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## Robustness of the Maladaptive Personality Plaster: An Investigation of Stability of the PSY-5-r in Adults over 20 Years

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### ABSTRACT

The long-term stability of maladaptive personality traits in the general population has been under-investigated. The current study examined the longitudinal 20-year mean-level stability and rank-order consistency of five maladaptive personality traits—as measured with the Personality Psychopathology-5-r scales. Correlations and regression analysis were conducted to test both types of stability comparing raw scores of scale administrations in a general population sample in both 1992 and 2012 ( $N = 65$ ). Repeated measures analysis of variance demonstrated significant mean-level stability of the PSY-5-r traits over 20 years. The PSY-5-r scales demonstrated significant rank-order consistency as evidenced by correlational analyses and reliability coefficients. The scales Aggressiveness- $r$  ( $r = .73$ ), Neuroticism/Negative Emotionality- $r$  ( $r = .65$ ), Introversion/Low Positive Emotionality- $r$  ( $r = .63$ ), and Disconstraint- $r$  ( $r = .56$ ), evidenced strong rank-order stability, whereas Psychoticism- $r$  ( $r = .3$ ) showed moderate rank-order consistency. The results of the present study indicate that maladaptive personality traits as measured with the PSY-5-r scales are relatively stable over 20 years in an adult community population.



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Conventional theories of personality describe personality traits as stable factors over the life span. Personality traits are historically regarded as permanent, or “set like plaster,” after the age of 30 (James, 1890). However, over the past few decades, scholars have posited a more nuanced view on personality trait stability, implying that personality traits are not entirely robust over age and time (Roberts, Walton, & Viechtbauer, 2006). Before expounding upon the extant literature, it is important to discuss the distinction between two different types of constructs that define stability and change. First, mean-level difference (or *absolute stability*, typically measured with effect size  $d$ ) reflects the average change between two time points when comparing a group-level score, and is mostly used in longitudinal research to indicate normative change (Roberts et al., 2006; Wagner, Ram, Smith, & Gerstorf, 2016). Further, mean-level change typically indicates systematic changes in the average scale score (Ashton, 2007). Second, rank-order consistency (or *differential stability*) represents an individual's relative position on a trait compared to others—typically operationalized using test-retest correlations—and can exist alongside mean-level change (Anusic & Schimmack, 2016; Roberts et al., 2006). For example, a certain group can

have a relatively stable score on a certain measure overall, while individuals within that group have inconsistent scores over time. Rank order consistency assesses whether change is consistent across groups of individuals (Ashton, 2007). The present study examines both forms of stability of the Personality Psychopathology-Five-Revised (PSY-5-r), a model of maladaptive personality traits (Harkness & McNulty, 2007).

Over the last few decades, many empirical findings support the notion that normative personality traits undergo mean-level changes across multiple life phases, including adolescence (Allik, Laidra, Realo, & Pullman, 2004), adulthood (Roberts et al., 2006; Srivastava, John, Gosling, & Potter, 2003), late adulthood and old age (Debast et al., 2014; Möttus, Johnson, & Deary, 2012). Regarding mean-level changes in the Big Five personality traits (i.e., Neuroticism, Extraversion, Openness, Agreeableness, Conscientiousness), a large meta-analysis reported robust changes, showing that individuals become more agreeable, more conscientious and less neurotic as they age (Roberts et al., 2006). However, results appear to be less straightforward for rank-order stability of these constructs. Some studies indicate that personality traits become increasingly stable (i.e., display a stronger test-retest correlation) over

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the adult life-course, and that this effect plateaus (i.e., displaying weaker test-retest correlation) after the age of 50 (Roberts & DelVecchio, 2000). Another study found a U-shaped temporal trajectory of rank-order instability of four of the Big Five traits, such that traits were found less stable before the age of 40 and after the age of 60, and this instability was found to be largely influenced by environmental changes and maturation (Specht, Egloff, & Schmukle, 2011). These findings suggest that normative personality may have both dynamic and stable aspects in adulthood and that personality stability should be interpreted in the context of life phase and stability type.

