilities (i.e., theory of mind, emotion recognition). Metacognition, as defined by the integrated model of metacognition, differs in that it emphasizes the integration of cognitive, emotional,

and social experiences related to the self, others, and wider world in increasingly complex and evolving ways rather than the accurate identification of specific mental states or social cues. Finally, metacognition (especially at higher levels of functioning) and narrative identity both emphasize the integration of experience into a cohesive life narrative. Intact metacognition has been proposed as a precursor of sorts to the development of narrative identity such that lower levels of metacognitive ability (i.e., the ability to identify thoughts and emotions) provide the foundation for building a life narrative (Lysaker et al., 2022; Wiesepepe et al., 2023).

Broadly, we used the integrated model of metacognition in this review for several reasons. First, in this model, metacognition is a measurable construct and is assessed using the Metacognitive Assessment Scale-Abbreviated (MAS-A; Lysaker et al., 2005). The MAS-A attempts to measure both the automatic and purposeful processes that represent affective and cognitive experiences, rather than discrete experiences. Measuring metacognition in this way may be a more accurate representation of the processes operating in real world interactions that may be barriers for people with personality disorders. For example, metacognition is thought to uniquely contribute to understanding disturbances in how individuals may make sense of and respond to experiences within the flow of their life. Second, the integrated model conceptualizes metacognition as hierarchical and integrative, with more complex abilities building upon more basic skills. This dimensional structure may provide a useful framework for understanding individuals across a broad range of personality functioning and severity. Finally, the integrated model emphasizes how individuals organize and integrate experiences related to the self, others, and world in everyday life, which may offer relevance for understanding the complex self and interpersonal disturbances emphasized in the AMPD.

We propose that the four domains of metacognition described within the integrated model of metacognition (self-reflectivity, understanding the mind of the other, decentration, and mastery) map meaningfully onto the disturbances described within the AMPD. Specifically, impairments in metacognitive capacity may parallel the disruptions in self and interpersonal functioning emphasized by the AMPD framework. In the sections that follow, we elaborate on these conceptual connections and consider their implications for understanding Cluster A personality pathology. See Table 1 for the proposed conceptual alignment between the integrated model of metacognition and the AMPD.

Table 1. Conceptual alignment between the integrated model of metacognition and the AMPD.

Metacognitive Domain	AMPD Domain (Criterion A)	AMPD Trait (Criterion B)	Potential Clinical Manifestation
Self-Reflectivity	Identity	Psychoticism	Fragmented or unusual self-narratives; difficulty integrating experiences into a coherent sense of self
Understanding the Mind of Others	Intimacy	Detachment	Difficulty developing nuanced representations of others; social withdrawal and limited use of social supports
Decentration	Empathy	Negative Affectivity (Suspiciousness)	Difficulty understanding others’ perspectives independent from self-referential interpretations; experiences of paranoia
Mastery	Self-Direction	Psychoticism, Detachment	Difficulty using an integrated understanding of self and others to respond adaptively to psychosocial challenges

3.1. Self-Disturbances

The AMPD understands self-functioning to include identity and self-direction. Thus, as mentioned above, people with PDs may have difficulty developing a stable and integrated idea of themselves and a sense of agency or self-direction, which can lead to functional difficulty. More specifically, Cluster A PDs tend to be characterized by odd, eccentric or un-

usual thoughts and beliefs (American Psychiatric Association, 2022), which likely impact the development of a multi-faceted and complex sense of self. For example, youth with higher levels of schizotypal PD traits have been found to display alterations in narrative identity, including lower levels of agency and fewer themes of redemption (Shiner et al., 2021). These narratives are also more likely to contain Cluster A- and schizotypal-related descriptions of symptomology, indicating that these symptoms are a key aspect of one's understanding of self (See et al., 2021). Disruptions in identity may then impair self-direction by weakening the integration of past experiences, present functioning, and future goals, thereby reducing the capacity for consistent, goal-oriented action. We propose that metacognitive domains of self-reflection and mastery may offer an actionable clinical framework for understanding and treating self-disturbances in Cluster A PDs.

