

**SATURDAY, MARCH 28**

5:30 – 6:30      **POSTER SESSION (JOINT WITH SPA)**

**MMPI-A-RF Predictors of Adolescent Therapy Engagement in Residential Youth** - Landon J. Freiburger, Tayla T.C. Lee, Cheyenne McIntyre, & Janay B. Sander (Ball State University)

**MMPI-3 Scale Correlates of Vaping Behaviors** – Brandon W. Mills, Brittany L. Mitton, & Nathan C. Weed (Central Michigan University)

**Associations between the IOP-29, IOP-M, MMPI-3 and WMT in a Non-Head Injury Disability Sample** – Adriana Ross, Dana Doucette, Jessica Scott (Neurobehavioural Associates), & Roger O. Gervais (Neurobehavioural Associates, University of Alberta)

**SUNDAY, MARCH 29**

8:55 – 9:00      **Welcome** – Martin Sellbom (Monash University) & Dustin B. Wygant (Eastern Kentucky University), *Symposium Program Co-chairs*

9:00 – 10:00    **Integrated Paper Session: The Kent State University Student Life Study**

**The Kent State University Student Life Study: An Overview of the Study and its use of the MMPI-3** – Yossef S. Ben-Porath, John Gunstad, & Karin G. Coifman (Kent State University)

**Further Comparison of the MMPI-3 Antagonism and Aggressiveness Scales using Longitudinal Prediction of Affect and Interpersonal Dysfunction** – Jacob R. Brown, Yossef S. Ben-Porath, John Gunstad, & Karin G. Coifman (Kent State University)

**Associations Between the MMPI-3 Externalizing Scales and Risk Behavior as Indexed by EMA** – Kaci F. Holmes, Yossef S. Ben-Porath, John Gunstad & Karin G. Coifman (Kent State University)

**Examining the Prediction of Longitudinal Affect and Sleep Difficulties from MMPI-3 Activation Scores** – Kaitlyn E. May, Jacob R. Brown, Yossef S. Ben-Porath, John Gunstad, & Karin G. Coifman (Kent State University)



- 10:00 – 10:15 **Examining Change Using the MMPI-2-RF in a Multicenter RCT on BPD** – Jan H. Kamphuis (University of Amsterdam), Martin Sellbom (Monash University), & Carlijn Wibbelink (University of Amsterdam)
- 10:15 – 10:30 **Does Acculturative Stress Still Impact the MMPI-3 Performance of Latinos/as?** Roberto Velasquez (Northern New Mexico College)
- 10:30 – 11:00 **Break**
- 11:00 – 11:15 **An Update on the MMPI-A-3 Development Project: Year 1** – Tayla T.C. Lee (Ball State University), Richard Handel (Old Dominion University), Radhika Krishnamurthy (Florida Institute of Technology), & Yossef S. Ben-Porath (Kent State University)
- 11:15 – 11:30 **Beyond the Critical Items: Exploring MMPI-A-RF Item Endorsements in the Prediction of Adolescent Suicidal Ideation** – Katelyn Bradley & Linda Baum (Regent University)
- 11:30 – 11:45 **An Examination of the Impact of L and K Scale Elevations on Substantive Scales of the MMPI-A-RF** – Linda J. Baum (Regent University)
- 11:45 – 12:00 **Cross-Validation of the MMPI-3 Dissimulation ADHD (Ds-ADHD) Scale with Item-Level Empirical Correlates** – Samantha Strickland, Richard Rogers, Shannon R. Williamson-Butler, & Emma Fisher (University of North Texas)
- 12:00 – 12:15 **Exploring the Associations between MMPI-3 Scale Scores and Autism Spectrum Disorder Symptoms** – Keefe Maccarone & Yossef Ben-Porath (Kent State University)
- 12:15 – 1:45 **Lunch**
- 1:45 – 2:00 **Linking the MPQ to physical health in the Minnesota Center for Twin and Family Research (MCTFR): Multi-decade opportunities for collaboration** – Robert F. Krueger (University of Minnesota)
- 2:00 – 2:15 **MPQ Profiles of Care Partners of Veterans with Traumatic Brain Injury** – Jacob A. Finn (Minneapolis VA Health Care System & University of Minnesota-Twin Cities), Nadia L. Hinman (Minneapolis VA Health Care System), & Susan J. Knight (Minneapolis VA Health Care System & St. Mary's University of Minnesota)



- 2:15 – 2:30     **The Role of the MMPI-3 in Identifying Factors Associated with Adherence to Treatment for Chemical Dependency in a Veteran Sample** – Paul A. Arbisi (Minneapolis VA Health Care System & University of Minnesota-Twin Cities), William H. Menton (Minneapolis VA Health Care System), Craig A. Marquardt (University of Minnesota), & Noah C. Venables (Expansive MN, Minneapolis, MN)
- 2:30 – 2:45     **Personality, Attitudes, and Alcohol Use in Emerging Adults: An MMPI Investigation** – Jeremy Azofeifa, Cheyenne McIntyre (Ball State University), Andrew J. Kremyar (Ohio Northern University), & Tayla T.C Lee (Ball State University)
- 2:45 – 3:00     **Untangling the Energetic Architecture of Psychopathology: A Network Analysis of MMPI-3 Hypomanic Activation (RC9) within Dimensional Personality Models in an Italian Community Sample** – Paolo Roma, Ludovica Oppici, Cristina Mazza (Sapienza University of Rome), Merylin Monaro (University of Padua), & Martin Sellbom (Monash University)
- 3:00 – 3:15     **Break**
- 3:15 – 3:30     **Assessment of Personality Impairment using the MMPI-3** – Martin Sellbom (Monash University)
- 3:30 – 3:45     **Examining the Criterion Validity of the MMPI-3 PD Syndrome Scales in an Outpatient Community Mental Health Sample** – David A. Rich, Kaitlyn E. May, Jacob R. Brown, & Yossef S. Ben-Porath (Kent State University)
- 3:45 – 4:45     **Panel Discussion: Methodological and Statistical Advances in Personality Assessment Research**
- Chair: Dustin B. Wygant (Eastern Kentucky University)
- Panel: Robert F. Krueger (University of Minnesota), Tayla T.C. Lee (Ball State University), William H. Menton (Minneapolis VA Health Care System), Martin Sellbom (Monash University)
- 4:45             **Adjourn**



