

A Framework for Treating DSM-5 Alternative Model for Personality Disorder Features

Christopher J. Hopwood
University of California, Davis

Target: Personality and Mental Health

Contact:

Christopher J. Hopwood, PhD

271 Young Hall

1 Shields Ave

University of California, Davis

Davis, CA 95616

chopwoodmsu@gmail.com

Abstract

Despite its demonstrated empirical superiority over the DSM-5 Section 2 categorical model of PDs for organizing the features of personality pathology, limitations remain with regard to the translation of the DSM-5 Section 3 Alternative Model of Personality Disorders (AMPD) to clinical practice. The goal of this paper is to outline a general and preliminary framework for approaching treatment from the perspective of the AMPD. Specific techniques are discussed for the assessment and treatment of both Criterion A personality dysfunction and Criterion B maladaptive traits. A concise and step-by-step model is presented for clinical decision making with the AMPD, in the hopes of offering clinicians a framework for treating personality pathology and promoting further research on the clinical utility of the AMPD.

Keywords: DSM-5 Alternative Model for Personality Disorders; Psychotherapy; Clinical Utility; Assessment; Personality Disorder

Although the DSM-5 Alternative Model of Personality Disorder (AMPD; American Psychiatric Association, 2013) improves upon the validity of the categorical model of PD in a number of respects (Krueger & Markon, 2014), its clinical utility is less established. Perceived clinical utility is among the chief reasons for the persistence of the categorical model in the DSM (Zachar & First, 2015). A number of case examples are now available in the literature for using the AMPD to develop treatment plans (Bach et al., 2015; Hopwood, Zimmermann, Pincus, & Krueger, 2015; Morey & Stagner, 2012; Pincus, Dowgwillo, & Greenberg, 2016; Simonsen & Simonsen, 2014; Skodol, Morey, Bender, and Oldham, 2015; Waugh et al., 2017), and practice reviews generally suggest acceptability among clinicians (Morey, Skodol, & Oldham, 2014). However, a framework for connecting AMPD features to specific therapeutic techniques is currently unavailable. The goal of this paper is to provide a preliminary framework to guide current practice and future research.

A Multidimensional Treatment Approach

The development and evaluation of treatments has been cited as a criterion for the transition to evidence-based dimensional models (Keely et al., 2016). This criterion implicitly assumes the viability of evidence-based treatments for PD categories. It is therefore noteworthy that the evidence supporting available treatments for PD categories is not particularly strong (Bateman, Gunderson, & Mulder, 2015). There are no evidence-based treatments for most of the PD types. The main exception, borderline PD, has a host of treatments (Bateman et al., 2015), all of which tend to be similarly effective in direct comparisons (e.g., Cristea et al., 2017) and none of which has shown specific efficacy for borderline PD as opposed

to psychological distress and dysfunction more generally. Moreover, patients experience borderline symptom improvement regardless of treatment intensity or type in naturalistic studies (Wright, Hopwood, Morey, & Skodol, 2016; Gunderson et al., 2011; Zanarini et al., 2012). Thus, while treatments developed for borderline or other PDs have considerable value for thinking about how to approach patients with personality problems, they provide a rather weak justification for retaining a categorical model of PD.

There is nevertheless a need for guidelines for the treatment of PD features from the perspective of the AMPD. One challenge in developing such guidelines is that the AMPD approaches the problem of personality difficulties in a way that is fundamentally different from the categorical PD framework (Krueger, Hopwood, Wright, & Markon, 2014; Waugh et al., 2017). The AMPD does not assert that patients come in specific types which can be effectively discriminated from one another and which are essentially homogeneous, because empirical evidence consistently shows that comorbidity and heterogeneity are pervasive in psychiatric classification (Kotov et al., 2017). It follows that efforts to match a certain treatment to a certain type of patient inevitably fail because certain types of patients cannot be reliably identified. It turns out that the same can be said for treatments: many established intervention approaches share essential features, but they also differ in important ways (Garfield, 1995).

Given that evidence supports the multidimensional structure of both personality and intervention strategies, a useful approach to treating AMPD features should integrate multidimensional models of personality and intervention rather than be organized around specific disorders and specific treatment packages (Clarkin, Cain, & Livesley, 2015; Magnavita, 2010; Millon, 1988; Singer, 2005).

Instead of a 1:1 mapping between a type of patient and a type of treatment, what is needed is a flexible and evidence-based system that can account for what both patients and treatments have in common and how they are different.

It is already routine to distinguish common and specific factors in the psychotherapy research literature (Table 1; Beutler et al., 2011). Common factors like empathy, therapeutic alliance, and expectancy effects (Imel & Wampold, 2008) are thought to be essential for any effective psychotherapy. Specific factors include targeted and theory-specific techniques, such as exposure and response prevention, cognitive restructuring, transference interpretation, pharmacology, contingency management, and homework (Nathan & Gorman, 2015). Treatments for borderline PD also have common and specific factors (Hopwood et al., 2014). For instance, all evidence-based treatments assert the need for enhanced structure and attention to the therapeutic relationship relative to treatments for less severe conditions (Bateman et al., 2015), but whereas in Dialectical Behavior Therapy (Linehan et al., 1991) the therapist takes a supportive “cheerleading” role with the patient, in Transference Focused Therapy (Yeomans, Levy, & Caligor, 2013) the therapist maintains technical neutrality.

The AMPD likewise distinguishes between common and specific features of personality pathology (Table 1). The features that all patients with PD have in common are reflected in Criterion A, Level of Personality Functioning (LPF; Bender et al., 2011). The LPF defines PD as involving impairments related to self (identity and self-direction) and interpersonal (empathy and intimacy) functioning (Table 2). Patients receive a PD diagnosis based on the LPF rating. The features that describe the specific pattern of pathological behavior for an individual patient are listed in Criterion B, maladaptive traits (Krueger et al., 2012) (Table 2). Having diagnosed a

patient with PD, the manner in which personality problems are expressed can be articulated using this trait model. Thus the AMPD allows for a distinction between the overall level of severity of a patient's problems and the specific style in which those problems manifest.

This paper is structured by the distinction between common and specific therapeutic and personality factors (Table 1). I first outline approaches to assessing AMPD features in clinical settings. I then move on to provide suggestions for how to treat Criterion A features with techniques common to all effective psychotherapies for PD. I then offer ideas about how to treat Criterion B features with theory-based techniques that target specific types of patient problems. I conclude by summarizing these suggestions with a practical, step-by-step guide to conceptualizing and treating individuals with PD diagnoses.

Assessment

The principal advantage of the AMPD over the categorical PD model in terms of clinical utility currently lies in its improved ability to articulate the specific features of personality problems. This feature overcomes problems such as comorbidity and heterogeneity and distinguishes the severity of personality dysfunction from the style of personality expression. A careful assessment of Criterion A tells the clinician important information about level of risk, prognosis, and treatment intensity, and it provides a variable for the assessment of change common to all individuals with PD diagnoses. All things equal, the more severe a patient's personality pathology, the greater the risk there is for extreme behavior (e.g., harm to self or others, treatment dropout, criminal issues) and the less optimistic the clinician can be for a smooth treatment with linear, rapid, and

enduring gains (Crawford et al., 2011). Individuals with severe personality dysfunction may need more intense treatments, such as hospitalization or multimodal (e.g., combined group and individual) approaches.

A detailed assessment of Criterion B traits allows the clinician to develop a patient-specific formulation based on the particular manner in which the patient's personality interacts with her environment (see Table 2). This trait model helps the clinician develop an idiographic formulation that implies particular treatment strategies that target the patient's specific problems (Bach et al., 2015).

Several assessment practices can maximize the clinical utility of the AMPD (Table 3). First, the clinician should have an organized plan for how to approach assessing AMPD features. The initial step involves assessing the LPF to establish whether or not the patient meets criteria for PD and to determine the overall severity of his functioning. Having established PD, the clinician should move on to the assessment of maladaptive traits to establish the main areas of his personality that are likely to be associated with problems. The clinician should then carefully assess the patient's social environment, toward a detailed formulation of how his personality interacts with the context in which he lives to give rise to distress and dysfunction.

The hierarchical organization of AMPD features (Wright et al., 2012) facilitates a systematic approach to assessment, because broad domains of maladaptive functioning at the top of the hierarchy can be evaluated first, followed by a more detailed examination of specific features (traits and behaviors) within problematic domains (Ruggero et al., in progress). For instance, if the patient's main problems involve antagonism, the clinician can focus and streamline her assessment by focusing specifically on traits within that domain. Having established that

deceitfulness is the core facet that captures the patient's problems, the clinician may then want to determine when and with whom the patient is dishonest, so that a specific treatment target can be identified. Ultimately, this organized approach to assessment should make use of the nomothetic AMPD variables to develop a specific, detailed, and idiographic assessment of the patient's personality difficulties in a way that balances comprehensiveness with efficiency.

