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)	Mental health issues and illness and substance use disorder (non-)disclosure to a supervisor: A cross-sectional study on beliefs, attitudes and needs of military personnel.
AUTHORS	Bogaers, Rebecca; Geuze, Elbert; van Weeghel, Jaap; Leijten, Fenna; van de Mheen, D; Greenberg, N; Rozema, A; Brouwers, Evelien

VERSION 1 – REVIEW

REVIEWER	Cristello, Julie
	Florida International University
REVIEW RETURNED	25-Jul-2022

GENERAL COMMENTS	The current study assesses military personnel with and without mental health disorders/difficulties within the Dutch military. The authors use logistic and ordinal regression analyses to examine beliefs, attitudes, and needs regarding the disclosure decision to a supervisor, as well as how both groups differ. While the strengths of the manuscript include the use of a sample that is underrepresented in social sciences research, and a large sample size, there are several changes the authors could make that would strengthen the manuscript. Please see comments detailed below:
	1. The most challenging thing for me to process while reading this manuscript was the number of results presented. The number of beliefs and attitudes variables presented made me question the scope of the manuscript and made me wonder how to draw meaningful conclusions from the data. Specific comments related to this general comment are listed below: a. In the introduction, the authors detail three research questions. The hypotheses for each research question should be detailed as
	well. b. After seeing the results section, I'm wondering if each of these research questions should be split up into a separate manuscript. This may be difficult to do but worth a thought. c. When you get to the results section, there are a number of beliefs, attitudes, needs that were assessed in the online questionnaire. While I understand that qualitative focus groups were conducted to inform some of these items, the literature in the
	introduction needs to provide a rationale for including these specific items. As the introduction reads, it is unclear which specific beliefs, attitudes, and needs are going to be assessed and why.

This needs to be included in the introduction and synthesized in a way so that the results are easier to digest.

- d. Has the beliefs, attitudes, and needs questionnaire been validated? While the authors explain there has been prior work done (in the Dutch military, German military, and from a literature review), a brief background should be provided that explains how these items were developed (assuming that the reader is not going to read the other studies that are cited). Or, this should be included as a limitation, if not.
- e. The items from this questionnaire are presented in Table 2 with bolded headings. If these are single-items, I'm not sure that a title for each item is necessary. This would typically only occur with subscales.
- 2. There is stigmatizing language throughout the manuscript.
 a. The term substance abuse is stigmatizing. Please reference the addiction-ary for information about non-stigmatizing language related to substance use:

https://www.recoveryanswers.org/addiction-ary/

- b. The phrase mental illness is also stigmatizing as it suggests that individuals are "ill" or have something wrong with them. This should be revised.
- 3. In the discussion, the authors state, "Concerns about stigma appear to be stronger within the military setting." This should be clarified and include a citation, as the sentence prior does not include criminal justice populations, individuals with substance use disorders or lived experience, etc.

REVIEWER	Puyat, Joseph The University of British Columbia
REVIEW RETURNED	24-Sep-2022

GENERAL COMMENTS

The study fills an existing gap in our understanding of the reasons for not seeking care in an understudied population. The use of two groups - people with and with mental illness - in examining attitudinal, beliefs and need factors that are associated with disclosure or intention to disclose is interesting.

I'd encourage the researchers to address a bit more the potential impact of missingness in their conclusions. Missingness (14%) was not addressed using acceptable methods for dealing with missing data - ML or multiple imputations - and was only acknowledged as a limitation. Ideally, it would be good to perform some sensitivity analyses to see how this might impact the main conclusions. If acknowledged as a limitation, it would be helpful to at least discuss how this may have influenced their conclusions.

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Dr. Julie Cristello, Florida International University Comments to the Author:

The current study assesses military personnel with and without mental health disorders/difficulties within the Dutch military. The authors use logistic and ordinal regression analyses to examine beliefs, attitudes, and needs regarding the disclosure decision to a supervisor, as well as how both groups differ. While the strengths of the manuscript include the use of a sample that is underrepresented in social sciences research, and a large sample size, there are several changes the authors could make that would strengthen the manuscript. Please see comments detailed below:

- >> Thank you for taking the time to review our manuscript and recognizing the strengths of this study. We have followed your suggestions and believe this has indeed strengthened the manuscript.
- 1. The most challenging thing for me to process while reading this manuscript was the number of results presented. The number of beliefs and attitudes variables presented made me question the scope of the manuscript and made me wonder how to draw meaningful conclusions from the data.
- >> We agree that this study yields a lot of results, as we indeed have three research questions. However, we also see it as a strength of the study that we can present important findings on this topic that has never before studied in the Dutch military, and is under-researched in general. However, we are grateful for your comment as it has urged us to again look at how we can present our data in a way that is as appealing and easy to read as possible.

