

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Scoping review to evaluate the effects of peer support on the mental health of young adults
AUTHORS	Richard, Jérémie; Rebinsky, Reid; Suresh, Rahul; Kubic, Serena; Carter, Adam; Cunningham, Jasmyn; Ker, Amy; Williams, Kayla; Sorin, Mark

VERSION 1 – REVIEW

REVIEWER	Rovetta, Alessandro Mensana srls, Research and Disclosure Division
REVIEW RETURNED	23-Feb-2022

GENERAL COMMENTS	<p>General comments</p> <p>Dear authors, thank you for the opportunity to read your interesting work. This paper summarizes the evidence regarding the role of peer support in the young population. In particular, the manuscript adopts the scoping review method to provide a general picture of the most reliable evidence in the literature. The authors conclude that most of the literature shows the substantial utility of peer support and, at the same time, the need for further research. Nonetheless, I suggest addressing the following points.</p> <p>=====</p> <p>Major comments</p> <p>1) Introduction.</p> <p>1.1. “However, to date, there has been no systematic investigation of how exactly peer support may contribute to the mental health and wellbeing of young adults, a demographic particularly vulnerable to a range of mental health disorders.” I suggest using more moderate expressions like “To the best of the authors’ knowledge” (or similar). Moreover, some systematic reviews are present in the literature (e.g., https://pubmed.ncbi.nlm.nih.gov/26543923/). In particular, Ali et al. found low-quality evidence about online peer (to peer) support and declared the need for more studies. Such an outcome can strengthen the scope of your paper. This document could also be helpful (https://youthmovenational.org/wp-content/uploads/2019/09/YouthPeertoPeerLiteratureReviewFINAL.pdf).</p> <p>2) Results. “One study noted no significant effect of peer support in reducing depressive symptoms.[41]” and “Overall, peer support was found to lead to various mental health benefits for supportees including statistically significant increases in happiness,[48] self-esteem,[52] problem- and emotion-focused coping strategies,[56] as well as</p>
-------------------------	--

	<p>significant reductions in loneliness,[48] depression,[50-52] and anxiety.[50]" Dear authors, even if the studies adopted the words "(no significant," I suggest avoiding this kind of expression since the dichotomous use of the threshold is incorrect (e.g., https://pubmed.ncbi.nlm.nih.gov/27209009/). In particular, I suggest a more cautious "low/high significance." This improvement should be accomplished in the whole manuscript. Furthermore, such a conservative measure is even more important considering that the results were not pooled or adjusted for multi-comparisons.</p> <p>3) Discussion. Among the limitations, I suggest mentioning a critical aspect: the statistical approach may not fully consider individuals. For instance, peer support could be highly beneficial to 10 subjects with unique (or very rare) "hidden" characteristics and low beneficial to 90 with more common characteristics. Therefore, compared to a control group, a substantial difference may not be deduced. This scenario highlights that qualitative analyses are equally fundamental, especially in the psychological field. Indeed, groupings are not always sufficient to represent the actual peculiarities of individuals (https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC2529190/).</p> <p>=====</p> <p>Minor comments</p> <p>m1) Introduction. "The transition to university often coincides with young adulthood and a peak of mental illness onset due to decreased support from family and friends, increased financial burden, loneliness, and intense study periods." I suggest using a more fitting source to justify this sentence (e.g., https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC4527955/)</p> <p>m2) References. Reference 31 and 47 are the same.</p>
--	---

REVIEWER	Remes, Olivia University of Cambridge, Public Health and Primary Care
REVIEW RETURNED	29-Mar-2022

GENERAL COMMENTS	<p>This was a scoping review assessing the effects of peer support on the mental health of young adults. It is a well-written and rigorous paper. Nevertheless, I am including minor comments for fine-tuning of this article.</p> <p>In the introduction and throughout the paper, could you go into slightly more detail on the forms of peer support that were assessed.</p> <p>Methods: Please clarify if the scoping review was limited to any specific geographical setting.</p> <p>Please indicate how you arrived at the data charting form – for example, did you pilot it? If so, how many people were involved?</p> <p>Results: Measurement of mental health - please provide examples of instruments that were used to measure mental health outcomes within the Results section of the paper (ex. DSM, ICD, GAD-7, simple symptom checklists, etc.)</p> <p>Where possible, could you provide key effect estimates, such as</p>
-------------------------	---