Second, clinicians should use validated assessment tools to assess both Criterion A and Criterion B features. A variety of tools are available for the assessment of AMPD features, including patient-report questionnaires (Criterion A: Hutsebaut et al., 2016; Morey et al., 2017; Criterion B: Krueger et al., 2012; Maples et al., 2016), informant-report questionnaires (Markon, Quilty, Bagby, & Krueger, 2013), and diagnostic interviews (First et al.; in press; Hutsebaut et al., 2017). An AMPD formulation should be based upon data gathered via evidence-based assessment tools.

An advantage of the AMPD is that it is rooted in psychometric models of dysfunction, which permit statistically-based inferences about the extremity of different personality features. This is unlike the medical model, in which severity is determined not by the patient's standing in a distribution, but instead a decision about whether or not they are above or below an arbitrarily established threshold. To take advantage of this feature of the AMPD, the clinician should make clinical inferences based on standardized scores against community and/or clinical norms. By placing the patient in a distribution from standardization samples, norms provide specific information about the extremity of his scores relative to some known group. The clinician should also use the established reliability of AMPD scales to infer confidence intervals around those standardized scores to determine the precision of

her inference. Using validated assessment tools with norms will allow for appreciably more accurate inferences about a patient's functioning than are possible in the standard approach to categorical diagnosis.

It is established that data from different sources often do not converge (e.g., Bornstein, 2017), particularly among PD measures (Klonsky & Oltmanns, 2002; Samuel, 2015). There is little reason to think that one source of information is privileged in terms of validity relative to any other. For instance, Hopwood et al. (2008) found that questionnaire and interview measures of borderline PD were similarly valid and that each had relative strengths (see also Vazire, 2010). This research suggests that different forms of assessment each provide useful information and that clinical assessments that rely too heavily on any single method are likely to miss important information. Clinicians should accordingly use multiple methods and consider carefully test score discrepancies (e.g., when the patient reports more severe dysfunction than her family member). Although the pressures of practice can make multimethod assessment challenging (Hopwood & Bornstein, 2014), in an ideal world the clinician would integrate interview, patient-report, informant report, and other methods to develop a well-rounded AMPD diagnosis (e.g., Pilkonis et al., 1991).

Fourth, empirical evidence supports a collaborative approach to clinical assessment (Finn & Tonsager, 1997; Poston & Hanson, 2010) in which the patient, other providers, and possibly family members are included in the process of formulating the case and developing a treatment plan. Several specific clinician behaviors can enhance collaborative assessment (Finn, 2007). Rather than adopting an expert role, the clinician should frame the patient and clinician as collaborators, for instance by asking the patient what questions she would like to have answered

via assessment, and by fully explaining how any assessment tools would serve to answer those questions. The assessment results can be co-interpreted with the patient, on the assumption that the patient will have some good ideas about what certain findings mean, and the treatment plan can then be developed collaboratively. A collaborative approach can contribute to an enhanced alliance (Ackerman et al., 2000; Hilsenroth, Peters, & Ackerman, 2004) and the patient's commitment to treatment (Allen et al., 2003), and thus gives the clinician the best chances for moving forward with a treatment plan that will be effective.

Finally, follow up data should be gathered at regular intervals to track whether or not the treatment is meeting its goals. This includes assessments of both treatment progress and process. Progress assessments should target the maladaptive traits and dysfunctions identified in the initial assessment as the problematic behaviors the patient would like to change. This could include specific behaviors (e.g., self-harm behaviors, alcohol use), traits (e.g., irresponsibility), or broad domains (e.g., identity problems), depending on the formulation and treatment goals. Process assessments should target the specific interventions that the treatment plan hypothesizes should affect change. The purpose of the remainder of this paper is to describe some of the treatment approaches that might be effectively used to treat AMPD features.

Treatment

Criterion A represents the level of severity that can be used to capture any person with PD. Certain principles become particularly important depending on that level of severity. In the section that follows immediately, I use summaries of treatments for borderline PD to develop general principles for the treatment of

Criterion A features (Table 4), based on the theoretical and empirical similarity between borderline PD and general personality pathology (Kernberg, 1984; Sharp et al., 2015). The different ways PD is expressed tends to get captured with Criterion B traits. In the section below, I offer some suggestions for different treatment strategies depending on the particular trait profile of a given patient.

Treating Criterion A Features

The term “borderline” has historically been used to refer to both a general level of personality pathology (Kernberg, 1984) and a specific category of PD. Interestingly, recent research suggests that borderline PD is a robust indicator of what all PDs have in common (Sharp et al., 2015), and that there is very little specific variance in borderline PD that is left over once this general factor is modeled (Wright et al., 2016). This research implies that borderline PD can be regarded as essentially a general factor of PD. From a treatment perspective, this has important prognostic and intervention implications, because it suggests that interventions designed to treat borderline PD are relevant across different PD types or styles. Put differently, evidence-based recommendations for treating borderline PD are applicable to the treatment of AMPD Criterion A features.

Bateman et al. (2015) distilled five transtheoretical principles from the borderline treatment literature that can be applied as general guidelines for the clinical management of personality severity (Table 3). First, the more severe the patient’s personality pathology, the more important is a structured treatment approach. Patients with severe personality pathology often present with a range of issues and emotional dynamics which can contribute to a discursive, unfocused treatment. Structure gives the clinical team a clear guide for how to respond to the complicated dynamics that often occur in treatments with people whose personality

difficulties are severe and provides the patient with a solid therapeutic frame whose boundaries are clear, so that they know what to anticipate. Structure requires a focused intervention framework and formulation so that every intervention fits into the bigger picture. Bateman et al. recommend treatment manuals as one way to support a structured approach to treatment.

Second, the patient's sense of agency is encouraged in effective treatments. One of the common complications of therapy with patients who have severe levels of personality dysfunction has to do with responsibility for treatment gains (and losses) – is it the therapist, the treatment, or the patient? Significant time can be spent on this issue, and it can lead to misperceptions and complications that interfere with progress. To the extent possible, role expectations should be established early and reinforced throughout treatment. A formal treatment contract may assist the dyad in establishing roles and reinforcing the patient's sense of agency (e.g., Kernberg, Yeomans, Clarkin, & Levy, 2008).

Third, therapists should work to consistently connect feelings to events and actions. This focus addresses a fundamental problem in PD that reliably interferes with self and interpersonal relations. In contrast, the assumption of an inner coherence on the part of the patient is likely to lead to therapeutic rupture and impasse. Terms like mentalizing and mindfulness have been used to describe suites of techniques designed to address disconnections between inner experiences and outer behaviors.

Fourth, effective therapists are active rather than passive. Patients with severe pathology will be unlikely to make use of a therapy in which the patient is responsible for the content and focus of the treatment. This principle harkens to the early meaning of the term borderline, which was used to refer to a group of patients

who seemed neurotic upon first assessment, and thus amenable to psychoanalysis, but decompensated in the context of a hidden and interpretive analyst, suggesting the need for a more direct therapeutic approach (Stern, 1938). Therapy should be dialogic, meaning that there is a continuous interaction between clinician and patient, and the patient should have the sense that the clinician is appropriately emotionally involved in the relationship. Pre-session preparation in which the clinician consults the treatment plan and takes regular assessments of progress could facilitate this goal.

Finally, clinicians with patients who have severe personality difficulties should seek regular consultation or supervision to discuss their cases, their strategies, and their personal reactions to the dynamics of the therapeutic relationship. Consultation can provide the clinician with support, help keep the treatment on track, and prevent counter-transference or frame-breaking behaviors from interfering with treatment.

The treatment literature generally indicates that common factors have a more powerful impact on therapy outcomes than specific interventions (Ahn & Wampold, 2001), and a similar effect is apparent in the treatment for PD (Bateman, 2012). If the clinician is not sensitive to the patient's overall level of suffering and dysfunction, empathically attuned to the dynamics that are occurring in the consulting room and the patient's life, and sufficiently flexible to adjust his techniques in light of the patient's overall level of severity, it is unlikely that specific techniques targeting focal problems will be effective. This fact probably explains the association of PD diagnosis with patient dropout (Thormählen et al., 2003) and elevated levels of clinician burnout (Linehan et al., 2000) in treatments for people with PD features. That is to say, it is commonly regarded as paramount to carefully

assess personality dysfunction and make use of that information throughout the treatment process.

Treating Criterion B Features

Two issues need to be addressed before moving on to the specifics of treating AMPD Criterion B features. The first involves the variety of approaches that can be taken to treating specific kinds of problems, in general. The second has to do with the overlap between AMPD personality dysfunction (i.e., what Criterion A is designed to assess) and traits (Criterion B).