Specific comments related to this general comment are listed below:

- a. In the introduction, the authors detail three research questions. The hypotheses for each research question should be detailed as well.
- >> Thank you for this comment. We have now added a hypothesis regarding the attitudes and beliefs of importance for the disclosure decision. Please see lines 150-165.
- b. After seeing the results section, I'm wondering if each of these research questions should be split up into a separate manuscript. This may be difficult to do but worth a thought.
- >> Thank you for this suggestion. We have given it serious consideration, and have contacted the editor to see if he would still believe the paper would be as interesting if we would leave out the third research question (and write a separate paper on it). However, like us, he has a slight preference not to split up the paper. Nevertheless, the results need to be presented as clearly as possible. Therefore, we now have made the following adjustments:
- (1) We included a description of the beliefs, attitudes, and needs which will be examined in the introduction. This way, the reader already knows what to expect when reading the rest of the manuscript. Please see line 150-165.
- (2) We have put more focus on the two categories of beliefs and attitudes, namely those pro non-disclosure and those pro disclosure. This will make information easier to process. We have done this by putting pro disclosure and pro non-disclosure in italics throughout the text. Additionally, we have adjusted the order in which we discuss all the results, and the order in which the results are presented

within each table, such that first all the beliefs and attitudes pro non-disclosure are discussed, followed by those pro disclosure. For examples, please see line 599-618, and Table 2 and Table 3.

Together we believe this improves the manuscript and makes the results easier to understand.

- c. When you get to the results section, there are a number of beliefs, attitudes, needs that were assessed in the online questionnaire. While I understand that qualitative focus groups were conducted to inform some of these items, the literature in the introduction needs to provide a rationale for including these specific items. As the introduction reads, it is unclear which specific beliefs, attitudes, and needs are going to be assessed and why. This needs to be included in the introduction and synthesized in a way so that the results are easier to digest.
- >> Thank you for this suggestion. We have now added a paragraph in the introduction where we explain which attitudes beliefs and needs will be assessed, and why. Please see line 150-165. We believe this will make the results easier to digest.
- d. Has the beliefs, attitudes, and needs questionnaire been validated? While the authors explain there has been prior work done (in the Dutch military, German military, and from a literature review), a brief background should be provided that explains how these items were developed (assuming that the reader is not going to read the other studies that are cited). Or, this should be included as a limitation, if not.
- >> The beliefs, attitudes, and needs questionnaire has not been validated. It has been shown to several experts in the military, to examine the questions in the military context. And the questionnaire was adjusted according to their feedback. We do agree that more details are needed on how we developed the questionnaire. We have now added this the methods section, please see lines 455-464. Additionally, we have added this to the limitations section, line 1135-1137.
- e. The items from this questionnaire are presented in Table 2 with bolded headings. If these are single-items, I'm not sure that a title for each item is necessary. This would typically only occur with subscales.
- >> We agree that this is typically only the case for subscales. However, we wanted to make sure the reader can easily find the beliefs and attitudes we are discussing, by looking at the headings. To solve this, we have now deleted the heading, but made part of the belief/attitude bold. For example, in 'fearing negative career consequences as result of disclosure' we made 'negative career consequences' bold. Please see Table 2. We believe this also makes the results easier to read.
- 2. There is stigmatizing language throughout the manuscript.
- a. The term substance abuse is stigmatizing. Please reference the addiction-ary for information about non-stigmatizing language related to substance use:
- https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.recoveryanswers.org%2F addiction-
- ary%2F&data=05%7C01%7Cneil.greenberg%40kcl.ac.uk%7C068017de07754197830108dab1f3a20 8%7C8370cf1416f34c16b83c724071654356%7C0%7C0%7C638017957194732242%7CUnknown% 7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTil6lk1haWwiLCJXVCI6Mn0%3D %7C3000%7C%7C%7C&sdata=A64qCP7mKUNKbetFsp%2FtOYv9SYqndje0p8laRCfagr4%3D&rese rved=0

