

Adaptive personality traits and psychosocial correlates among living kidney donors

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Introduction

Since living kidney donors have repeatedly been shown to be mentally more healthy compared to the general population, they might also exhibit more adaptive personality characteristics. Little is known about the personality of individuals who chooses to consider living donation and if certain personality traits are common among living organ donors compared to the general population.

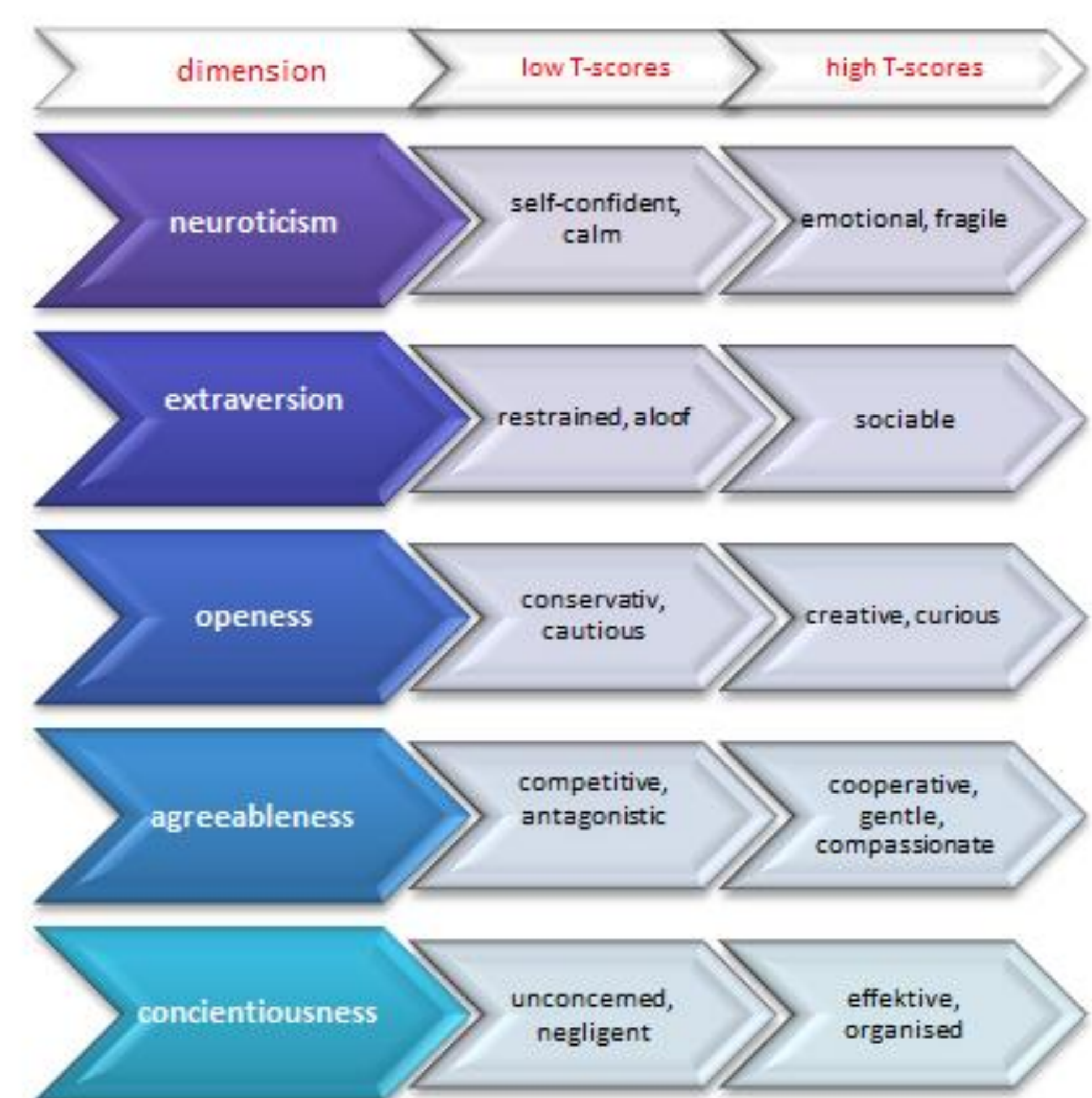
The aim of the study was to investigate personality traits in a large sample of German living kidney donors and to compare the results with a German norm population. In line with earlier studies, we expected to find more adaptive personality traits, specifically with regard to neuroticism, agreeableness, and conscientiousness. In addition, gender differences were investigated. Finally, correlations between personality traits and symptoms of depression, anxiety, and fatigue as well as the association with regret regarding donation were examined.