Relational and Behavioral Approaches. There are many more techniques than most clinicians can keep track of, but a few general dimensions underlie most of them (Tracey et al., 2003). To account for the different ways clinicians of varying perspectives might approach treating Criterion B features, I will make a basic distinction between relational and behavioral families of treatment. This distinction corresponds to the two clusters of techniques labeled as “hot” and “cool” in a multidimensional scaling analysis of therapeutic common factors by Tracey and colleagues (2003). The behavioral approach stems from the behavioral and cognitive traditions, is relatively logical and analytical (thus the term “cool”), and uses principles of learning as mechanisms of change. The clinician takes the role of a coach or teacher, and the focus is on the identification of problem behaviors and explicit training and practice in modification. The relational approach stems from the humanistic and psychodynamic traditions, stays relatively nearer emotional experience in the here and now (thus the term “hot”), and uses the therapeutic relationship as a mechanism of change. The clinician and patient are seen as two individuals in a highly personal relationship who have a shared goal of becoming

more aware of affectively evocative interpersonal patterns so that they can be changed with intention.

A variety of approaches tend to fall somewhere between these two extremes, and most approaches to PD treatment integrate them to some degree. So far as the empirical literature is concerned, there is scant evidence that there are meaningful differences in effectiveness between these two or any other principled approaches (Wampold, 2007). Most clinical problems can be approached from relational, behavioral, or integrative perspectives, but it is also true that certain clinicians are likely to be more comfortable with one or another approach. It also seems likely that certain patients will respond better to certain therapeutic styles. In general, the relative emphasis of relational and behavioral techniques should be considered based on the individual preferences of clinician and patient, the ongoing assessment of the patient's change (with the caveat that there should be a very good reason to make dramatic changes to treatment approach, particularly with patients who have a severe level of personality dysfunction), and the degree to which the stimulus is interpersonal and manifest in the treatment relationship (in which case a relational approach may be indicated) or related to non-interpersonal objects (e.g., fears of specific objects, alcohol use; in which case a behavioral approach may be indicated).

A third general approach to treatment is pharmacological, and there are effective pharmacological treatments for behaviors connected to the traits Negative Affectivity (e.g., SSRIs, anxiolytics, MAOIs), Disinhibition (e.g., stimulants), and Psychoticism (e.g., anti-psychotics) domains. I will not go into detail about these approaches, but as a general rule it is wise to consider medications or to consult

with a psychiatrist regarding the applicability of medications for the treatment of particular symptoms.

Severity and Style with Criterion B. While there is significant evidence supporting the hypothesis that personality and PD symptoms can improve (Gunderson et al., 2011; Zanarini et al., 2012), this work has not distinguished personality style from severity (Calabrese & Simms, 2014). Wright et al. (2016) showed that it is the general severity component of personality pathology that tends to change, whereas personality style tends to be relatively slight. The results of this study could be interpreted as suggesting that people tend to stay essentially who they are, even if successful treatment helps them adapt who they are to their environment more effectively.

A complication of the AMPD in terms of clinical utility is that the maladaptive trait model of Criterion B includes both severity (the dysfunction that is generally the target of improvement, and which longitudinal research suggests improves over time) and style (individual differences in personality that are not generally a treatment target, and which may be relatively more stable over time) (Morey, Good, & Hopwood, under review). Research suggests that the overlap of assessment tools measuring these two criteria is substantial, and incremental validity is limited (Bastiaansen et al., 2016; Berghuis et al., 2014; Few et al., 2016). It is reasonable to expect some reduction in pathological traits with treatment to the degree that dysfunctional aspects of those traits decline, even if the basic personality structure remains intact. For instance, a pathologically detached person will probably remain relatively taciturn, even if she learns more effective means of social interaction in situations where it is appropriate through treatment. It would generally not be a goal to make her the life of the party, but rather to help her adapt her introverted

personality style to her environment in a way that does not contribute to distress or dysfunction.

In this sense, the DSM-5 Criterion B features represent reasonable treatment targets, in that successful treatment would generally involve a reduction in maladaptive traits, and most formulations would target the most elevated traits. At the same time, the therapeutic goal is usually not to restructure the configuration of those traits, but rather to quell the degree to which the traits contribute to distress and dysfunction.

It is important to note that longitudinal studies of PD patients suggest that functioning remains poor even when symptoms remit (Skodol et al., 2005; Zanarini et al., 2010). These results could be explained by sampling issues, in that the features that decline the most were those on which the patients were sampled. Indeed, the Wright et al. (2016) study referenced above uses data from one such study, and shows that within the PD assessments on which patients were sampled, general indicators of functioning declined more rapidly than assessments of individual differences in personality style.

A Treatment Framework for Criterion B Traits. An emerging literature supports the clinical utility of personality traits for intervention. Research suggests that traits change in an adaptive direction in response to psychotherapy (Carl et al., 2014; Jackson et al., 2012; Roberts et al., in press), that patients with less adaptive personality traits may have worse treatment response (Ogrodniczuk et al., 2003; Quilty et al., 2008), and that traits predict differential response to pharmacotherapy and psychotherapy (Bagby et al., 2008). As yet, this work has not been systematically connected to the DSM-5 AMPD.

The fact that maladaptive traits are organized into a hierarchy, with broad domains at the top and narrow facets at the bottom, can facilitate a systematic approach to treatment, as described above (Table 2). For instance, a profile might have elevated negative affectivity, with anxiety and separation insecurity as its highest facets. This would suggest that a principal treatment goal would be to help the person become more comfortable with autonomy and less concerned about abandonment. Successful therapy would be indicated by lower scores on those two specific facets, which would drive a reduction in negative affectivity more generally.

Neither space in this manuscript nor evidence in the literature would support specific recommendations for all 25 of the Criterion B facets. Luckily, many treatment strategies are similar across the facets of each domain, even if they target different kinds of behaviors. Space constraints also limit my ability to list the full variety of treatment strategies available in the literature. I describe some general behavioral and relational treatment strategies for each domain (Table 5), with the recognition that ultimately a comprehensive formulation will specify facets, how those facets interact with one another and the patient's environment, and the specific treatment strategies that may be helpful.

Negative Affectivity. Variations of negative affectivity have in common an intense level of negative emotions in response to some environmental stimulus or stimuli, coupled with a learned maladaptive method for coping with those negative emotions (Harkness, Reynolds, & Lilienfeld, 2015; Ormel et al., 2013). This dimension is empirically very similar to the internalizing spectrum that has a long history in psychopathology research (Achenbach & Edelbrock, 1978; Wright et al., 2012). It has also been the dimension that has received the most attention in

treatment research (although typically not as a broad dimension), because it is related empirically to nearly every psychiatric diagnosis (Lahey, 2009).

Behavioral treatments for problems related to negative affectivity typically involve exposure to the environmental stimuli that give rise to negative emotions, a prevention of the maladaptive response to those stimuli, and some reframing of the nature of the potential harm involved in those stimuli (Gratz & Gunderson, 2006; Ormel et al., 2013). These treatments sometimes include some form of relaxation training (Stetter & Kupper, 2002). This general rubric captures what many behavioral and cognitive behavioral treatments for mood and anxiety disorders have in common (Barlow et al., 2014), and initial research suggests that such interventions can lead to reductions in negative affectivity (Carl et al., 2014). Manuals for these treatments may be usefully applied in cases of PD depending on the patient's specific problem (e.g., generalized anxiety vs. separation insecurity vs. depressivity). However, I again caution that in the case of PD, these treatments need to be implemented with careful attention to the therapeutic relationship the balance between reflective, supportive, and change-oriented strategies (Newton-Howes, Tyrer, & Johnson, 2002).

In many instances, particularly among people with PDs, the stimuli that are associated with distress are certain aspects of the self (as occurs with shame and judgment) or others (Bender et al., 2011; Hopwood, Wright, Ansell, & Pincus, 2013). This fact lends itself to a relational approach to treatment (e.g., Bateman & Fonagy, 2004; Levy et al., 2006), under the assumption that the therapist will eventually become a kind of trigger for negative emotions. This could manifest in the form of a rupture between clinician and patient (Safran & Muran, 2006). The goal when this occurs is to develop the habit of reflecting on the rupture, how it reflects a pattern

that generalizes to other aspects of the patient's life, and to work together to develop a new and healthier pattern. The patient may defend against this process, likely with the same form of coping that he applies in his daily life. Such defensive reactions can also be mutually understood, particularly to the degree that the clinician can be empathic and curious about how the here-and-now situation fits the patient's general pattern.

The Interpersonal Domain: Antagonism and Detachment. I pair antagonism and detachment together because they are the two dimensions of the interpersonal circumplex (Leary, 1957; Williams & Simms, 2016), around which a highly generative model of pathology and treatment has already been developed (Pincus, 2005; Pincus & Hopwood, 2012). Doing so comes with the advantage that both tails of Detachment (dominance vs. submissiveness) and Antagonism (warmth vs. coldness) can be explicitly conceptualized within an integrative model that assumes that extremity at either end can potentially be maladaptive (Samuel, 2011). Dysfunctions related to both of these traits have to do with being socially ineffective one way or another. For instance, people who are too submissive have a difficult time asserting themselves, whereas people who are too dominant have a difficult time knowing when to stand back. People who are too warm may be clingy, needy, or hungry for attention, whereas people who are too cold may be cruel or disconnected.

