

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Cohort profile: Resettlement in Uprooted Groups Explored (REFUGE) – A longitudinal study of mental health and integration in adult refugees from Syria resettled in Norway between 2015 and 2017
AUTHORS	Nissen, Alexander; Cauley, Prue; Saboonchi, Fredrik; Andersen, Arnfinn; Solberg, Øivind

VERSION 1 – REVIEW

REVIEWER	Dr Domenico Giacco University of Warwick
REVIEW RETURNED	01-Jan-2020

GENERAL COMMENTS	<p>This article describes plans for a longitudinal cohort study based on random sampling from a National Registry. It addresses an important gap in this area of research as available longitudinal studies are still scarce and low quality.</p> <p>The study protocol appears generally sound. Investigators may consider:</p> <ul style="list-style-type: none">- Addressing constructs related to social integration during their survey (e.g. social capital, social connectedness, experiences of discrimination, etc.)- Addressing reasons for participation and non-participation to research through qualitative interviews. Given the low rate of participation despite their efforts and the possibility to access non participants, this may be a useful addition and very helpful for further research efforts.- The abstract section on "purpose" should briefly explain the rationale for the study based on current evidence gaps.
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REVIEWER	Vanessa Redditt Women's College Hospital, Canada
REVIEW RETURNED	04-Feb-2020

GENERAL COMMENTS	<p>**Please see attached document with comments due to formatting challenges in this online submission field**</p> <p>The intersection of mental health and integration among refugee newcomers is a very important topic of study. There is meaningful potential in the research plan outlined by the authors, particularly given the longitudinal nature of the study. There are many strengths to the study and paper. However, there a number of significant areas for further improvement and clarification as outlined below.</p>
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	<ul style="list-style-type: none"> • Page 2, Paragraph 1: Will the study only investigate “how mental health may affect integration”, or will it also investigate the effect of integration on mental health? The outcome variables in table 2 refer to mental health outcomes, suggesting the latter. Many would argue that these variables interact bidirectionally and thus studies should also focus on the bidirectional interactions. • Page 2, Paragraph 2: What are the measures of integration? • Page 4, Line 7: Please add reference for number of forcibly displaced • Page 4, Line 7: Consider further explanation of term “vulnerable” somewhere in article. --> This recent article further explains the concerns regarding vaguely defined terms: Katz, A., Hardy, B., Firestone, M., Lofters, A., Morton Ninomiya, M. (2019). Vagueness, power and public health: use of ‘vulnerable’ in public health literature. <i>Critical Public Health</i>. 1-11. 10.1080/09581596.2019.1656800. • Page 4, Line 10: Consider adding some examples of post-migratory stressors (many, but not all, readers will understand this; however, it is worth making explicit to emphasize the profound impact of poverty, barriers to employment, discrimination, etc) • Page 4, 2nd paragraph: I believe the literature review here should be more comprehensive. For example, these concepts are explored in the work of Morton Beiser, Michaela Hynie, etc. Please look beyond the European literature (unless you have a rationale and clear statement that you chose to only look at European studies). • Page 4: Please further define “integration”, as per the definition and metrics you are using in this study. --> Throughout the paper, the measures of integration are not clear. There also seems to be repeated statements of how they study intends to investigate “how mental health may affect integration” but then the study seems to focus more on mental health outcomes (i.e. how sociodemographic variables and some limited integration variables affect mental health). • Page 4, 3rd paragraph: What about other measures of social integration – social networks, social capital, etc? --> Hynie, M., Korn, A., & Tao, D. (2016). Social context and social integration for Government Assisted Refugees in Ontario, Canada (pp 183-227). In M. Poteet & S. Nourpanah (Eds.), <i>After the flight: The dynamics of refugee settlement and integration</i>. Newcastle upon Tyne, UK: Cambridge Scholars. • Page 4, Line 49: Please change “exploits” to another word, such as “explores the synergies”, “optimizes”, etc. “Exploit” has a negative connotation, particularly when related to groups facing layers of social and economic marginalization and exploitation. • Page 5, line 9: Please correct spelling: “ClincalTrials.gov database” • Page 5, lines 18 and 19: Please include references for both sentences.
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	<ul style="list-style-type: none"> • Page 5, lines 23-25 (description of UDI): Please include references for UDI and “requirements for residency”. I am curious about the language stating that UDI: “ensures that those who meet the requirements for residency are given an opportunity to come to Norway”. I question whether this is completely accurate as currently worded; I do not believe that all in the world who technically meet the requirements for residency are given the opportunity to migrate to Norway? • Page 6: Great to hear about the user-reference group/advisory board. Given their stated contributions to the study design, implementation, and hopefully data analysis and interpretation, was there consideration of including their contributions formally as authors? Were they involved in developing the research questions? • Page 6: Is there country-level data on baseline literacy rates (in Arabic, as well as other languages) among resettled refugees and asylum seekers in Norway? I see that 49 study participants did not complete the survey because they were unable to read Arabic (page 20). Were alternatives available for those who could not complete a written survey? This should at least be listed as a limitation. • Page 9: How are/were the surveys—especially the Harvard Trauma Questionnaire, Hopkins Symptom Checklist, and Refugee Trauma History Checklist, and Post-migration stress scale (and additional questions)— administered? They explore very sensitive issues. Responding to these questions can be triggering/re-traumatizing for individuals. How have and will these potentially damaging effects be mitigated/addressed? Some guidelines and studies suggest that probing for trauma—even within a clinical encounter—risks causing more harm than good in well-functioning individuals (Pottie et al, Evidence-based clinical guidelines for immigrants and refugees. CMAJ 2011). I’m concerned about the experience of refugee participants in filling out these surveys. • Page 10, Lines 31-45: Was there consideration of including other sociodemographic variables, such as baseline literacy in Arabic (in addition to education level), rural/urban resettlement location in Norway, transit countries between Syria and Norway, if time was spent in a refugee camp? • Page 10, Line 50: What does “employment status” refer to? Does this include type/descriptor of employment (e.g. teacher, cook, driver, etc)? Does this include full-time, part-time, contract, etc status? Further details are required. • Page 10, Line 52: Please clarify what “years of education” refers to? Years of education in Norway? How is this different from the “education” measure listed in the preceding paragraph (line 32; assuming this means pre-migratory level of education)? Also, ensure this distinction and these definitions are clear in the tables. • Page 10, Lines 48-55: Was there consideration of including income level? • Page 15, Lines 37-52: Were there any attempts/considerations of administering surveys through community centres, language classes, other trusted spaces with facilitators, etc instead of
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	mailing paper surveys, in order to overcome the low response rate?
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VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Reviewer Name: Dr Domenico Giacco

