

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	VALIDATION OF RISK ASSESSMENT SCALES AND PREDICTORS OF INTENTIONS TO QUIT SMOKING IN AUSTRALIAN ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLES: A CROSS-SECTIONAL SURVEY PROTOCOL
AUTHORS	Gould, Gillian; Watt, Kerriane; McEwen, Andy; Cadet-James, Yvonne; Clough, Alan

VERSION 1 - REVIEW

REVIEWER	Vanessa Johnston Menzies School of Health Research Australia
REVIEW RETURNED	19-Mar-2014

GENERAL COMMENTS	<p>This paper outlines the study protocol to validate risk assessment scales in a cross-sectional survey of attitudes to tobacco smoking and intentions to quit in a samples of Indigenous Australians.</p> <p>It is well written and easy to read and follow.</p> <p>My suggestions for improving the paper are provided below</p> <p>Introduction</p> <ul style="list-style-type: none">I think more is known than the authors claim about attitudes to smoking and cessation, and knowledge about health effects in this population, even among pregnant women and women of child-bearing age. The authors outline some of this evidence but should also refer to other studies that have explored this in some detail: <p><i>LisaWood et al., Indigenous women and smoking during pregnancy: Knowledge, cultural contexts and barriers to cessation, Social Science & Medicine (2008), doi:10.1016/j.socscimed.2008.01.024</i></p> <p><i>Gilligan, C et al. Knowledge and attitudes regarding smoking during pregnancy among Aboriginal and Torres Strait Islander women. Med J Aust 2009; 190 (10): 557-561.</i></p> <p><i>Passey et al. Factors associated with antenatal smoking among Aboriginal and Torres Strait Islander women in two jurisdictions. Drug Alcohol Rev 2012;31:608–616</i></p> <ul style="list-style-type: none">Note also that some research reports have found that mainstream antismoking mass media campaigns can positively influence the thoughts and behaviours that Aboriginal smokers
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	<p>have, towards quitting smoking.</p> <p><i>Boyle, T et al. Awareness and impact of the 'Bubblewrap' advertising campaign among Aboriginal smokers in Western Australia. Tob Control 2010;19:83-86 doi:10.1136/tc.2009.031856</i></p> <p><i>Stewart, H. et al. Potential effectiveness of specific anti-smoking mass media advertisements among Australian Indigenous smokers. Health Educ. Res. (2011) 26 (6): 961-975. doi: 10.1093/</i></p> <ul style="list-style-type: none"> Probably what is less well understood is how Indigenous adults broadly assess risk in relation to tobacco smoking (not just their knowledge of adverse health effects) and how these assessments are related to intentions to quit smoking (as the authors point out). This is the real rationale behind this study. This study has been submitted to an international journal, yet there is no reference to any literature about the issues canvassed in the background among Indigenous women/populations in other parts of the world. I think this should be addressed. I think finally a brief discussion of why scales, such as the proposed risk assessment scales, may need to be adapted in a cross-cultural context is warranted. <p>Methods</p> <p>Sample size calculation</p> <ul style="list-style-type: none"> How appropriate is it to use calculated means and standard deviations in a study which involved predominantly white, educated Americans to calculate the sample size for this study? <p>Consultative process, face validity and questionnaire adaption</p> <ul style="list-style-type: none"> I think the most important details in this section are what changes were made to the key risk assessment scales the authors are testing? Can they give some examples of how the "RBD core statements were reworded." Were some statements omitted altogether or additions made? Similarly, what were the two additional responses that were included in the RAL? Table 3 outlines numerous variables for inclusion in the survey. How long will it take to administer? What are the authors' plans to pilot the survey to test if it is feasible for people to answer so many items? <p>Statistical analyses</p> <ul style="list-style-type: none"> It appears to me that a small focus group of Aboriginal community member and staff (what were the numbers? Who were the participants?), and consultation with the authors of the original risk assessment instruments is a rather weak process for determining the validity and reliability of these measurements for this population (particularly as these measures are being validated in a very different cultural context than the original populations). I am not an expert in the area of measuring the validity and reliability but surely future work would have to be
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	<p>done on expanding the measure of both constructs e.g. considering test-retest reliability, or expanding the measurement of validity to include a greater number of content experts and/or the population the authors are targeting. There is a great literature on psychometric testing of measurement scales as well as cross-cultural adaption of scales that perhaps should be referred to in any future efforts to extend the measurement of validity and reliability of these scales in this population.</p> <p>Ethics and dissemination</p> <ul style="list-style-type: none"> • Could the authors give an example or two of how the project adheres to the principles of reciprocity, respect, equality etc.? <p>Discussion</p> <ul style="list-style-type: none"> • I think the Discussion section is well written and acknowledges the limitations of this small, context-specific cross-sectional study, although as mentioned above the measure of face validity and reliability in this study are preliminary only. • Note that there is a more recent version of the Cochrane article cited: <i>Chamberlain et al. 2013. Psychosocial interventions for supporting women to stop smoking in pregnancy.</i> I am unsure whether the more recent paper supports the authors' statement that interventions based on SOC are not effective in pregnancy. • Finally, the discussion is very much focused on the potential utility of tailoring smoking cessation messages appropriately to an individual based on their assessment of risk behaviour. This is all very well and good and could prove valuable but I think in this context, given the research that has previously been published, we cannot forget the very strong influence of the social environment and daily stressors, particularly those exacerbated by pregnancy, in influencing smoking, as well as the skill level and expertise of health care providers in providing such messages (see, for example Passey, M. et al. Knowledge, attitudes and other factors associated with assessment of tobacco smoking among pregnant Aboriginal women by health care providers: a cross-sectional survey. <i>BMC Public Health</i> 2012, 12:165 doi:10.1186/1471-2458-12-165).
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REVIEWER	<p>Kristin Carson Senior Research Scientist, The Queen Elizabeth Hospital, Adelaide, Australia</p> <p>I have collaborated with the lead author on a submitted NHMRC project grant for the 2015 funding round.</p>
REVIEW RETURNED	08-Apr-2014