A behavioral approach to treating these kinds of interpersonal dysfunctions would typically involve interpersonal skills training (Beidel et al., 2014; Herbert et al., 2005; Linehan, 2014). In this approach, the patient's interpersonal deficits would be identified and the contexts in which they occur would be isolated. Specific strategies would be employed to help the patient change their interpersonal

behavior. These strategies would be practiced until they are mastered, and generalized to new environments. Behavioral activation represents an alternative and potentially complementary behavioral approach to treating interpersonal difficulties. In this technique, the patient is instructed to increase the frequency of pleasurable activities, and these activities often have a social component (Hopko et al., 2003).

The interpersonal principle of complementarity can be used to frame a relational approach to treating interpersonal difficulties. Complementarity is an evidence-based probabilistic prediction that all things equal, warm behaviors beget warmth whereas cold behaviors beget coldness; dominance begets submission but submission begets dominance (Carson, 1969; Sadler et al., 2009). A corollary is that complementary patterns are generally reinforcing whereas non-complementary patterns generally are not. The therapist can use this principle to encourage therapeutic change (Tracey, 1993). For instance, if a patient were to be submissive and overly compliant during therapy in a manner that corresponds to her primary interpersonal difficulties outside of the consulting room, the therapist could either reinforce or challenge that behavior. If the patient were to say: "I just don't know what to do", a complementary (warm dominant) response might be "I have some ideas to share with you", whereas an anti-complementary (cold submissive) response might be "me neither, you will need to figure this one out for yourself". The former would likely reassure the patient that the therapist is "there" for her but may also reinforce her maladaptive interpersonal style. The latter would be likely to increase anxiety, but could also challenge the patient to try a different interpersonal solution. Relational approaches can build upon this general principle, and couple it with techniques designed to enhance the patient's awareness of interpersonal

patterns, in a way that may lead to corrective emotional experiences and more adaptive interpersonal functioning (Anchin & Pincus, 2010).

Disinhibition. Disinhibition is closely connected to the externalizing disorders of psychopathology (Kotov, Gamez, Schmidt, & Watson, 2010; Wright et al., 2012), which include constructs such as ADHD and substance use. In some (functional, as opposed to factor analytic) sense, disinhibition facets (e.g., irresponsibility, impulsivity, distractibility) reflect the opposite of the negative affectivity facets, in that they involve a behavioral action that is insufficiently constrained by an appreciation of its consequences (Young et al., 2009). Put in a different and oversimplified way, negative affect problems involve internalizing behaviors arising from an overactive amygdala whereas disinhibition problems involve externalizing behaviors that stem from an underactive frontal cortex (DeYoung et al., 2010; Harkness et al., 2014). Whereas treating the features of negative affectivity entails encouraging a person to do a risky thing and helping him understand a better way to deal with associated fear or shame, treating disinhibition involves helping a person understand that the long term payoff is worth sacrificing the short term reward so that he will choose not to do the risky thing.

Behavioral treatments for disinhibition problems usually involve some kind of contingency management and instrumental reinforcement (e.g., Battagliese et al., 2015) which could be supported by some kind of motivational coaching (e.g., Miller & Rose, 2009; Magidson et al., 2014; Roberts et al., 2017), and potentially safety planning and/or relapse prevention (Marlatt & George, 1984). In a sense, the behavioral approach to treating externalizing problems is similar to treatments for internalizing problems, but in the opposite order. That is, the goal is to first reflect upon the consequences of doing or not doing something, become motivated to

make better decisions in general, practice making those better decisions when risky situations arise, and then experience rewards for doing so. This is in contrast to the order in treatments for traits related to negative affectivity, in which the first step is to do something that is unpleasant, and then experience a consequence, and then reflect upon the experience.

In contrast, relational treatments for disinhibition problems tend to be of a piece with relational treatments for negative affectivity problems, because “acting-out” (disinhibition) and “acting-in” (negative affectivity) are thought of as two sides of the same coin. For instance, Safran and Muran’s (2006) taxonomy of ruptures includes those involving confrontation (“acting out”) and withdrawal (“acting in”). In either case, the expectation is that these ruptures will manifest in the therapy dyad in a way that reflects relationship dynamics in the patient’s life, and the goal is to examine the ruptures and develop a modified way of coping with them. Although the techniques may differ slightly depending on whether the rupture manifests as more externalizing/acting out/disinhibitory or more internalizing/acting in/negative affective, the therapeutic process is essentially the same.

Note that, like the interpersonal dimensions, behaviors related to low disinhibition can also be maladaptive (Samuel, 2011). These kinds of problems are represented in the AMPD by rigid perfectionism (Table 2). Problems related to perfectionism, such as obsessive-compulsive behavior and restricted eating, tend to be responsive to the same kinds of treatments as internalizing disorders (Flett & Hewitt, 2002; Shafran & Manzell, 2001).

Psychoticism. Medication and safety planning will probably be necessary for patients with active psychotic conditions. However, many patients with personality problems distort reality to some degree in a manner that can impact psychotherapy.

Research with the AMPD suggests that the facets of the psychoticism domain are strongly related to features of negative affectivity (e.g., Few et al., 2013; Hopwood, Wright, Krueger, et al., 2013), highlighting the interaction between perceptual distortion and more general mental health problems. As such, in this section, I will focus on perceptual dysregulation as a transdiagnostic marker of personality pathology and as assessed by AMPD psychoticism, rather than psychotic process characteristic of diagnoses like schizophrenia.

The central premise of Cognitive Behavioral Therapy is that a more realistic perception of the self and others is associated with improved functioning (Beck, Freeman, & Davis, 2015). A variety of techniques from that tradition, including reframing and thought records, are designed to help patients develop a more accurate appraisal of their social environment and inner world. Techniques such as interpretation, clarification, and confrontation are similarly central to treatments in the relational tradition. It is assumed that patients routinely distort reality about the meaning of others' behaviors, and this is generally dealt with by raising awareness about such distortions and interpreting their meaning in terms of the patient's developmental dynamics. These techniques have in common the assumptions that perceptual distortion is a cross-cutting feature of most personality problems and that any treatment should actively pursue a more accurate and consensual model of reality.

Summary. This section was necessarily brief and speculative, and it admittedly misses significant detail that the clinician would need to make a specific formulation and treatment plan. It neglected both the facet variations of major personality trait domains and the wide variety of treatment techniques available to clinicians with patients who have different kinds of problems. If there is value in the

preceding text, it involves its provision of a general taxonomy of available techniques and a rubric for matching those techniques to broad variation in personality problems. This general framework and more specific extensions offer some guidance to the clinician who wishes to approach the treatment of AMPD feature systematically, as well as a testable scheme for future treatment research.

A Summary of Steps in Treating AMPD Features

The following section summarizes the content above into an efficient rubric for approaching treatment from an AMPD perspective.

- 1) *Carefully assess Criterion A personality dysfunction using validated assessment tools.* Ideally, this assessment would include multiple methods, including patient self-report, clinician-rating, informant-report, and other approaches, and would involve collaboration between the patient, the clinician, and potentially other providers and family members. The greater the level of severity, the more it will be necessary to consider the following modifications to standard treatment:
 - 1a) intensive care, including hospitalization, day treatment, or multiple sessions per week;
 - 1b) multimodal treatment, with careful attention to communication between providers, clear roles and boundaries, and awareness of the possibilities for triangulation;
 - 1c) regular case consultation with colleagues in order to discuss personal reactions to difficult cases and to avoid pathogenic behaviors;
 - 1d) an extended treatment approach, in which change-oriented techniques are supplemented with supportive methods, and modest initial goals;

1e) careful attention to dynamics of the treatment relationship, and a consideration of the relationship in the use of any specific techniques;

1f) a high level of structure, potentially including a treatment contract and safety plan.

2) *Carefully assess Criterion B personality traits, using validated measures.* Again, this would ideally include multiple methods, including patient self-report, clinician-rating, informant-report, and other types of measures. Use a hierarchical approach, where primary domains of dysfunction are first identified, followed by an articulation of the most elevated facets, followed by an assessment of the specific behaviors related to those facets that represent primary treatment concerns.

3) *Develop a coherent and holistic formulation of the patient's problems based on these data and an assessment of the patient's social environment and treatment resources.* This formulation should include a position regarding the relative emphasis on relational and behavioral techniques, as well as specific interventions based on evidence from the psychotherapy research literature that are designed to target primary problems. It should also include suggestions regarding the intensity and duration of treatment, and a plan for regular follow-up assessments to determine progress and consider any necessary adjustments.

4) *Share this formulation with the patient and other treaters to develop a consensual approach to treatment.* In an ideal situation, all parties, including the patient, would be active participants in interpreting the data and developing the treatment plan. Emphasis should be placed on the patient's agency and

responsibility for change, whether as part of an explicit contract or by the manner of relating. The plan should include an explicit agreement regarding the techniques that will be used and how the effectiveness of the techniques will be assessed. This should also include a plan for what will happen if there is treatment interference (e.g., missed sessions), how treaters will communicate with one another, and how to handle crises.