3.1.1. Identity and Self-Reflectivity

As stated earlier, self-reflectivity, as defined by the integrated model of metacognition, is the capacity to form increasingly complex and integrated understandings of the self. Self-reflectivity appears aligned with the AMPD domain of identity, as both constructs involve the capacity to recognize, organize, and integrate one's internal experiences into a coherent understanding of the self (Morey et al., 2011). Both metacognitive and AMPD frameworks highlight the importance of integrating internal experiences into an organized and flexible sense of identity. From this perspective, impairments in self-reflectivity could potentially undermine the capacity to revise self-representations in light of new experiences, resulting in rigid or poorly integrated identity structures. For example, a person with personality pathology may hold a maladaptive belief that does not change when presented with new, conflicting information and which ultimately impacts one's understanding of self. These difficulties may be particularly pronounced in Cluster A PDs, where disturbances in self-experience may be odd or eccentric and often co-occur with social-cognitive and interpersonal dysfunction (e.g., detachment from others).

Recent research has explored the links between metacognition and identity, suggesting that intact metacognition is necessary for narrative identity to evolve with novel experiences (Lysaker et al., 2022; Wiesepepe et al., 2023). Without the ability for narratives to evolve, one's identity may become stuck or stagnant. In regard to PDs, life narratives may be helpful to conceptualize a person's self-functioning in terms of subjective experience. Millon and Davis (1996) describe PDs as multifaceted entities, in that each disorder has one central part that is composed of multiple elements (e.g., personal beliefs, behavioral patterns, etc.). For example, individuals with schizotypal PD may construct narratives characterized by unusual beliefs and perceptions in the interpretation of their experiences. Schizotypal presentations may further include tangential or loosely organized narratives, reflecting difficulties in the integration of internal experiences with shared social reality (Cowan et al., 2021). In paranoid personality presentations, which are often characterized by suspiciousness, narratives may be organized around expectations of harm or exploitation, with events interpreted through a lens of mistrust (Lee, 2017). In schizoid personality pathology, narratives may be marked by emotional constriction, detachment, and a diminished emphasis on interpersonal relatedness (Thomson & Bornstein, 2024). Although there is a dearth of direct empirical research connecting metacognition to identity in Cluster A PDs, the metacognitive domain of self-reflectivity may provide one framework to better measure and understand identity disturbances.

3.1.2. Self-Direction and Mastery

Mastery is defined as the ability to recognize a psychological problem and use metacognitive knowledge to respond to and manage this problem. Within this metacognitive do-

main, management approaches range from more maladaptive strategies (e.g., general avoidance) to more adaptive strategies (e.g., changing thoughts about the problem or using unique metacognitive knowledge about the self, others, and the wider world to cope). Of note, a psychological problem is not a specific symptom or diagnosis, but rather a psychosocial challenge that can be mutually understood and reflected upon (e.g., I feel abandoned when my partner steps away after a disagreement or I do not have many friends because I have trouble trusting people). Measuring and understanding deficits in metacognitive mastery may help to better conceptualize and treat the lack of agency and self-direction common for people with PDs.

Generally, individuals with PDs tend to utilize coping strategies related to escape and avoidance and underutilize strategies related to problem solving and reappraisal strategies (Bijttebier & Vertommen, 1999; Watson & Sinha, 2000). Specific to Cluster-A PDs, these individuals have been found to typically engage in avoidance-based coping strategies and generally do not seek social support (Bijttebier & Vertommen, 1999), indicative of lower levels of metacognitive mastery. Further, individuals with schizotypal PD utilize more emotion-focused strategies (as opposed to problem solving strategies), generally endorse more uncontrollable stress than a control group (Zong et al., 2010), and endorse lower levels of self-agency (Asai & Tanno, 2008). More explicitly related to metacognition, it has been found that individuals with PDs have difficulties in metacognitive mastery which tend to persist even over the course of psychotherapy (Carcione et al., 2011). Although metacognitive mastery has been explored in other PDs (e.g., Lysaker et al., 2017; Outcalt et al., 2016), there are limited studies exploring these constructs in Cluster A PDs.