To date, most research on personality stability has focused on the assessment of normative personality traits (Krueger et al., 2011). Significantly fewer research efforts have focused on investigation of the stability of maladaptive personality traits, or the outermost levels of the normative personality spectra. In one study, dimensional measures of personality disorders (i.e., the SNAP-2 scales) showed strong rank-order stability (mean  $r = .69$ ) and moderate mean-level stability (mean  $d = .21$ ) in a clinical sample over a two-year period, indicating robust stability (Samuel et al., 2011). In addition, the maladaptive personality traits of the Personality Psychopathology 5 model (PSY-5) showed mean-level stability over a 6-month period in clinical and normative samples, consisting of adults between 20 and 84 years old (specifically, measures of the constructs Psychoticism, Negative Emotionality/Neuroticism and Introversion/Low Positive Emotionality). Also, all five traits showed strong rank-order consistency (Trull, Ueda, Costa, & McCrae, 1995).

Further investigation of the stability of maladaptive personality measures could be valuable in several ways. First, empirical evidence for stability (or change) of maladaptive personality traits increases understanding of the course and structure of personality pathology, especially in context of a dimensional approach to personality and psychopathology (Hopwood & Bleidorn, 2018). Second, maladaptive personality traits can be interpreted in the larger context of dimensional psychopathology taxonomies (Kotov et al., 2017). Third, acquiring a deeper understanding of the measurement of maladaptive personality traits may add to the predictive value of diagnostic assessment in specific life phases (Clark, 2009; Hopwood & Bleidorn, 2018; Malouff, Thorsteinsson, & Schutte, 2005). Fourth, longitudinal research on reliability and stability of dimensional measures and maladaptive personality is valuable for assessment and treatment planning. Lastly, these findings could also contribute to insight in the temporal stability of Criterion B of the Alternative Model of Personality Disorders in DSM-5 and to the temporal stability of higher order factors of the Hierarchical Taxonomy of Psychopathology (Anderson et al., 2013; Kotov et al., 2017). True stability of dimensional models such as Criterion B of the Alternative Model of Personality Disorders would underline the notion that dimensional models are more valid and reliable than categorical taxonomies, which increases dimensional models' value in clinical context. The present study utilizes the PSY-5-r personality scales (Harkness & McNulty, 2007) of the MMPI-2-RF, a dimensional measure of personality and psychopathology (Ben-

Porath & Tellegen, 2008). Stability is investigated in an adult normative community sample over 20 years.

The aim of the present study is to investigate both mean-level and rank order consistency of the five PSY-5-r scales over a 20-year period. First, we expect a significant mean-level change of three of the PSY-5-r scales, as reflected in significant differences in the average scale scores between the two measurement points of 1992 and 2012. Given the 20-year difference between time-point one (ages 25 to 65) and time-point two (ages 45 to 85), participants have undergone a significant shift in life phase. This shift in life phase may be associated with mean-level changes in maladaptive personality scale scores (Roberts et al., 2006; Srivastava et al., 2003). Regarding direction and strength of these effects, we expect NEGE-r and PSYCH-r, INTR-r scales scores to moderately decrease ( $d \geq .50$ ) with age, and we expect DISC-r and AGGR-r scale scores to show no significant mean-level change. These hypotheses are in line with directions found by Trull et al. (1995). Second, regarding rank-order consistency we expect to see robust 20-year stability of all five PSY-5-r personality measures, consistent with previous findings on rank-order consistency of maladaptive personality constructs over shorter periods (Harkness, McNulty, et al., 2014; Trull et al., 1995) and personality disorders (Hopwood et al., 2013). Robust rank-order consistency of these traits is expected to be evidenced by strong test-retest correlations ( $r \geq .50$ ) of 1992 scores and 2012 scores on these scales.