5) *Assess treatment goals regularly.* It may be useful to focus follow-up assessments on subsets of the baseline assessment that correspond to general personality dysfunction (Criterion A), specific maladaptive traits (Criterion B), and any other relevant difficulties. Be wary of dramatic changes to the treatment plan, but flexible about changing course if doing so is consistently indicated by data.

Conclusion

In this paper I have proposed a general framework for using the DSM-5 AMPD to conceptualize and treat patients with AMPD diagnoses. Although I hope that it is useful in guiding clinicians who work with PD patients and framing clinical research on the AMPD, it is necessarily sparse because of limited space and insufficient evidence. Fuller explications that share the general spirit of using personality individual differences to guide treatment are available (e.g., Beutler & Clarkin, 2013; Castonguay & Beutler, 2006; Livesley, Dimaggio, & Clarkin, 2016; Magnavita, 2010; Millon & Grossman, 2007; Paris, 1998; Roberts et al., 2017; Singer, 2005).

The ICD-11 has proposed a model for PD diagnosis that is somewhat similar to the AMPD (Mulder et al., 2016). Ultimately we can expect the DSM and ICD models to converge around an evidence-based model of the PD features, which will

allow for the refinement and standardization of treatment approaches like the one described here. For now, the approach offered in this paper applies reasonably well to the model proposed for ICD-11, which also is also poised to distinguish severity from style and organizes stylistic features around an evidence-based model of individual differences in personality.

Readers may notice that none of the suggestions in this paper are organized around PD types (e.g., dependent, paranoid, etc.), with the exception that I indicated that generalized personality pathology severity is similar conceptually and empirically to borderline personality. Reasonable people can disagree about the value of PD types for the clinical lexicon and treatment planning moving forward. Types can be reformulated as combinations of traits and dysfunctions, and the AMPD provides a useful rubric for doing that. Proponents of retaining typal language opine their legacy in the literature and suggest that keeping them around will ease the transition to a fully dimensional model. While acknowledging that this is a reasonable stance, I personally find myself in a relatively more progressive position. Because they are diagnostically superfluous in the AMPD (i.e., they can be reformulated with AMPD features, but this does not add anything to the AMPD *per se*) and the value of types for treatment development has been empirically unimpressive, I am ready to move on and focus on evidence-based dimensions of personality (Hopwood et al., in press).

Finally, while I based my recommendations on the empirical literature to the extent possible, many of the suggestions in this paper are based on my reading of the research literature as well as my personal experiences and tastes, which is to say they remain “empirical questions”. As in clinical practice in general, convincing evidence is insufficient to guide every clinical decision. I accordingly approached

developing a framework for treating AMPD features in the same way I approach my own cases and supervision, by first using any evidence I can find, and then supplementing the many gaps that are left over with principled judgment and personal preference. For this reason, the suggestions in this paper should not be understood as solid, empirically-supported guidelines; rather I hope they provide a preliminary framework for the clinical application of the AMPD and for future research connecting AMPD features to treatment techniques.

References

- Achenbach, T. M., & Edelbrock, C. S. (1978). The classification of child psychopathology: a review and analysis of empirical efforts. *Psychological Bulletin*, 85(6), 1275-1301.
- Ackerman, S.J., Hilsenroth, M.J., Baity, M.R., & Blagys, M.D. (2000). Interaction of therapeutic process and alliance during psychological assessment. *Journal of Personality Assessment*, 75, 82-109.
- Ahn, H. N., & Wampold, B. E. (2001). Where oh where are the specific ingredients? A meta-analysis of component studies in counseling and psychotherapy. *Journal of Counseling Psychology*, 48, 251-257.
- Allen, A., Montgomery, M., Tubman, J., Frazier, L., & Escovar, L. (2003). The effects of assessment feedback on rapport-building and self-enhancement processes. *Journal of Mental Health Counseling*, 25, 165-181.
- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders, 5th Edition (DSM-5)*. Arlington, VA: American Psychiatric Publishing, Inc.
- Anchin, J. C., & Pincus, A. L. (2010). Evidence-based interpersonal psychotherapy with personality disorders: Theory, components, and strategies. In Magnavita, J.J. (Ed.) *Evidence-based treatment of personality dysfunction: Principles, methods, and processes*, 113-166.
- Bach, B., Markon, K., Simonsen, E., & Krueger, R. F. (2015). Clinical utility of the DSM-5 alternative model of personality disorders: Six cases from practice. *Journal of Psychiatric Practice*, 21(1), 3-25.
- Bagby, R. M., Quilty, L. C., Segal, Z. V., McBride, C. C., Kennedy, S. H., & Costa Jr, P. T. (2008). Personality and differential treatment response in major

- depression: a randomized controlled trial comparing cognitive-behavioural therapy and pharmacotherapy. *The Canadian Journal of Psychiatry*, 53(6), 361-370.
- Barlow, D. H., Ellard, K. K., Sauer-Zavala, S., Bullis, J. R., & Carl, J. R. (2014). The origins of neuroticism. *Perspectives on Psychological Science*, 9(5), 481-496.
- Bastiaansen, L., Hopwood, C. J., Van den Broeck, J., Rossi, G., Schotte, C., & De Fruyt, F. (2016). The twofold diagnosis of personality disorder: How do personality dysfunction and pathological traits increment each other at successive levels of the trait hierarchy?. *Personality Disorders: Theory, Research, and Treatment*, 7(3), 280-292.
- Bateman, A. W., Gunderson, J., & Mulder, R. (2015). Treatment of personality disorder. *The Lancet*, 385(9969), 735-743.
- Bateman, A.W. (2012). Treating borderline personality disorder in clinical practice. *American Journal of Psychiatry*, 169, 560-563.
- Bateman, A. W., & Fonagy, P. (2004). Mentalization-based treatment of BPD. *Journal of personality disorders*, 18(1), 36-51.
- Battagliese, G., Caccetta, M., Luppino, O. I., Baglioni, C., Cardi, V., Mancini, F., & Buonanno, C. (2015). Cognitive-behavioral therapy for externalizing disorders: A meta-analysis of treatment effectiveness. *Behaviour research and therapy*, 75, 60-71.
- Beck, A. T., Freeman, A., & Davis, D. D. (Eds.). (2015). *Cognitive therapy of personality disorders*. New York, NY: Guilford Publications.
- Beidel, D. C., Alfano, C. A., Kofler, M. J., Rao, P. A., Scharfstein, L., & Sarver, N. W. (2014). The impact of social skills training for social anxiety disorder: A randomized controlled trial. *Journal of anxiety disorders*, 28(8), 908-918.

- Bender, D. S., Morey, L. C., & Skodol, A. E. (2011). Toward a model for assessing level of personality functioning in DSM-5, part I: A review of theory and methods. *Journal of Personality Assessment, 93*(4), 332-346.
- Berghuis, H., Kamphuis, J. H., & Verheul, R. (2014). Specific personality traits and general personality dysfunction as predictors of the presence and severity of personality disorders in a clinical sample. *Journal of Personality Assessment, 96*(4), 410-416.
- Beutler, L.E. & Clarkin, J.F. (2013). *Systematic Treatment Selection: Toward targeted therapeutic interventions*. New York, NY: Routledge.
- Beutler, L. E., Forrester, B., Gallagher-Thompson, D., Thompson, L., & Tomlins, J. B. (2012). Common, specific, and treatment fit variables in psychotherapy outcome. *Journal of Psychotherapy Integration, 22*(3), 255-281.
- Bornstein, R. F. (2017). Evidence-Based Psychological Assessment. *Journal of personality assessment, 99*(4), 435-445.
- Calabrese, W. R., & Simms, L. J. (2014). Prediction of daily ratings of psychosocial functioning: can ratings of personality disorder traits and functioning be distinguished?. *Personality Disorders: Theory, Research, and Treatment, 5*(3), 314-322.
- Carl, J. R., Gallagher, M. W., Sauer-Zavala, S. E., Bentley, K. H., & Barlow, D. H. (2014). A preliminary investigation of the effects of the unified protocol on temperament. *Comprehensive psychiatry, 55*(6), 1426-1434.
- Carson, R. C. (1969). *Interaction concepts of personality*. Oxford, UK: Aldine Publishing Company.
- Castonguay, L.G. & Beutler, L.E. (2006). *Principles of Therapeutic Change that Work*. Oxford, UK: Oxford University Press.

