Author's response to reviews

Title: Screening Cluster A and Cluster B Personality Disorders in Chinese High School Students

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Author's response to reviews: see over
March 22, 2013  
Carlo Rye Chua, Ph.D.

Re: Manuscript 1976201681699850 entitled “Screening Cluster A and Cluster B Personality Disorders in Chinese High School Students”

Dear Dr. Carlo Rye Chua and Prof. Mario Fioravanti,

Thank you for your letter of March 19, 2012. We would like to thank you and the two reviewers for your carefulness and helpful comments. We have responded to the reviewers’ comments point by point as well as revised the manuscript. The language of the revised manuscript was corrected thoroughly by a native English speaker, and the changes we have made to the manuscript are highlighted with yellow marker in the revised manuscript.

**Response to Reviewer: Dr. Ragnhild Orstavik**

**Reviewer's report:**

I have read the revised manuscript and find that it has been extensively improved compared to the first version. The authors’ response to the reviewers comments is comprehensive, and the manuscript now appears greatly improved both in scientific content and language. I do, however, have some minor points (Minor Essential Revisions) that should be addressed before the manuscript is acceptable for printing.

**Abstract:**

Background, line 3: Please change to “to explore the prevalence of Cluster A and Cluster B PD traits”, as this seems to be the scope of the paper – not to study the characteristics of the PDs.

**Response:** Thanks for your carefulness. In the abstract section, line 3, “to explore the characteristics of cluster A and cluster B PDs” has been changed to “to explore the prevalence of Cluster A and Cluster B PD traits” in the revised manuscript.

**Introduction:**

Page 4, first line: Please change to PDs are
Page 5, first line: As for aim in abstract

**Response:** Thank you for your carefulness.

① Page 4, first line: “PD is…” has been corrected to be “PDs are”.

② Page 5, first line: “to explore the characteristics of cluster A and cluster B PDs” has been changed to “to explore the prevalence of Cluster A and Cluster B PD traits” in the revised manuscript as for aim in revised abstract.

**Methods:**

Under Procedures, a number specifying the exact participation rate (which seems to be impressive) should be included.

Statistical analyses: The large number of analyses should be problematized and some form of post hoc test included, alternatively, p-values less than 0.001 could be applied to address statistical significance.
General: It is unnecessary to provide numbers when these are so large (tables and text), percentages are sufficient (example Page 5, last line. A large majority of the children (3285/3552; 92.5%)…). Also, some additional proof reading is Necessary.

Response: Thank you for your valuable advices.

① A total of 4000 high school students were asked to participate this survey, and 3594 written informed consent forms were signed by students and their’ guardians. The exact participation rate is 89.9%, which have been highlighted with yellow on page 5.

Four thousand written informed consent forms explaining the aim and procedures of this study were sent to high school students’ guardians (mostly parents), and 3594 signed forms were returned (participation rate 89.9%). Subsequently, 3594 students also signed written informed consent forms and completed the Personality Diagnostic Questionnaire-4+ (PDQ-4+), the MacArthur Scale of Subjective Social Status-youth version (SSSy), and a general questionnaire that collected information about demographic variables. Forty two participants were excluded for they did not fill out the surveys at least one item, leaving an effective sample size of 3552, therefore, the effective rate of response was 98.8%.

② As you have pointed out, a large sample had been used in our study, which asked for some form of post hoc test, therefore, to assess the statistical significance, we used effect size to assess the size of differences when statistical significances were found by p values < 0.05.

③ According to your suggestion, the percentages were provided to make the description more intuitively as follows, which have been highlighted with yellow on page 5 in the revised manuscript.

A total of 3,552 high school students (50.4% males) were enrolled from eight high schools located across seven geographic districts in China, encompassing a generally representative sample of Chinese high school students with regard to socioeconomic status and most demographic variables. The mean age of the students was 16.62 years (SD = 1.11, range = 14 – 20). The sample included 39.8% freshmen, 35.3% sophomores, and 24.9% juniors. Most of the participants (61.0%) were singletons (the only children in their families). A large majority of the children (92.5%) were of Han Chinese ethnicity, and 7.5% were ethnic minorities (Table 1).

Response to Reviewer: Dr. Martine Bouvard

Reviewer's report:

minor essential revisions

I agree with the new text. However, there is no comment on the effect size.

Table 3

All the effect sizes are weak only 2 (STPD and APD) are >.20. So the present study
revealed that boys showed more evidence on schizotypal and antisocial PDS than girls with a weak effect. The difference between gender is significant but the effect size is weak.

Table 4
All the effect sizes are weak (under .20, the effect is insignificant). So the comments on family structure must be change (singletons vs nonsingleton)

Table 5
All the effect sizes are weak (under .20, the effect is insignificant). So the comments on the status in society must be change (low vs high).

Can you add a comment on the weakness of the effects in the discussion?

Response: Thank you for your valuable suggestions.

In the results section, we added some comments on the effect size as follows, which have been highlighted with yellow on page 8-9 in the revised manuscript.

**Influence of gender and grade on PD traits**

*Boys scored higher than girls on the paranoid, schizotypal, antisocial, and narcissistic PDs with a weak effect size.* As a result of gender distribution not being equivalent across the grades, we found an effect of grade on PDQ-4+ scores with gender as a covariate. Freshmen and sophomores scored higher than juniors on the schizoid, borderline, and antisocial PDs; freshman and sophomore scores did not differ from each other (Table 3).

