

FREQUENTLY ASKED QUESTIONS

Gender Differences on Personality Tests

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Q: Is there evidence of gender differences that must be taken into account when undertaking a psychological evaluation using personality instruments like the MMPI-2, MMPI-2-RF, 16PF, MCMI-III, or PAI?

A: The research and theoretical literature show clear differences in the symptoms and behaviors of men and women assessed by personality tests. There is a robust body of literature on gender differences in personality, psychopathology, cognition, and social behavior. Indeed, personality differences in males and females have even been demonstrated in animal studies. An understanding of gender differences in personality is important for assuring fair and balanced assessment of women in particular given the potential for discriminatory practices. In personality assessment, gender differences are typically managed by using gender-specific comparison groups and separate validation samples of men and women for personality scales. However, there are notable exceptions when non-gendered norms have been developed and used in clinical decision-making, as described below.

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Q: Are there psychological theories regarding the origin/nature of gender difference in personality?

A: Yes, a number of psychologists have provided theoretical perspectives on the origin and nature of gender differences in personality, for example:

Social role models suggest that differences in personality traits, social behaviors and/or psychological variables result from social and cultural gender roles. Thus, men and women demonstrate various traits and psychological variables that are in line with culturally proscribed gender norms; adults adopt gender-specific social roles that impact

personality traits and behavior.

Evolutionary models posit that men and women developed various personality traits and behavioral tendencies over time in order to maximize survival and quality of life, especially during early periods of human history. More specifically, evolutionary psychologists suggest that psychological differences between men and women are evolved adaptations to biological sexual difference.

Artifact models state that gender differences in personality are due to bias in some aspect of the measurement itself or the testing environment. This might include gender differences that result from informants rating others in ways that are consonant with gender stereotypes, the experience of stereotype threat on individuals completing assessments, or test items that are biased against either men or women (especially when combined gender norms are used).

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Personality and Social Psychology, 94(1), p. 168-182.

Q: Does the personality research literature show gender differences in personality traits or characteristics?

A: Yes, numerous studies have reported gender differences across a number of different personality traits and measures. See below for some of the research studies.

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Zupancic, M., & Kavcic, T. (2005). Gender differences in personality through early childhood: A multi-informant perspective. *Psiholoska Obzorja/Horizons of Psychology*, 14, 11-38.

Q: Does the personality research literature show gender differences in correctional settings?

A: Yes, although studies have found no significant differences between African Americans and Caucasians on prison populations, research has shown subtle differences between MMPI-2 scores of males and female offenders. One specific area the MMPI-2 has been used for in prison is with sex offenders.

Reference:

Grover, B. L. (2011). The Utility of MMPI-2 Scores with a Correctional Population & Convicted Sex Offenders, *Psychology: Individual Development*, 2, 638-642.

Q: What research exists on sex differences in non-human personality?

A: Gender differences in personality are not just found in the human species. Research has found sex differences in personality characteristics of non-human animals/species. See references below for some examples.

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Q: What are some of the research articles on gender differences in personality and psychopathology (e.g. trait/state anxiety, depression, pain, personality disorders, substance abuse)?

A: The following is a list of articles that address gender differences in various assessment instruments for specific personality characteristics.

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Q: Are there gender differences in the ways people experience emotional responsiveness?

A. In general, women rated themselves as feeling more happiness and sadness than men, whether the event happened to themselves, or to a friend or enemy. This suggests gender differences in self-reported empathy may be due to differences in general emotional responsiveness. An empathy score was computed by subtracting, for each scenario, the rating for the other person from the rating for self. Women showed a greater difference between friend and enemy than men.

Reference:

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Q: What are gender specific, gender separate, and non-gendered norms on personality measures?

A: Gender specific and gender separate norms are interchangeable terms referring to population norms that have been developed separately for men and women. In other words when you use a gender specific or gender separate norm, men are compared with men, and women with women. Several major personality measures utilize separate gender norms in test design and scoring.

In contrast, non-gendered norms are those in which men's and women's scores are combined into one comparison sample that is used to develop norms to evaluate test scores of persons from either gender.

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Q: Does the MMPI-2 use gender specific norms?

