

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Healthy eating and physical activity environments in out of school hours care: an observational study protocol
AUTHORS	Crowe, Ruth; Probst, Yasmine; Norman, Jennifer; Furber, Susan; Franco, Lisa; Stanley, Rebecca; Okely, Tony

VERSION 1 – REVIEW

REVIEWER	Sara Kirk, Hannah Flaherty, Sarah Scruton Dalhousie University, Canada
REVIEW RETURNED	Dalhousie University, Canada 25-Jan-2020

GENERAL COMMENTS	- The reviewer provided a marked copy with additional comments. Please contact the publisher for full details.
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REVIEWER	Zenobia Talati Curtin University, Australia
REVIEW RETURNED	21-Feb-2020

GENERAL COMMENTS	<p>This paper reports on a protocol for measuring the healthy eating and physical activity environments created in out of school hours care. As the project is currently underway, I have no suggestions for change to the methodology.</p> <p>Could the authors provide more information on this research will be translated and can be used to improve environments at care facilities? This should be mentioned in the introduction when making a case for the study and also in the Ethics and Dissemination section of the abstract.</p> <p>I'm not sure why the protocol was included twice in the manuscript pdf I received. I also note that the STROBE checklist appears as a fillable form on the pdf and there are no page numbers listed in the "Reported on Page No." column.</p> <p>Other than these minor issues, I would recommend this protocol for publication.</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer's comments	Author response	Page no. in Main text
<p>1. Thank you for the opportunity to review this protocol. Overall it is well described and the resulting study will contribute new knowledge within the Australian context. Below are some general comments necessary for clarification of the proposed methods:</p>	<p>We thank you for your review and these positive comments</p>	
<p>2. The first line of the protocol is focused on obesity, and yet the protocol itself is not addressing obesity per se but the behaviours that lead to chronic diseases like obesity. Framing around obesity without the additional context of chronic diseases that impact everyone can contribute to weight stigma and we would suggest that this framing be removed. Instead, the authors should focus on the behaviours (healthy eating and physical activity) since these are the focus of the National Quality Standards and provide sufficient rationale. Along the same lines, using person-first language, e.g. person with overweight or obesity, rather than obese person, is less stigmatizing language.</p>	<p>We agree with these comments and have removed all content regarding obesity as suggested by the reviewer.</p> <p>Content has been removed in the abstract.</p> <p>And in the introduction:</p> <p>“One in four Australian primary school-aged children are classified as overweight or obese”.</p> <p>The wording in the introduction has been adjusted based on reviewer’s suggestions:</p> <p><i>Healthy eating and physical activity (HEPA) are important in maintaining healthy weight status.</i></p>	<p>Page 2, Line 2</p> <p>Page 3, Line 35</p> <p>Page 3, Line 38</p>
<p>3. Passive consent is being used for recruitment, but how will the researchers ensure that non- participating children are excluded from the data collection? For example, over meals, will these</p>	<p>Data collected during meal-times will primarily consist of observing staff behaviour and recording the foods provided and offered by the program. No</p>	

<p>children be seated separately? It seems like this might be challenging to manage within an observational protocol and should be clearly described.</p>	<p>individual child data will be collected. No staff or child will be identified in this study.</p> <p>As suggested by the reviewer, this section has been re-worded to describe the process for seeking passive consent for accelerometry data collection clearer.</p> <p><i>Written informed consent will be obtained from OSHC directors. Data collected from a service will primarily consist of observing a) staff behaviour, interactions and involvement during OSHC programs, b) food and beverages provided and c) physical activity opportunities. Due to the observational nature of this research, methods have been determined as low risk.²⁰A passive consent approach, however, will be applied for collecting accelerometry data. Children will be invited to wear an accelerometer for the duration of their time at the program, unless parents/ guardians have opted their child out of wearing an accelerometer. A child can refuse assent at any stage of the research process.</i></p>	<p>Page 5, Line 93 - 100</p>
<p>4. In the STROBE checklist, bias is indicated as N/A. There may be potential for observer bias, where evaluators are looking for specific behaviours, or response bias where the program directors answer questions with the responses that they think evaluators are looking for. The Hawthorne Effect could come into play here, as the staff could feel pressure to act a certain way while researchers are present. There should be an explanation of how researchers plan to combat</p>	<p>We thank you for your comments and we do agree with you. As recommended, we have added additional considerations for addressing bias and included this to the STROBE Checklist.</p> <p>a) Response bias to interview questions: <i>To minimise potential response bias, all staff will be reminded at the commencement of the interview that all data collected will be deidentified and the importance of not modifying any of their behaviours.</i></p>	<p>Page 12, Line 237 -238.</p>

