Personality Disorders: Theory, Research, and Treatment

© 2022 American Psychological Association
ISSN: 1949-2715

2022, Vol. 13, No. 4, 343–346
https://doi.org/10.1037/per0000571

COMMENTARY

The *DSM* Should Replace Maladaptive Traits With the Five-Factor Model: Comment on Clark and Watson (2022)

Christopher J. Hopwood
Department of Psychology, University of Zurich

In their target article, Watson and Clark made a number of useful suggestions for improving Criterion B of the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition,* alternative model of personality disorders, all of which assume that personality variation will be represented in the next iteration of the *Diagnostic and Statistical Manual of Mental Disorders* as a maladaptive trait variation diagnostic of personality disorders (PDs). I describe how maladaptive traits are not equivalent to normal-range five-factor model traits in terms of domain structure, range, and stability, and I conclude that rather than making subtle changes to the existing maladaptive trait model for PDs, it would be better to replace it with a genuine five-factor model that could be used to conceptualize all patients, whether or not they are diagnosed with a PD.

Keywords: personality disorder, traits, five-factor model, alternative model

This document is copyrighted by the American Psychological Association or one of its allied publishers.
This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.

Clark and Watson (2022) provided a scholarly, objective, and fair review of the evidence for the alternative model of personality disorder (AMPD) Criterion B traits and offered several thoughtful and specific recommendations for how to improve the model of maladaptive traits in the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM*). Their recommendations largely focused on the model's lower order facets and issues related to content coverage and interstitiality. Each of these recommendations would be wise if it was assumed that personality traits in the *DSM* should be maladaptive indicators of personality disorder (PD). In this comment, I challenge that basic assumption and offer a more radical (albeit not new: see Hopwood, 2011; Hopwood et al., 2011, 2018; Morey et al., 2007, 2022) recommendation that personality traits in the *DSM* should be represented by normal-range traits that more directly reflect the five-factor model (FFM).

Maladaptive and Normal-Range FFM Traits Are Not the Same

Clark and Watson echoed the common view that Criterion B traits are largely equivalent to, or maladaptive variants of, normal-range FFM traits. This view has been voiced often, both because of a large body of evidence that maladaptive and normal-range traits are similar in terms of number of factors extracted from facet scales and cross-instrument domain associations (Somma et al., 2019; Watson et al., 2013; Watters & Bagby, 2018; Wright & Simms, 2014) and because it is strategic for maladaptive trait advocates to point out that Criterion B has roots in a very large literature on the structure of personality variation. However, this refrain belies the fact that maladaptive and normal-range traits also meaningfully differ in three important ways: domain structure, range, and stability.

Domain Structure

Although structural issues were a major theme of the target article, the focus was primarily on the structure of lower order facets within the maladaptive trait model. A different aspect of structure has to do with the magnitude of associations among higher order factors or domains. It is widely accepted that higher order traits of both normal-range and maladaptive traits are not orthogonal. Meaningful factor correlations have been observed for normal-range instruments (Park et al., 2020; Sleep et al., 2021), maladaptive measures (Ringwald et al., 2021; Somma et al., 2019), and conjoint models that include both (Wright & Simms, 2014). Although results vary across studies, in general, factor correlations tend to be stronger for maladaptive than normal-range traits. For instance, the median factor correlation among Personality Inventory for *DSM–5* (PID-5) factors in the initial validation study was .27 (Krueger et al., 2012), and the same correlation for the Computerized Adaptive Test of Personality Disorder reported by Ringwald et al. (2021) was .30. In contrast, this value was .18 for the NEO Personality Inventory in the DeYoung et al. (2022) study that proposed stability and plasticity as higher order factors of normal-range FFM traits, .13 for the widely used Goldberg (1992) Big Five markers, and .21 for the Big Five Inventory-2 (Soto & John, 2017). Similar patterns can also be observed by comparing

Christopher J. Hopwood https://orcid.org/0000-0001-6645-8645
Correspondence concerning this article should be addressed to Christopher J. Hopwood, Department of Psychology, University of Zürich, Binzmühlestrasse 14, Zürich 8050, Switzerland. Email: chopwoodmsu@gmail.com

the eigenvalue percentages of the first factors for normal-range and maladaptive personality inventories, which is an indication of how much variance their indicators have in common. For instance, for the PID-5, this value was 8.68/25 facets (34.72%; Krueger et al., 2012), whereas for the Big Five Inventory-2, it was 4.05/15 facets (27%; Soto & John, 2017).