# MMPI-A-RF Predictors of Adolescent Therapy Engagement in Residential Youth

Landon J. Freiburger, Tayla T.C. Lee, Cheyenne McIntyre, Janay B. Sander

*Ball State University*

Therapeutic engagement is critical for positive treatment outcomes (Becker et al., 2017), yet research examining predictors of engagement in residential settings is limited. This study examined associations between pre-admission MMPI-A-RF scores and engagement markers among 32 adolescents in residential care. Higher scores on Hypomanic Activation (RC9) were associated with lower therapeutic alliance ( $r = -.32$ ), whereas Obsessions/Compulsions (OCS) and Anxiety (AXY) were associated with stronger alliance ( $r = .34$  and  $.44$ , respectively). Conduct Problems (CNP) predicted lower treatment expectancy ( $r = -.32$ ), while Aberrant Experiences (RC8) predicted higher expectancy ( $r = .39$ ). Homework completion was positively associated with Dysfunctional Negative Emotions (RC7), Anxiety (ANX), and Introversion (INTR-r) ( $r = .32$  -  $.44$ ), and negatively associated with Antisocial Attitudes (ASA) and Substance Abuse (SUB) ( $r = -.32$  and  $-.38$ ). Treatment clarity showed a non-discriminating pattern of negative associations with 21 MMPI-A-RF scales. These findings are consistent with prior research in other adolescent samples (Shirk & Carver, 2003) and suggest MMPI-A-RF scores may help identify adolescents at risk for poor engagement in residential treatment, excepting clarity. Future work should replicate these findings in larger residential samples and determine whether identifying risk for poor engagement can guide pre-treatment interventions that improve treatment outcomes.

## **MMPI-3 Scale Correlates of Vaping Behaviors**

Brittany L. Mitton, Brandon W. Mills, & Nathan C. Weed  
*Central Michigan University*

Mitton (2025) demonstrated that predictable relationships exist between vaping behaviors and MMPI-3 scales, focusing on the Restructured Clinical Scales. For example, she found that RC6 (Ideas of Persecution) scores were correlated .44 with the self-report that, “I vape to deal with being hassled by others” and that RC1 (Somatic Complaints) scores were correlated .35 with the self-report that, “Vaping helps me cope with worries about my physical health” in a sample of college students who vape. The proposed poster explores the relationship between vaping behaviors and a broader array of MMPI-3 scales in an expanded sample of 105 college students who vape. Each of the substantive MMPI-3 scales will be correlated with each of the items in the Vaping Rating Scale, an experimental 27-item self-report measure that describes the emotional, cognitive, and behavioral contexts surrounding vape use. Results may inform theoretical relationships between personality, psychopathology, and vape-related behaviors.

## **Associations between the IOP-29, IOP-M, MMPI-3 and WMT in a non-head injury disability sample**

Adriana Ross, M.A.<sup>1</sup>, Dana Doucette, B.A.<sup>1</sup>, Jessica Scott, M.C.<sup>1</sup>, & Roger O. Gervais, Ph.D.<sup>1,3</sup>

<sup>1</sup>*Neurobehavioural Associates, University of Alberta*

This study is an investigation of the association between the Inventory of Problems-29 (IOP-29) and its memory module (IOP-M) the MMPI-3 validity scales and the Word Memory Test (WMT), in a sample of non-head injury disability claimants (N = 104) with financial incentives. The IOP-29 (Viglione & Giromini, 2020) is a freestanding symptom validity test (SVT) and the IOP-M (Giromini, Viglione, et al., 2020) is a performance validity test (PVT) derived from the content of the IOP-29.

We began by examining associations between the IOP-29 FDS (False Disorder Probability Score) and the MMPI-3 validity scales. As expected, the FDS was positively correlated with all MMPI-3 overreporting validity scales, with the strongest associations noted for F (.593), RBS (.547) and Fs (.466). Significant negative correlations were observed between the FDS and WMT Immediate Recognition (IR) (-.510) and Delayed Recognition (DR) (-.512). IOP-M also showed a negative correlation with IR (-.324) and DR (-.414).

Chi-square analysis revealed a significant association between IOP-M below cutoff (noncredible) scores and WMT failure using the standard WMT scoring criteria ( $p < .001$ ). OCC of the IOP-M relative to WMT was 69%, with 4 indeterminate cases (5%). There were no false positive noncredible IOP-M cases. Using more conservative WMT failure criteria (IR or DR  $\leq 77.5\%$ ) proposed by Rohling et al. (2024) resulted in an OCC of 81%, with one false positive IOP-M.

Finally, we used ROC analysis to examine the effectiveness of the IOP-29 FDS and MMPI-3 overreporting validity scales in predicting WMT failure, using the standard failure criteria. The most effective measure was IOP-29 FDS ( $d = 1.40$ , AUC = .831), followed by RBS ( $d = 1.19$ , AUC = .804) and F ( $d = .876$ , AUC = .735). Using the more conservative WMT failure criteria, the most effective measure was RBS ( $d = 1.17$ , AUC = .816), followed by FDS ( $d = .122$ , AUC = .805) and F ( $d = 1.14$ , AUC = .793).

Results of this study support the utility of the IOP-29 and the IOP-M as effective measures of symptom validity and performance validity in psychological assessment of non-head injury disability claimants.

**The Kent State University Student Life Study:  
An Overview of the Study and its use of the MMPI-3**

Yossef S. Ben-Porath, John Gunstad, & Karin G. Coifman  
*Kent State University*

The Kent State University Student Life Study (SLS) aims to investigate a large cohort of undergraduate students across their college experience and beyond, potentially across the lifespan. The project employs a longitudinal measurement-burst design, with repeated assessments each semester, including surveys (baseline/annual, and each semester), lab-based assessment (computer session and biomarkers), and ecological momentary assessment (EMA). Students who consent to enroll in the study are invited to complete the MMPI-3 (for additional compensation) in addition to the other study measures. Approximately 1,000 SLS participants have completed the MMPI-3 to date. This presentation provides an overview of the study and the MMPI-3 data collected to date.