Institution and Country: University of Warwick

Please state any competing interests or state 'None declared': None declared

This article describes plans for a longitudinal cohort study based on random sampling from a National Registry. It addresses an important gap in this area of research as available longitudinal studies are still scarce and low quality. The study protocol appears generally sound. Investigators may consider:

- Addressing constructs related to social integration during their survey (e.g. social capital, social connectedness, experiences of discrimination, etc.)

Author reply: These constructs will be considered as part of our second wave of our data collection. We already have questions concerning discrimination, social support/social capital embedded in the questionnaire, but will also include a measure of social participation in the next wave of data collection. A paragraph describing this has now been included (Methods/Measures/Integration).

- Addressing reasons for participation and non-participation to research through qualitative interviews. Given the low rate of participation despite their efforts and the possibility to access non participants, this may be a useful addition and very helpful for further research efforts.

Author reply: Qualitative interviews will include questions about participation/non-participation. A separate paper explicitly discussing this topic has already been considered. A paragraph describing the qualitative part of the study has now been included (Methods/Qualitative analysis)

- The abstract section on "purpose" should briefly explain the rationale for the study based on current evidence gaps.

Author reply: The "purpose" section has been adapted accordingly (Abstract/Purpose).

Reviewer: 2

Reviewer Name: Vanessa Redditt

Institution and Country: Women's College Hospital, Canada

Please state any competing interests or state 'None declared': None declared

The intersection of mental health and integration among refugee newcomers is a very important topic of study. There is meaningful potential in the research plan outlined by the authors, particularly given the longitudinal nature of the study. There are many strengths to the study and paper. However, there a number of significant areas for further improvement and clarification as outlined below.

• Page 2, Paragraph 1: Will the study only investigate "how mental health may affect integration", or will it also investigate the effect of integration on mental health? The outcome variables in table 2 refer to mental health outcomes, suggesting the latter. Many would argue that these variables interact bidirectionally and thus studies should also focus on the bidirectional interactions.

Author reply: Our primary interest is how mental health may affect integration, but when data collection wave 2 and 3 are completed, we will consider the bidirectional interaction of mental health and integration over time. This is expanded upon under Methods/Measures/Integration (first two paragraphs)

- Page 2, Paragraph 2: What are the measures of integration?

Author reply: Measures of integration are as of now linked to registry data concerning work and school participation, sick leave and other data from health registries. Social integration is somewhat covered by the post migratory stress scale, social support scale and quality of life measures. In the coming data collection waves, we will also include a social participation scale and incorporate this as a topic for the planned qualitative interviews. A section about this is now included in the manuscript (Methods/2nd and 4th paragraphs)

- Page 4, Line 7: Please add reference for number of forcibly displaced

Author reply: We have added relevant references.