	<p>odds ratios, etc. (this helps the reader better understand the relationship between peer support and outcomes, such as, happiness, loneliness, depression, etc.).</p> <p>It would be interesting to include a very brief mention of the setting of these studies – the countries where most of the studies took place so the reader can determine generalizability.</p>
--	--

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Dr. Alessandro Rovetta, Mensana srls

Comments to the Author:

General comments

Dear authors, thank you for the opportunity to read your interesting work. This paper summarizes the evidence regarding the role of peer support in the young population. In particular, the manuscript adopts the scoping review method to provide a general picture of the most reliable evidence in the literature. The authors conclude that most of the literature shows the substantial utility of peer support and, at the same time, the need for further research. Nonetheless, I suggest addressing the following points.

=====

Major comments

1) Introduction.

1.1. “However, to date, there has been no systematic investigation of how exactly peer support may contribute to the mental health and wellbeing of young adults, a demographic particularly vulnerable to a range of mental health disorders.” I suggest using more moderate expressions like “To the best of the authors’ knowledge” (or similar). Moreover, some systematic reviews are present in the literature (e.g., <https://pubmed.ncbi.nlm.nih.gov/26543923/>). In particular, Ali et al. found low-quality evidence about online peer (to peer) support and declared the need for more studies. Such an outcome can strengthen the scope of your paper. This document could also be helpful (<https://youthmovenational.org/wp-content/uploads/2019/09/YouthPeertoPeerLiteratureReviewFINAL.pdf>).

We thank the reviewer for this comment and pointing out two important literature reviews in this research area. These two publications have been included within the present review in order to strengthen the scope of the paper. Modifications have been made on pages 5 and 6 to reflect these changes.

“Beyond the effects to those receiving support, there are also promising findings related to the benefits of providing peer support.[30, 31] Some of the positive reported outcomes reported include improvements in self-esteem, self-efficacy, self-management, and in the recovery from addiction or bereavement.[28, 32, 33] Nevertheless, findings are mixed when it comes to the effects of peer support. In a systematic review investigating the role of online peer support (i.e., Internet support groups, chat rooms) on the mental health of adolescents and young adults, only two of the four randomized trials reported improvements in mental health symptoms, with the two other studies included in the review showing decreases in symptoms, but these differences were not statistically significant.[34]”

2) Results. "One study noted no significant effect of peer support in reducing depressive symptoms.[41]" and "Overall, peer support was found to lead to various mental health benefits for supportees including statistically significant increases in happiness,[48] self-esteem,[52] problem- and emotion-focused coping strategies,[56] as well as significant reductions in loneliness,[48] depression,[50-52] and anxiety.[50]" Dear authors, even if the studies adopted the words "(no) significant," I suggest avoiding this kind of expression since the dichotomous use of the threshold is incorrect (e.g., <https://pubmed.ncbi.nlm.nih.gov/27209009/>). In particular, I suggest a more cautious "low/high significance." This improvement should be accomplished in the whole manuscript. Furthermore, such a conservative measure is even more important considering that the results were not pooled or adjusted for multi-comparisons.

We thank the reviewers for this important comment. Modifications were made throughout the results section to remove the usage of the term "no significant" and efforts were framed to state the results when results were of high significance more cautiously (pg. 11 to 15).

3) Discussion. Among the limitations, I suggest mentioning a critical aspect: the statistical approach may not fully consider individuals. For instance, peer support could be highly beneficial to 10 subjects with unique (or very rare) "hidden" characteristics and low beneficial to 90 with more common characteristics. Therefore, compared to a control group, a substantial difference may not be deduced. This scenario highlights that qualitative analyses are equally fundamental, especially in the psychological field. Indeed, groupings are not always sufficient to represent the actual peculiarities of individuals (<https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC2529190/>).

The reviewer raises an important point regarding the importance of qualitative research in this research domain. Inclusions have been made to the limitations section to include this point (pg. 17): "Moreover, studies investigating the effect of peer support on mental health through the use of statistical approaches are limited in that they do not fully consider individuals, their peculiarities, and unique characteristics, emphasizing the importance of qualitative research in this research domain."

=====
Minor comments

m1) Introduction. "The transition to university often coincides with young adulthood and a peak of mental illness onset due to decreased support from family and friends, increased financial burden, loneliness, and intense study periods." I suggest using a more fitting source to justify this sentence (e.g., <https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC4527955/>)

This citation has been added as Reference 4 (page 4) with a less fitting reference being removed (i.e., Merikangas et al., 2010).

m2) References. Reference 31 and 47 are the same.