3.2. Other Disturbances

The AMPD describes interpersonal functioning as including both empathy and intimacy. Empathy involves the ability to think about another person's thoughts and emotions and appropriately respond, whereas intimacy involves the ability to connect and bond with another person. Across Cluster A PDs, research supports a pattern of disconnection, social avoidance, and suspiciousness (Wilson et al., 2017). For example, individuals with schizoid PD often display restricted emotional expression and alexithymia, which may limit emotional attunement and connection with others (Chaim et al., 2024). Similarly, schizotypal PD is associated with discomfort in close relationships, reduced empathy, and social withdrawal, often reinforced by stigma toward odd behaviors and perceptual experiences (Wilson et al., 2017; Hammer et al., 2024). In paranoid PD, pervasive distrust and suspiciousness may further disrupt reciprocal interpersonal engagement (Wilson et al., 2017). We propose that deficits in metacognitive abilities related to understanding others and decentration, as defined above, may interfere with the development and enactment of empathy and intimacy. Stated differently, disturbances in metacognitive abilities that contribute to interpersonal functioning may result in difficulty forming lasting connections or relationships (intimacy) and reduced ability to understand and respond to the experiences and perspectives of others (empathy).

3.2.1. Intimacy and Understanding the Mind of the Other

Understanding the mind of the other refers to the capacity to form increasingly complex understandings of specific others. This ability allows for individuals to develop more nuanced representations of other people in their lives (e.g., a romantic partner, a coworker, etc.), including the ability to recognize others' mental states, develop social insight, and identify patterns in relationships and interpersonal schemas. These representations are thought to be closely tied to the capacity to form and sustain close, intimate relationships, as

intimacy may require flexible and integrated understandings of others across contexts. Thus, deficits in understanding the mind of the other may constrain the development of intimacy.

Broadly, depth and duration of connection, desire for closeness, and reciprocity are often impaired across individuals with personality pathology. Recent AMPD research suggests that individuals high in personality dysfunction (detachment, disinhibition, negative affectivity, psychoticism and antagonism) experience functional difficulties in maintaining reciprocal relationships with others and show poorer attachment to others (Di Caro et al., 2025). Relatedly, individuals with Cluster A PDs demonstrate impairments in metacognitive domains involving understanding the thoughts, emotions, and intentions of others (Carcione et al., 2019). More specifically, these individuals struggle to identify others' internal states and form integrated representations of others, resulting in rigid beliefs about others as hostile or untrustworthy. These processes may further consolidate patterns of social withdrawal and/or eccentricity characteristic of Cluster A personality pathology. Taken together, impairments in understanding the mind of the other could potentially limit the development of flexible and integrated representations of others, thereby constraining intimacy and reinforcing the social distance and interpersonal difficulties characteristic of Cluster A personality pathology.

3.2.2. Empathy and Decentration

Decentration is defined as the awareness that others have unique histories, thoughts, and experiences that form complex lives independent from oneself. This includes the ability to decenter the self and recognize that one is not the center of all noteworthy events. This capacity is related to the ability to take the perspective of others, consider alternative and valid thoughts, and view one's community as a collection of unique individuals. Each of these abilities may be related to the development and enactment of empathy, defined by the AMPD as the ability to appreciate others' experiences and motivations (American Psychiatric Association, 2022). Thus, we propose that without intact decentration, the development of empathy may be restricted or otherwise stunted.

Broadly, metacognition has been found to be significantly correlated with empathy, and it has been suggested that interventions that target metacognition are also helpful in enhancing empathy (Bonfils et al., 2018, 2019). This raises the question of if deficits in decentration may represent a mechanism underlying impairments in empathy, particularly in severe personality pathology. In particular, these processes may be relevant to Cluster A PDs, where impairments in interpersonal relatedness are central (American Psychiatric Association, 2022). For example, in paranoid personality presentations, limited decentration may manifest as a tendency to interpret others' behaviors as self-referential and threatening, along with a reduced capacity to consider alternative explanations (Trotta et al., 2021). This bias could constrain empathic understanding by narrowing the range of possible interpretations of others' intentions. In schizoid PD, impairments in decentration may be reflected in diminished engagement with others' experiences. This would be consistent with evidence of reduced social motivation and restricted emotional expression observed in the condition (Triebwasser et al., 2012). Impairments in decentration may thus be relevant to consider in future research focused on empathy in PDs.