GENERAL COMMENTS	<p>Some minor proof reading is advisable for small errors such as on page 22 line 9 "The aim was to at test..." (remove 'at').</p> <p>Although in the background on page 10 the authors state that the aim is to examine participants of childbearing age, participants under the age of 18 have been excluded. Is there a particular reason for</p>
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	<p>this? Considering that the majority of addiction and tobacco abuse begins before the age of 18 it would make more sense to include younger adolescents as well. Can the authors please justify their decision or reconsider their age criteria?</p> <p>The study population proposed are from a regional location in NSW, however the majority of Aboriginal and TSI people live in the urban setting, whilst the highest prevalence of tobacco use is in rural locations. With this in mind is there a reason for only choosing the regional setting and could the authors consider extending the study to urban and/or rural locations to improve generalizability of findings?</p> <p>By recruiting participants from only one regional centre in NSW the data produced will really only be generalizability to that area. It is also advisable in community level studies to include multiple clusters for data analysis to improve generalizability. A minimum of two clusters is advisable to address any confounding factors from recruitment of subjects from one site.</p> <p>Will the face-to-face interviews use an interview guide? If so, how will this be developed and how long are each of the one-on-one interviews expected to last? Some data has been described on page 22 for the quantitative data 'survey instrument' but not development of the qualitative data. Perhaps just expand this section to include the qualitative guide development or reword slightly to make it clearer if this section does also relate to the qualitative guide.</p> <p>How will the qualitative data be analysed? Currently page 26 states that thematic analyses will occur but no further details are provided. Will this data be coded by two independent researchers? Is there a theoretical framework to underpin these analyses and how will the data be analysed? NVivo?</p> <p>How will the heritage of Aboriginal and/or TSI people be determined? Is it self-reported Indigenous status or will the family lineage be followed-up? This needs to be specified.</p> <p>More information is required regarding how the sample size of 120 was determined. In particular, authors should consider adjusting the data for clustering effects.</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer: 1 Vanessa Johnston Response

Introduction

1) I think more is known than the authors claim about attitudes to smoking and cessation, and knowledge about health effects in this population, even among pregnant women and women of child-bearing age. The authors outline some of this evidence but should also refer to other studies that have explored this in some detail:

Response:

We have included a more detailed discussion of these issues in the introduction p9.