# **Further Comparison of the MMPI-3 Antagonism and Aggressiveness Scales using Longitudinal Prediction of Affect and Interpersonal Dysfunction**

Jacob R. Brown, Yossef S. Ben-Porath, John Gunstad, Karin G. Coifman

*Kent State University*

The Personality Psychopathology Five (PSY-5) trait of Aggressiveness is a conceptual cognate of the Antagonism construct incorporated in contemporary personality disorder literature. The MMPI-3 includes PSY-5 scales that link the inventory to contemporary personality disorder models. Sellbom and Brown (2025) posited that the PSY-5 Aggressiveness (AGGR) scale is too content restricted to effectively capture its target construct and developed the MMPI-3 Antagonism (ANT) scale as an alternative to AGGR. Two initial validation studies have indicated improved convergent validity, and more theoretically consistent discriminant validity, of ANT relative to AGGR (Sellbom, 2025; Sellbom & Brown, 2025). These studies relied on cross-sectional data. The current study extended the validity comparison of ANT and AGGR to a longitudinal framework using ecological momentary assessment (EMA) measures of daily affective and interpersonal conflict experiences. This was done using a sample of university students participating in a large-scale longitudinal investigation of undergraduate mental health (Coifman & Gunstad, 2025). Participants ( $n = 376$ ) were 23.1% men, 68.9% women, and 7.2% another gender. The average age was 19.83 ( $SD = 3.73$ ). Zero-order correlations with daily anger ratings indicated a stronger association with ANT ( $r = .17$ ) than AGGR ( $r = .04$ ). Regressing daily anger onto scores on both MMPI-3 scales simultaneously yielded significant prediction from ANT ( $\beta = .23$ ,  $t(373) = 3.51$ ,  $p < .001$ ), whereas AGGR ( $\beta = -.10$ ,  $t(373) = -1.53$ ,  $p = .13$ ) was a non-significant predictor. Given that the target construct of these two scales is posited as being rooted in an anger-based agenda protection system (Harkness et al., 2014), ambulatory prediction of daily anger is important validity consideration. ANT scores were also more strongly (inversely) associated with EMA-reported adaptive emotion regulation behaviors ( $r = -.13$ ) than were AGGR scores ( $r = .08$ ). Neither scale was meaningfully associated with EMA-reported interpersonal conflicts. Follow-up mixed effect regression models were used to compare the prediction of these criteria from ANT and AGGR scores while accounting for within-person variability in EMA ratings across time.

# Associations Between the MMPI-3 Externalizing Scales and Risk Behavior as Indexed by EMA

Kaci F. Holmes, Yossef S. Ben-Porath, John Gunstad & Karin Coifman

*Kent State University*

The goal of the current study was to examine the associations between the MMPI-3 scales measuring externalizing dysfunction and risk behavior as measured using ecological momentary assessment (EMA) data in a college student sample. Specifically, participants were asked about their engagement in risk behaviors (i.e., risky sex, overspending, substance use, bingeing/purging, self-harm, and substance abuse) five times per day over the course of seven days. A person-level mean index for each of the combined risk behaviors was derived. The total sample included 343 individuals (i.e., 86 men; 257 women) after removing cases due to non-content-based responding (i.e., CNS < 18; CRIN < 80T; VRIN < 80T; TRIN < 80T)<sup>1</sup> and lack of EMA data.

Zero-order correlations between raw MMPI-3 scale scores and the risk variable (i.e., the average probability of endorsing risk behavior at a given time) were calculated for the total sample and separately for those identifying as men or women<sup>2</sup>. In the total sample, small-to-medium associations were observed between the risk variable and several of the externalizing scales, including Behavioral/Externalizing Dysfunction (BXD;  $r = .36$ ), Antisocial Behavior (RC4;  $r = .40$ ), Juvenile Conduct Problems (JCP;  $r = .21$ ), Substance Abuse (SUB;  $r = .48$ ), and Disconstraint (DISC;  $r = .42$ ). Significant associations were found between the risk variable and Infrequent Responses (F;  $r = .25$ ), Eating Concerns (EAT;  $r = .20$ ), and Suicidal Death Ideation (SUI;  $r = .26$ ) in the total sample.

Regarding the gender groups, correlations were largely robust, with significant associations between the risk variable and externalizing MMPI-3 scales for both men and women. The average, statistically significant correlation coefficient was .31 for men and .30 for women. Correlations between MMPI-3 EAT scores and risk-related behavior generalized across gender; however, the correlation with SUI was only significant for women.

Overall, the associations between some MMPI-3 externalizing scales and EMA reports of engaging in risk-related behaviors identify relevant behavioral correlates of higher MMPI-3 scores that generalize across gender. Future research will focus on the identification of specific risk-related behaviors that may be associated distinctively with externalizing MMPI-3 scales.

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<sup>1</sup> Cannot Say [CNS]  $\geq 18$ ; Combined Response Inconsistency [CRIN]; Variable Response Inconsistency [VRIN]; True Response Inconsistency [TRIN]  $\geq 80T$ ; Infrequent Responses [F]; Infrequent Psychopathology Responses [Fp]  $\geq 100T$ .

<sup>2</sup> For these analyses we removed participants who identified as gender-nonconforming or did not report gender due to small sample sizes (i.e.,  $n = 26$  and  $n = 3$ , respectively).