A: Yes, the MMPI-2 utilizes gender specific norms. Separate gender norms were developed at the inception of the original MMPI. Hathaway and McKinley (1940) found differences between men and women's scores on a number of MMPI scales. For example, they pointed out "Depression scores are significantly higher for females than for males..." thus they decided separate gender norms were necessary for the original MMPI. When the MMPI was restandardized in 1989, the use of gender specific norms was continued because: a) there were gender differences noted for some scales and b) we wanted to maintain the continuity between the MMPI-2 and the original MMPI in the interpretation of the traditional clinical scales (Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989; Butcher, Graham, Ben-Porath, Tellegen, Dahlstrom, & Kaemmer, 2001). Because the test was used in employment selection programs, research was conducted to examine results of men and women plotted on the same normative distributions as well as on gender specific norms (see Ben-Porath and Forbey, 2003). Both sets of norms were made available to assure that applicant's item responses were appropriately compared (see discussion in Butcher & Williams, 2000).

The MMPI-2-RF or Restructured Form (Ben-Porath & Tellegen, 2008; Tellegen & Ben-Porath, 2008) is a marked departure from the MMPI and MMPI-2 empirical tradition of gender-based normative comparisons. It introduced non-gendered norms in all settings, despite evidence of gender differences on items, scales, and correlates for scales. Butcher and Williams (2009) provide a critique of this departure.

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Q: Do other major personality assessment measures utilize gender specific norms?

A: Yes. Several measures maintain separate gender-specific norms, including the 16 Personality Factor Questionnaire (16PF), Millon Multiaxial Clinical Inventory-III (MCMI-III), the NEO-PI and the NEO-FFI.

Q. Do some personality tests use non-gendered T scores? A: Yes, as noted above the

MMPI-2-RF (Ben-Porath & Tellegen, 2008; Tellegen & Ben-Porath, 2008) uses non-gendered norms although gender differences are found on the test responses. In addition, the *Personality Assessment Inventory (PAI)* (Morey, 1991) uses combined norms even though gender differences have been reported.

References

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Q: Are there any controversies about gender bias in MMPI-2 scales?

A: Yes, the publisher's decision in 2007 to add the Fake Bad Scale (FBS) to the standard scoring of the MMPI-2 is very controversial. The FBS, whose name was changed by the publisher to the Symptom Validity Scale in 2008, was developed by Lees-Haley et al. (1991) to detect malingering in personal injury cases.

Several studies have reported gender differences in FBS scores because many of the items are endorsed more frequently by women (e.g., Butcher, Arbisi, Atlis & McNulty, 2003; Dean, Boone, Kim, Curiel, Martin, Victor, Zeller, & Lang, 2008; Greiffenstein, Fox & Lees-Haley, 2007; Lees-Haley, 1992; Nichols, Williams & Greene, 2009). Using the same cut-off raw scores for attributing "malingering" is likely to classify more women than men in the extreme range.

However, without mentioning several of these studies reporting gender differences on the scale, the FBS test manual authors (Ben-Porath, Graham & Tellegen, 2009) reach the conclusion that there is absence of gender bias in the prediction of noncredible symptom presentation with the FBS. In the MMPI-2-RF, non-gendered T scores are used for interpreting the abbreviated Fake Bad Scale Scores (FBS-r). (For a give and take discussion of the FBS controversy see articles: by Butcher, Gass, Cumella, Kally & Williams, 2008; Gass, Williams, Cumella, Butcher, Kally, 2010; Williams, Butcher, Gass, Cumella & Kally, 2009 and responses by: Ben-Porath, Greve, Bianchini & Kaufmann, 2009a, b).

Recently, Lee, Graham, et al. (2012) confirmed that there are clear gender differences on the FBS in a sample of clients being evaluated in a medico-legal context. They reported that these differences would not adversely affect decisions based upon gender if the test publisher's cut-off guidelines that Ben-Porath, Graham & Tellegen (2009) recommended. However, many practitioners do not follow these more conservative guidelines but use those recommended by Lees-Haley et al. (1991) instead. They pointed out that additional research on gender differences is needed. However, practitioners should be aware that this study, like most others on the FBS, is not an empirical validity study of the FBS. This study did not include an evaluation of the empirical validity of the FBS for determining whether the scale actually predicts malingering. This study also did not

address the important problem of false positives, that is, attributing malingering to a high percentage of clients who have genuine mental health or health problems (Butcher, Arbisi, Atlis & McNulty, 2008; Gass, Williams, Cumella, Butcher, Kally, 2010).

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