'Several studies have explored the knowledge levels of Aboriginal and Torres Strait Islander peoples about tobacco smoking, [16-18] with more limited exploration about Indigenous attitudes and beliefs about the risks of smoking.'

And also on page 10 have toned down this section:

'However, attitudes of Indigenous maternal smokers, to prevailing health risk messages about smoking, have been under-researched.'

1a) LisaWood et al., Indigenous women and smoking during pregnancy: Knowledge, cultural contexts and barriers to cessation, *Social Science & Medicine* (2008), doi:10.1016/j.socscimed.2008.01.024
Response:

Included in Gould et al systematic review on maternal smokers, now cited in the list of the included papers.

1b) Gilligan, C et al. Knowledge and attitudes regarding smoking during pregnancy among Aboriginal and Torres Strait Islander women. *Med J Aust* 2009; 190 (10): 557 PubMed -561.

Response:

Also included in Gould et al systematic review on maternal smokers, now cited in the list of the included papers.

1c) Passey et al. Factors associated with antenatal smoking among Aboriginal and Torres Strait Islander women in two jurisdictions. *Drug Alcohol Rev* 2012;31:608–616

Response:

This paper is cited on page 10 of the original submission.

2) Note also that some research reports have found that mainstream antismoking mass media campaigns can positively influence the thoughts and behaviours that Aboriginal smokers have, towards quitting smoking.

Response:

We have expanded the discussion of antismoking mass media and added the following section p10. It includes reference to another systematic review summarising 21 papers on this topic outlining good recall and perceived effectiveness of messages but no evidence for increased quit rates in Indigenous people from mainstream campaigns:

'Mainstream antismoking campaigns have shown to be effective in terms of recall and perceived effectiveness by Indigenous peoples in Australia [21, 22], the U.S. [23] and NZ [24] but have not necessarily translated into increased quit rates in these populations [25]. Aboriginal and Torres Strait Islander smokers in a forced exposure to several television advertisement rated those containing strong graphic imagery or personal narratives as effective for a range of measures including being more likely to quit. [19] Indigenous peoples in the US, Australia and New Zealand (NZ), have a preference for culturally targeted campaigns. [25] Aboriginal and Torres Strait Islander viewers aged 16-40 years of the Break The Chain campaign in Australia positively rated the targeted advertisement, had good recall and 57% stated they intended to quit in the following month. [26] Where culturally targeted campaigns have been tested, alongside generic campaigns, for example in NZ youth, they proved as effective at supporting Maori to quit smoking as generic messages were for the general NZ population. [27]'

We also made specific reference to the DVD used with Alaskan Native women p11:

'However, a program using a culturally targeted smoking cessation video with pregnant Alaska Native smokers was no more efficacious than in the control group. [36]'

2a) Boyle, T et al. Awareness and impact of the 'Bubblewrap' advertising campaign among Aboriginal smokers in Western Australia. *Tob Control* 2010;19:83-86 doi:10.1136/tc.2009.031856

Response:

This has now been cited as above.

2b) Stewart, H. et al. Potential effectiveness of specific anti-smoking mass media advertisements among Australian Indigenous smokers. *Health Educ. Res.* (2011) 26 (6): 961-975. doi: 10.1093/

Response:

This paper is cited on page 13 of the original submission

3) Probably what is less well understood is how Indigenous adults broadly assess risk in relation to tobacco smoking (not just their knowledge of adverse health effects) and how these assessments are related to intentions to quit smoking (as the authors point out). This is the real rationale behind this study.

Response:

We thank the reviewer for this comment. We have included a sentence to this effect towards the end of the introduction p11.

'Issues less well understood are how Indigenous adults broadly assess their risks in relation to tobacco smoking (not just their knowledge of adverse health effects) and how these assessments are related to their intentions to quit smoking.'

4) This study has been submitted to an international journal, yet there is no reference to any literature about the issues canvassed in the background among Indigenous women/populations in other parts of the world. I think this should be addressed.

Response:

We agree with this comment. We have now made brief reference to commonalities in other Indigenous populations, however We do not believe this paper can fully do justice to such a discussion here, without making the introduction overly long.

'While it is acknowledged that Indigenous populations across and even within different continents belong to very diverse communities with their own cultures and norms, some broad factors impact on Indigenous peoples in colonised Western nations. American Indians, Alaskan Natives, New Zealand Māori and Inuit all have a higher prevalence of smoking than the mainstream populations, [7] particularly in their reproductive years, resulting in significant health disparities.[8] Smoking is comparably affected by the social determinants of health, and cultural factors, including for some First Nation peoples ceremonial and spiritual uses of tobacco. [9]'

5) I think finally a brief discussion of why scales, such as the proposed risk assessment scales, may need to be adapted in a cross-cultural context is warranted.

Response:

This has been included after the section explaining theoretical concepts, p16-7.

'Rationale for assessing validity and reliability of the scales for Aboriginal and Torres Strait Islander smokers.

Assessment scales, developed for Western populations, are important to validate before use in a cross-cultural context. [57] Theoretical concepts developed in the context of the dominant Western psychology and communication fields may not transfer into a cross-cultural or Indigenous setting. [57-58] Preliminary phases of community engagement are an important part of the process of validation, and will be described below. [56] Results from the validation and reliability process also need careful interpretation with culturally competent advisors. [58]'

6) Methods

Sample size calculation

How appropriate is it to use calculated means and standard deviations in a study which involved predominantly white, educated Americans to calculate the sample size for this study?

Response:

We agree with the reviewer that it is far from ideal to use the means and SDs from a study of predominantly white, educated Americans on which to base sample size calculations. However, this was the only information available that could be used to perform sample size calculations, as no research has been done in Indigenous populations. Our study will provide new knowledge on which to base future research. A comment about this has been added on p 19:

'These figures are taken from a different population because there have been no relevant studies in Indigenous peoples.'

In addition we have added in the means and SD:

'(intent to quit M 2.48, SD 0.78; intent to seek help M 1.85, SD 0.77).'

7) Consultative process, face validity and questionnaire adaption

I think the most important details in this section are what changes were made to the key risk assessment scales the authors are testing? Can they give some examples of how the "RBD core statements were reworded." Were some statements omitted altogether or additions made?

Response:

To clarify, no questions were omitted. More clarity regarding this section has been provided on p24-25. In addition, we now provide the (reworded) scales in their entirety in Appendix 1 (so not in text). For the information of reviewer we detail an example of the changes in wording below.

Revised text is as follows (p 24/25):'The RBD scales were adapted to tobacco-related risks from the templates in Witte's manual. [39]'

and:

'Minor rewording was suggested for some of the RBD core statements to make them more comprehensible to this population.'

For the information of the reviewer, the examples of the amendments are as follows:

'Not smoking help avoid serious sickness or disease' was changed to 'Giving up smoking helps avoid...'

'I believe the effects of smoking are severe' to 'Smoking can severely affect health.'

Additionally several sensitive questions about socioeconomic status and pregnancy were reworded and made optional, for example instead of asking directly if the participant (or their partner) was pregnant, we will ask 'Is there a pregnant women living in your house?'

8) Similarly, what were the two additional responses that were included in the RAL? As per our response to the above comment, we will provide the SRAT scales in their entirety in Appendix 1, with a note about the 2 added options for response.

9) Table 3 outlines numerous variables for inclusion in the survey. How long will it take to administer? What are the authors' plans to pilot the survey to test if it is feasible for people to answer so many items?

Response:

This has been clarified in the Methods section (page 21). A sentence has been added:

"The survey was pilot tested with an Aboriginal Health Worker (AHW), and based on this it is anticipated that it will take approximately 20 minutes for participants to complete."

Since submitting this manuscript, the data collection has started and the anticipated administration time of approx. 20 minutes has been confirmed.

10) Statistical analyses

It appears to me that a small focus group of Aboriginal community member and staff (what were the numbers? Who were the participants?), and consultation with the authors of the original risk assessment instruments is a rather weak process for determining the validity and reliability of these measurements for this population (particularly as these measures are being validated in a very different cultural context than the original populations). I am not an expert in the area of measuring the validity and reliability but surely future work would have to be done on expanding the measure of both constructs e.g. considering test-retest reliability, or expanding the measurement of validity to include a greater number of content experts and/or the population the authors are targeting. There is a great literature on psychometric testing of measurement scales as well as cross-cultural adaption of scales that perhaps should be referred to in any future efforts to extend the measurement of validity and reliability of these scales in this population.

Response:

Additional detail regarding the focus group has been provided (page 24) :

'Consultation was through a focus group with Aboriginal and/or Torres Strait Islander people in the target age group, and an Aboriginal elder, recruited from an Aboriginal Studies class at a local tertiary college and two Aboriginal Indigenous student liaison staff from the University campus (N=7).'

For clarification, the RBD was firstly made suitable for tobacco smoking, using the guide in Kim Witte's book, which gives examples for HIV/AIDS. Hence, Kim Witte's views were sought, as her scales have been used in many cultural contexts and for other health behaviours. The expert consultation with the original scale developers was to informally assess if the scales maintained integrity once adapted, rather than assess their cultural suitability for this population. We have added a note to this effect on page 24.

We would like to clarify that it was not the intention of this study to be a rigorous investigation of the scales in the psychometric sense. The purpose was to assess their pragmatic use and cross-cultural adaptability in practice. We believe that we have articulated this in our description of the aims of the study, and also in the relevant section of the Methods section (Analyses – page 27), where we describe the methods used to assess the validity and reliability. In this study, we took into account feasibility of conducting the study in a reasonable time frame, and within the resources available. Out of interest, we did initially plan to conduct a test-retest measure of reliability as well, however the AH&MRC ethics committee did not support this, and there were also a number of logistical challenges related to doing this in this particular sample. We also acknowledge that the questions asked of participants involve a high degree of reflection on smoking history, behaviours, experiences and attitudes to quitting, which in itself can be considered a brief intervention. This could inadvertently engage smokers to consider a change in smoking behavior, such that the results of a test-rest method to measure reliability may indicate a true shift in perspective, and not accurately measure reliability of the scales.

This reflects the challenges associated with working in this topic area, as well as with this target population. If the Editor and Reviewer consider it appropriate, and there is sufficient space, we are happy to incorporate comments to this effect in the Discussion section. Please advise if this degree of detail should be included in the article.

11) Ethics and dissemination

Could the authors give an example or two of how the project adheres to the principles of reciprocity, respect, equality etc.?

Response:

We have added in the following p28: 'Examples of reciprocity include the first author sharing her knowledge and skill base (as a GP and Tobacco Treatment Specialist) about tobacco control and research with the participating organisations and their staff members. The participants also would be offered brief advice on smoking cessation if they wished after the interview, and extra resources such as a culturally adapted DVD.'

12) Discussion

I think the Discussion section is well written and acknowledges the limitations of this small, context-specific cross-sectional study, although as mentioned above the measure of face validity and reliability in this study are preliminary only.