## Methods

### Measures

The MMPI-2-RF is an internationally used self-report dimensional measure of personality and psychopathology constructs (Ben-Porath & Tellegen, 2008). Details regarding the psychometric properties and translation processes of the Dutch-language versions of the MMPI-2-RF and its predecessor—the Dutch language version of the MMPI-2—are provided in the respective manuals (Derksen, De Mey, Sloore, & Hellenbosch, 2006; Van der Heijden, Rossi, Van der Veld, Derksen, & Egger, 2013). The psychometric properties of the Dutch language version of the MMPI-2-RF and PSY-5-r are comparable to those of the US version (Van der Heijden, Egger, & Derksen, 2008, 2010). Table 1 displays detailed information on the PSY-5-r scales.

### Participants and procedure

As part of the standardization of the Dutch language version of the MMPI-2, a representative community sample was recruited in 1992 ( $N = 1244$ ,  $M_{\text{age}} = 44.23$ , 45.3% female) by a Dutch national survey agency. To update this standardization sample, a second Dutch community sample was recruited in 2012 ( $N = 2140$ ,  $M_{\text{age}} = 52.47$ , 47.9% female). At both time points, sampling procedures were closely monitored and stratified in order to accurately represent the general Dutch population. By happenstance, 66 participants completed the MMPI-2 in 1992 as well as in 2012. During

**Table 1.** Psychopathology Five-Revised (PSY-5-r) scale descriptions and psychometric properties.

Trait	Scale	Behavioral descriptors <sup>a</sup>	Number of items	<i>r</i> <sup>c</sup>	$\alpha$
Aggressiveness	AGGR-r	Aggressive, angry, argumentative, assertive, competitive, concerned about status, hostile, hostile toward therapist, manipulative, overbearing in relationships, (passive) (passive in relationships), physically abusive, power-oriented, stereotypic masculine behavior, (submissive)	14	.80	.69
Disconstraint	DISC-r	Acts out, bored, poor judgment, does not complete projects, impulsive, restless, problems with authority figures, impatient, (work-oriented), (moralistic), (dependable), (overcontrolled), and (perfectionistic)	13	.78	.61
Negative Emotionality/ Neuroticism	NEGE-r	Anxious, whiny, worrier, self-degrading, feels hopeless, pessimistic, nervous, self-doubting, physical symptoms in response to stress, feels gets raw deal from life, preoccupied with health problems, ruminates, believes cannot be helped, feels life is a strain, feels mistreated, feels like a failure, and many specific fears	14	.82	.84
Introversion/Low Positive Emotionality	INTR-r	Introverted, low sex drive, shy, keeps others at a distance, (extroverted), (energetic), (likeable), (needs to be with others), and (optimistic).	16	.81	.74
Psychoticism	PSYC-r	Paranoid ideation, unusual experiences, abnormal experiences, connection to shared reality, hallucinations, delusions, loose associations	17	.81	.32

<sup>a</sup>Behavioral descriptors reflect elevated scores on the scale, as described by Harkness, McNulty, et al. (2014), descriptors in parentheses reflect opposite characteristics (i.e., negatively formulated items);

Note: Number of Items = number of items that make up the scale; *r*<sup>c</sup> = test-retest of the PSY-5-r over 6 weeks reported in the Dutch-language version manual (Van der Heijden et al., 2013);  $\alpha$  = internal consistencies reported in the Dutch language version manual (Van der Heijden et al., 2013).

both time points, all eligible and enrolled subjects (18 years and older) completed the MMPI-2 through an online portal. Computers with internet connection were provided for participants who did not have access to the necessary technology. Further, all participants were compensated for their time and effort.

