Author’s response to reviews

Title: Social anxiety increases visible anxiety signs during social encounters but does not impair performance

Authors:

Trevor Thompson (t.thompson@gre.ac.uk)
Nejra Van Zalk (n.van-zalk@imperial.ac.uk)
Christopher Marshall (chris@start2stop.co.uk)
Melanie Sargeant (msarg666@hotmail.co.uk)
Brendon Stubbs (brendon.stubbs@kcl.ac.uk)

Version: 2 Date: 26 Mar 2019

Author’s response to reviews:

Paula Vagos (Reviewer 2):

This work set out to investigate if the social performance of young adults (i.e., students) was impaired in the beholders’ eyes based on their own account of their social anxiety. The goal of the work is very significant and the findings are new and intriguing. The authors have been very responsive to my previous comments and I have very few additional comments to present, which stem from the changes that were made to the manuscript following my previous comments (or the changes that were not made and the explanation of the why). I present them below, but would like to highlight at this moment that this manuscript presents a very rigorous, innovative and interesting work that I will be glad to see published.

Many thanks again for taking the time to review the manuscript and for your helpful comments. Responses to the queries raised are provided below.

Method

(1) Participants knew one of the confederates from one task to another. How could this have influenced the results?
Response:

We agree, participant responses on the second task could conceivably have been affected by confederate exposure on the previous task (e.g. by potentially diminishing anxiety due to some familiarity with the confederate). In this particular case, we would expect any such effect to have minimal impact on the findings as such exposure was limited and the order of presentation of these tasks was randomized.

(2) The authors seem to indicate that SEM was used and the same pattern of results as using regression analyses were found. They then chose to present the regression analyses based on the fact that they would be more familiar to the readers. Even if, in my opinion, this argument for presenting regression analyses is not entirely valid, please provide a footnote referring to the SEM results.

Response:

Thank you for this suggestion; we agree this would be a useful addition, and we have added the following footnote (bottom of page 13):

We also reran these tests using only one SPRS outcome at a time. This was done as a consistency check to ensure that the results of the hypothesis testing in sections 3.4 and 3.5, which used a regression approach, were the same as those using an SEM approach. As expected, both techniques produced the same results (least squares and maximum likelihood estimators used in regression and SEM respectively produce identical estimates under the usual assumptions of regression).
Results

Table 1 - correlations of social anxiety and gender with self-reported anxiety

(3) The authors argue for presenting only the analyses that concern the goals of their work. I tend to understand and agree with this (e.g., comparing the three moments would be unnecessary), but also feel that presenting evidence on the successful induction of anxiety for speech and then for interaction is not an addition to their goals, but rather a specification of their findings. They state that "paired -tests showed uniformly significant increases in pre-task and during-task anxiety from baseline for both speech and interaction tasks" but then only present one result, which is confounding regarding what dependent variable was used in this t-test. Presenting results by gender would also be a way of guaranteeing that the induction of anxiety was valid for both genders (thus not adding but simply grounding the analyses concerning their goals - men and women did not differ though they similarly experienced increase in anxiety).

Response:

This is a good point, and we have amended the results section accordingly by conducting t-tests separately for males and females and by reporting complete results for each t-test. These revisions are reproduced below (Section 3.2, page 11).

Consistent with the successful induction of anxiety, paired t-tests found significant increases from baseline anxiety for the speech task at pre-task (t(92) =5.58, p<.001) and during-task (t(92) =9.92, p<.001) periods, and for the interaction task at pre-task (t(92) =5.84, p<.001) and during-task periods (t(92) =5.69, p<.001) (see Table 1 for mean task anxiety scores at each assessment period). To check that anxiety was induced in both male and female participants, t-tests were repeated for each gender separately. For males, significant increases from baseline anxiety were uniformly found at pre-task (t(44) =3.61, p<.001) and during-task (t(44) =5.63, p<.001) in the speech task, and pre-task (t(44) =2.52, p=.015) and during-task (t(44) =4.15, p<.001) in the interaction task. This pattern of results was replicated for females, with significant increases from baseline anxiety observed at pre-task (t(47) =4.49, p<.001) and during-task (t(47) =8.58, p<.001) for the speech task, and pre-task (t(47) =5.89, p=.015) and during-task (t(47) =4.03, p<.001) for the interaction task.
(4) Page 12, there is a note signaled with "1" that is not associated with any real note.

Response:

This should have stated ‘2’ and has now been corrected - thanks for pointing this out.