

# Cultural Incongruence: MMPI-2 and Native Americans

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## Background

The Minnesota Multiphasic Personality Inventory-2 (MMPI-2) is a 567 item true and false assessment that utilizes self-report to help categorize personality traits and characteristics into the various personality disorders of the Diagnostic and Statistical Manual of Mental Disorders (DSM). The MMPI-2 was designed to provide an unbiased and appropriate clinical diagnostic tool to aid in personality assessment in clinical settings. The assessment is categorized into 10 clinical scales corresponding to the 10 personality disorders discussed in the DSM-IV (Kagan, 2012).

Scale 4, Psychopathic Deviate (Pd) is comprised of 50 items that assess: family problems, dissatisfaction in life, delinquency, and difficulties with authority (Graham, 2006). Participants who score higher on the Pd Scale are often described as angry, impulsive, emotionally shallow, and unpredictable (Greene, 1980). The Pd Scale correlates closely with a DSM-IV diagnosis of antisocial personality disorder and/or passive-aggressive personality disorder.

Native Americans often display social confusion and trouble with authority figures due to historical trauma issues (Hill, Pace, & Robbins, 2010). The cultural practices of Native Americans may also help explain why this group often has elevated scores on the Pd Scale (Hill, Pace, & Robbins, 2010). The myriad of factors that may impact performance question the reliability and validity of this scale of the MMPI-2. Whether or not elevated scores on this scale are produced by endorsement of same or different items for Native Americans as for White Caucasians needs further examination.

## Methods

Participants included 115 Native American (NA) and 152 White Caucasian (WC) non-clinical community members from in and around Grand Forks, ND. Each participant completed a short demographic questionnaire, the MMPI-2, the Northern Plains Bicultural Inventory – Third Edition (NPBI-III), and the Life Perspectives Scale (LPS). The demographics requested relevant information such as age, gender, education, ethnicity, tribal affiliation and income level. The NPBI-III uses self-report on various cultural questions to categorize an individual into one of four categories: traditional, bicultural, assimilated and marginalized (McDonald, Baker, Gonzalez, & Rose, 2011). The LPS also looks at various levels of acculturation by way of traditionality in the areas of cognitive, spiritual, behavioral and social (Berryhill, 1998).

For the purposes of this study the individual item responses on the Pd Scale were examined. The 50 questions that contribute to the overall scores on the Pd Scale were examined for significant differences between NA and WC groups. Only questions that were significantly different are discussed. A table was made using the NA community sample and the WC community sample item analysis and Z-scores were computed to determine significant differences on item endorsement by the two groups.



TABLE 1. Significant item analysis and z-score differences between Native American and White Caucasian responses to Pd (Scale 4) items of the MMPI-2

Question	NA	WC	Z-score	HT / SI
<b>*17-I am sure I get a raw deal from life.</b>	<b>.313</b>	<b>.088</b>	<b>-2.4302</b>	<b>HT</b>
21- At times I have very much wanted to leave home.	.542	.294	-2.2348	HT
<b>*34- I have never been in trouble because of my sex behavior.</b>	<b>.396</b>	<b>.147</b>	<b>-2.4472</b>	<b>HT</b>
42- If people had not had it in for me, I would have been much more successful.	.188	.029	-2.1721	HT
<b>*54-My family does not like the work I have chosen(or the work I intend to choose for my life work)</b>	<b>.208</b>	<b>.029</b>	<b>-2.3516</b>	<b>HT</b>
71-These days I find it hard not to give up hope of amounting to something.	.542	.294	-2.2348	HT
82-I do many things which I regret afterwards (I regret things more than others seem to).	.313	.118	-2.0655	SI
83-I have very few quarrels with member of my family.	.438	.206	-2.1874	HT
<b>*89-My hardest battles are with myself.</b>	<b>.417</b>	<b>.706</b>	<b>2.5919</b>	<b>SI</b>
<b>*94-Much of the time I feel as if I have done something wrong or evil.</b>	<b>.229</b>	<b>.029</b>	<b>-2.5325</b>	<b>HT</b>
<b>*99-Someone has it in for me.</b>	<b>.229</b>	<b>.029</b>	<b>-2.5325</b>	<b>HT</b>
105-In school I was sometimes sent to the principal for bad behavior.	.479	.235	-2.2506	HT
<b>*157-What others think of me does not bother me.</b>	<b>.417</b>	<b>.794</b>	<b>3.4088</b>	<b>SI</b>
<b>*185-I wish I were not so shy.</b>	<b>.542</b>	<b>.794</b>	<b>2.3574</b>	<b>SI</b>
195-There is very little love and companionship in my family as compared to other homes.	.333	.118	-2.2392	SI
202-my parents often objected to the kind of people I went around with.	.396	.176	-2.1374	SI
266-I have never been in trouble with the law.	.604	.382	-1.9862	SI
288-My parents and family find more fault with me than they should.	.250	.059	-2.2697	SI

NA= Native American, WC= White Caucasian, HT= Historical Trauma, SI= Self Image, \* =, Significance,  $\pm 2.33$ ,  $\Delta = 0.02$

Highlighted areas can be interpreted as follows:

- Blue= Historical Trauma-** "Indigenous peoples have experienced pervasive and cataclysmic collective, intergenerational massive group trauma and compounding discrimination, racism, and oppression" (Brave Heart, Chase, Elkins, & Altschul, 2011).
- Red= Self Image-** The way one sees oneself. Social reputation (Hulme, Hirsch, & Stopa, 2012).

## Results

Results of the MMPI-2 Pd Scale item analysis of the NA and WC and z-scores comparing the two groups were computed using SPSS for each of the 50 questions. Significant level for each group comparison was set at a z score of  $\pm 1.96$ ,  $\Delta$  of 0.05 to protect against experiment wise error. This analysis resulted in 18 questions showing significant differences between NA and WC groups. After identification of significantly different items, the significant level bar was raised to a z-score of  $\pm 2.33$  representing a  $\Delta$  of 0.02. Eight items were significant at this level. The Table details the 18 questions at  $\pm 1.96$  and the 8 highlighted items are from the z-score of  $\pm 2.33$ . The highlighted items were further analyzed for content and separated into two areas, historical trauma (HT) and self image (SI).

## Discussion

Results indicate the NA subjects scored significantly higher than WC on the Pd Scale of the MMPI-2. Two areas of content could contribute to these elevated scores, Historical Trauma and self image. In particular, questions involving feelings about or dealing with authority figures could relate to Historical Trauma and may negatively impact their Pd Scale scores. This suggests that certain individuals may feel as if they are getting a raw deal from life. Being a minority in a white dominated culture could contribute to feelings of hardship.

WC subjects have a slightly higher score than NA on the social image aspect of the Pd scale. These findings may indicate, WC subjects are more aware and protective of their social image as compared to the NA participants. Being able to keep things "bottled up" to maintain reputation could cause one to feel displeased with oneself.

Further qualitative research could help determine the core reasons why NA and WC responded the way they did.

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