In the present study, raw item scores were used in statistical analyses derived from scores obtained by computer administration of the MMPI-2 booklet. Non-gendered T-scores for the MMPI-2-RF validity scales were computed for both time points to examine the validity of the profiles. One respondent was excluded from analyses due to an elevated T-score on the TRIN-r scale ( $T = 96$ , in 2012). The MMPI-2-RF profiles of all other participants met the following inclusion criteria at both moments (1992 and 2012, based on calculation of non-gendered norms for the specific time of administration): Cannot Say raw scores  $< 14$ , VRIN-r and TRIN-r  $T$  score  $\leq 80$ , Fp-r  $T$  score  $< 100$ , and L-r  $\leq 80$  (Ben-Porath & Tellegen, 2008). In the final sample ( $N = 65$ ) participants were between the ages of 25 and 65 years old ( $M_{\text{age}1992} = 44.52$ , 58.5% female) in 1992, and 45 and 85 years old ( $M_{\text{age}2012} = 64.52$ ) in 2012. The raw, PSY-5-r scores of 65 participants were used to address the research question.

### Analysis procedures

Independent-samples *t*-tests were conducted to compare the current sample ( $N = 65$ ) to the larger sample at both time points to check for differences in age and sex. With regard to the 1992 group, results indicated that the subsample ( $N = 65$ ) was about 1 year younger on average ( $M_{\text{subsample}} = 45.02$  vs.  $M_{\text{largesample}} = 44.19$ ) than the larger 1992 sample ( $N = 1178$ ), and this difference was statistically significant ( $t = -.463$ ,  $p = .005$ , Cohen's  $d = .07$ ). In contrast, there was no statistical difference in sex (%femalesubsample = 43.1 vs %femalelargesample = 45.3;  $\chi^2(1) = 1.232$ ,  $p = .267$ ,  $d = .058$ ) between the subsample ( $N = 65$ ) and the larger 1992-sample ( $N = 1178$ ). With regard to the 2012 group, results indicated that the subsample ( $N = 65$ ) was about 12 years older on average ( $M_{\text{subsample}} = 65.02$  vs.  $M_{\text{largesample}} = 53.33$ ) than the larger 2012 sample ( $N = 2087$ ),

and this difference was statistically significant ( $t = -5.559$ ,  $p < .001$ , Cohen's  $d = .83$ ). In addition, there was no statistical difference in sex (%femalesubsample = 43.1 vs %femalelargesample = 47.9;  $\chi^2(1) = 1.232$ ,  $t = .267$ ,  $d = .11$ ) between the subsample ( $N = 65$ ) and the larger 2012-sample ( $N = 2087$ ). Thus, our subsample was significantly different in mean age compared to the entire normative samples at both time points. However, these differences in mean age are due to the 20-year difference between time point one and time point two: in 1992 they were relatively younger (age range 25–45) whereas in 2012 this group was relatively older (age range 45–65).

First, we confirmed that our sample exceeded the minimum number of participants (i.e.,  $N = 64$ ) to assume a power of .80, based on  $\alpha = .05$  and a hypothesized medium effect size (Cohen, 1992; Faul, Erdfelder, Buchner, & Lang, 2009). Next, we examined mean-level change using repeated-measures analysis of variance (ANOVA). We calculated Cohen's  $d$  as effect size (Dunlap, Cortina, Vaslow, & Burke, 1996). Second, we assessed Pearson correlations between the 1992 and 2012 time points to investigate rank-order consistency of the PSY-5-r scales. We interpreted these correlations ( $r$ ) as effect sizes based on established cutoff values: .10 (small), .30 (medium) and .50 (large; Cohen, 1992). Furthermore, we compared the test-retest correlations over 20 years found in this study with test-retest correlations obtained over 6 weeks in 1993, by calculation of Fisher's  $r$ -to- $z$  transformation between the correlations and the 1993 test-retest correlations of the PSY-5-r (Fisher, 2006). We calculated Cohen's  $q$  to evaluate the effect size of this statistical comparison (Cohen, 1992).

### Results

Results of various ANOVAs indicated no significant differences between the 1992 and 2012 means for all five of the PSY-5-r scales. Table 2 displays a summary of statistics of the conducted mean-level analysis of the PSY-5-r scales between the 1992 and 2012 time-points, including mean T-scores, mean raw scores, raw score standard deviations, Standard Errors of the Mean,  $F$ -values,  $p$ -values and Cohen's  $d$ -values.