These values may depend in part on the degree to which facets are interstitial, as emphasized by Clark and Watson, as well as other issues such as instrument-specific content or factor analytic method. However, the fact that this pattern seems to replicate across measures and studies suggests a generalizable substantive explanation. One promising hypothesis is that the scales of maladaptive trait measures have stronger intercorrelations because they share variation attributable to nonspecific personality pathology (i.e., self and other dysfunction) that is not specific to any single trait domain. Morey et al. (2022) found that measures of AMPD Criterion A and normal-range FFM traits provided incremental information about maladaptive traits in three samples and that covarying Criterion A variance out of associations between maladaptive and normal-range FFM traits significantly enhanced patterns of discriminant validity. These findings suggest that the inclusion of variation related to nonspecific personality pathology within Criterion B maladaptive traits is one of the reasons why maladaptive traits depart from the normal-range FFM model in terms of the structure of factor correlations. These findings also imply that replacing maladaptive traits with normal-range traits would help solve the oft-discussed issue that Criterion A and Criterion B are too similar in terms of content and correlates (Widiger et al., 2019).

Range

A second difference between normal-range and maladaptive traits is that normal-range traits are bipolar, whereas maladaptive traits are mostly or typically unipolar. Thus far, no study that has sampled maladaptive content at both tails of all five domains has fit an FFM well. Indeed, among major conceptual models of PD, only the FFM of PD has scales that tap maladaptive variation at both tails of each domain (Miller & Widiger, 2020). Crego et al. (2018) fit several models with FFM of PD scales and found that more than five factors were needed to account for the intercorrelations among these traits. In a follow-up study, Crego et al. (2020) did not even report the fit of the model they used to articulate a bipolar maladaptive FFM. Thus, existing evidence suggests that a model with maladaptive tails at both ends of all five domains cannot be effectively summarized with five factors.

This would not be so if all maladaptive variants of personality could be summarized with the FFM. In contrast, if the tails of maladaptive traits have content related to nonspecific dysfunction (Suzuki et al., 2015), we would expect those tails to be correlated with one another in ways that violate the basic assumption of a bipolar model. In other words, to the degree that problems in living tend to covary regardless of their nature, including problems on the opposite tails of a single dimension will tend to disfigure that dimension. This, along with the fact that problems tend to be more probabilistically related to one tail of each trait than the other (e.g., high neuroticism and low agreeableness), may explain why most maladaptive trait models have unipolar domains.

However, there are significant benefits to bipolar traits (Samuel, 2011; Widiger & Crego, 2019). First, most personality research has used normal-range, bipolar traits, and this research provides a strong foundation for the clinical application of trait models. Indeed, the ostensible lack of such evidence was given as one of the main reasons why the AMPD ended up as an "alternative" to the existing categorical model of PDs. Second, normal-range, bipolar traits cover all variants of personality, including variants that represent risk for problems in living among a minority of the population. For instance, just because low agreeableness tends to be more strongly related to individual differences in maladaptive behavior on average does not mean that some individuals do not primarily have problems related to high agreeableness. It is important to remember that in an $N = 1$ clinical context, the clinician cares about understanding each individual's risk for problems, not how individual differences across people nomothetically predict risk. Third, normal-range traits offer useful information about all individuals. This includes risk for mental health problems among those who do not have significant personality pathology (Kotov et al., 2010) and predictions about how an individual will function, respond to treatment, or interact with clinicians that is independent of clinical symptomatology (Thomas et al., 2014).

There is thus an underlying tension within debates about PD diagnosis, even among people who generally favor a model based on the FFM. On the one hand, there are significant advantages to a bipolar model. On the other hand, existing evidence suggests that data from an instrument with items that include maladaptive trait content at both poles of FFM domains will not fit an FFM well. Resolving this tension requires doing something to both retain the integrity of the FFM and account for variation at both tails of each domain. Previous authors have suggested a variety of statistical approaches to parsing maladaptive and normal-range variation in personality (Morey et al., 2022; Oltmanns et al., 2018; Pettersson et al., 2014). Clark and Watson's 11th recommendation was to include both sides of Conscientiousness, as separate "Anankastia" and "Disinhibition" domains, in the *DSM* (the PID-5 already has facet scales that reflect high and low levels of Conscientiousness). If this strategy were extended to all five domains, one solution could be to have 10 separate unipolar traits, each representing one tail of the FFM factors. However, to my mind, the simplest and most clinically practical way to move from the existing AMPD framework to a more tractable and useful model would be to conceptualize personality problems with Criterion A and use bipolar FFM traits to focus more exclusively on normal-range variation in personality that would truly fit an FFM.