# Examining the Prediction of Longitudinal Affect and Sleep Difficulties from MMPI-3 Activation Scores

Kaitlyn E. May, Jacob R. Brown, Yossef S. Ben-Porath, John Gunstad, Karin G. Coifman

*Kent State University*

Watson and Tellegen (1999) posit that positive and negative *affect* are optimally conceptualized as positive and negative *activation*, with both being intertwined with broader biobehavioral systems of approach and withdrawal. The authors posit this conceptualization as being able to aid in the understanding of related phenomena, such as circadian rhythms, sleep, and mood disorders (Watson & Tellegen, 1991). The MMPI-3 (Ben-Porath & Tellegen, 2020a) includes an Activation (ACT) scale, which comprises items measuring mood fluctuation, excessive energy and talking, heightened excitation, and a decreased need for sleep. Ambulatory criterion validity is an important validity consideration for this scale, given the impact of activation-related difficulties (e.g., sleep difficulties and fluctuating mood) on daily life. Further, because the MMPI-3 is widely used in settings where these difficulties are likely to occur, such investigations are particularly important. The current study consequently examined MMPI-3 ACT score associations with affect and sleep difficulties measured using an Ecological Momentary Assessment (EMA) framework. This was done in a sample of university students participating in a large-scale longitudinal investigation of undergraduate mental health (Coifman & Gunstad, 2025). Participants ( $n = 376$ ) were 23.1% men, 68.9% women, and 7.2% another gender. The average age was 19.83 ( $SD = 3.73$ ). Zero-order correlations between ACT and EMA measures of positive and negative affect yielded meaningful associations with positive affect, measured in the morning ( $r = .24$ ) and again in the evening ( $r = .22$ ). Meaningful associations also emerged with negative affect assessed at the same time points of morning ( $r = .17$ ) and evening ( $r = .15$ ), supporting the ACT scale as mapping onto to Watson and Tellegen's (1999) construct conceptualization. Only one other MMPI-3 scale (i.e., Hypomanic Activation [RC9], which encompasses the target construct of ACT) yielded meaningful positive associations with both positive and negative affect. However, ACT was more strongly associated with these criteria ( $Mdn r = .20$ ) than was RC9 ( $Mdn r = .17$ ). Locally Weighted Regression Smoothing (LWRS) indicated ACT to be most strongly associated with positive affect at higher ACT scores, whereas prediction of negative affect was strongest at both the high and low ranges of ACT scores. Scores on ACT were not meaningfully associated with average daily sleep quality ( $r = .003$ ), potentially warranting replication with sleep quality actigraphy data to comprehensively examine ACT associations with sleep dysfunction. Implications for the interpretation of ACT scores and recommendations for future research will be presented and discussed.

## **Examining Change Using the MMPI-2-RF in a Multicenter RCT on BPD**

Jan H. Kamphuis, *University of Amsterdam, (UvA)*

Martin Sellbom, *Monash University, Australia*

Carlijn Wibbelink, *University of Amsterdam, (UvA)*

This study investigates psychological change in individuals with borderline personality disorder (BPD) using the MMPI-2-RF within the context of a multicenter randomized controlled trial (RCT), as part of the BOOTS project (Wibbelink et al., 2022). A sample of 86 participants completed the MMPI-2-RF at pre-treatment and at 36 month follow-up. Change vs stability was examined on both absolute terms (i.e., mean levels) as well as by individual relative rankings over time. Moreover, change was examined at each level of the hierarchy of scales, as well as between the evidence-based treatments (Schema-Focused Therapy and Dialectical Behavior Therapy). Although this present study is specific to individuals meeting criteria for BPD, we argue that inspection of the MMPI-2-RF pattern of change may have more broad clinical utility (Kamphuis, Noordhof & Hopwood, 2019) in indicating targets for the enhancement of treatment approaches and identifying possible process indicators of change.

## **Does Acculturative Stress Still Impact the MMPI-3 Performance of Latinos/as?**

Roberto Velasquez, Ph.D.  
*Northern New Mexico College*

The impact of acculturation and “acculturative stress” on the MMPI scores of Latinos/as in the United States has been perhaps the most widely studied topic with this population, especially Chicanos/as or Mexican Americans, dating back to the original MMPI and continuing with newer adaptations. Past research with the MMPI and MMPI-2 found that acculturation, as measured through instruments such as the Acculturation Rating Scale for Mexican Americans (ARSMA), did impact performance on several scales including the L and F scales. Researchers, while generally supporting the use of the MMPI instruments in the assessment and treatment of Latinas/os, have argued that “stress” associated with acculturating or adapting to mainstream American culture, whether a person is born in the United States or not, can be significant and observed through the MMPI-3 scales. More importantly, without taking into consideration the role of acculturative stress on the MMPI-3 performance of this group, clinicians may be prone to interpret a Latino/a’s performance as the result of more severe psychopathology. This results of this study describe the performance of a large group of Latino/a students, primarily of Mexican descent, on both the MMPI-3 and the Multidimensional Acculturative Stress Inventory (MASI). Results suggest that acculturative stress is likely to account for elevations on certain MMPI-3 scales, suggesting the need to develop methods to partial out stress related to acculturation from symptoms related to conditions identified on the MMPI-3. Implications for assessment of Latinos/as are discussed by this presenter.

## **An Update on the MMPI-A-3 Development Project: Year 1**

Tayla T.C. Lee<sup>1</sup>, Richard Handel<sup>2</sup>, & Radhika Krishnamurthy<sup>3</sup>, & Yossef S. Ben-Porath<sup>4</sup>

*<sup>1</sup>Ball State University*

*<sup>2</sup>Old Dominion University*

*<sup>3</sup>Florida Institute of Technology*

*<sup>4</sup>Kent State University*

This presentation provides an update on Year 1 of the MMPI-A-3 development project, a multi-year effort to revise the Minnesota Multiphasic Personality Inventory–Adolescent–Restructured Form (MMPI-A-RF) to better reflect contemporary adolescent language, experiences, and population demographics, while maintaining alignment with the adult MMPI framework. The goal of this presentation is to summarize Year 1 activities and document progress relevant to the next phase of instrument development. Year 1 activities center on two coordinated efforts. First, we are evaluating modified MMPI-A-RF and MMPI-3 items designed to improve clarity, readability, and inclusivity. School-based data collection is currently underway, with adolescents ages 14 to 18 completing either original or revised item sets, along with external self-report criterion measures. In parallel, de-identified school record indicators of academic and behavioral functioning are being collected from partner schools. Planned analyses will examine item- and scale-level comparability across versions to inform decisions about which modified items should be retained in subsequent iterations of the test. Second, Year 1 includes preparatory work for content enhancement, including the development of a survey to be administered to subject matter experts. Survey results will be used to identify priority constructs for potential addition to the test and to guide subsequent item development efforts. The presentation concludes by describing how Year 1 outputs transition directly into Year 2 item development activities.