**Table 2.** Repeated measures ANOVA results of the 2012 PSY-5-r scales onto each single 1992 PSY-5-r scales.

Scale	$M_{\text{tscore}}_{1992}$	$M_{\text{tscore}}_{2012}$	$M_{\text{raw}}_{1992}$	$M_{\text{raw}}_{2012}$	$SD_{\text{raw}}_{1992}$	$Se_m_{1992}$	$SD_{\text{raw}}_{2012}$	$Se_m_{2012}$	F	$p$	$d_{\text{Cohen}}$
AGGR-r	50.22	49.82	8.23	7.98	3.156	.395	3.370	.418	.674	.415	.010
PSYC-r	48.54	49.22	1.78	2.08	1.772	.220	1.923	.238	1.164	.285	.018
DISC-r	48.51	49.30	4.51	4.11	2.326	.288	1.977	.245	2.487	.120	.037
NEGE-r	48.34	50.67	4.89	5.11	3.873	.480	3.8	.471	.293	.590	.005
INTR-r	49.86	49.04	8.52	8.40	3.236	.401	3.916	.486	.101	.751	.002

Note:  $M_{\text{tscore}}$  = mean T-score derived from comparison to Dutch norms in 1992 or 2012 respectively;  $M_{\text{raw}}$  = mean of raw scores ( $N=65$ );  $SD_{\text{raw}}$  = standard deviation of raw scores ( $N=65$ );  $Se_m$  = Standard Error of the Mean ( $N=65$ ); Repeated Measures ANCOVA: F,  $p$ ,  $d_{\text{Cohen}}$

**Table 3.** Correlations in comparison to Test-Retest Correlations reported in the manual and Fisher z and p-values of the PSY-5-r scales.

Scale	Current sample <sup>a</sup> $r$	Correlations reported in manual		Statistical comparison (Cohen)		
		$r^c$	$r^d$	Fisher $z^e$	$p$	$q$
AGGR-r	.73**	.80	.78	-2.07	.02	.27
PSYC-r	.3*	.81	.65	-6.28	<.01	.82
DISC-r	.56**	.78	.81	-3.06	<.01	.40
NEGE-r	.65**	.82	.84	-3.06	<.01	.40
INTR-r	.63**	.81	.83	-2.96	<.01	.39
M	.57	.80				.46

\* $p < .05$ ; \*\* $p < .001$ ;

<sup>a</sup> $N=65$ ; as reported in the manual of the Dutch language version of the MMPI-2-RF (Van der Heijden et al., 2013).

Note:  $r^c$  = test-retest of the PSY-5-r over 6 weeks in general population in 1992 ( $N=1244$ );  $r^d$  = test-retest of the PSY-5-r scales over 6 weeks in a student population in 2010 ( $N=107$ ); Fisher  $z^e$  = z-score for statistical comparison of the correlation ( $r$ ) and the test retest correlation in 1993 over a 6 week time span ( $r^c$ ) as reported in the manual;  $q$  = Cohen's  $q$  (Cohen, 1992).

Table 3 displays detailed findings of the correlational analyses. Overall, all five correlations were significant and ranged between moderate (.30) and strong (.73), indicating rank-order consistency of all 5 scales. We applied Fisher's  $r$ -to- $z$  transformations (Fisher, 2006) to compare findings in the present investigation with test-retest correlations over 6 weeks that were computed in a different subsample of the normative sample ( $N=161$ ), randomly selected in 1992 during the standardization process (Derksen & De Mey, 1992). Results showed significant differences between correlations in the present study (i.e., over 20 years) and test-retest correlations found in the 1992 normative sample (i.e., over 6 weeks). This indicates that the PSY-5-r scales are significantly less reliable over 20 years than over a 6-week period. The effect sizes for the differences between these correlation (i.e., test-retest over 6 weeks compared test-retest over 20 years) were all in the small-medium range: AGGR-r ( $q = .27$ ); DISC-r ( $q = .40$ ); NEGE-r ( $q = .40$ ) and INTR-r ( $q = .39$ ), except for PSYC-r ( $q = .82$ ) which can be considered moderate to large. Table 3 displays statistics around rank-order consistency, including test-retest correlations, and Fisher's  $z$ -values,  $p$ -values and  $q$ -values.