Methods

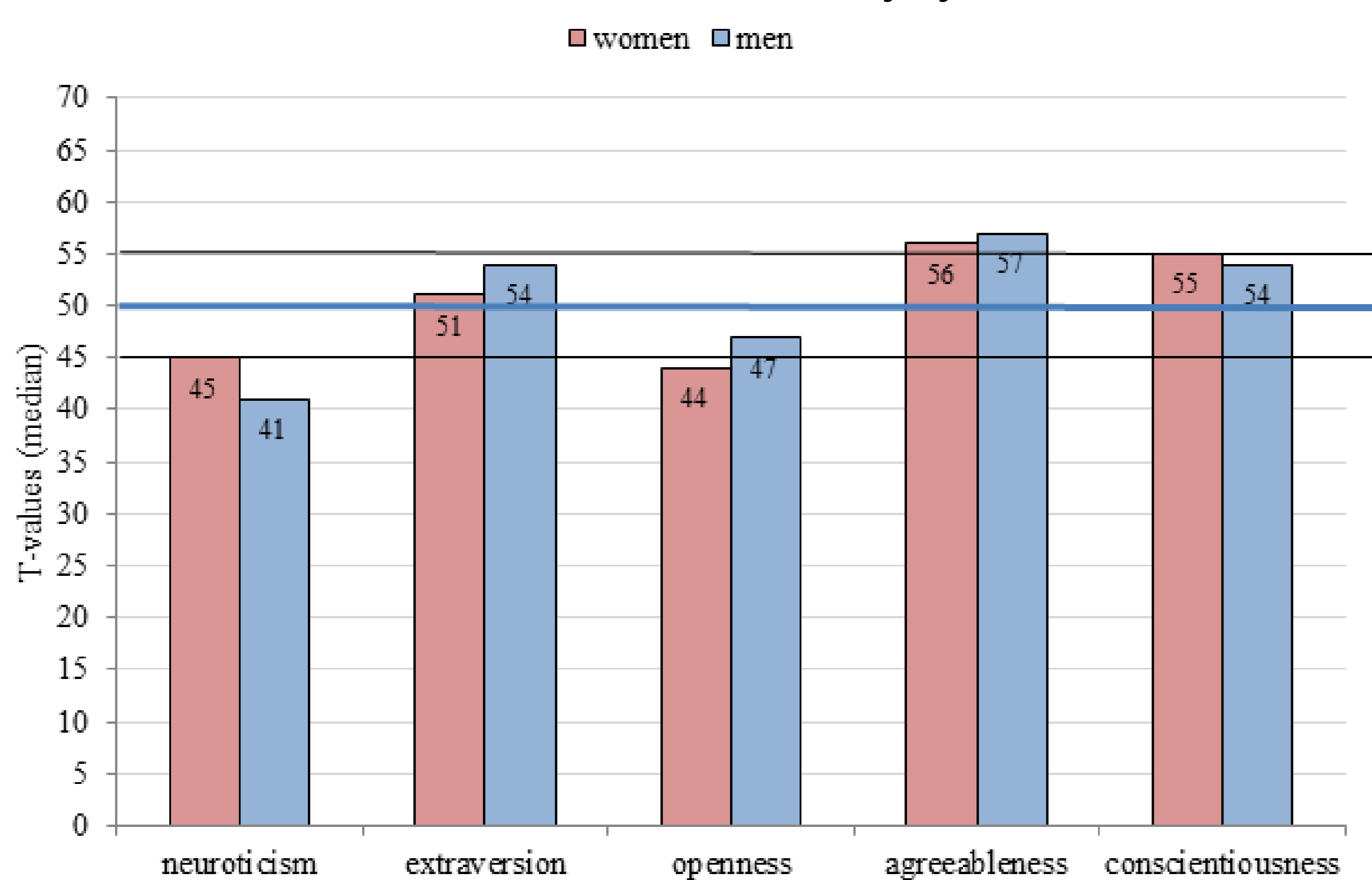
All individuals registered in the outpatient database of Hannover Medical School as living kidney donors where the donation was at least 1 year ago (1987-2016), and who were below 70 years of age at the time of the survey were contacted. A total of 535 surveys were mailed to the selected living kidney donors. After numerous attempts, 315 were returned, for a **response rate of 59%**. 7.5% had moved to foreign countries, died or were no longer findable. 3% rejected taking part and 30.6% did not response at all. We investigated the personality traits of 315 living kidney donors using the NEO-Five Factor Inventory, a frequently used personality inventory measuring the "big five" dimensions of personality (neuroticism, extraversion, openness, agreeableness, and conscientiousness). In addition, levels of depression, anxiety and fatigue were assessed with the PHQ-9, GAD-7 and MFI-20. The survey also contained investigator-generated questions on donor demographics, year of donation, the current relationship with the organ recipient, the donors' willingness to donate again (regret).

Results

- gender distribution of the sample: 64.1% 35.1%
- mean age: 55,9 years (SD 8,0)
- mean age at donation 48,8 years (ranging from 25 to 68 years)
- years since donation ranged from 1 to 29 years with an average of 7.1 years (SD 5.2)
- ≥ 12 years school attendance: 27,6 %
- employed 69,8%
- retirement or unemployed 26,9 %
- 83% in partnership
- Overall, **75.9% donors reported no regrets at all**; whereas 24.1% reported at least some regret regarding donation. Of the latter 13.7% would likely donate again, just 1.6% would not choose to be a donor again.
- 86,4% donors perceived their current relationship with the recipient as very good or good; at least 1,6% perceived their relationship as 25 bad or very bad.