## **Beyond the Critical Items: Exploring MMPI-A-RF Item Endorsements in the Prediction of Adolescent Suicidal Ideation**

Katelyn Bradley, M. A. (*Regent University*)  
Linda Baum, PhD (*Regent University*)

Accurate assessment of suicidality is vital due to its highly indicated prevalence. The Minnesota Multiphasic Personality Inventory–Adolescent (MMPI-A) is a tool used in the assessment of mood and behavior problems, where risk for suicidal ideation is measured by the three item Suicidal Ideation Content Component scale (A-dep 4; Archer & Slesinger, 1999). These items are included on the Minnesota Multiphasic Personality Inventory–Adolescent–Restructured Form (MMPI-A-RF) as critical items but are not assigned to any scale. We previously found *HLP* scale scores showed the highest mean elevations across all levels of endorsement of the SUI items (Bradley & Baum, 2025), supporting previous literature that indicates that hopelessness and helplessness play a key role in the development of suicidality and may act as an indicator of overall suicidality risk in the adolescent population. Additionally, RCd, RC2, RC4, RC6, RC8, *SFD*, and *ANX* were found to have prominent mean scale elevations concurrent with SUI critical item endorsement. Using data from the previous research, analyses were conducted to explore the relationship between items on the aforementioned scales, suicide related critical items, and suicidality endorsement. It was hypothesized that both the critical items assessing suicide and items from the aforementioned scales could predict suicidal ideation endorsement. The sample consisted of 122 adolescents receiving outpatient psychological testing and producing a valid MMPI-A-RF profile. Results indicated significant correlations between the endorsement of items 43, 46, 56, 73, 82, and 169, and reported current suicidal ideation. Logistic regression was utilized to evaluate whether the significantly correlated items predicted the likelihood of current suicidal ideation report. Results indicated perfect specificity but 0% sensitivity, due to the extreme imbalance in the dependent variable (only 3 positive cases out of 114 total). Considerations in assessing suicide risk, including the need for future research, will be discussed.

# **An Examination of the Impact of *L* and *K* Scale Elevations on Substantive Scales of the MMPI-A-RF**

Linda J. Baum

*Regent University*

Underreporting (UR) serves as a threat to test validity. The Minnesota Multiphasic Personality – Adolescent – Restructured Form (MMPI-A-RF), like its predecessors the MMPI and MMPI-A, contains scales to assess UR. The *L* scale assesses the denial of shortcomings while the *K* scale assesses atypically high levels of adjustment. However, research on the differential utility of *L* and *K* in assessing UR is limited. The current study was conducted to examine the unique utility of the MMPI-A-RF *L* and *K* scales in an outpatient sample. Based on research conducted with the Minnesota Multiphasic Personality Inventory – 2 – Restructured Form (MMPI-2-RF), it was hypothesized that *L* would have a greater impact on UR of behavioral symptomatology, while *K* scale scores would be related to score suppression on scales assessing internalizing symptomatology. The total sample of 163 adolescent outpatient clients were separated into four groups, after the removal of profiles invalid due to concerns regarding non-content based responding: UR within normal limits ( $n = 89$ ), elevated *L* scale scores only ( $n = 12$ ), elevated *K* scale scores only ( $n = 22$ ), and both elevated *L* and *K* scale scores ( $n = 29$ ). Mean Higher Order (H-O) and Restructured Clinical (RC) Scale scores were compared for the four groups. Results of an ANOVA indicated significant differences between groups for all H-O and RC scales. Specifically, hypotheses were supported for a differential impact of *L* and *K* scores in the expected direction on *EID*, *BXD*, *RCd*, *RC2*, and *RC7*. Despite the small sample size, this study provides support for the differential utility of the MMPI-A-RF *L* and *K* scale. Future research should continue to explore the utility of the *L* and *K* scales in the assessment of UR in adolescent samples.

# Cross-Validation of the MMPI-3 Dissimulation ADHD (Ds-ADHD) Scale with Item-Level Empirical Correlates

Samantha Strickland, B.S., *University of North Texas*

Richard Rogers, Ph.D., *University of North Texas*

Shannon R. Williamson-Butler, M.S., *University of North Texas*

Emma Fisher, M.S., *University of North Texas*

**Background.** Okie (2006) noted an alarming upsurge for American adult clients receiving stimulant medications to treat ADHD; specifically, a 90.0% increase from 2002 to 2005. Surveying 1,811 students, DeSantis et al. (2008) found 89.5% used stimulants for recreational reasons.

Robinson and Rogers (2018) developed an ADHD-specific feigning scale based on false stereotypes: Dissimulation Scale for ADHD (DS-ADHD). Participants were asked to “pinpoint those MMPI-2-RF items” that would be “useful in identifying ADHD” (p. 380).

**Method.** This between-subjects simulation design compared 156 feigners on Prolific to outpatients responding genuinely. They were compared to a clinical dataset of 116 outpatients, including 47 with ADHD diagnoses.

Procedurally, feigners were randomly assigned to one of four feigning conditions: Inattentive ADHD, Combined-type ADHD, SAD, or general feigning. Feigners were coached about their specific feigning condition with DSM-5 symptoms for their condition. They were also cautioned about MMPI-3’s validity scales. All genuine outpatients completed the MMPI-3 as part of their assessment battery.

