Reviewer's report

Title: A case control study of five factor model personality traits in opioid dependence

Version: 2  Date: 17 May 2007

Reviewer: Antonio Terracciano

Reviewer's report:

General
This study addresses the important question of whether opioid users differ from the general population on personality traits. The study provides insights in the etiology and treatment of substance abuse.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
1. This study is not exactly a case-control study, given that some individuals in the general population sample might use opioids. In the article, the authors did not describe procedures to screen out opioid users from the general population sample. I suggest dropping the case-control wording.
2. In the abstract, the authors should clarify that personality testing was performed about 6 weeks from treatment inception. This is an important issue given that at least one study [Piedmont (2001) Cracking the plaster cast: Big Five personality change during intensive outpatient counseling. Journal of Research in Personality 35: 500-520] has found large personality changes (decline in Neuroticism, increase in Conscientiousness) six weeks after admission into an outpatient drug rehabilitation program. Discussing the differences and similarities with the Piedmont study could enrich the current manuscript.
3. The samples are not matched on sex, which can introduce biases given the sex differences on personality traits [Costa PT Jr., Terracciano A, & McCrae RR (2001). Gender differences in personality traits across cultures: Robust and surprising findings. Journal of Personality and Social Psychology, 81, 322-331]. Although I do not expect large differences, the authors should match the sample on sex or statistically control for sex differences.
4. The discussion about the Norway/US difference on Extraversion needs reformulation. The authors suggest that the lack of association in the US opioid-dependent sample is due to the older age of the addicts. The authors should consider that most people decline on Extraversion with age, so the older American opioid users should score even lower on Extraversion, but this is not the case.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
5. References: fix McCrae RR

Discretionary Revisions (which the author can choose to ignore)
6. The conclusion in the text is identical to the one in the abstract. Change or drop it from the text.
7. I suggest using more recent references from the same authors:
8. On p.4, specify whether sex-specific or combined norms were used.
9. Drop on p.5 “These associations support the assumption that opioid use is a response to a need for arousal.” It is the association with Extraversion that was often “explained” by the “need for arousal.”

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field
Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests