

RESPONSE LETTER

Dear Editor-in-Chief and Referees:

Thank you for your email letter of "Reviews of Manuscript 25167". The title of the manuscript is: "The effectiveness of an intervention for reducing social stigma towards mental illness in adolescents". We are very grateful to you and the reviewers' comments and thoughtful suggestions. We are sorry for the linguistic quality of the original manuscript. Based on these comments and suggestions, we have made careful modifications to the original manuscript, and carefully proof-read the manuscript to minimize typographical and grammatical errors. We believe that the manuscript has been greatly improved and hope it has reached your magazine's standard.

Once again, we acknowledge your comments very much, which are valuable in improving the quality of our manuscript.

Sincerely yours

Regina Vila and Susana Ochoa

Here are our responses to editor comments and the reviewers' comments and list of corrections.

Associate Editor comments:

1. A succinct and impactful title will include minimal nonfunctional words, such as "a," "an," "the," "roles of," etc. and will avoid non-standard abbreviations.

We didn't change the title

2. Please put the reference numbers in square brackets in superscript. Please check across the text.

We have put the reference numbers in square brackets in superscript

3. Please add PubMed citation numbers and DOI citation to the reference list and list all authors.

We have added de PubMed citation numbers and DOI citation in the reference

4. Please write the comments.

We have added comments

5. Add a audio core tip, Fax, Telephone and Informed consent statement PDF, Conflict-of-interest statement PDF, Data sharing statement PDF and PDF of Supported by

Associate Reviews comments:

Review 1:

First, throughout the Introduction section, the authors correctly stated that individuals who suffer from mental illness, and in particular those suffering from schizophrenia, represent one of the most stigmatized groups in society. However, they did not report that schizophrenia genetic explanation may potentially increase the stigmatization towards these patients. Considering schizophrenia as a genetic condition influenced participants perception of other people's beliefs about dangerousness and unpredictability and people's desire for social distance. In order to develop this topic, i suggest to cite and discuss the paper of Serafini and colleagues.

We have added the article mentioned of Serafini et colleagues; Serafine et al. (2011)⁴ found that the fact that schizophrenia is perceived as a genetic disorder and not environmental disorder, increase the stigma towards this mental illness.

Within the same section, the authors stated that some explicit ideas of personality traits, which are the basis for the formation of stereotypes of certain groups, are not developed until adolescence. This assumption is quite interesting as formulated, but needs to be further developed. In detail, based on the authors' opinion, what are these specific personality/temperamental traits that would expose some subgroups of subjects to a specific vulnerability in developing these stereotypes?

We have eliminated the sentence "Furthermore, some explicit ideas of personality traits, which are the basis for the formation of stereotypes of certain groups, are not developed until adolescence", because we didn't found a strong theory behind.

Regarding the Methods section, the description of the CAMI psychometric instrument could be reduced in length. Concerning the procedure of the study, the authors stated that a total of 12 students were not present in the second evaluation and, thus, these cases were lost. However, they did not report the main reasons of this loss. Did participants refuse to undergo the second evaluations? In addition, within the same section, whether the parents' signed consents have been collected has not been reported. Importantly, did the authors really randomized their participnats into two groups? In this case, why they continued to name "control group", the sample of adolescents who did not undergo the intervention? Whether they did really assign the total sample into subjects who underwent the intervention and subjects who did not is not well specified. Here, more details are needed.

On the one hand we reduced the description of the CAMI, and we explained the reasons of the 12 students were not presented in the second evaluations (A total of 12 students were not assessed in the second evaluation, because they did not assist to the school the second day therefore these cases were lost). On the other hand, we explained better the procedure of the experiment and the two groups and we added information about informed consents (The first contact with the students was to inform them of our interest in their opinions on mental health and collected the informed consents)

Regarding statistical analyses, the authors stated that when all the variables were obtained, a general linear model for repeated measures was carried out controlling for the variables of gender and whether or not the subjects knew someone with a mental disorder. However, i did not find any Table throughout the main text reporting these type of analyses. Within the

Results section, there is no mention to multivariate analyses that the authors conversely reported to carry out. In addition, Table 1, 2, and 3 did not report the Student t-test values but simply the p values and this is quite confusing for the general readership. I suggest to add the Student t-test values as specified throughout the Methods section.

We have added the t-Students values in the three tables, and we have also changed in the three tables "Difference" for "Difference between baseline and post-intervention" for explain better it. No diem res del model multivariate analysis

Throughout the Discussion section, the authors reported that their intervention using a documentary film with adolescents was effective and that there are other studies in literature that may confirm this finding. However, they did not provide eventual explanations.

No hem afegit res pq creiem que esta bé.

Review 2:

1. P. 3; 3rd row: I would prefer using "measured" compared to "assessed". - P. 5; 3rd paragraph; 6th row and following in the introduction: Please use past tense when reporting findings from the literature – Reid showed....; 2nd last row: ...Weist said that programs to promote mental health as well as intervention programs should be carried out in schools

We changed "assessed" for "measured" and we put the sentences in past tense.

2. What's the difference between programs to promote mental health and intervention programs? What should be promoted in particular? What types of intervention etc...?