- >> Thank you for making us aware that the term substance abuse is stigmatizing. In line with the link you provided us, we have adjusted substance abuse to substance use disorder throughout the manuscript.
- b. The phrase mental illness is also stigmatizing as it suggests that individuals are "ill" or have something wrong with them. This should be revised.
- >> We respectfully disagree with the author's vision that the term mental illness suggests "they are ill or that there is something wrong with them" (especially with the latter part). Some conditions (e.g. depression, anxiety) often can successfully be treated with medication, which in our opinion suggests that at least to some degree, they can be considered an illness. On the other hand, we recognize that the views on what 'disease' actually is, and the concepts of health and recovery are currently changing, from a biomedical to a more biopsychosocial model. Also, we are aware of the concept of neurodiversity, that for instance challenges the question whether autism isn't a just another way of thinking rather than a disease. In conclusion however, we certainly agree with the reviewer that we do not want to use any terms that come across as stigmatizing or offensive. Therefore we suggest to use the term 'Mental health issues or illness" which we have used in previous publications, after similar discussions with reviewers and editors. This has been adjusted throughout the manuscript, and we use the abbreviation 'MHI'.
- 3. In the discussion, the authors state, "Concerns about stigma appear to be stronger within the military setting." This should be clarified and include a citation, as the sentence prior does not include criminal justice populations, individuals with substance use disorders or lived experience, etc.
- >> Thank you for this remark. The statement 'concerns about stigma appear to be stronger within the military setting' was a reference to the sentence following that sentence. However, we understand that this might be confusing, given the prior sentence. We have now adjusted the order of the sentences, to make it easier to follow. Please see line 1043-1047.

Reviewer: 2

Dr. Joseph Puyat, The University of British Columbia Comments to the Author: The study fills an existing gap in our understanding of the reasons for not seeking care in an understudied population. The use of two groups - people with and with mental illness - in examining attitudinal, beliefs and need factors that are associated with disclosure or intention to disclose is interesting.

>> Thank you for acknowledging that our research is interesting, and for taking time to provide your suggestions on our manuscript. This is highly appreciated.

I'd encourage the researchers to address a bit more the potential impact of missingness in their conclusions. Missingness (14%) was not addressed using acceptable methods for dealing with missing data - ML or multiple imputations - and was only acknowledged as a limitation. Ideally, it would be good to perform some sensitivity analyses to see how this might impact the main conclusions. If acknowledged as a limitation, it would be helpful to at least discuss how this may have influenced their conclusions.

>> We are thankful for your suggestion to add some sensitivity analyses. These have now been included, please see line 929-930 and 940-941.

We are not entirely sure to what 14% of missingness you are referring to. We expect that you refer to the proportion of people who started the questionnaire but did not complete it. It should be mentioned

that most of these people quit while answering the questions about mental health, at the beginning of the questionnaire. As they had not provided answers on the questions regarding disclosure, we decided to only use the data of the fully completed questionnaires. This is explained in line 572-577. Therefore, there was no missing data during analyses, and no method had to be used to deal with missing data. The influence this might have on the results, has been mentioned in line 1126-1134 of the limitations section, based on the characteristics of the people who did not finish the questionnaire.

Reviewer: 1

Competing interests of Reviewer: None

Reviewer: 2

Competing interests of Reviewer: I declare no competing interests.

VERSION 2 - REVIEW

REVIEWER	Cristello, Julie Florida International University
REVIEW RETURNED	27-Nov-2022

GENERAL COMMENTS	The current study assesses military personnel with and without mental health disorders/difficulties within the Dutch military. The authors use logistic and ordinal regression analyses to examine beliefs, attitudes, and needs regarding the disclosure decision to a supervisor, as well as how both groups differ. The authors responded to reviewer comments wonderfully and in an extremely professional manner. The revisions have made it increasingly clear as to why there are three research questions included within one manuscript. A few remaining comments are detailed below:
	1. The authors mention substance use rather infrequently in the intro. I think being more explicit about whether the manuscript will focus on mental health or substance use would make it much more clear. If substance use is the focus (which it seems like it's actually both), the authors could briefly include why/how disclosure of substance use may differ from other mental health concerns and draw on substance use literature. 2. Under participant recruitment please revise alcohol abuse to alcohol use.