3.3. Metacognition and Criterion B Traits

Although the current paper emphasizes the alignment between the integrated model of metacognition domains and the AMPD's disturbances in self and interpersonal functioning (Criterion A), metacognition may also have conceptual relationships with specific maladaptive traits domains and facets described within Criterion B. Specifically, trait domains commonly associated with schizotypal and related PDs, including psychoticism,

detachment, and negative affectivity (Kwapil & Barrantes-Vidal, 2022), may correspond with deficits in metacognitive functioning. For example, psychoticism may be associated with difficulties integrating experiences into coherent and flexible understandings of the self, whereas detachment may reflect disruptions in the ability to form nuanced interpersonal representations of others and sustain social connection. Relatedly, suspiciousness, a facet of negative affectivity, may also correspond with difficulties in decentration or understanding the intentions of others. Although conceptual overlap appears clinically relevant and research has generally linked metacognition to experiences related to psychosis (Lysaker et al., 2020b), detachment (Lysaker et al., 2011) and suspiciousness (Lysaker et al., 2005), empirical studies directly linking metacognition with specific AMPD traits remain largely underdeveloped and offers a future direction for research.

4. Metacognitive Functioning in PDs

Although we have explored the potential conceptual overlap between the integrated model of metacognition and the AMPD above, empirical literature supporting the presence of metacognitive deficits in PDs remains limited. However, metacognitive deficits have been theorized to be a core, underlying element of personality pathology, which impact clinical processes and contribute to symptoms and interpersonal challenges that result in treatment that is both slower to demonstrate improvements and less effective overall (Carcione et al., 2019). Broadly, Semerari et al. (2014) found impaired metacognition in a sample of individuals with a range of PDs. Further, degree of personality pathology (i.e., severity) was found to be significantly related to metacognitive dysfunction. As related to treatment, individuals with PDs (borderline, narcissistic, avoidant, dependent, obsessive-compulsive, and paranoid) may display persistent deficits in metacognitive domains even after engaging in psychotherapy (Carcione et al., 2011). Of note, research has predominately focused on including individuals with broader personality pathology or Cluster B PDs (e.g., Lysaker et al., 2017; Outcalt et al., 2016) with less emphasis on Cluster A PDs.

Cluster A PDs

In addition to metacognitive deficits being broadly present across personality disorders, differing metacognitive profiles may characterize Cluster A PDs in a way that could inform treatment. This may be especially relevant for schizotypal PD, as explored below. Although Cluster A PDs in general have been regarded as risk factors for the development of schizophrenia (Simonsen & Newton-Howes, 2018), it has long been recognized that schizotypal PD is more directly related to schizophrenia spectrum disorders. For example, a review by Rosell et al. (2014) identified schizotypal PD as a “intermediate schizophrenia-spectrum phenotype” and noted numerous similarities between schizotypal PD and schizophrenia spectrum disorders related to genetics, neurocognitive functioning, neurobiology, and environmental risk factors. Metacognitive deficits are well established in schizophrenia spectrum disorders (e.g., Lysaker & Dimaggio, 2014; Lysaker et al., 2012, 2020a), contributing to the potential theoretical connection between Cluster A PDs and metacognitive deficits. It is possible that metacognitive frameworks and treatment approaches for schizophrenia spectrum disorders may share conceptual overlap for people with Cluster A, and specifically schizotypal PDs. Relatedly, metacognition has been proposed as a transdiagnostic determinant of recovery in schizotypal PD (Wiesepape et al., 2024). Finally, although empirical studies establishing metacognitive deficits in Cluster A personality disorders are severely limited, treatment studies have begun to explore the relationship between Cluster A PDs and metacognition (Catania et al., 2023; Cheli et al., 2019, 2021, 2023), as further discussed below.