Stability

A third difference between normal-range and maladaptive traits is stability. Morey and Hopwood (2013) compared rank-order (correlations) stability and absolute (mean-level) change in normal-range and maladaptive traits in existing longitudinal studies of PD. They found that normal-range traits showed less mean-level change and were more rank-order stable than either self-reported maladaptive traits or PD symptom counts assessed by diagnostic interview. Bleidorn et al. (2022) recently conducted a meta-analysis of longitudinal personality studies in nonclinical samples. Consistent with results from clinical samples, maladaptive traits were less stable than normal-range traits.

This document is copyrighted by the American Psychological Association or one of its allied publishers.
This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.

This document is copyrighted by the American Psychological Association or one of its allied publishers.
This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.

The mechanisms underlying stability differences between maladaptive and normal-range traits are not clear, but one hypothesis is that traits represent enduring, underlying dispositions for problems in living, whereas maladaptive traits include dispositional variance in addition to the ways in which these dispositions become dysfunctional in the context of certain kinds of environments (DeYoung et al., 2022; Hopwood et al., 2022; Morey et al., 2007). In other words, normal-range traits are relatively purer indicators of underlying tendencies, whereas maladaptive traits tap those tendencies plus symptomatic dysfunction that occurs as people live their lives. From this perspective, the fact that environmental context can be relatively dynamic would make maladaptive traits less stable than normal-range traits. To the degree that this mechanism explains stability differences between normal-range and maladaptive traits, it would be more parsimonious to contain content having to do with personality dysfunction within AMPD Criterion A and reserve traits for purer representations of basic, normal-range personality dispositions.

The FFM Belongs in the Diagnostic Manuals

In summary, although I admire both the tremendous long-standing contributions of Clark and Watson to the generation of a more valid system for diagnosing PD and understand their specific recommendations for how to change Criterion B in the AMPD, I think a more radical transition would solve many of the problems currently being debated about the structure of personality in diagnostic manuals. Rather than treating traits as if they are the maladaptive symptoms of PD, traits should be conceived of in the diagnostic manuals as they are in the scientific literature, as normally distributed bipolar variables that describe relatively enduring differences between people, regardless of their clinical status.

A number of authors have described the advantages of incorporating normal-range traits into the diagnostic manuals. Within the AMPD, replacing maladaptive variants with normal-range traits helps solve discriminant validity issues between Criterion A and Criterion B. Beyond the AMPD, normal-range traits provide a coherent and principled framework for conceptualizing individual differences in predispositions for a wide range of mental health problems and functioning. For specific clinical cases, traits provide a way of conceptualizing the whole person and, thus, humanizing the diagnostic process.

Re-envisioning traits in this way would render specific recommendations for how to modify Criterion B of the AMPD, including the recommendations of Clark and Watson, largely moot. Although I think that Clark and Watson made a convincing case regarding how Criterion B could be improved if it were to remain a model of maladaptive traits diagnostic of PD, I continue to think that replacing maladaptive traits as PD indicators with FFM traits as a general model of personality variation would be a more fruitful direction and that this is where our attention should be focused.

References

Bleidorn, W., Schwaba, T., Zheng, A., Hopwood, C. J., Sosa, S. A., Roberts, B. W., & Briley, D. A. (2022). *Personality stability and change: A meta-analysis of longitudinal studies*. Unpublished manuscript.