All in-text citations have been revised and sentences including 47 as a reference were replaced with 31.

Reviewer: 2

Dr. Olivia Remes, University of Cambridge

Comments to the Author:

This was a scoping review assessing the effects of peer support on the mental health of young adults. It is a well-written and rigorous paper. Nevertheless, I am including minor comments for fine-tuning of this article.

In the introduction and throughout the paper, could you go into slightly more detail on the forms of peer support that were assessed.

We thank the reviewer for this comment. Within the introduction, additional details have been provided specific to the various forms of peer support that exist (pg. 5):

“Various forms of peer support exist; they can be classified based on the setting in which peer support is provided (e.g., hospital, school, online), the training of the individual offering the service (e.g., prior training in active listening/supportive interventions, no previous training), shared characteristic or past experience(s) between the supporter or person receiving support, and/or the administration overseeing the service.[23] Furthermore, peer support has been identified as having the potential to serve individuals, for example ethnic and sexual minorities, who are in need of mental health services yet feel alienated from the traditional mental health system.[29]”

Moreover, additions have been made in the Results section in the section entitled “Measurement of peer support” to provide additional details on the included measures (pg. 10):

“Generally, these scales include items related to perceived social support (e.g., “I get the help and support I need from my friends.”; “I have friends with whom I can share my joys and sorrows.”; “When we discuss things, my friends care about my point of view.”; “Could you turn to your friends for advice if you were having a problem?”) with responses including Likert-type scales ranging from strongly disagree/never/no to strongly agree/always/yes.”

Methods:

Please clarify if the scoping review was limited to any specific geographical setting.

The authors have specified that “No limitations were included specific to geographic location of the study” within the Inclusion and Exclusion criteria section (page 8).

Please indicate how you arrived at the data charting form – for example, did you pilot it? If so, how many people were involved?

The following sentence was added to the manuscript (page 9): “These extracted characteristics were identified based on previous systematic or scoping reviews investigating peer support and/or mental health outcomes.” There was no piloting of the table as it was clear to the authors which variables were of interest based on our research questions and the methodology of the extracted studies.

Results:

Measurement of mental health - please provide examples of instruments that were used to measure mental health outcomes within the Results section of the paper (ex. DSM, ICD, GAD-7, simple symptom checklists, etc.)

The authors have carefully considered this comment and acknowledge the utility of having the name of the instruments in the main text. As the name of each instrument is already included in Appendix 1, a sentence has been added pointing the reader to this table so they can access the information here (page 11).

Where possible, could you provide key effect estimates, such as odds ratios, etc. (this helps the reader better understand the relationship between peer support and outcomes, such as, happiness, loneliness, depression, etc.).

We thank the reviewer for this comment. Key effect estimates and/or reported p-values are now reported throughout the Results section (pg. 12 to 15).

It would be interesting to include a very brief mention of the setting of these studies – the countries

where most of the studies took place so the reader can determine generalizability.

Details regarding the setting of these studies have been added to the Results section (pg. 10):
 “Geographically, studies were carried out in the United States (n = 10), Canada (n = 3), the United Kingdom (n = 3, with one study recruiting part of their sample from Portugal), and Pakistan (n = 1). Most samples included university students (n = 15), with the remaining studies including young adults from the general population (n = 2).”

VERSION 2 – REVIEW

REVIEWER	Rovetta, Alessandro Mensana srls, Research and Disclosure Division
REVIEW RETURNED	14-Jun-2022