**Results.** ADHD feigners ( $n = 59$ ) demonstrated significantly higher scores than genuine ADHD patients on F ( $d = 0.63$ ) and Fp ( $d = 0.75$ ) yet lower scores on the FBS scale ( $d = -0.47$ ). As predicted, the Ds-ADHD scale was the most effective ( $d = 1.00$ ) between feigned and genuine ADHD groups. ADHD feigners endorsed 55% more erroneous stereotypes than genuine ADHD patients. Importantly, the Ds-ADHD scale targeted feigned ADHD; general feigners did not elevate on this scale

When distinguishing genuine ADHD outpatients from inattentive and combined-type simulators, the Ds-ADHD scale demonstrated moderate effect sizes ( $ds = 0.92$  and  $1.04$  respectively). The scale also effectively discerned between general feigners and both inattentive ( $d = 1.19$ ) and combined-type ADHD feigners ( $d = 1.27$ ). Effect sizes for Fp between the genuine ADHD and ADHD simulation groups exhibited nearly moderate effects ( $ds = 0.72$  and  $0.62$ ). Finally, moderate effect sizes were observed among Fp values between general feigners and both ADHD simulation groups ( $ds = 0.80$  and  $0.78$  respectively).

**Discussion.** These positive results cross-validated the 2018 research. Unlike most detection strategies, erroneous stereotypes—the basis for dissimulation scales—can be focused on specific diagnoses or syndrome. Similar work is needed on the PTSD and other commonly feigned

conditions. Conceptually, generic strategies (e.g., F), lack the precision for diagnostic-specific feigning. Additional research is being conducted with a continued focus on discriminant validity and racial/gender identity. It includes near-neighbor comparisons, such as SAD, to further test its discriminability.

# Exploring the Associations between MMPI-3 Scale Scores and Autism Spectrum Disorder Symptoms

Keefe Maccarone and Yossef Ben-Porath

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Investigations exploring the degree to which MMPI scores are associated with features of autism spectrum disorders (ASDs) are limited. Ozonoff and colleagues (2005) found that high-functioning adults with ASDs produced higher scores on the MMPI-2 Clinical Scales 0 and 2, RC Scales Demoralization and Low Positive Emotions, and the PSY-5 Introversive/Low Positive Emotionality (INTR) scale and lower scores on the RC Scale Hypomanic Activation compared to college students. Langwerden and colleagues (2022) found that participants with ASDs produced higher scores on the MMPI-2-RF Emotional/Internalizing Dysfunction (EID), RCd, RC2, Cognitive Complaints (COG), Self-Doubt, Inefficacy (NFC), Stress/Worry (STW), and Negative Emotionality/Neuroticism, Revised, (NEGE-r) scales compared to a community sample. Duran and colleagues (2025) observed higher scores among individuals with ASDs on the MMPI-2-RF RC6, RC7, Disaffiliativeness (DSF), Behavior-Restricting Fears, Helplessness/Hopelessness, Social Avoidance (SAV), and INTR-r scales, in addition to STW and NEGE-r, compared to community members.

The current study explores associations between MMPI-3 scale scores and ASD symptoms using a contemporary sample of 312 college students. Thirty participants were excluded based upon standard interpretive guidelines (Ben-Porath & Tellegen, 2020a), resulting in a final sample of 282 students that is predominately female (73.8% female, 26.2% male), White (71.6% White, 16.7% Black or African American, 10.3% Asian, 6.7% Hispanic or Latino, 1.4% American Indian or Alaska Native, .4% Native Hawaiian or Other Pacific Islander, 1.8% identified as another race), and young ( $M$  age = 20.25,  $SD$  = 3.73).

We examined correlations between MMPI-3 scale scores and Autism Spectrum Quotient-28 (AQ-28) scales, which measure ASD features with a total score and subscales labeled Social Skills, Routine, Switching (task alternation), Imagination, and Numbers/Patterns.

Results indicated that the total AQ-28 total score was meaningfully associated ( $r \geq |.30|$ ) with multiple MMPI-3 emotion-related and interpersonal scales, including EID, RC2, NFC, DSF, SAV, SHY, NEGE, and negatively with Self-Importance ( $r$ s = .31-.58; -.33). The AQ-28 Social Skills scale was meaningfully associated with these same scales at larger magnitudes ( $r$ s = .38-.76; -.36). The AQ-28 Routine scale was also meaningfully associated with MMPI-3 emotion-related scales, including EID, RC7, NFC, Stress, Worry, Compulsivity (CMP), Anxiety-Related Experiences, SAV, SHY, NEGE, and INTR. The AQ-28 Switching scale was meaningfully associated with COG ( $r$  = .30), and AQ-28 Imagination was not meaningfully associated with any MMPI-3 scales. The AQ-28 Numbers/Patterns scale was associated with thought-dysfunction-related scales, including Thought Dysfunction, RC8, and Psychoticism, in addition to CMP and Aggressiveness ( $r$ s = .32-.41). Implications of these findings will be discussed.

## **Linking the MPQ to physical health in the Minnesota Center for Twin and Family Research (MCTFR): Multi-decade opportunities for collaboration**

Robert F. Krueger PhD  
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*Principal Investigator, MCTFR*

In the Minnesota Center for Twin and Family Research (MCTFR), we have been collecting Multidimensional Personality Questionnaire (MPQ) data since the 1990s. Our extensive and growing database provides ample opportunities to tie personality variation as conceptualized by the MPQ to numerous health outcomes in later life. In addition, the family, twin, and adoption designs used in our research allow for a deeper understanding of the etiology of relations between personality and health outcomes, by parsing longitudinal associations into genetic and environmental pathways. In this brief report, I will provide the audience with an overview of available data and illustrate collaborative possibilities. I will make specific reference to a 3+ decade twin study of relations between MPQ in mid-life and metabolic health (assessed using biomarker data such as high-density lipoprotein cholesterol, C-reactive protein, triglycerides, and glycated hemoglobin) in later life. In this research, we documented substantial longitudinal and genetically mediated paths linking traits such as alienation and stress reactivity to metabolic health. We are eager to collaborate and share our data resources with other qualified investigators and I will conclude the presentation by encouraging such efforts.