Clark, L. A., & Watson, D. (2022). The trait model of the DSM-5 Alternative Model of Personality Disorders (AMPD): A structural review. *Personality Disorders: Theory, Research, and Treatment*, *13*(4), 328–336. https://doi.org/10.1037/per0000568

Crego, C., Oltmanns, J. R., & Widiger, T. A. (2018). FFMPD scales: Comparisons with the FFM, PID-5, and CAT-PD-SF. *Psychological Assessment*, *30*(1), 62–73. https://doi.org/10.1037/pas0000495

Crego, C., Oltmanns, J. R., & Widiger, T. A. (2020). Obtaining and losing the bipolarity of the five-factor model through factor analysis. *Personality Disorders: Theory, Research, and Treatment*, *11*(2), 119–130. https://doi.org/10.1037/per0000378

DeYoung, C. G., Chmielewski, M., Clark, L. A., Condon, D. M., Kotov, R., Krueger, R. F., Lynam, D. R., Markon, K. E., Miller, J. D., Mullins-Sweatt, S. N., Samuel, D. B., Sellbom, M., South, S. C., Thomas, K. M., Watson, D., Watts, A. L., Widiger, T. A., & Wright, A. G. C., & HiTOP Normal Personality Workgroup. (2022). The distinction between symptoms and traits in the Hierarchical Taxonomy of Psychopathology (HiTOP). *Journal of Personality*, *90*(1), 20–33. https://doi.org/10.1111/jopy.12593

Goldberg, L. R. (1992). The development of markers of the Big Five factor structure. *Psychological Assessment*, *4*(1), 26–42. https://doi.org/10.1037/1040-3590.4.1.26

Hopwood, C. J. (2011). Personality traits in the DSM-5. *Journal of Personality Assessment*, *93*(4), 398–405. https://doi.org/10.1080/00223891.2011.577472

Hopwood, C. J., Good, E. W., & Morey, L. C. (2018). Validity of the DSM–5 levels of personality functioning scale–self report. *Journal of Personality Assessment*, *100*(6), 650–659. https://doi.org/10.1080/00223891.2017.1420660

Hopwood, C. J., Malone, J. C., Ansell, E. B., Sanislow, C. A., Grilo, C. M., McGlashan, T. H., Pinto, A., Markowitz, J. C., Shea, M. T., Skodol, A. E., Gunderson, J. G., Zanarini, M. C., & Morey, L. C. (2011). Personality assessment in DSM-5: Empirical support for rating severity, style, and traits. *Journal of Personality Disorders*, *25*(3), 305–320. https://doi.org/10.1521/pedi.2011.25.3.305

Hopwood, C. J., Wright, A. G., & Bleidorn, W. (2022). Person–environment transactions differentiate personality and psychopathology. *Nature Reviews Psychology*, *1*(1), 55–63. https://doi.org/10.1038/s44159-021-00004-0

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. https://doi.org/10.1037/a0020327

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. https://doi.org/10.1017/S0033291711002674

Miller, J. D., & Widiger, T. A. (2020). The Five-Factor Model of personality disorders. In C. W. Lejuez & K. L. Gratz (Eds.), *The Cambridge handbook of personality disorders* (pp. 145–160). Cambridge University Press. https://doi.org/10.1017/9781108333931.028

Morey, L. C., Good, E. W., & Hopwood, C. J. (2022). Global personality dysfunction and the relationship of pathological and normal trait domains in the DSM-5 alternative model for personality disorders. *Journal of Personality*, *90*(1), 34–46. https://doi.org/10.1111/jopy.12560

Morey, L. C., & Hopwood, C. J. (2013). Stability and change in personality disorders. *Annual Review of Clinical Psychology*, *9*, 499–528. https://doi.org/10.1146/annurev-clinpsy-050212-185637

Morey, L. C., Hopwood, C. J., Gunderson, J. G., Skodol, A. E., Shea, M. T., Yen, S., Stout, R. L., Zanarini, M. C., Grilo, C. M., Sanislow, C. A., & McGlashan, T. H. (2007). Comparison of alternative models for personality disorders. *Psychological Medicine*, *37*(7), 983–994. https://doi.org/10.1017/S0033291706009482

Oltmanns, J. R., Smith, G. T., Oltmanns, T. F., & Widiger, T. A. (2018). General factors of psychopathology, personality, and personality

disorder: Across domain comparisons. *Clinical Psychological Science*, *6*(4), 581–589. https://doi.org/10.1177/2167702617750150

Park, H. H., Wiernik, B. M., Oh, I.-S., Gonzalez-Mulé, E., Ones, D. S., & Lee, Y. (2020). Meta-analytic five-factor model personality intercorrelations: Eeny, meeny, miney, moe, how, which, why, and where to go. *The Journal of Applied Psychology*, *105*(12), 1490–1529. https://doi.org/10.1037/apl0000476