- Clarkin, J. F., Cain, N., & Livesley, W. J. (2015). An integrated approach to treatment of patients with personality disorders. *Journal of Psychotherapy Integration, 25*(1), 3-12.
- Crawford, M. J., Koldobsky, N., Mulder, R., & Tyrer, P. (2011). Classifying personality disorder according to severity. *Journal of personality disorders, 25*(3), 321-330.
- Cristea, I.A., Gentili, C., Cotet, C.D., Palomba, D., Barbui, C., & Cuijpers, P. (2017). Efficacy of psychotherapies for borderline personality disorder: A systematic review and meta-analysis. *Journal of the American Medical Association Psychiatry, 74*, 319-328.
- DeYoung, C. G., Hirsh, J. B., Shane, M. S., Papademetris, X., Rajeevan, N., & Gray, J. R. (2010). Testing predictions from personality neuroscience: Brain structure and the big five. *Psychological Science, 21*(6), 820-828.
- Few, L. R., Miller, J. D., Rothbaum, A. O., Meller, S., Maples, J., Terry, D. P., ... & MacKillop, J. (2013). Examination of the Section III DSM-5 diagnostic system for personality disorders in an outpatient clinical sample. *Journal of Abnormal Psychology, 122*(4), 1057-1069.
- Finn, S.E. (2007). *In our Clients' Shoes: Principles and techniques of Therapeutic Assessment*. Mahwah, NJ: Lawrence Erlbaum.
- Finn, S. E., & Tonsager, M. E. (1997). Information-gathering and therapeutic models of assessment: Complementary paradigms. *Psychological Assessment, 9*, 374-385.
- First M.B., Skodol, A.E., Bender, D.S., Oldham, J.M., (in press). *Structured clinical interview for the DSM-5 alternative model for personality disorders (SCID-AMPD)*. New York: New York State Psychiatric Institute.

- Flett, G. L., & Hewitt, P. L. (2002). Perfectionism and maladjustment: An overview of theoretical, definitional, and treatment issues. In P. L. Hewitt & G. L. Flett (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 5-31). Washington, DC: American Psychological Association.
- Garfield, S. L. (1995). *Psychotherapy: An eclectic-integrative approach*. New York, NY: John Wiley & Sons.
- Gratz, K. L., & Gunderson, J. G. (2006). Preliminary data on an acceptance-based emotion regulation group intervention for deliberate self-harm among women with borderline personality disorder. *Behavior Therapy, 37*(1), 25-35.
- Gunderson, J. G., Stout, R. L., McGlashan, T. H., Shea, M. T., Morey, L. C., Grilo, C. M., ... & Ansell, E. (2011). Ten-year course of borderline personality disorder: psychopathology and function from the Collaborative Longitudinal Personality Disorders study. *Archives of General Psychiatry, 68*(8), 827-837.
- Harkness, A. R., Reynolds, S. M., & Lilienfeld, S. O. (2014). A review of systems for psychology and psychiatry: Adaptive systems, personality psychopathology five (PSY-5), and the DSM-5. *Journal of Personality Assessment, 96*(2), 121-139.
- Herbert, J. D., Gaudiano, B. A., Rheingold, A. A., Myers, V. H., Dalrymple, K., & Nolan, E. M. (2005). Social skills training augments the effectiveness of cognitive behavioral group therapy for social anxiety disorder. *Behavior Therapy, 36*(2), 125-138.
- Hilsenroth, M. J., Peters, E. J., & Ackerman, S. J. (2004). The development of therapeutic alliance during psychology assessment: Patient and therapist perspectives across treatment. *Journal of Personality Assessment, 83*, 331, -344.

- Hopko, D. R., Lejuez, C. W., Ruggiero, K. J., & Eifert, G. H. (2003). Contemporary behavioral activation treatments for depression: Procedures, principles, and progress. *Clinical Psychology Review, 23*(5), 699-717.
- Hopwood, C.J. & Bornstein, R.F. (2014). *Multimethod Clinical Assessment*. New York, NY: Guilford.
- Hopwood, C.J., Kotov, R., Krueger, R.F., Watson, D., Widiger, T.A., Althoff, R.R., Ansell, E.B., Bach, B., Bagby, R.M., Bornovalova, M.A., Blais, M.A., Chmielewski, M., Cicero, D.C., Clark, L.A., Conway, C., De Clerq, B., De Fruyt, F., Docherty, A.R., Eaton, N.R., Edens, J.F., Forbes, M.K., Forbush, K.T., Hengartner, M.P., Ivanova, M.Y., Leising, D., Livesley, W.J., Lukowitsky, M.R., Lynam, D.R., Markon, K.E., Miller, J.D., Morey, L.C., Mullins-Sweatt, S.N., Ormel, J.H., Patrick, C.J., Pincus, A.L., Ruggero, C., Samuel, D.B., Sellbom, M., Slade, T., Tackett, J.L., Thomas, K.M., Trull, T.J., Vachon, D.D., Waldman, I.D., Waszczuk, M.A., Waugh, M.H., Wright, A.G.C., Yalch, M.M., Zald, D.H., & Zimmermann, J. (in press). The time has come for dimensional personality disorder diagnosis. *Personality and Mental Health*.
- Hopwood, C.J., Morey, L.C., Edelen, M.O., Shea, M.T., Grilo, C.M., Sanislow, C.A., McGlashan, T.H., Daversa, M.T., Gunderson, J.G., Zanarini, M.C., Markowitz, J.C., & Skodol, A.E. (2008). A comparison of interview and self-report methods for the assessment of borderline personality disorder criteria. *Psychological Assessment, 20*, 81-85.
- Hopwood, C.J., Swenson, C.M., Bateman, A., Yeomans, F.E., & Gunderson, J.G. (2014). Approaches to Psychotherapy for borderline personality: Demonstrations by four master clinicians. *Personality Disorders: Theory, Research, and Treatment, 5*, 108-116.

- Hopwood, C.J., Wright, A.G.C., Ansell, E.B., & Pincus, A.L. (2013). The interpersonal core of personality pathology. *Journal of Personality Disorders, 27*, 270-295.
- Hopwood, C.J., Wright, A.G.C., Krueger, R.F., Schade, N., Markon, K.E., & Morey, L.C. (2013). DSM-5 pathological personality traits and the Personality Assessment Inventory. *Assessment, 20*, 269-285.
- Hopwood, C.J., Zimmermann, J., Pincus, A.L., & Krueger, R.F. (2015). Connecting personality structure and dynamics: Towards a more evidence based and clinically useful diagnostic scheme. *Journal of Personality Disorders, 29*, 431-448.
- Hutsebaut, J., Feenstra, D. J., & Kamphuis, J. H. (2016). Development and Preliminary Psychometric Evaluation of a Brief Self-Report Questionnaire for the Assessment of the DSM-5 level of Personality Functioning Scale: The LPFS Brief Form (LPFS-BF). *Personality Disorders: Theory, Research, and Treatment, 7*(2), 192-197.
- Hutsebaut, J., Kamphuis, J. H., Feenstra, D. J., Weekers, L. C., & De Saeger, H. (2017). Assessing DSM-5-oriented level of personality functioning: Development and psychometric evaluation of the Semi-Structured Interview for Personality Functioning DSM-5 (STiP-5.1). *Personality Disorders: Theory, Research, and Treatment, 8*(1), 94.
- Imel, Z., & Wampold, B. E. (2008). The importance of treatment and the science of common factors in psychotherapy. *Handbook of Counseling Psychology, 4*, 249-266.
- Jackson, J. J., Hill, P. L., Payne, B. R., Roberts, B. W., & Stine-Morrow, E. A. (2012). Can an old dog learn (and want to experience) new tricks? Cognitive training

increases openness to experience in older adults. *Psychology and aging, 27*(2), 286-292.

Keeley, J. W., Reed, G. M., Roberts, M. C., Evans, S. C., Medina-Mora, M. E., Robles, R., ... & Andrews, H. F. (2016). Developing a science of clinical utility in diagnostic classification systems: Field study strategies for ICD-11 mental and behavioral disorders. *American Psychologist, 71*(1), 3-16.

Kernberg, O.F. (1984). *Severe Personality Disorders*. New Haven, CT: Yale University Press.

Kernberg, O. F., Yeomans, F. E., Clarkin, J. F., & Levy, K. N. (2008). Transference focused psychotherapy: Overview and update. *The International Journal of Psychoanalysis, 89*(3), 601-620.

Klonsky, E. D., & Oltmanns, T. F. (2002). Informant-reports of personality disorder: Relation to self-reports and future research directions. *Clinical Psychology: Science and Practice, 9*(3), 300-311.

Kotov, R., Gamez, W., Schmidt, F., & Watson, D. (2010). Linking Big Personality Traits to Anxiety, Depressive, and Substance Use Disorders: A Meta-Analysis. *Psychological Bulletin, 136*(5), 768-821.

Kotov, R., Krueger, R. F., Watson, D., Achenbach, T. M., Althoff, R. R., Bagby, R. M., ... & Eaton, N. R. (2017). The Hierarchical Taxonomy of Psychopathology (HiTOP): A dimensional alternative to traditional nosologies. *Journal of Abnormal Psychology, 126*(4), 454-477.

Krueger, R. F., Derringer, J., Markon, K. E., Watson, D., & Skodol, A. E. (2012). Initial construction of a maladaptive personality trait model and inventory for DSM-5. *Psychological Medicine, 42*(9), 1879-1890.