<p>these biases or stronger justification of why they feel this is not applicable.</p>	<p>b) Data collector bias <i>Data collectors will be extensively trained in all data collection methods prior to data collection via a combination of a) classroom simulation and b) practical on-site training at local, non-participating OSHC programs.</i></p> <p>c) Data collectors will be required to meet greater than 80% interrater-reliability agreement via an interval-by-interval agreement on two consecutive data collection days.²⁶ Interrater reliability will be continuously monitored throughout the data collection process, completing a minimum of five reliability scans per day.</p>	<p>Page 12, Line 241-247</p> <p>Page 11, Line 217-220</p>
<p>5. The abstract mentions “short interviews with program directors will gather contextual information about OSHC”, but these interviews are not mentioned anywhere else in the protocol. This should be expanded upon if being conducted and some example questions provided or else removed from the protocol.</p>	<p>We apologies for the misunderstanding, the short interviews will be guided by the HAAND tool. The focus of the HAAND and the topics the interview covers is mentioned under the subheading, “HEPA Policy Environment: Healthy After school Activity and Nutrition Documentation”.</p> <p><i>The Healthy After school Activity and Nutrition Documentation (HAAND) instrument is a validated tool that will be used to guide and collect information on HEPA policies and practices through short interviews with Directors from each OSHC program.</i></p>	<p>Page 11, Line 223 and 239.</p> <p>Page 11, Line 227-228.</p>
<p>6. There is a sentence on page 8 that outlines the recommended amount of physical activity needed daily. However, it needs to be written more clearly to address that researchers are considering 30 minutes of MVPA as the maximum because there is an assumption that children will</p>	<p>We have revised this sentence to provide a clearer reason why we have chosen 30 minutes of MVPA as the criterion (not maximum) for a child being adequately active.</p> <p>“National physical activity guidelines state that children should accumulate a minimum</p>	

<p>be getting the rest of the recommended amount of MVPA in school or elsewhere</p>	<p>of 60-minutes of moderate-to-vigorous physical activity (MVPA) across an entire day.²⁷ <i>For the current study, a minimum of 30 minutes of MVPA has been selected as the criterion.²⁷ This amount of time is half of the daily recommendation. It is also recognised internationally as an achievable goal specifically within the afterschool period²⁸ and has been used in studies conducted in similar settings in the United States.^{19, 28, 29}</i></p>	<p>Page 8, Line 148 -152</p>
<p>7. The protocol mentions that digital photography will be used to capture waste and leftovers (page 10). No rationale is provided as to what will be done with these, and the protocol states that the researchers are only looking at the type/amount of food offered, not the amount that is consumed. Please provide more explanation of the purpose of this.</p>	<p>On review of your comment this sentence has been removed.</p> <p>“Digital images will be taken pre- and post-meals being served, including multiple camera angles and using common objects (e.g. fork, spoon, hand) to assist as a point of reference for size estimation”.</p>	<p>Page 8 line 156</p>
<p>8. The two-local health districts included in the study are in the Metropolitan area of Australia. Are these two districts going to be representative of all of Australia?</p>	<p>This has been mentioned as a limitation of the study, under the strengths and limitations section below the abstract.</p> <p><i>OSHC programs from the two Local Health Districts in NSW may not be representative of all OSHC programs across NSW or Australia.</i></p>	<p>Page 3, Line 31</p>
<p>9. There are two data collection periods. For after school it is May 2018- April 2019 and the before school data collection period is February 2020-December 2020. If children are in both the before and after school program what will be in place to avoid double data</p>	<p>This study is exploring environmental factors related to HEPA behaviour within the out of school hours' time period., It does not have a focus on individual child behaviour, rather the environment children are exposed to. The before and after school environments are unique independent of each other. Children may potentially attend both the before and afterschool programs but as the</p>	