Response:

We thank the reviewer for this comment and have added in a sentence to the limitations section of the Discussion p33:

'As the validity and reliability measures to be used are context specific, they should be considered provisional, pending a larger study.'

13) Note that there is a more recent version of the Cochrane article cited: Chamberlain et al. 2013. Psychosocial interventions for supporting women to stop smoking in pregnancy. I am unsure whether the more recent paper supports the authors' statement that interventions based on SOC are not effective in pregnancy.

Response:

We thank the reviewer for drawing this to our attention and have updated the Discussion with reference to Hettema et al's review on motivational interviewing and the Chamberlain review p31. 'Also it is known that motivational interviewing, including that based on the SOC, is not as effective in pregnancy as in the general population,[68] and holds no special advantages over other types of psychosocial counselling.[69]'

14) Finally, the discussion is very much focused on the potential utility of tailoring smoking cessation messages appropriately to an individual based on their assessment of risk behaviour. This is all very well and good and could prove valuable but I think in this context, given the research that has previously been published, we cannot forget the very strong influence of the social environment and daily stressors, particularly those exacerbated by pregnancy, in influencing smoking, as well as the skill level and expertise of health care providers in providing such messages (see, for example Passey, M. et al. Knowledge, attitudes and other factors associated with assessment of tobacco smoking among pregnant Aboriginal women by health care providers: a cross-sectional survey. BMC Public Health 2012, 12:165 doi:10.1186/1471-2458-12-165).

Response:

This is an important point and we thank the reviewer for making it. We have added a section on this topic in the discussion which draws out how the study will add new knowledge in this area of social and environmental influences, p32-33:

'Previous research has demonstrated the strong social and environmental influences on smoking cessation, and the role health professionals play in supporting smoking cessation in Aboriginal and Torres Strait Islander communities. [70] The study will also assess predictors of intentions to quit that include measures of socio-economic position, smoking by friends, and household members, support offered by family and health professionals, and a range of other factors. These measures have the potential to determine social and health profession influences on intentions to quit smoking in this population. The analysis will determine if once these factors are controlled for whether the responses to the risk assessment measures have any additional impact.'

Reviewer: 2 Kristin Carson
Senior Research Scientist, The Queen Elizabeth Hospital, Adelaide, Australia

1) Some minor proof reading is advisable for small errors such as on page 22 line 9 "The aim was to at test..." (remove 'at').

Response:
Thanks...amended

2) Although in the background on page 10 the authors state that the aim is to examine participants of childbearing age, participants under the age of 18 have been excluded. Is there a particular reason for this? Considering that the majority of addiction and tobacco abuse begins before the age of 18 it would make more sense to include younger adolescents as well. Can the authors please justify their decision or reconsider their age criteria?

Response:
We agree that it would be preferable to include participants under 18yrs, however this was not considered feasible by the the ethics committee A sentence clarifying this has been added to p18: 'Although we would have preferred to include participants under 18yrs, the ethics committee did not support this.'

3) The study population proposed are from a regional location in NSW, however the majority of Aboriginal and TSI people live in the urban setting, whilst the highest prevalence of tobacco use is in rural locations. With this in mind is there a reason for only choosing the regional setting and could the authors consider extending the study to urban and/or rural locations to improve generalizability of findings?

Response:
Thank you for making this observation. Although the absolute number of Aboriginal people is higher in cities, the Aboriginal community represents 5-10% of the Mid North Coast population, which is above the NSW State average of 2.3%, and above Blacktown 3%, and Redfern 3% in Sydney (ABS, 2011 census). The regional setting was based on the high prevalence of smoking in the area and the history of engagement and trusted relationship of the primary researcher with the Aboriginal community.
In a future larger study, urban centres, and remote areas could be involved, after the required community engagement processes, which may include local researchers.

4) By recruiting participants from only one regional centre in NSW the data produced will really only be generalizability to that area. It is also advisable in community level studies to include multiple clusters for data analysis to improve generalizability. A minimum of two clusters is advisable to address any confounding factors from recruitment of subjects from one site.