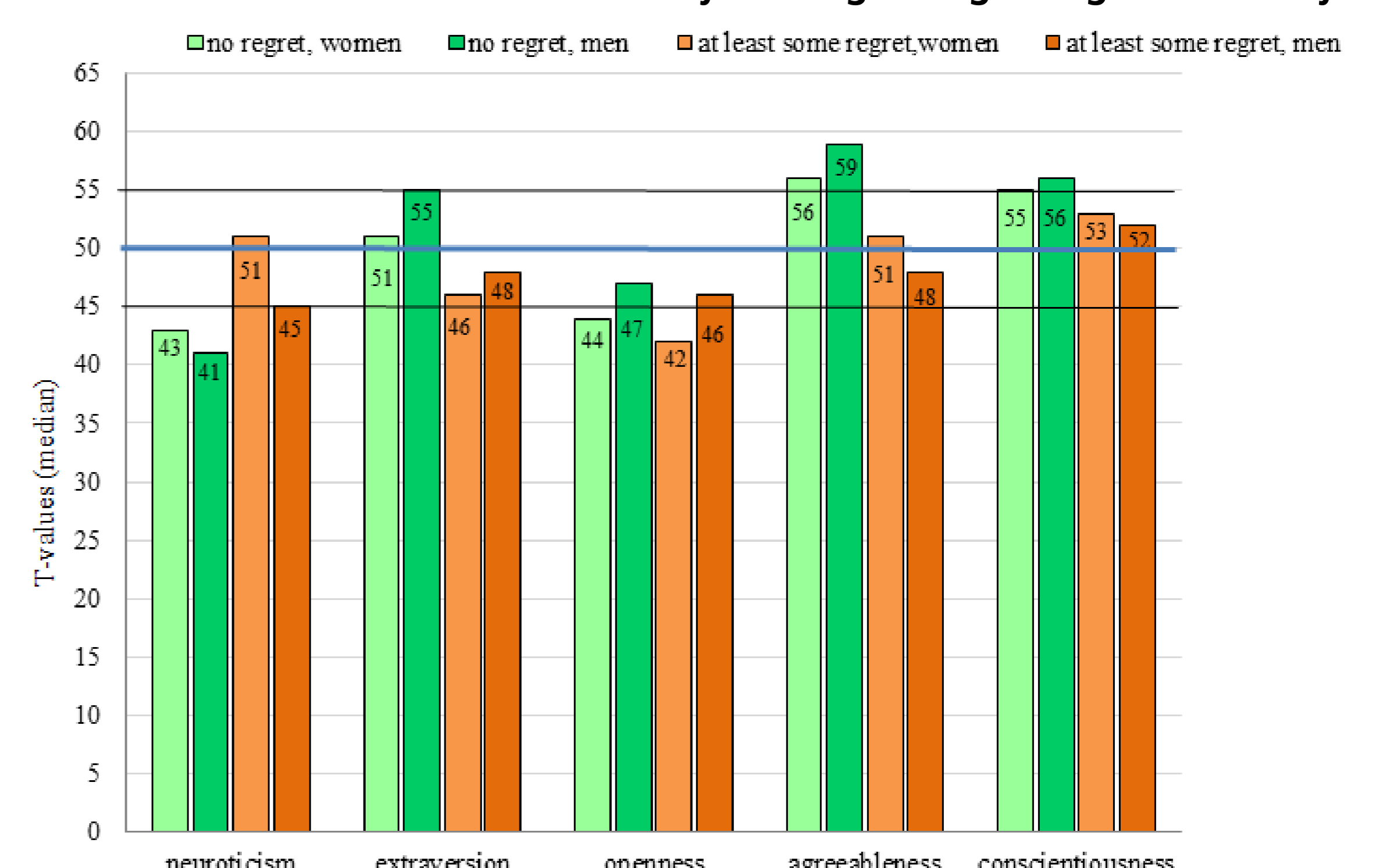


Median T-scores on the NEO-Five Factor Inventory by sex of the donor



Raw scores for each of the "big five" personality dimensions were transformed into sex- and age-specific standardized T-scores which were based on the German population norm data. T scores for the NEO-FFI have a mean of 50; scores > 55 is higher than average, < 45 is lower than average; scores between 45 and 55 are considered "average".

Median T scores on the NEO-Five Factor Inventory and regret regarding donation by sex



Charts adapted from: Pollmann et al., Front Psychiatry 8:210. DOI: 10.3389/fpsy.2017.00210

Conclusion

- **Kidney donors showed more adaptive personality traits with higher agreeableness and lower neuroticism scores compared to the German general population. This was even more pronounced in living kidney donors with a high motivation to donate again (non-regreters).**
- **Scores for depression, anxiety, and fatigue did not differ from general population values and were significantly correlated with most personality dimensions.**

Literatur

Conrad et al., Compr Psychiatry 2016, 67, 1-8; de Groot et al., Transplant Int 2012, 25, 967-975; Janki et al., Transplant Int 2015, 28, 1268-1275; Meyer et al., BMC Nephrology 2016, 17, 8; Sommerer et al., Transplant Int 2015, 28, 416-428; Wirken et al., Am J Transplant 2015, 15, 3041-3054;

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