**Influence of family structure on PD traits**

*Singleton youths scored higher than kids with siblings on the paranoid and antisocial PDs with gender and age as covariates, but the effect size is weak.* After controlling for gender and age, we found that children in single-parent families had significantly higher scores than children from double-parent families on the schizotypal and antisocial PDs, while kids from remarried families scored higher than those from double-parent families on the borderline and antisocial PDs (Table 4).

**Influence of perceived social status on PD traits**

With gender and age as covariates, we found that students who had a low subjective perception of social status in the society ladder of the SSSy scored higher on the schizoid and borderline PDs than those who had a high perceived status, but had a significantly lower score on the histrionic PD. *However, all the effect sizes are weak* (Table 5). Students who had a low perceived social status in the school community ladder of the SSSy scored higher on the paranoid, schizoid, borderline, and antisocial PDs than students who had a high perceived status, but scored lower on the histrionic PD, *while all the effect sizes are weak* (Table 5).

In the discussion section, we added a comment on the weakness of the effect size.
as one of the limitations, and some inaccurate description were also revised as follows, which have been highlighted with yellow on page 9-12 in the revised manuscript.

Discussion

The present study indicated that, overall, boys showed more evidence of paranoid, schizotypal, antisocial, and narcissistic PDs than girls, although the evidence are insufficient for the effect sizes are not large enough. This result is consistent with prior reports by Huang et al. [22], Fu and Yao [20], and Fu et al. [21]. We also found that several PD traits (schizoid, borderline, and antisocial) were observed more in freshman and sophomores than in juniors. This grade (age) effect is, to a certain extent, consistent with Johnson et al.’s findings from a community-based longitudinal investigation that PD traits tend to decline steadily in prevalence with advancing age during adolescence and early adulthood [12].

Family structure may also be related to personality pathology. Students from single-parent families scored higher than students from double-parent families on the schizotypal and antisocial PDs, whereas students from remarried families scored higher than students from double-parent families on the borderline and antisocial PDs. Additionally, singleton youths might get higher scores than kids with siblings on the paranoid and antisocial PDs with an insignificant effect. Our family structure effect findings in high school students confirm Huang et al.’s findings in college students in part—like us, they also found that singleton children scored higher on the paranoid and antisocial PDs and that children from single-parent households scored higher on the schizotypal PD. However, our findings differed from Huang et al.’s findings in several ways. For example, they did not see higher antisocial subscores in single-parent versus double-parent households as we did [22]. Huang et al. additionally found significantly lower schizoid subscores for singleton children, versus children with siblings, which we did not find [22]. There are multiple factors that may have contributed to these differences, including possible contributions of differences in familial social and economic statuses between the groups. Additionally, the timing and length of fathers’ absences should be considered when researching PD development in boys [25].

The prevalence of PDs has been reported previously to be inversely related to family socioeconomic factors, such as annual income [26], neighborhood [22], occupational status [27], and employment status [28]. The present findings further support the notion that socioeconomic factors may influence risk of PD development. We found that students who had a low subjective perception of social status in the society ladder of the SSSy scored higher on the schizoid and borderline PDs, but scored lower on the histrionic PD, than students with a high perceived society ladder status. Furthermore, students with a low subjective social status in the school community ladder scored higher than students with a high subjective social status in the school community ladder on the paranoid, schizoid, borderline, and antisocial PDs, while scoring lower on the histrionic PD. Goodman et al.’s research showed that younger adolescents had higher perceptions of social status in society than older adolescents, although age was not significantly associated with adolescents’ responses for the school community ladder [23]. Therefore, as adolescents mature, the influence of subjective social status in the school community
ladder on their personality development becomes greater than the influence of subjective social status in the society ladder.

There are some important limitations of this study that should be mentioned. First, although we did not make formal diagnoses, the PDQ-4+ instrument can be strongly over-inclusive when the clinical significance scale is not used. Further studies involving clinical interviews should be conducted to improve the reliability of the questionnaire score. Second, because we conducted a cross-sectional study, not a longitudinal study, these data cannot be used to make claims on direct connections between PDs in adolescence and adulthood. However, we know from other studies that PDs in adolescence can have a profound impact on associated personality traits in adulthood [11-12]. Longitudinal research is necessary to further explicate the possibility that PDQ-4+ scores in adolescence may predict personality pathology in adulthood. Third, although several statistical significances were found by p values less than 0.05, all effect sizes are weak which may have a certain impact on the reliability of the conclusion inference. Further clinical studies on personality disorders patients need to be conducted to assess the relationship between personality disorders and demographic variables. Finally, because this study is part of a larger project examining Chinese adolescents’ risk behaviors and related factors, we focused on cluster A and cluster B PD traits only. This limitation of scope allowed us to have greater focus on the areas of interest for our larger project, and thus improved the quality of results within this scope. However, the trade-off for this focus was that we did not examine cluster C PDs (avoidant, dependent, obsessive-compulsive) or other PD behaviors, such as passive-aggressive and depressive traits, although such features are observed in adolescents. To obtain a full understanding of PD characteristics in adolescence and their relationships to demographic variables, it will be important clinically to have data on all PDs.

Thank you again for your attention and consideration. We shall look forward to receiving good news from you.

Sincerely yours,

Xiongzhao Zhu, M.D. & Ph.D.
Professor of Clinical Psychology and Psychiatry