REVIEWER	Puyat, Joseph
	The University of British Columbia
REVIEW RETURNED	22-Nov-2022

GENERAL COMMENTS	I tried to review the revised manuscript today, paying particular attention to the lines that were revised by the authors as per the letter of response. However, I couldn't find the specific lines (e.g., lines 572-577 and lines 1126-1134) the authors were referring to in their responses.
	The authors should acknowledge that missingness in their data was about 14% (14/1025). Thus, the statement that there were no missing data, because the authors dropped them from analysis, is not correct. The authors' approach (complete case analysis) in handling missing data carries a strong assumption (MCAR) that need to be discussed in the limitation.

The authors may have also misinterpreted my comments about sensitivity analysis, which I provided only in the context of missing data. I'm not sure what the "sensitivity" and "specificity" values add in the revised paper; it would be better to remove these, unless the authors will discuss or interpret them meaningfully.

I'd encourage the authors to refer to this paper about performing sensitivity analyses in the context of missingness:

Thabane, et al. A tutorial on sensitivity analyses in clinical trials: the what, why, when and how.

https://bmcmedresmethodol.biomedcentral.com/articles/10.1186/1471-2288-13-92

VERSION 2 – AUTHOR RESPONSE

Reviewer: 1

Dr. Julie Cristello, Florida International University

Comments to the Author:

The current study assesses military personnel with and without mental health disorders/difficulties within the Dutch military. The authors use logistic and ordinal regression analyses to examine beliefs, attitudes, and needs regarding the disclosure decision to a supervisor, as well as how both groups differ. The authors responded to reviewer comments wonderfully and in an extremely professional manner. The revisions have made it increasingly clear as to why there are three research questions included within one manuscript. A few remaining comments are detailed below:

- >> Thank you for the positive feedback on our manuscript. We are glad to read that the revisions have added clarity to the manuscript and why the three research questions were included within one manuscript. Thank you for the time you invested to help us improve this paper.
- 1. The authors mention substance use rather infrequently in the intro. I think being more explicit about whether the manuscript will focus on mental health or substance use would make it much more clear. If substance use is the focus (which it seems like it's actually both), the authors could briefly include why/how disclosure of substance use may differ from other mental health concerns and draw on substance use literature.
- >> Thank you for this suggestion. In the introduction we state that we will examine mental health issues and illness, including substance use disorders. Please see lines 80-81. We have added a section about how the stigma surrounding substance use disorders might be different from the stigma surrounding other mental health issues and illnesses, and that future research should examine these two separately. Please see lines 453-457.
- 2. Under participant recruitment please revise alcohol abuse to alcohol use.
- >> We have adjusted this, please see line 151.

Reviewer: 2

Dr. Joseph Puyat, The University of British Columbia

Comments to the Author:

I tried to review the revised manuscript today, paying particular attention to the lines that were revised by the authors as per the letter of response. However, I couldn't find the specific lines (e.g., lines 572-577 and lines 1126-1134) the authors were referring to in their responses.

>> Thank you for taking the time to look at our revised manuscript. My apologies, I am not sure what went wrong with citing the lines. In the revised manuscript I have now highlighted the added lines. The originally referenced lines 572-577 can now be found in line 242-243 and 261-262. The originally referenced lines 1126-1134 can now be found in line 440-445 and 449-452.

The authors should acknowledge that missingness in their data was about 14% (14/1025). Thus, the statement that there were no missing data, because the authors dropped them from analysis, is not correct. The authors' approach (complete case analysis) in handling missing data carries a strong assumption (MCAR) that need to be discussed in the limitation.

>> Thank you for bringing this to our attention. We have now included a few sentences in the limitations section which describe this assumption, and how the assumption was violated, and results should be interpreted with caution because they might be different for distinct groups of military personnel. Please see the highlighted lines 445-452.

The authors may have also misinterpreted my comments about sensitivity analysis, which I provided only in the context of missing data. I'm not sure what the "sensitivity" and "specificity" values add in the revised paper; it would be better to remove these, unless the authors will discuss or interpret them meaningfully.

I'd encourage the authors to refer to this paper about performing sensitivity analyses in the context of missingness:

Thabane, et al. A tutorial on sensitivity analyses in clinical trials: the what, why, when and how.

https://bmcmedresmethodol.biomedcentral.com/articles/10.1186/1471-2288-13-92

>> We indeed misinterpreted your comments about sensitivity analysis. We have now removed these values in the revised paper. We have also added a reference to the suggested paper, please see line 447.