- Krueger, R. F., Hopwood, C. J., Wright, A. G., & Markon, K. E. (2014). DSM-5 and the path toward empirically based and clinically useful conceptualization of personality and psychopathology. *Clinical Psychology: Science and Practice, 21*(3), 245-261.
- Krueger, R. F., & Markon, K. E. (2014). The role of the DSM-5 personality trait model in moving toward a quantitative and empirically based approach to classifying personality and psychopathology. *Annual Review of Clinical Psychology, 10*, 477-501.
- Lahey, B. B. (2009). Public health significance of neuroticism. *American Psychologist, 64*(4), 241-256.
- Leary, T. (1957). *Interpersonal diagnosis of personality; a functional theory and methodology for personality evaluation*. Oxford, UK: Ronald Press.
- Levy, K. N., Meehan, K. B., Kelly, K. M., Reynoso, J. S., Weber, M., Clarkin, J. F., & Kernberg, O. F. (2006). Change in attachment patterns and reflective function in a randomized control trial of transference-focused psychotherapy for borderline personality disorder. *Journal of Consulting and Clinical Psychology, 74*(6), 1027.
- Linehan, M.M. (2014). *DBT skills training manual*. New York, NY: Guilford Publications.
- Linehan, M. M., Cochran, B. N., Mar, C. M., Levensky, E. R., & Comtois, K. A. (2000). Therapeutic burnout among borderline personality disordered clients and their therapists: Development and evaluation of two adaptations of the Maslach Burnout Inventory. *Cognitive and Behavioral Practice, 7*(3), 329-337.

- Linehan, M. M., Armstrong, H. E., Suarez, A., Allmon, D., & Heard, H. L. (1991). Cognitive-behavioral treatment of chronically parasuicidal borderline patients. *Archives of General Psychiatry*, *48*(12), 1060-1064.
- Livesley, W.J., Dimaggio, G., & Clarkin, J.F. (2016). *Integrated treatment for personality disorder: A modular approach*. New York, NY: Guilford.
- Magidson, J. F., Roberts, B. W., Collado-Rodriguez, A., & Lejuez, C. W. (2014). Theory-driven intervention for changing personality: Expectancy value theory, behavioral activation, and conscientiousness. *Developmental psychology*, *50*(5), 1442-1450.
- Roberts, B.W., Hill, P.L., & Davis, J.P. (2017). How to change conscientiousness: The sociogenomic trait intervention model. *Personality Disorders: Theory, Research, and Treatment*, *8*, 199-205.
- Magnavita, J. J. (2010). *Evidence-based treatment of personality dysfunction: Principles, methods, and processes*. Washington, DC: American Psychological Association.
- Maples, J. L., Carter, N. T., Few, L. R., Crego, C., Gore, W. L., Samuel, D. B., ... & Krueger, R. F. (2015). Testing whether the DSM-5 personality disorder trait model can be measured with a reduced set of items: An item response theory investigation of the Personality Inventory for DSM-5. *Psychological Assessment*, *27*(4), 1195-1210.
- Markon, K. E., Quilty, L. C., Bagby, R. M., & Krueger, R. F. (2013). The development and psychometric properties of an informant-report form of the Personality Inventory for DSM-5 (PID-5). *Assessment*, *20*(3), 370-383.
- Marlatt, G. A., & George, W. H. (1984). Relapse prevention: Introduction and overview of the model. *Addiction*, *79*(3), 261-273.

- Miller, W. R., & Rose, G. S. (2009). Toward a theory of motivational interviewing. *American Psychologist, 64*(6), 527-537.
- Millon, T. (1988). Personologic psychotherapy: Ten commandments for a posteclectic approach to integrative treatment. *Psychotherapy, 25*(2), 209-219.
- Millon, T. & Grossman, S. (2007). *Moderating Severe Personality Disorders: A personalized psychotherapy approach*. Hoboken, NJ: John Wiley & Sons.
- Morey, L.C., Good, E.W., & Hopwood, C.J. (under review). Global personality dysfunction and the relationship of pathological and normal trait domains in the DSM-5 alternative model for personality disorders.
- Morey, L. C., Skodol, A. E., & Oldham, J. M. (2014). Clinician judgments of clinical utility: A comparison of DSM-IV-TR personality disorders and the alternative model for DSM-5 personality disorders. *Journal of Abnormal Psychology, 123*(2), 398-405.
- Morey, L. C., & Stagner, B. H. (2012). Narcissistic Pathology as Core Personality Dysfunction: Comparing the DSM-IV and the DSM-5 Proposal for Narcissistic Personality Disorder. *Journal of clinical psychology, 68*(8), 908-921.
- Mulder, R. T., Horwood, J., Tyrer, P., Carter, J., & Joyce, P. R. (2016). Validating the proposed ICD-11 domains. *Personality and Mental Health, 10*(2), 84-95.
- Nathan, P. E., & Gorman, J. M. (Eds.). (2015). *A Guide to Treatments that Work*. Oxford, UK: Oxford University Press.
- Newton-Howes, G., Tyrer, P., & Johnson, T. (2006). Personality disorder and the outcome of depression: meta-analysis of published studies. *The British Journal of Psychiatry, 188*(1), 13-20.

- Ogrodniczuk, J. S., Piper, W. E., Joyce, A. S., McCallum, M., & Rosie, J. S. (2003). NEO-five factor personality traits as predictors of response to two forms of group psychotherapy. *International Journal of Group Psychotherapy, 53*(4), 417-442.
- Ormel, J., Jeronimus, B. F., Kotov, R., Riese, H., Bos, E. H., Hankin, B., ... & Oldehinkel, A. J. (2013). Neuroticism and common mental disorders: meaning and utility of a complex relationship. *Clinical Psychology Review, 33*(5), 686-697.
- Paris, J. (1998). *Working with Traits: Psychotherapy of personality disorders*. New York, NY: Jason Aronson Press.
- Pilkonis, P. A., Heape, C. L., Ruddy, J., & Serrao, P. (1991). Validity in the diagnosis of personality disorders: The use of the LEAD standard. *Psychological Assessment: A Journal of Consulting and Clinical Psychology, 3*(1), 46.
- Pincus, A. L. (2005). A contemporary integrative interpersonal theory of personality disorders. In M.F. Lenzenweger & J.F. Clarkin, *Major Theories of Personality Disorder* (pp. 282-331), New York, NY: Guilford Press.
- Pincus, A. L., Dowgillo, E. A., & Greenberg, L. S. (2016). Three cases of narcissistic personality disorder through the lens of the DSM-5 alternative model for personality disorders. *Practice Innovations, 1*(3), 164-177.
- Pincus, A.L. & Hopwood, C.J. (2012). A contemporary interpersonal model of personality pathology and personality disorder. In T.A. Widiger (Ed.) *Oxford Handbook of Personality Disorders* (pp. 372-398). Oxford: Oxford University Press.
- Poston, J. M. & Hanson, W. M. (2010). Meta-analysis of psychological assessment as a therapeutic intervention. *Psychological Assessment, 22*, 203-212.
- Quilty, L. C., De Fruyt, F., Rolland, J. P., Kennedy, S. H., Rouillon, P. F., & Bagby, R. M. (2008). Dimensional personality traits and treatment outcome in patients

with major depressive disorder. *Journal of Affective Disorders*, 108(3), 241-250.

Roberts, B. W., Luo, J., Briley, D. A., Chow, P. I., Su, R., & Hill, P. L. (in press). A systematic review of personality trait change through intervention. *Psychological Bulletin*.

Ruggero, C.J. et al. (in preparation). Integrating the hierarchical taxonomy of psychopathology into clinical practice.

Sadler, P., Ethier, N., Gunn, G. R., Duong, D., & Woody, E. (2009). Are we on the same wavelength? Interpersonal complementarity as shared cyclical patterns during interactions. *Journal of Personality and Social Psychology*, 97(6), 1005-1020.

Safran, J. D., & Muran, J. C. (2006). Has the concept of the therapeutic alliance outlived its usefulness? *Psychotherapy: Theory, Research, Practice, Training*, 43(3), 286-291.

Samuel, Douglas B. "Assessing personality in the DSM-5: The utility of bipolar constructs." *Journal of personality assessment* 93, no. 4 (2011): 390-397.

Samuel, D.B. (2015). A review of the agreement between clinician's personality disorder diagnoses and those from other methods and sources. *Clinical Psychology: Science and Practice*, 22, 1-19.

Shafran, R., & Mansell, W. (2001). Perfectionism and psychopathology: A review of research and treatment. *Clinical Psychology Review*, 21(6), 879-906.

Sharp, C., Wright, A.G.C., Fowler, J.C., Frueh, B.C., Allen, J.G., Oldham, J., & Clark, L.A. (2015). The structure of personality pathology: Both general ('g') and specific ('s') factors? *Journal of Abnormal Psychology*, 124, 387-398.