Pettersson, E., Mendle, J., Turkheimer, E., Horn, E. E., Ford, D. C., Simms, L. J., & Clark, L. A. (2014). Do maladaptive behaviors exist at one or both ends of personality traits? *Psychological Assessment*, *26*(2), 433–446. https://doi.org/10.1037/a0035587

Ringwald, W. R., Emery, L., Khoo, S., Clark, L. A., Kotelnikova, Y., Scalco, M. D., Watson, D., Wright, A. G. C., & Simms, L. (2021, September 10). *Structure of Pathological Personality Traits Through the Lens of the CAT-PD Model*. https://doi.org/10.31234/osf.io/kuefm

Samuel, D. B. (2011). Assessing personality in the DSM-5: The utility of bipolar constructs. *Journal of Personality Assessment*, *93*(4), 390–397. https://doi.org/10.1080/00223891.2011.577476

Sleep, C. E., Lynam, D. R., & Miller, J. D. (2021). A comparison of the validity of very brief measures of the Big Five/Five-Factor Model of personality. *Assessment*, *28*(3), 739–758. https://doi.org/10.1177/1073191120939160

Somma, A., Krueger, R. F., Markon, K. E., & Fossati, A. (2019). The replicability of the personality inventory for DSM-5 domain scale factor structure in U.S. and non-U.S. samples: A quantitative review of the published literature. *Psychological Assessment*, *31*(7), 861–877. https://doi.org/10.1037/pas0000711

Soto, C. J., & John, O. P. (2017). The next Big Five Inventory (BFI-2): Developing and assessing a hierarchical model with 15 facets to enhance bandwidth, fidelity, and predictive power. *Journal of Personality and Social Psychology*, *113*(1), 117–143. https://doi.org/10.1037/pspp0000096

Suzuki, T., Samuel, D. B., Pahlen, S., & Krueger, R. F. (2015). DSM-5 alternative personality disorder model traits as maladaptive extreme variants of the five-factor model: An item-response theory analysis. *Journal of Abnormal Psychology*, *124*(2), 343–354. https://doi.org/10.1037/abn0000035

Thomas, K. M., Hopwood, C. J., Donnellan, M. B., Wright, A. G. C., Sanislow, C. A., McDevitt-Murphy, M. E., Ansell, E. B., Grilo, C. M., McGlashan, T. H., Shea, M. T., Markowitz, J. C., Skodol, A. E., Zanarini, M. C., & Morey, L. C. (2014). Personality heterogeneity in PTSD: Distinct temperament and interpersonal typologies. *Psychological Assessment*, *26*(1), 23–34. https://doi.org/10.1037/a0034318

Watson, D., Stasik, S. M., Ro, E., & Clark, L. A. (2013). Integrating normal and pathological personality: Relating the DSM-5 trait-dimensional model to general traits of personality. *Assessment*, *20*(3), 312–326. https://doi.org/10.1177/1073191113485810

Watters, C. A., & Bagby, R. M. (2018). A meta-analysis of the five-factor internal structure of the Personality Inventory for DSM-5. *Psychological Assessment*, *30*(9), 1255–1260. https://doi.org/10.1037/pas0000605

Widiger, T. A., Bach, B., Chmielewski, M., Clark, L. A., DeYoung, C., Hopwood, C. J., Kotov, R., Krueger, R. F., Miller, J. D., Morey, L. C., Mullins-Sweatt, S. N., Patrick, C. J., Pincus, A. L., Samuel, D. B., Sellbom, M., South, S. C., Tackett, J. L., Watson, D., Waugh, M. H., . . . Thomas, K. M. (2019). Criterion A of the AMPD in HiTOP. *Journal of Personality Assessment*, *101*(4), 345–355. https://doi.org/10.1080/00223891.2018.1465431

Widiger, T. A., & Crego, C. (2019). The bipolarity of normal and abnormal personality structure: Implications for assessment. *Psychological Assessment*, *31*(4), 420–431. https://doi.org/10.1037/pas0000546

Wright, A. G. C., & Simms, L. J. (2014). On the structure of personality disorder traits: Conjoint analyses of the CAT-PD, PID-5, and NEO-PI-3 trait models. *Personality Disorders: Theory, Research, and Treatment*, *5*(1), 43–54. https://doi.org/10.1037/per0000037

This document is copyrighted by the American Psychological Association or one of its allied publishers.
This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.