Response:
Because of the diversity of Aboriginal populations, and the important issue of fostering ownership with the local ACCHS, as stated on p33, this strategy was not deemed feasible for this current study. We have noted this as a limitation in the Discussion section. If the scales prove valid and reliable, a larger, multi-site study could be planned, and then recommendations about generalisability could be made.

5) Will the face-to-face interviews use an interview guide? If so, how will this be developed and how

long are each of the one-on-one interviews expected to last? Some data has been described on page 22 for the quantitative data 'survey instrument' but not development of the qualitative data. Perhaps just expand this section to include the qualitative guide development or reword slightly to make it clearer if this section does also relate to the qualitative guide.

Response:

Thank you for the opportunity to clarify this. This study is essentially a quantitative study. The face to face interviews were highly structured and based on the survey instrument, which comprised closed and open-ended questions. This section has been clarified on page 21:

'Three open-ended questions are used in the survey: 1) to initially explore general attitudes to smoking; 2) to ascertain if there is any more the participant would like to say about smoking or quitting at the end of the interview; and 3) to elicit more detail from those who indicate that they do not want to quit smoking. The survey guide includes 'notes sections' on most of the pages, so that the interviewer can record relevant comments or narratives expressed by the participant in the course of the interview.'

6) How will the qualitative data be analysed? Currently page 26 states that thematic analyses will occur but no further details are provided. Will this data be coded by two independent researchers? Is there a theoretical framework to underpin these analyses and how will the data be analysed? NVivo?

Response:

We have added in more detail and cited an article on this general methodology p28.

'Qualitative and open-ended responses will undergo a general inductive thematic analysis, [64] by two researchers independently, and consensus reached by discussion.'

7) How will the heritage of Aboriginal and/or TSI people be determined? Is it self-reported Indigenous status or will the family lineage be followed-up? This needs to be specified.

Response:

This will be 'self-reported' status. 'Formal' identification will not be required and is not appropriate in this setting. This has been clarified in the text on page 18:

'Participants will be included in the study if they self-report as Indigenous, and are in the age bracket.'

8) More information is required regarding how the sample size of 120 was determined. In particular, authors should consider adjusting the data for clustering effects.

Response:

For the purposes of this study, we have defined the "Mid-North Coast area" as one community. Hence, we did not consider sample size calculations necessary for each community within the Mid-North Coast area, as we anticipated significant crossover of the community using our main recruitment strategy at community events, with much mobility up and down the Mid North Coast area. This also aligns with the previous comments by the reviewer regarding this geographical area representing one cluster. It will be possible perform power calculation post-hoc, of different groupings of post-codes, to check for effects.

Page 20: We have also amended the sample size calculation description as below:

An additional sample size calculation was performed to determine the required sample size to detect prevalence of knowledge, attitudes and behavior within the target population. The required sample size is 100, based on 50% prevalence, 10% precision and 95% Confidence Intervals. However for the multivariate analysis 120 participants are required (assuming 6 key variables. [60]

Comment from editor re title

Response: This has been shortened to 'VALIDATION OF RISK ASSESSMENT SCALES AND PREDICTORS OF INTENTIONS TO QUIT SMOKING IN AUSTRALIAN ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLES: A CROSS-SECTIONAL SURVEY PROTOCOL'

Additional changes

Minor changes suggested by the AH&MRC Ethics Committee to the proposed manuscript have been addressed also in this revision:

a) Full name of Ethics Committee has been added (Aboriginal Health & Medical Research Council Ethics Committee).

b) The role of AHW has been added into the acknowledgement section.

c) The statement about risk p28 has been amended to:

'The study is considered low risk in terms of ethics, however we acknowledge that discussing smoking may be considered a sensitive issue for Aboriginal and Torres Strait Islander participants, and researchers collecting the data will be suitably briefed.'