- Simonsen, S., & Simonsen, E. (2014). Contemporary directions in theories and psychotherapeutic strategies in treatment of personality disorders: Relation to Level of Personality Functioning. *Journal of Contemporary Psychotherapy, 44*(2), 141-148.
- Singer, J.A. (2005). *Personality and Psychotherapy: Treating the Whole Person*. New York: Guilford Press.
- Skodol, A. E., Morey, L. C., Bender, D. S., & Oldham, J. M. (2015). The alternative DSM-5 model for personality disorders: a clinical application. *American Journal of Psychiatry, 172*(7), 606-613.
- Skodol, A. E., Pagano, M. E., Bender, D. S., Shea, M. T., Gunderson, J. G., Yen, S., ... & Zanarini, M. C. (2005). Stability of functional impairment in patients with schizotypal, borderline, avoidant, or obsessive-compulsive personality disorder over two years. *Psychological Medicine, 35*(3), 443-451.
- Stern A. (1938). Psychoanalytic investigation and therapy in the borderline group of neuroses. *Psychoanalytic Quarterly, 7*, 467-489.
- Stetter, F. & Kupper, S. (2002). Autogenic training: A meta-analysis of clinical outcome studies. *Applied Psychophysiology and Biofeedback, 27*, 45-98.
- Thormählen, B., Weinryb, R. M., Norén, K., Vinnars, B., & Bågedahl-Strindlund, M. (2003). Patient factors predicting dropout from supportive-expressive psychotherapy for patients with personality disorders. *Psychotherapy Research, 13*(4), 493-509.
- Tracey, T. J. (1993). An interpersonal stage model of the therapeutic process. *Journal of Counseling Psychology, 40*(4), 396-409.

- Tracey, T. J., Lichtenberg, J. W., Goodyear, R. K., Claiborn, C. D., & Wampold, B. E. (2003). Concept mapping of therapeutic common factors. *Psychotherapy Research, 13*(4), 401-413.
- Vazire, S. (2010). Who knows what about a person? The self-other knowledge asymmetry (SOKA) model. *Journal of Personality and Social Psychology, 98*(2), 281-300.
- Wampold, B. E. (2007). Psychotherapy: The humanistic (and effective) treatment. *American Psychologist, 62*(8), 857-873.
- Waugh, M. H., Hopwood, C. J., Krueger, R. F., Morey, L. C., Pincus, A. L., & Wright, A. G. (2017). Psychological assessment with the DSM-5 Alternative Model for Personality Disorders: Tradition and innovation. *Professional Psychology: Research and Practice, 48*(2), 79-89.
- Williams, T. F., & Simms, L. J. (2016). Personality disorder models and their coverage of interpersonal problems. *Personality Disorders: Theory, Research, and Treatment, 7*(1), 15-27.
- Wright, A.G.C., Thomas, K.M., Hopwood, C.J., Markon, K.E., Pincus, A.L., & Krueger, R.F. (2012). The hierarchical structure of DSM-5 pathological personality traits. *Journal of Abnormal Psychology, 121*, 951-957.
- Wright, A. G., Hopwood, C. J., Skodol, A. E., & Morey, L. C. (2016). Longitudinal validation of general and specific structural features of personality pathology. *Journal of Abnormal Psychology, 125*(8), 1120-1138.
- Yeomans, F. E., Levy, K. N., & Caligor, E. (2013). Transference-focused Psychotherapy. *Psychotherapy, 50*(3), 449-453.
- Young, S. E., Friedman, N. P., Miyake, A., Willcutt, E. G., Corley, R. P., Haberstick, B. C., & Hewitt, J. K. (2009). Behavioral disinhibition: Liability for externalizing

spectrum disorders and its genetic and environmental relation to response inhibition across adolescence. *Journal of Abnormal Psychology, 118*(1), 117-130.

Zachar, P., & First, M. B. (2015). Transitioning to a dimensional model of personality disorder in DSM 5.1 and beyond. *Current Opinion in Psychiatry, 28*(1), 66-72.

Zanarini, M. C., Frankenburg, F. R., Reich, D. B., & Fitzmaurice, G. (2010). The 10-year course of psychosocial functioning among patients with borderline personality disorder and axis II comparison subjects. *Acta Psychiatrica Scandinavica, 122*(2), 103-109.

Zanarini, M. C., Frankenburg, F. R., Reich, D. B., & Fitzmaurice, G. (2012). Attainment and stability of sustained symptomatic remission and recovery among patients with borderline personality disorder and axis II comparison subjects: a 16-year prospective follow-up study. *American Journal of Psychiatry, 169*(5), 476-483.

Table 1. *Common and Specific Factors in Treatment and the Alternative Model of Personality Disorder.*

	Treatment Examples	AMPD Features
Common	Empathy	Criterion A Level of Personality
	Alliance	Functioning
	Expectancy Effects	Self (Identity and Self-Direction) Interpersonal (Empathy and
Specific		Intimacy)
	Exposure and Response	Criterion B Maladaptive Traits
	Prevention	Negative Affectivity
	Cognitive Restructuring	Detachment
	Interpretation	Antagonism
	Pharmacology	Disinhibition
	Contingency Management	Psychoticism
	Homework	

Table 2. *Structure of the DSM-5 Alternative Model of Personality Disorders.*

	Higher Order Features	Lower Order Features
Criterion A	Self	Identity
Level of Functioning		Self-Direction
	Interpersonal	Empathy
		Intimacy
Criterion B	Negative Affectivity	Emotional Lability
Maladaptive Traits		Anxiousness
		Restricted Affectivity
		Separation Insecurity
		Hostility
		Perseveration
	Detachment	Withdrawal
		Anhedonia
		Depressivity
		Intimacy Avoidance
		Suspiciousness
	Antagonism	Manipulativeness
		Deceitfulness
		Grandiosity
		Attention Seeking
		Callousness
	Disinhibition	Irresponsibility
		Impulsivity
		Rigid Perfectionism
		Distractibility

Psychoticism	Unusual Beliefs/Experiences
	Eccentricity
	Perceptual Dysregulation

Note. There is not a precise mapping of Criterion B lower order features to higher order features. Some facets are interstitial, meaning that they are related to more than one domain. For instance, in Krueger et al. (2012), depressivity reflected a combination of Detachment and Negative Affectivity.

Table 3. *Principles for Assessing DSM-5 Alternative Model of Personality Disorder Features.*

Principle	Techniques
Organized approach	<p>Assess level of functioning to establish severity</p> <p>Assess traits to establish style</p> <p>Assess environment to understand interaction of personality with context</p> <p>Assess Criterion A and B features hierarchically</p> <p>Conclude with idiographic formulation based on specific features</p>
Evidence-Based Assessment	<p>Use standardized and validated tools</p> <p>Interpret data using norms</p> <p>Use reliability of assessment tools to determine precision of inferences</p>
Multimethod Assessment	<p>Interviews</p> <p>Self reports</p> <p>Informant reports</p>
Collaboration	<p>Involve the patient, other providers, and family members</p> <p>Have the patient ask questions for the assessment</p> <p>Ask the patient to help interpret the data</p> <p>Collaborate in developing a treatment plan</p>
Follow up	<p>Collect ongoing data about treatment progress</p> <p>Collect ongoing data about treatment process</p>

Table 4. *Treatment Principles for Criterion A Personality Dysfunction.*

Principle	Goals	Techniques
Structure	Maintain therapeutic frame	Manual
	Provide coherent framework for determining specific interventions	Thorough formulation Treatment contract Establish roles outside of sessions
Patient Agency	Encourage patient to take responsibility for treatment gains	Establish and reinforce role expectations
	Avoid misperception about responsibilities	
Connect Feelings to Actions	Address core difficulty in PD	Mentalization
	Limit patient decompensation	Mindfulness Pre-session preparation
Activity	Sustain therapeutic progress	Regular assessments of progress
	Effectively address impasses	Emotional involvement Dialogic approach
Consultation	Maintain treatment focus	Consult regularly with a supervisor or colleagues
	Support clinician Limit impact of counter-transference and potential for boundary violation	

Note. Adapted from Bateman, Gunderson, and Mulder (2015).

Table 5. *Treatment Principles for Criterion B Maladaptive Traits.*

	Behavioral	Relational
Negative	Exposure	Deepening of awareness
Affectivity	Response prevention Cognitive reframing	Interpretation of interpersonal dynamics
Detachment	Skills training	Interpretation of defense Deepening of awareness
Antagonism	Behavioral activation Skills training	Modification of relational process Deepening of awareness
Disinhibition	Contingency Management Motivational Interviewing Relapse Prevention	Modification of relational process Deepening of awareness Interpretation of interpersonal dynamics
Psychoticism*	Safety Planning Reframing Thought Records	Interpretation of defense Clarification Interpretation Confrontation

* Techniques listed for Psychoticism refer to transdiagnostic tendency for perceptual dysregulation, not active psychotic processes.