## Discussion

The purpose of the present investigation was to examine mean-level change and rank-order consistency of the PSY-5-r scales over 20 years in a Dutch community sample. First, all PSY-5-r scales demonstrated a lack of significant mean-level change, which supports the notion that these five maladaptive personality constructs may have *absolute* stability. We hypothesized that 3 out of 5 PSY-5-r scales (PSYC-r, NEGE-r, INTR-r) would show significant mean-level change over 20 years and 2 out of the 5 PSY-5-r scales (AGGR-r, DISC-r) would not. Thus, our hypotheses were only partially confirmed. Second, correlational results indicated that all PSY-5-r

scales but the PSYC-r scale show rank-order consistency, as evidenced by moderate to strong correlations across the two time points. However, after controlling for measurement error, rank-order consistency evidenced to be moderate. Overall, our findings imply that the constructs measured by the PSY-5-r could be considered stable on a group level (i.e., *absolute* stability), whereas the PSY-5-r scales show moderate stability on an individual level (i.e., *differential* stability). The latter results, however, must be interpreted in light of imperfect measurement reliability of the scales.

The findings from the present study are derived from rare, multi-decade longitudinal data and offer a unique contribution to the scientific literature regarding the reliability of scales that measure these five constructs as well as the stability of underlying maladaptive personality traits. Our findings on reliability of the PSY-5-r scales align with the notion that personality psychopathology constructs are relatively stable when measured dimensionally, which is consistent with previous results showing reliability of dimensional measurement of personality psychopathology and personality disorders (Samuel et al., 2011; Trull et al., 1995). However, there is variation in reliability among the scales. Particularly, the PSYC-r scale appears to be the most susceptible to measurement error over 20 years, whereas AGGR-r appears to be the most reliable scale. The PSYC-r's lack of robust reliability may be due to its unique property of measuring both normal and clinical components of the Psychoticism construct, potentially causing it to be the least reliable due to a lack of clinical-level variance in normative populations. The influence of measurement error on the reliability implies that further research is needed to disentangle the true differential stability of maladaptive traits from the reliability of the scales.

The stability of underlying maladaptive personality constructs warrants discussion of implications, contextualizing our results within the broader literature on rank-order consistency (i.e., *differential* stability) of the PSY-5-r traits.

Assuming true score stability of the PSY-5-r over 20 years would be consistent with findings by Trull et al. (1995), who found rank-order consistency of the PSY-5 (the predecessor of the PSY-5-r) constructs over 6 months. These researchers also found that these constructs predict most forms of personality disorders at both time points, which was not assessed in the present study. Notably, stability was found between specific life phases, particularly early adulthood (ages 25 to 45) to late adulthood (65–85), though the present study did not cover early life stages. However, given the range of ages covered, one could interpret our results to support the claim that the PSY-5-r is stable in adulthood on an individual level. Lastly, the maladaptive side of the personality traits could be linked to theories of evolved major systems, as discussed in Harkness, Reynolds, and Lilienfeld (2014). Individual differences in trait levels across life phases may represent an evolved adaptation to the external environment. For example, there might be an evolutionary benefit to stability of certain levels of trait Aggressiveness (measured by AGGR-r), because continuation of this trait reflects *agenda protection* (Harkness, Reynolds, et al., 2014), benefitting the individual in the long-term. Therefore, certain trait levels have become psychopathological (i.e., standardized scores above 65) in modern society, though stable individual differences may reflect an originally adaptive system, evolved as a result of influences of environmental shaping.

