

**Folks:** If you would like to read the original article on which this summary is based then you can access it here:

[Del Giudice, M., Booth, T., and Irwing, P. \(2012\). The distance between Mars and Venus: Measuring global sex differences in personality. \*PLoS ONE\* 7\(1\): e29265.](#)

## Gender Differences in Personality Are Larger than Previously Thought

New study confirms that men's minds come from Mars and women's from Venus.

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A new study confirms that men's minds come from Mars and women's from Venus. In an article recently published in the online journal PLoS ONE, Italian [cognitive](#) psychologist Marco Del Giudice and his collaborators compared the [personality](#) traits of men and women in a sample of over 10,000 people and found huge differences. Women scored much higher than men in Sensitivity, Warmth, and Apprehension, while men scored higher than women in Emotional Stability, Dominance, Rule-Consciousness, and Vigilance. When many personality traits were considered simultaneously, there was only a 10% overlap between the distributions of these traits in men and women. Essentially, the study suggests that when it comes to personality men and women belong to two different species.

Although many of us have long known - on the basis of personal experience - that women are generally more sensitive than men, and men are slightly more emotionally stable than women, previous studies comparing personality traits in men and women found few or no quantitative differences. Del Giudice and his collaborators argue that these previous studies didn't use an appropriate methodology. Their argument is that measuring personality at the level of the Big Five - the way it was done before - can potentially hide some important differences between the sexes

because this approach lacks resolution. They suggest, instead, that in order to get the most accurate picture of [sex](#) differences, researchers need to (a) measure personality with a higher resolution than that afforded by the Big Five, (b) estimate sex differences on latent factors rather than observed scores; and (c) assess global differences between males and females by computing a multivariate effect size. And this is exactly what they did in the study reported in the PLoS ONE article.

The personality data for this study were obtained from an existing database, in which 10,261 adults of US nationality were interviewed in 1993 to validate a particular personality questionnaire (16PF). The people in the sample were 50.1% female and 49.9% male. The sample was primarily white (77.9%), was proportionally geographically distributed, and on average, the educational level and years in [education](#) of the sample was greater than that of the US population. Personality was assessed with 15 primary scales, corresponding to the following traits: Warmth (reserved vs. warm), Emotional Stability (reactive vs. emotionally stable), Dominance (deferential vs. dominant), Liveliness (serious vs. lively), Rule-Consciousness (expedient vs. rule-conscious), Social Boldness ([shy](#) vs. socially bold), Sensitivity (utilitarian vs. sensitive), Vigilance (trusting vs. vigilant), Abstractness (grounded vs. abstracted), Privatness (forthright vs. private), Apprehension (self-assured vs. apprehensive), Openness to Change (traditional vs. open to change), Self-Reliance (group-oriented vs. self-reliant), [Perfectionism](#) (tolerates disorder vs. perfectionistic), and Tension (relaxed vs. tense). These 15 primary scales were further organized into the following 5 global scales: Extraversion (Warmth, Liveliness, Social Boldness, Privatness, and Self-Reliance), [Anxiety](#) (Emotional Stability, Vigilance, Apprehension, and Tension), Tough-Mindedness (Warmth, Sensitivity, Abstractness, and Openness to Change), Independence (Dominance, Social Boldness, Vigilance, and Openness to Change) and [Self-Control](#) (Liveliness, Rule-Consciousness, and Perfectionism).

Del Giudice and collaborators used a statistical technique called multigroup latent variable modeling to estimate sex differences on individual personality dimensions, which were then aggregated to yield a multivariate effect size (Mahalanobis D). They found a global effect size  $D = 2.71$ , corresponding to an overlap of only 10% between the male and female distributions. This is an extremely large effect by any psychological standard, which suggests that the sex differences in personality are of the same magnitude as the sex differences in aggression or vocational interests.

From an evolutionary perspective, large differences in personality between the sexes make perfect sense. Divergent sexual selection pressures on men and women are expected to produce substantial differences in personality traits that influence mating and reproductive strategies. For example, sexual promiscuity is predicted by extraversion, openness to experience, [neuroticism](#) (especially in women), positive schizotypy, and the "dark triad" traits (i.e., [narcissism](#), [psychopathy](#), and Machiavellianism). Negative predictors of promiscuity and short-term mating include agreeableness, [conscientiousness](#), honesty, and autistic-like traits. Relationship instability is associated with extraversion, neuroticism, low agreeableness, and low conscientiousness. In addition to their direct influences on predispositions for sexual promiscuity and relationship instability or sexual monogamy and parental investment, personality traits may also influence competitive tendencies such as status-seeking and [risk-taking](#).

Del Giudice and colleagues conclude that from an evolutionary perspective personality traits are clearly not neutral with respect to sexual selection. "Instead, there are grounds to expect robust and wide-ranging sex differences in this area, resulting in strongly sexually differentiated patterns of emotion, thought, and behavior - as if there were two human natures."

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## References

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## More on some key words in this article

**Cognition:** [Social Cognition](#), [Embodied Cognition](#), [Language](#), [Sensory Perception](#), [Thinking](#) Understanding Cognition: Quite simply, cognition refers to thinking. There are the obvious applications of conscious reasoning—doing taxes, playing chess, deconstructing *Macbeth*—but thought takes many subtler forms, such as interpreting sensory input, guiding physical actions, and empathizing with others. The old metaphor for human cognition was the computer—a logical information-processing machine. (You can't spell cognition without "cog.") But while some of our thoughts may be binary, there's a lot more to our 'wetware' than 0's and 1's.

**Perfectionism:** For perfectionists, life is an endless report card on accomplishments or looks. It's a fast track to unhappiness, and perfectionism is often accompanied by depression and eating disorders. What makes perfectionism so toxic is that while those in its grip desire success, they are most focused on avoiding failure, so theirs is a negative orientation. And love isn't a refuge; in fact, it feels way too conditional on performance. The need for perfection is usually transmitted in small ways from parents to children, some as silent as a raised eyebrow over a B rather than an A.

**Narcissism:** The Truth about Narcissism: Narcissists cut a wide, swashbuckling figure through the world. At one end of the self-loving spectrum is the charismatic leader with an excess of charm, whose only vice may be his or her inflated *amour-propre*. At the far end of the spectrum reside individuals with [narcissistic personality disorder](#), whose grandiosity soars to such heights that they are manipulative and easily angered, especially when they don't receive the attention they consider their birthright. Here's how to figure out whether the big talker in your office really believes his own hype.

**Psychopathy:** What is Psychopathy? Psychopathy is among the most difficult disorders to spot. The psychopath can appear normal, even charming. Underneath, they lack conscience and empathy, making them manipulative, volatile and often (but by no means always) criminal. They are an object of popular fascination and clinical anguish: psychopathy is largely impervious to treatment. It is important to note that the vast majority of people with antisocial tendencies are **not** psychopaths.

**Conscientiousness:** All About Conscientiousness: Conscientiousness is not just about getting to the church on time, in a freshly-ironed outfit. It is a fundamental personality trait that influences whether people set and keep long-range goals, deliberate over choices or behave impulsively, and take seriously obligations to others. Conscientiousness is a key ingredient in success, but the off-the-charts conscientious may court perfectionism by setting their sites too high.