# MPQ Profiles of Care Partners of Veterans with Traumatic Brain Injury

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Traumatic brain injuries (TBI) are prevalent among military personnel, with more than 500,000 service members receiving a TBI diagnosis since 2000. TBIs can lead to physical, emotional, and cognitive disabilities that require support from family and friends. These care partners play an essential role in the injured individual's recovery; however, care partners also describe declines in their own physical and mental health, often reporting worse functioning than the general population. Although researchers have acknowledged the potential value of personality traits to understanding care partner strain, few studies have explored personality in this population, with a recent review calling for more work in this area. The current study sought to describe the personality of care partners of military veterans with a history of TBI using the Multidimensional Personality Questionnaire (MPQ; Tellegen et al., 2023). Veterans with a history of TBI were identified through the VA's electronic health record using ICD-10 diagnosis codes, which were confirmed via chart review. Veterans were contacted and asked to identify their primary care partner. Interested care partners completed a one-time survey that included the MPQ. The sample included 163 care partners, who were predominantly women (89.5%), mostly spouses/significant others (70.0%), largely White (90.8%), and had an average age of 61.6 years. The sample produced a profile with average levels of Positive Emotionality, lower than average levels of Negative Emotionality (particularly Alienation and Aggression), and higher than average levels of Constraint (particularly Control). Even after using a more conservative cut-score for Unlikely Virtues, more than half the sample produced interpretable low scores in AL and AG (72% and 77%, respectively) and interpretable high scores in CL and Harm Avoidance (58% and 56%, respectively). Item-level exploration noted 37 items with limited variability (i.e., scored-direction response in  $\leq 10\%$  or  $\geq 90\%$  of the sample). Although there are multiple hypotheses to account for these findings, the most plausible may be that the current results reflect a restriction on who steps into a care partner role. Future research should consider how these personality traits may integrate into support services and how this range restriction may impact research findings.

## **The Role of the MMPI-3 in Identifying Factors Associated with Adherence to Treatment for Chemical Dependency in a Veteran Sample**

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William H. Menton (*Minneapolis VA Health Care System*)

Craig A. Marquardt (*University of Minnesota*)

Noah C. Venables (*Expanse MN, Minneapolis, MN*)

The role of the MMPI-3 in identifying barriers to treatment adherence was examined in a group of 185, primarily male, veterans undergoing a four-week outpatient chemical dependency treatment program through a tertiary care VA health care center. Nearly 90% of the veterans produced valid MMPI-3 profiles, however those who produced invalid profiles due to either non-content or content-based invalidity were more likely to drop out of the program and fail random drug screens. Importantly, those who produced invalid profiles at the start no showed their treatment appointments at more than twice the rate of other patients. Zero order correlations between MMPI-3 substantive scales and treatment adherence variables were generally small and presented a mixed picture. Unexpectedly, higher DISC was associated with better program attendance and lower likelihood of dropout. Failed drug screen was associated with higher scores on internalizing, externalizing, and thought dysfunction related higher order, RC, and PSY-5 scales. Specifically, those with clinically significant elevations on NEGE failed drug screens at 2.4 times the rate of patients without NEGE elevations. These findings suggest that the MMPI-3 can potentially serve as a useful tool for identifying veterans who may struggle with adherence to a standard VA based outpatient chemical dependency treatment program. The information obtained from the MMPI-3 could allow providers to provide adjunctive interventions or modify the program to promote better adherence and potentially improve outcomes.

## **Personality, Attitudes, and Alcohol Use in Emerging Adults: An MMPI Investigation**

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Dr. Andrew J. Kremyar, *Ohio Northern University*, Dr. Tayla T.C Lee, *Ball State University*

Excessive alcohol use among emerging adults remains a significant public health issue (NIAAA, 2022). Finn's Cognitive Motivational Theory (CMT) identifies three key traits, impulsivity, novelty seeking, and low harm avoidance, that increase vulnerability to alcohol use disorder. To better understand the mechanisms linking these traits to behavior, the current study draws from the Acquired Preparedness Model (AMP) to test whether positive alcohol expectancies (PAEs) mediate the relationship between personality traits (assessed via the MMPI-3; Ben-Porath & Tellegen, 2020a; 2020b) and alcohol related problems and consumption. This was examined among a high-risk sample of college student drinkers (N = 496, ages 18–30).

Results from regression-based mediation analyses (PROCESS) suggested several different pathways for personality-based risk. Consistent with Finn's model, impulsivity and novelty seeking demonstrated significant direct effects on alcohol consumption and related outcomes ( $\beta = -.23$ -.88). However, low harm avoidance demonstrated weaker direct effects on both alcohol consumption and problems ( $\beta = .10$ -.16), which may reflect issues related to the operationalization of the construct. When examining mediation, PAEs were significant partial mediators in 14/15 models ( $\beta = -.12$ -.34, all  $p < .05$ ). Within these models, a particularly large effect was seen for power/aggression expectancies, or beliefs that alcohol increases personal influence, confidence, and aggressiveness, which significantly mediated the relationship between impulsivity and alcohol-related problems ( $\beta = .28$ , 95% CI [.18, .39]) Additionally, social and physical pleasure expectancies, or the belief that alcohol enhances enjoyment and well-being, indicated that higher scores on novelty seeking were associated with lower pleasure expectancies, which in turn predicted greater alcohol-related problems ( $\beta = -.25$ ,  $p = .004$ ;  $b = .35$ ,  $p < .001$ ). The direct effect of novelty seeking on alcohol-related problems remained significant after accounting for pleasure expectancies ( $b = -.23$ ,  $p = .001$ ).

These findings highlight the role of learned expectations in translating personality vulnerabilities into problematic drinking patterns. Although effects were small, results underscore the importance of expectancy content, rather than global positive expectancies, in understanding personality-linked risk for problematic drinking. Although the cross-sectional, college-based sample limits causal inference and generalizability, focusing on a high-risk drinking context allowed for clearer identification of expectancy-mediated pathways. Future research should extend this work using longitudinal designs and community samples to test the stability of these mechanisms across drinking environments.