Despite the lack of clear *differential* stability conclusions, the PSY-5-r constructs show meaningful *absolute* stability. Whereas normative personality traits have been found to show mean-level change in adulthood (Roberts et al., 2006; Srivastava et al., 2003) and late adulthood (Debast et al., 2014; Mõttus et al., 2012), the present study indicates that the five maladaptive PSY-5-r constructs may follow a somewhat stable temporal trajectory in healthy adults. One could conclude that the majority of PSY-5-r scales are stable when assessed between adult cohorts of healthy individuals. The present study did not allow for investigation of non-linear relationships and therefore we cannot rule out other types of temporal trajectories within the 20-year time span, such as a U-shaped trajectory found by Specht et al. (2011). Cross-sectional and longitudinal study designs investigating stability in different generational and diverse samples may be able to identify detailed information regarding the life-long nature of maladaptive trait stability.

The mean-level change of the PSY-5-r scales over two decades emphasizes the unique psychometric properties of the PSY-5-r as a clinical assessment tool. Individuals scoring particularly high on any of the five maladaptive personality scales may continue to score high over time. If this finding is replicated, scholars should direct their attention to studying intervention as a means of adjusting the stable course of maladaptive personality traits (Roberts et al., 2017). When interpreting scores on the PSY-5-r, clinicians should be knowledgeable of norm differences that might occur across ages, generation, and samples (i.e., clinical and non-clinical adults). Further, clinicians and clinical researchers ought to be mindful of the differences in applying adaptive versus maladaptive measurement models. Whereas adaptive personality traits

(e.g., the Big Five), evidences fluctuating stability based on the life phase (Debast et al., 2014; Mõttus et al., 2012; Roberts et al., 2006; Srivastava et al., 2003), the present study indicates maladaptive traits may be more stable in middle to late adulthood. Moreover, our findings indicate there may be stability differences among the five PSY-5-r maladaptive constructs and these should not be considered equally stable in clinical samples, perhaps due to differences in the extent to which they encompass symptomatology. Constructs containing more symptom-like features are expected to be more sensitive to change over time (Hopwood et al., 2013).

Some limitations of the present investigation warrant discussion. Our limited sample size puts constraints on the generalizability of the results. Additionally, the present study relies exclusively on self-report, and given the complexity of personality constructs overall, research should involve multiple ways of measuring personality to validly measure the assumed latent variable (McDonald, 2008). Furthermore, the community sample utilized in the current study may have introduced a risk of bias. Conducting this study in a clinical sample may have produced greater variance in the latent constructs, given the range of maladaptive symptoms assessed. Rank-order stability specifically could evidence a different temporal path in a controlled, clinical sample where one might expect stronger effects overall. Lastly, unidentified sampling error may have been introduced due to the nature of the present study's selection process.

As previously mentioned, a reliable investigation of the temporal path of maladaptive personality constructs ought to include multiple time points, while simultaneously applying sophisticated statistical analysis to control for measurement error. Future research should also address other types of stability (e.g., ipsative stability, intrapersonal stability) to strengthen conclusions on overall stability. Results from the present study imply that individuals in community-based settings may show a tendency toward stable maladaptive personality traits. However, these results require replication efforts in varying samples in order to draw conclusions that have strong implications for clinical practice. Further, investigation of different models of maladaptive personality would contribute to external validation of stability claims. Studying the nature of dimensional psychopathology should not only include stability of personality constructs, but also stability of other dimensional personality-related concepts, including higher-order psychopathology constructs such as internalizing, externalizing and thought dysfunction dimensions (Bornstein, 2019; Kotov et al., 2017).

In sum, the present study shows that maladaptive personality traits—measured by the PSY-5-r—are relatively stable over a 20-year period. These results support the use of the MMPI-2-RF as a clinical tool to assess maladaptive personality over time in community samples.

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