- Page 4, Line 7: Consider further explanation of term “vulnerable” somewhere in article.

--> This recent article further explains the concerns regarding vaguely defined terms: Katz, A., Hardy, B., Firestone, M., Lofters, A., Morton Ninomiya, M. (2019). Vagueness, power and public health: use of ‘vulnerable’ in public health literature. *Critical Public Health*. 1-11. 10.1080/09581596.2019.1656800.

Author reply: Thanks for pointing this out. A few sentences have been added in order to clarify what we mean by “vulnerable” (Introduction/first paragraph)

- Page 4, Line 10: Consider adding some examples of post-migratory stressors (many, but not all, readers will understand this; however, it is worth making explicit to emphasize the profound impact of poverty, barriers to employment, discrimination, etc)

Author reply: Two examples of post migratory stressors are now added in the method section (Methods/Measures/2nd paragraph under Integration)

- Page 4, 2nd paragraph: I believe the literature review here should be more comprehensive. For example, these concepts are explored in the work of Morton Beiser, Michaela Hynie, etc. Please look beyond the European literature (unless you have a rationale and clear statement that you chose to only look at European studies).

Author reply: The review of the literature have now been altered, including references to Beiser and Hynie, (Introduction/2nd paragraph; Methods/Measures/Integration).

- Page 4: Please further define “integration”, as per the definition and metrics you are using in this study.

--> Throughout the paper, the measures of integration are not clear. There also seems to be repeated statements of how they study intends to investigate “how mental health may affect integration” but then the study seems to focus more on mental health outcomes (i.e. how sociodemographic variables and some limited integration variables affect mental health).

Author reply: A new section covering our use and measures of the term “integration” has now been added (Methods/Measures/Integration)

- Page 4, 3rd paragraph: What about other measures of social integration – social networks, social capital, etc?

--> Hynie, M., Korn, A., & Tao, D. (2016). Social context and social integration for Government Assisted Refugees in Ontario, Canada (pp 183-227). In M. Poteet & S. Nourpanah (Eds.), *After the flight: The dynamics of refugee settlement and integration*. Newcastle upon Tyne, UK: Cambridge Scholars.

Author reply: Please see response immediately above above on integration

- Page 4, Line 49: Please change “exploits” to another word, such as “explores the synergies”, “optimizes”, etc. “Exploit” has a negative connotation, particularly when related to groups facing layers of social and economic marginalization and exploitation.

Author reply: We have now rephrased this sentence (see relevant section).

- Page 5, line 9: Please correct spelling: “ClinicalTrials.gov database”

Author reply: This has now been corrected.

- Page 5, lines 18 and 19: Please include references for both sentences.

Author reply: References have been added in the updated manuscript.

- Page 5, lines 23-25 (description of UDI): Please include references for UDI and “requirements for residency”. I am curious about the language stating that UDI: “ensures that those who meet the requirements for residency are given an opportunity to come to Norway”. I question whether this is completely accurate as currently worded; I do not believe that all in the world who technically meet the requirements for residency are given the opportunity to migrate to Norway?

Author reply: UDI is responsible for processing applications from foreign nationals who wish to live in Norway, the running of asylum reception centers and expulsion cases. When refugees and asylum-seekers meet the requirements, they are granted temporal or permanent residency. Strict rules and regulations apply. See <https://www.udi.no/en/want-to-apply/> for details. The sentence “...ensures that those who meet the requirements for residency are given an opportunity to come to Norway” is re-written for enhanced readability and clarity (Cohort Description/first paragraph).

- Page 6: Great to hear about the user-reference group/advisory board. Given their stated contributions to the study design, implementation, and hopefully data analysis and interpretation, was there consideration of including their contributions formally as authors? Were they involved in developing the research questions?

Author reply: Although the group contributed considerably in the developmental stages of the project, individual members of the group regrettably do not meet requirements for authorship as set out by the Vancouver guidelines. Acknowledgements will be given in the coming articles (as has been done for the present submission).

- Page 6: Is there country-level data on baseline literacy rates (in Arabic, as well as other languages) among resettled refugees and asylum seekers in Norway? I see that 49 study participants did not complete the survey because they were unable to read Arabic (page 20). Were alternatives available for those who could not complete a written survey? This should at least be listed as a limitation.