# Untangling the Energetic Architecture of Psychopathology: A Network Analysis of MMPI-3 Hypomanic Activation (RC9) within Dimensional Personality Models in an Italian Community Sample

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This study examined the dimensional positioning of the RC scales from the MMPI-3 within contemporary models of personality pathology, using network analysis to explore its structural associations with other psychopathological dimensions. A community sample of 613 Italian adults (61.2% female;  $M_{\text{age}} = 43.7$ ,  $SD = 17.1$ ) completed the Minnesota Multiphasic Personality Inventory-3 (MMPI-3) and the Personality Inventory for *DSM-5* Short Form (PID-5-SF). Thirteen variables (eight RC scales and five PID-5 domains) were entered into a regularized partial correlation network (EBICglasso,  $\gamma = .5$ , 1,000 bootstraps). The resulting network (48 nonzero edges; sparsity = .39) was broadly aligned with the hierarchical structure proposed by HiTOP, yet revealed divergences in the organization of activation-related constructs. RC9 (Hypomanic Activation) emerged as a central node ( $strength = .99$ ;  $betweenness = 1.56$ ;  $closeness = 1.46$ ), positioned at the interface between affective and behavioral domains. RC9 showed a strong connection with PID-5 Disinhibition ( $w = .32$ ) and a moderate link with RC4 (Antisocial Behavior) ( $w = .20$ ), reflecting shared variance in behavioral activation and impulsive tendencies. It was inversely related to RC2 (Low Positive Emotions) ( $w = -.17$ ), indicating an opposition between hypomanic energy and reduced positive affect. RC9 also displayed small positive edges with RC6 (Persecutory Ideas) ( $w = .13$ ), RC7 (Dysfunctional Negative Emotions) ( $w = .12$ ), and RC8 (Aberrant Experiences) ( $w = .20$ ). No direct edge emerged between RC9 and either Negative Affectivity or Psychoticism, suggesting that hypomanic activation in community samples is more closely tied to affective-behavioral dysregulation than to negative emotionality or perceptual disturbance. This divergence from HiTOP's placement of RC9 within the Thought Disorder spectrum may indicate that cognitive activation features become more prominent only in clinical or severe manic presentations. The network also revealed an internalizing configuration anchored by RCd (Demoralization), RC2 (Low Positive Emotions), and RC7 (Dysfunctional Negative Emotions), together with Negative Affectivity and Detachment, linked by strong edges (e.g., RC2-Detachment,  $w = .33$ ; RC7-Negative Affectivity,  $w = .38$ ). RC7 was additionally related to RCd ( $w = .25$ ), reinforcing its role as a marker of affective distress. RC8 (Aberrant Experiences) was tightly coupled with Psychoticism ( $w = .36$ ), delineating the cognitive-perceptual pole, while Antagonism and Disinhibition formed a coherent externalizing dyad ( $w = .32$ ). Overall, findings support the dimensional alignment of MMPI-3 and PID-5 domains within hierarchical models of psychopathology and highlight activation as a dynamic mechanism linking affective and behavioral spectra.

# **Assessment of Personality Impairment using the MMPI-3**

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There is a substantial body of literature supporting the use of MMPI instruments in the assessment of personality disorders, both from the traditional categorical perspective and from more recent dimensional approaches (e.g., Sellbom & Orellana, 2025; Tinker et al., 2025). Given the prominence of dimensional models in contemporary personality disorder research, much of the recent work has focused on these approaches (e.g., Brown & Sellbom, 2023; Haugh et al., 2024). Most of these studies have emphasized underlying trait models rather than the personality dysfunction that is central to personality disorder diagnosis within these frameworks. The current study therefore presents recently published data (Sellbom & Orellana, 2025), along with new unpublished data, examining the validity of MMPI-3 scales in assessing personality impairment from both the DSM-5 Alternative Model for Personality Disorders (AMPD) and the ICD-11 personality disorder framework. We used two community mental health samples from New Zealand and Australia (n = 289 and n = 112), whose participants completed a range of measures, including structured clinical interviews, to assess personality impairment. The results indicated that a wide range of MMPI-3 scales were meaningfully correlated with both AMPD and ICD-11 personality impairment, with various internalizing scales emerging as the strongest predictors. As a set, the Higher-Order scales provided the best prediction of impairment, particularly when parsimony was considered. These findings were largely expected, and their implications will be discussed.

# Examining the Criterion Validity of the MMPI-3 PD Syndrome Scales in an Outpatient Community Mental Health Sample

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The MMPI-3 Personality Disorder (PD) Syndrome Scales were developed to measure features of the PD diagnoses of the DSM-5-TR (APA, 2022). The construct validity of these scales has been investigated in two university student samples (Sellbom et al., 2024) and a sample of Dunedin, New Zealand community residents engaged in mental health treatment (Tinker & Sellbom, in press). These investigations have largely supported the construct validity of the scales. Extending these findings to additional clinical samples with diverse criterion measures is important. Thus, the current study investigated the criterion validity of the MMPI-3 PD Syndrome Scales in a sample of community mental health outpatients ( $n = 315$ ) from the midwestern United States. Participants included 124 men and 191 women, with ages ranging from 18 to 76 ( $M = 36.45$ ,  $SD = 13.13$ ). Participants were 83.8% White, 14.6% Black, 1.9% Hispanic or Latino, 2.5% Native American or Alaska Native, 2.2% other, and .3% Asian. Criteria included clinician ratings on narrowband personality and psychopathology constructs and record review-derived personal history variables. MMPI-3 PD Syndrome score associations with these criteria largely supported the validity of the scales. For example, Antisocial PD scores were meaningfully associated with clinician-rated antisocial behavior ( $r = .38$ ), aggressiveness ( $r = .33$ ), and several personal history variables related to impulsiveness ( $r = .34$ ) and substance use ( $r = .31 - .55$ ). Further examples include Schizotypal PD associations with clinician-rated paranoia ( $r = .31$ ) and hallucinations ( $r = .30$ ), as well as Avoidant PD associations with clinician-rated introversion ( $r = .39$ ) and social awkwardness ( $r = .38$ ), and a history of anhedonia ( $r = .22$ ). The latter criterion was also associated with Schizoid PD ( $r = .21$ ). As in previous investigations, Obsessive-Compulsive PD was meaningfully associated with relevant criteria (e.g., clinician-rated compulsivity [ $r = .20$ ]), as well as those indicating demoralization saturation of the scale (i.e., tearfulness [ $r = .20$ ] and feelings of hopelessness [ $r = .20$ ]). Recommendations for future research and implications for applied interpretation of MMPI-3 PD Syndrome scale scores will be presented and discussed.