We eliminated "intervention programs" in the sentence; Roeser¹⁹ and Weist²⁰ said that in the schools should carry out programs to promote mental health and intervention programs. Non-difference exists in the two concepts (programs to promote mental health and intervention programs).

3. P. 6; 1st row: "explained" instead of "explains", please - P.6; last paragraph: There is seemingly important information missing. Subscales from what? Please specify and describe the applied method or don't refer to scales but to measured attitudinal and behavioural constructs.

We changed "explained" instead of "explains" (He explained that it is necessary include training on interdisciplinary collaboration...) and we have specified the questionnaire which comprise mentioned subscales (Martinez-Zambrano et al.²⁵ found that women showed significant changes after the intervention in the authoritarianism and social restrictiveness subscales of OMI questionnaire).

- P. 8: You just refer to domains (seemingly questionnaire subscales) derived from type of stigma theory/model. I would like to read some introduction into this model before reporting related findings.

We have changed the sentence “Therefore, the principal aim of the present study was to evaluate the effectiveness of an intervention with professionals and documentary film in the reduction of social stigma towards a mental disorder in adolescents regarding stigma domains (authoritarianism, benevolence, social restrictiveness, and community mental health ideology)” for “Therefore, the principal aim of the present study was to evaluate the effectiveness of an intervention with professionals and documentary film in the reduction of social stigma towards a mental disorder in adolescents through the CAMI scale”.

P. 9; design: Please give some rationale for your sample size! Please reformulate the 2nd sentence. Your study did not “consisted in measuring ...” You just had one experimental condition and one control condition but not two experiments, am I right?

We have added a sentence for explain the sample size, “Our sample size of 280 people, would allow to detect an effect size of at least 0.3 between the groups, with a significance level of 5% and 80% power, with an unilateral Student’s t-test”, and furthermore we have changed the paragraph where there is the explications of the two groups of the study to understand it better, and we put: The intervention group included N=128 while the control group included N=152. The study consisted in measuring the effect of reduction in stigma before and after the intervention, controlling for the effect of intervention.

P. 9; subjects: Please report something about the sampling procedure. Please tell the reader what the Escola Amiga Program from ... contains (aims, goals, approaches etc. who participates(ed) based on what type of selection criteria and/or assumed benefits?

We have added information about Escola Amiga Program; The program offers young people the opportunity to learn firsthand stories of groups at risk of social exclusion and engage to change situations of injustice.

- P. 9; Evaluation instrument: How was the CAMI validated with which results? Where are psychometric properties published? The variation of stability seems to be very high (p. 10)? Please give more information about how stability was determined (period between assessments etc.).

The validation of the CAMI in Spanish version is published and we have added the reference and we have also added the period between the two evaluations, one week.

- P. 10; 1st paragraph: How did you approve the factor structure of the CAMI? Can you provide any reference for this? “declarations”? better “statements”? – Did the 12 students who dropped out at the 2nd assessment represent a systematic drop-out in any direction? Did you test this (intervention or control group? Gender, age etc...)?

XXX

P. 11; end of 1st paragraph: What questions have been discussed? Please give some examples. – last paragraph: Please explain what you mean with “within a week” – Did you mean “after

one week"? Or, was there a variation from 1 day to 7 days for the time between two assessments?

We have added some examples about questions that adolescents asked us, for example, if they are dangerous, if they can work, the relationship with others, etiology of the illness.... And we specify the meaning of one week; two assessments were performed in a week (concretely).

- P. 12: Did you consider a multi-level analysis? I could not really find the findings from your general linear model analysis for repeated measures in your findings. Please describe these more clearly.

XXX

- P. 13; 2nd sentence: What kind of difference was found to be significant? You just had one intervention group – please make clear what was significant. - Tables – Please change post-intervention into follow-up. Please provide with the related t-scores and clearly define which scores have been compared! For example in Table 1, it remains unclear if the p-values refer to the comparison control group versus intervention group at baseline or at follow-up or if they refer to differences between the two assessments for either, control or intervention group! It is the same dilemma within table 2 and 3 implying that it is impossible to follow the content of your result section.

We have added the t-Students values in the three tables, and we have also changed in the three tables "Difference" for "Difference between baseline and post-intervention" for explain better it.

Discussion: It remains unclear to me what the differences found for various subscales depending from some variable mean for changes in attitudes and behaviour in contact with individuals suffering from mental disorders in daily life. What might really have been changed, if so?

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Review 3:

I suggest to report effect sizes.

We have added "Our sample size of 280 people, would allow to detect an effect size of at least 0.3 between the groups, with a significance level of 5% and 80% power, with an unilateral Student's t-test"

I suggest to discuss the difference between attitude (measured) and behavior (not assessed) If somebody says I don't know somebody with a mental illness, given the high prevalence, this means that he or she does not know what mental illness is or limits this category to severe forms of schizophrenia. This affects table 3

XXX

A 20 minute film can carry only limited information. So it would be interesting to report in the paper, which aspects of mental illness were covered and what the main messages were.

We have added more information about the film, the next topics are treated to video; if they are dangerous, if they can work, the relationship with others, etiology of the illness....

As Schomerus has shown, the content of psychoeducation about mental illness may influence the extent of stigma.

XXX