GENERAL COMMENTS	<p>Dear authors, thank you for your professional answers and revisions. The manuscript has improved from the previous version. However, I believe there are still some aspects that need to be further clarified.</p> <p>1) Results & Discussion. Looking at the results, it is not always clear whether a combination of the P-values via data fusion methods (e.g., Fisher in Meta-analysis) would return intuitive results. For example, <<[...] if there were five studies each with P = 0.10, none would be significant at 0.05 level; but when these P values are combined using the Fisher formula [9], the overall P value would be 0.01.>> (see https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4877414/). Therefore, it should be specified that a meta-analysis is required to draw firm quantitative conclusions.</p> <p>2) Results & Discussion. Some studies report "statistically significant" results but with very little effect sizes (e.g., b = -.01, p = .047). On the contrary, other results had a large effect size with a P above the standard threshold (e.g., $\beta = -.49$, p = .06). Therefore, it is absolutely necessary to evaluate the usefulness of these interventions also on the basis of the effect size despite their significance. In this regard, as specified by Greenland et al., <<Among the many reasons are that, in most scientific settings, the arbitrary classification of results into “significant” and “non-significant” is unnecessary for and often damaging to valid interpretation of data; and that estimation of the size of effects and the uncertainty surrounding our estimates will be far more important for scientific inference and sound judgment than any such classification.>> (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4877414/). Therefore, if possible, confidence/credible intervals for β, r, b should be reported to significantly improve the relevance and accuracy of your paper. If these are not available such a fact should be reported as a limitation (not of your paper but the available literature).</p> <p>3) Results. Please, make a legend for β, r, b.</p>
-------------------------	---

VERSION 2 – AUTHOR RESPONSE

Reviewer: 1

Dr. Alessandro Rovetta, Mensana srls

Comments to the Author:

Dear authors, thank you for your professional answers and revisions. The manuscript has improved from the previous version. However, I believe there are still some aspects that need to be further clarified.

We thank the reviewer for noting the improvements in the manuscript. We have included changes to the manuscript based on your remaining comments.

1) Results & Discussion. Looking at the results, it is not always clear whether a combination of the P-values via data fusion methods (e.g., Fisher in Meta-analysis) would return intuitive results. For example, <<[...] if there were five studies each with $P = 0.10$, none would be significant at 0.05 level; but when these P values are combined using the Fisher formula [9], the overall P value would be 0.01.>> (see <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4877414/>). Therefore, it should be specified that a meta-analysis is required to draw firm quantitative conclusions.

The authors thank the reviewer for their comment on the interpretation of the results within this scoping review. We agree that meta-analysis of research findings is required to draw firm quantitative conclusions. As we utilized a scoping review methodology, these analyses fell outside of the scope of this study yet we acknowledge the importance of meta-analyses in the future. The following sentence has been added relevant to the limitations of the present review (page 19):

“Finally, although this scoping review determined the breadth and general findings of the available literature on the effects of peer support for the mental health of young adults, literature reviews utilizing data fusion methods (e.g., Fisher’s method in meta-analysis) are necessary to draw firm quantitative interpretations of these effects.”

2) Results & Discussion. Some studies report "statistically significant" results but with very little effect sizes (e.g., $b = -.01$, $p = .047$). On the contrary, other results had a large effect size with a P above the standard threshold (e.g., $\beta = -.49$, $p = .06$). Therefore, it is absolutely necessary to evaluate the usefulness of these interventions also on the basis of the effect size despite their significance. In this regard, as specified by Greenland et al., <> (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4877414/>). Therefore, if possible, confidence/credible intervals for β, r, b should be reported to significantly improve the relevance and accuracy of your paper. If these are not available such a fact should be reported as a limitation (not of your paper but the available literature).

The authors have thoroughly reviewed the article by Greenland and colleagues and have included additional modifications to the Results section to represent these important considerations. We have reviewed all included studies and screened them for their inclusion of confidence intervals for measures of effect size. If applicable, this has been included within the Results section (pages 12 to 15).

Unfortunately, most studies did not include confidence intervals for measures of effect size. Since most studies did not include confidence intervals in their findings, a limitation has been added specific to the available literature (page 18):

“Another limitation of the statistical findings reported in most included studies is that they do not include confidence intervals for measures of effect size. The absence of such reported findings limits the accuracy of statements regarding effect sizes and consequent interpretations of the data.”

3) Results. Please, make a legend for β, r, b .

A legend has been added to Appendix I with a definition of each acronym including β , r , and b . Moreover, an overview of each measure of effect size is now reported in the Methods section (page 9).

“Main reported findings will include measures of effect size including Pearson correlation coefficients (r), standardized beta coefficients (β), beta coefficients (b) with standardized errors (SE), and Cohen’s d . Confidence intervals (CI; 90% or 95%) and p -values will also be reported when applicable.”

VERSION 3 – REVIEW

REVIEWER	Rovetta, Alessandro Mensana srls, Research and Disclosure Division
REVIEW RETURNED	08-Jul-2022
GENERAL COMMENTS	Dear authors, thank you for your final changes. I wish you the best for this and your future research.