Author reply: This is now listed as a limitation (Strengths and limitations/end of 2nd paragraph). Regrettably, current ethical laws in Norway did not allow for an online-based questionnaire where Arabic voice-over could be utilized. Participants had to give written informed consent. Therefore, potential participants with low reading and writing proficiency regrettably were effectively excluded.

- Page 9: How are/were the surveys—especially the Harvard Trauma Questionnaire, Hopkins Symptom Checklist, and Refugee Trauma History Checklist, and Post-migration stress scale (and additional questions)— administered? They explore very sensitive issues. Responding to these questions can be triggering/re-traumatizing for individuals. How have and will these potentially damaging effects be mitigated/addressed? Some guidelines and studies suggest that probing for trauma—even within a clinical encounter—risks causing more harm than good in well-functioning individuals (Pottie et al, Evidence-based clinical guidelines for immigrants and refugees. CMAJ 2011). I’m concerned about the experience of refugee participants in filling out these surveys.

Author reply: This is a very important issue. A paragraph describing our clinical back-up and the information given about this issue, is now included (Cohort description/Sampling/end of first paragraph).

- Page 10, Lines 31-45: Was there consideration of including other sociodemographic variables, such as baseline literacy in Arabic (in addition to education level), rural/urban resettlement location in

Norway, transit countries between Syria and Norway, if time was spent in a refugee camp?
 Author reply: This regrettably was not considered. Attempt to include this in the coming data collection waves will follow.

• Page 10, Line 50: What does “employment status” refer to? Does this include type/descriptor of employment (e.g. teacher, cook, driver, etc)? Does this include full-time, part-time, contract, etc status? Further details are required.

Author reply: Additional details are now added (Methods/Measures/Sociodemographics)

• Page 10, Line 52: Please clarify what “years of education” refers to? Years of education in Norway? How is this different from the “education” measure listed in the preceding paragraph (line 32; assuming this means pre-migratory level of education)? Also, ensure this distinction and these definitions are clear in the tables.

Author reply: Thank you for pointing this out. The two measure of education are the same and, unfortunately, we have not specified where the education was obtained). The question with answer choices are included in the updated manuscript (Methods/Measures/Sociodemographics)

• Page 10, Lines 48-55: Was there consideration of including income level?

Author reply: Regrettably, we did not include this in the first wave, but this will be included in the next wave.

• Page 15, Lines 37-52: Were there any attempts/considerations of administering surveys through community centres, language classes, other trusted spaces with facilitators, etc instead of mailing paper surveys, in order to overcome the low response rate?

Author reply: Several efforts were made, e.g. visiting language classes, in order to overcome the low response rate, but the questionnaires could not be administered/distributed directly/face-to-face due to ethical considerations (possible identity identification, peer-pressure to participate etc.).

VERSION 2 – REVIEW

REVIEWER	Dr. Domenico Giacco University of Warwick - United Kingdom
REVIEW RETURNED	16-Mar-2020

GENERAL COMMENTS	I am happy with author's responses to my comments.
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REVIEWER	Vanessa Redditt Women's College Hospital, Canada
REVIEW RETURNED	30-Mar-2020

GENERAL COMMENTS	<p>Thank you for these revisions.</p> <p>I continue to have concerns about how the variables are defined to study the question of “how mental health may affect integration”. The "Outcome Variables" in table 2 refer to mental health indicators (PTSD, anxiety, insomnia, etc). Aren't integration measures the outcome variables (according the stated research question)? "Methods/Measures" includes a section on "Integration" variables but then subsequently another section on "Outcomes" outlining: "Complementary to the Harvard Trauma Questionnaire, an item is included regarding re-experiencing traumatic events or intrusive memories, which asks whether the participant experiences this, how often, and how distressing this is. Also included in the questionnaire is an item on daily effects of chronic</p>
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	<p>physical illness, disability, infirmity or mental health problem/s."-- which are mental health and functional impairment-oriented variables, not integration variables (but are listed as outcomes).</p> <p>Furthermore, it is unclear why the social support scale (ESSI) and additional "3 items have been included to assess how easily the respondent can get help from neighbours, how many people the participant can count on when serious problems occur, and how much concern people show in what the respondent is doing" are listed as predictors rather than as integration outcomes (these seem better defined as measures of social integration/social cohesion).</p> <p>The pathway of correlation of variables should be clarified and then consistent throughout the methods section. At present, this is not clear for the reader (and speaks to my previously submitted comment of the bidirectional interactions of mental health and integration).</p> <p>If you are studying the effect of traumatic experiences (predictors) on mental health (intermediate variable), with subsequent correlation with integration (outcome variables), this should be clarified.</p> <p>In the data interpretation stage, advise caution with stating any notions of causality between mental health and integration, given their interrelated nature. Relationships suggest correlations. Wording regarding "how mental health affects integration" may need to be revised for accuracy.</p>
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VERSION 2 – AUTHOR RESPONSE

Reviewer: 1

Reviewer Name: Dr. Domenico Giacco

Institution and Country: University of Warwick - United Kingdom Please state any competing interests or state 'None declared': None declared.