5. Metacognitive Treatments

We propose that metacognitive therapies may offer a potentially useful approach to the treatment of PDs. Of note, several metacognitive therapies exist, including Metacognitive Interpersonal Therapy (MIT; [Dimaggio et al., 2015](#)), Metacognitive Therapy (MCT; [Wells et al., 2020](#)) and Metacognitive Reflection and Insight Therapy (MERIT; [Lysaker & Klion, 2017](#)). Therapies that utilize the integrated model of metacognition may have the potential to address core personality pathology proposed by the AMPD (i.e., self and interpersonal disturbances). Together, these frameworks could help inform individualized treatment based on presenting the problem, metacognitive functioning, personality trait pathology, and core disturbances.

Preliminary evidence suggests metacognitively oriented treatments may be associated with improvements in metacognition and personality pathology. For example, in a sample of individuals diagnosed with PDs (10 participants diagnosed with paranoid PD, 1 with schizotypal PD, and none with schizoid PD), improvement was noted in metacognition, personality severity, symptom distress, interpersonal problems, and global functioning after one year of metacognitive-oriented therapy ([Carcione et al., 2019](#)). In addition to improvements in metacognition, symptoms, and functioning, therapy that focused on processes related to metacognition resulted in an increase in themes of agency in life stories as well as increases in the perceived number and quality of close relationships, suggesting potential changes in self and interpersonal disturbances ([Pol et al., 2023](#)).

More specific to Cluster A PDs, Cheli and colleagues (2019) compared two metacognitively oriented therapies, MIT and MERIT, as treatment options for schizotypal personality disorder. They found that both therapies were acceptable and were associated with reliable changes in symptomology and reductions in schizotypal features ([Cheli et al., 2019](#)). [Dmitryeva et al. \(2021\)](#) outlined MERIT specifically with an individual diagnosed with schizotypal personality disorder and described improvements in both metacognition and functioning. Other studies have demonstrated additional support for metacognitive therapies with individuals with schizotypal PD ([Catania et al., 2023](#)), schizoid PD ([Cheli et al., 2023](#)), and paranoid PD ([Cheli et al., 2021](#)). Although metacognitively oriented therapies may have potential relevance for Cluster A PDs more broadly, empirical support remains limited, with most existing literature focused on schizotypal PD. Additional research is needed to better understand the applicability to these approaches across Cluster A and other PD presentations.

6. Limitations

This conceptual review has several limitations that should be acknowledged. We hoped to offer a conceptual review that may contribute to theoretical and clinical frameworks of PDs. However, as the review was non-systematic it was subject to selection bias. Second, direct empirical literature examining metacognition and metacognitive treatments in Cluster A PDs was limited. Third, although paranoid and schizoid PDs were discussed where relevant, there was substantially less evidence linking these presentations to a metacognitive model compared with schizotypal PDs. Based on these limitations, any conclusions or perceived relationships must be interpreted with an abundance of caution. In addition, the limitations of this review support the need for more research exploring metacognitive functioning in PDs, especially as conceptualized by dimensional models. Future research may benefit from examining whether the conceptual relationships discussed in the present review extend to other forms of personality pathology beyond schizotypal and related presentations. Empirical research may focus on establishing how metacognitive deficits may relate to PDs, especially as related to self and interpersonal disturbances and specific PD traits. Additional research, including randomized controlled trials of metacognitively oriented interventions

in PDs, may help clarify the potential clinical utility of these approaches and further examine their relationship to AMPD-based conceptualizations of personality pathology.

7. Conclusions

The current paper reviewed the integrated model of metacognition as a potentially clinically relevant framework for understanding PDs within the AMPD. We synthesized preliminary and emerging literature on metacognitive deficits in schizotypal PDs and other Cluster A PDs when research was available. We highlighted disturbances in self and interpersonal functioning as core features of personality pathology and proposed that the integrated model of metacognition may offer a useful lens through which to conceptualize and assess these difficulties. In addition, we briefly reviewed metacognitively oriented psychotherapies as approaches that conceptually align with dimensional models of personality pathology and may help address impairments in identity, self-direction, intimacy, and empathy. Taken together, this work suggests that metacognitive interventions may represent one potentially useful avenue for future research and may help inform the development of more personalized, recovery-oriented approaches to care.

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