<p>collection? In addition, it looks like some of the data are already collected. What might be the impact of this time lag in data collection?</p>	<p>focus is on the environment, rather than the individual child, there will not be double data collection. The two cohorts (i.e. before school cohort and afterschool cohort) will be treated separately in the analyses.</p> <p>The time lag in data collection is the result of a high demand for essential data collection resources (such as accelerometers, ipads and data collectors) and multiple research projects being conducted simultaneously.</p>	
<p>10. There was no mention of who would be conducting the observations/data collection for food and beverage or the observations of staff behaviours. There was also no mention of the training that would be conducted prior to data collection.</p>	<p>We have provided an additional section on data collection training based on the reviewer's comments.</p> <p><i>Data collectors will be extensively trained in all data collection methods prior to data collection commencing. This will occur via a combination of classroom simulation and practical on-site training at local, non-participating OSHC programs. Theoretical classroom training will include the review of study protocols, memorising observational codes and watching video clips depicting the out of school hours environment and coding scenarios using observational tools, developed by Weaver et al (2015). Data collection will be primarily conducted by PhD candidates, nutrition and dietetics final year graduate students and research assistants.</i></p> <p>And data collection</p> <p><i>Trained nutritionists or final year nutrition and dietetics graduate students will collect all food and nutrition behavioural observation data.</i></p>	<p>Page 12, Line 242 -248</p> <p>Page 8, Line 158- 159</p>
<p>11. Data are plural.</p>	<p>This has been amended as advised.</p>	<p>Page 4, Line 76</p>

<p>12. P5. Study sample description “Once the inclusion criteria were applied 204 OSHC programs were eligible to participate” write in present tense to align with rest of article.</p>	<p>This has been amended as advised.</p> <p>“Of these, 204 OSHC programs are eligible to participate based on the following criteria:...”</p>	<p>Page 5, Line 82-83</p>
<p>Second Reviewer</p>	<p>Author response</p>	<p>Page no. in Main text</p>
<p>This paper reports on a protocol for measuring the healthy eating and physical activity environments created in out of school hours care. As the project is currently underway, I have no suggestions for change to the methodology.</p> <p>13. Could the authors provide more information on this research will be translated and can be used to improve environments at care facilities? This should be mentioned in the introduction when making a case for the study and also in the Ethics and Dissemination section of the abstract.</p>	<p>Thank you for these positive comments</p> <p>We will provide individualised feedback reports to each of the participating services. As requested, this has been added to the ethics section.</p> <p><i>Ethics and dissemination:</i> Findings will be disseminated through peer-reviewed scientific journals, conference presentations and individualised feedback reports to each participating service. Ethical approval was granted by the University of Wollongong Human Research Ethics Committee (HE17/490).</p> <p>It is anticipated that the findings from this study will be used to support the development of future interventions and stronger policies within the out of school hours care programs. This has been listed as a strength of this research project on page 2. As we are unsure what our findings will be it is not possible to predict the type of interventions that may be developed.</p>	<p>Page 2, Line 20</p> <p>Page 2, Line 25</p>

14. I'm not sure why the protocol was included twice in the manuscript pdf I received. I also note that the STROBE checklist appears as a fillable form on the pdf and there are no page numbers listed in the "Reported on Page No." column.	This has been amended as advised. Thank you.	
15. Other than these minor issues, I would recommend this protocol for publication	We thank you again for these positive comments	

VERSION 2 – REVIEW

REVIEWER	Sara Kirk Dalhousie University
REVIEW RETURNED	21-May-2020

GENERAL COMMENTS	The authors have responded well to the previous review and I am happy to see this move forward to acceptance.
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REVIEWER	Zenobia Talati Curtin University Australia
REVIEW RETURNED	08-May-2020

GENERAL COMMENTS	No further comments
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