Please leave your comments for the authors below I am happy with author's responses to my comments.

Reviewer: 2

Reviewer Name: Vanessa Redditt

Institution and Country: Women's College Hospital, Canada Please state any competing interests or state 'None declared': None declared

Please leave your comments for the authors below Thank you for these revisions.

COMMENT: I continue to have concerns about how the variables are defined to study the question of "how mental health may affect integration". The "Outcome Variables" in table 2 refer to mental health indicators (PTSD, anxiety, insomnia, etc). Aren't integration measures the outcome variables (according the stated research question)? "Methods/Measures" includes a section on "Integration" variables but then subsequently another section on "Outcomes" outlining: "Complementary to the

Harvard Trauma Questionnaire, an item is included regarding re-experiencing traumatic events or intrusive memories, which asks whether the participant experiences this, how often, and how distressing this is. Also included in the questionnaire is an item on daily effects of chronic physical illness, disability, infirmity or mental health problem/s."-- which are mental health and functional impairment-oriented variables, not integration variables (but are listed as outcomes).

RESPONSE: We can see now that the structure/set-up in the last manuscript (e.g. the headings "Outcome" and "Predictors") was a bit unfortunate and at odds with our stated aim, and we appreciate the reviewer's concern about this point. We have had some discussions within the team and decided to address this point in the following ways: one, we have broadened our aim to also include the investigation of mental health and mental health trajectories (please see Abstract and third paragraph in Introduction). These are also important aims of the study even if the overarching goal is to explore the associations between mental health and integration. Two, we have removed the headings "outcomes" and "predictors" in text/tables so that the Methods are in line with the aims (e.g. Table 2 and subsections within Methods). We have also tried to be more conscious about how and when we use the terms "outcome" and "predictor", and instead tried to use the words "variable"/"measure". Given that several studies will be published from the larger REFUGE project, it is quite likely that a measure may be a predictor in one study and an outcome in another. Three, we have merged the section on Integration with the section on Registry data (and done some revisions) to make it clearer that registry data is one of the main ways in which the study will measure integration. However, as is explained in the third paragraph in the section on Integration, we also intend to use questionnaire/self-report data to measure integration (see also response to reviewer's point below).

COMMENT: Furthermore, it is unclear why the social support scale (ESSI) and additional "3 items have been included to assess how easily the respondent can get help from neighbours, how many people the participant can count on when serious problems occur, and how much concern people show in what the respondent is doing" are listed as predictors rather than as integration outcomes (these seem better defined as measures of social integration/social cohesion).

RESPONSE: we have decided to follow the reviewer's advice as it makes perfect sense: these variables are now integrated in the section on Integration as measures of integration.

COMMENT: The pathway of correlation of variables should be clarified and then consistent throughout the methods section. At present, this is not clear for the reader (and speaks to my previously submitted comment of the bidirectional interactions of mental health and integration). If you are studying the effect of traumatic experiences (predictors) on mental health (intermediate variable), with subsequent correlation with integration (outcome variables), this should be clarified.

RESPONSE: We hope that some of the changes made in response to previous comments also address this comment (e.g. we have changed what is designated "outcome" and "predictor"). We have also added a small section on "Analysis" at the end of the Quantitative measures section in order to further address the reviewer's point. However, as stated in in Instructions for Authors for cohort profiles ("Detailed statistics plans should not be reported"), we have limited this section to outlining some broad overarching analytic questions to be pursued. We hope this is satisfactory.

COMMENT: In the data interpretation stage, advise caution with stating any notions of causality between mental health and integration, given their interrelated nature. Relationships suggest correlations. Wording regarding "how mental health affects integration" may need to be revised for accuracy.

RESPONSE: this comment is noted and appreciated, and we will make sure that we are very careful when commenting on potential causal links and do not make statements that are unwarranted given the design of the study. Even if the study encompasses longitudinal survey data and will use mental health data at a given time-point to predict "integration" in subsequent periods (i.e. for time periods after the survey collection points), there are clear limits to the extent that causality can be claimed. If we remember correctly, we did include the important modifier "may" in the quoted sentence for exactly

this reason (i.e. the sentence was “how mental health may affect integration). We do believe, though, that the design of the study offers clear advantages to purely cross-sectional studies when it comes to theorizing about potential causal pathways.