PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Why do smokers try to quit without medication or counselling? A qualitative study with ex-smokers
AUTHORS	Smith, Andrea; Carter, Stacy; Chapman, Simon; Dunlop, Sally; Freeman, Becky

VERSION 1 - REVIEW

REVIEWER	Marc Willemsen Department of Health Promotion, University of Maastricht, the Netherlands
REVIEW RETURNED	18-Dec-2014

GENERAL COMMENTS	This paper uses qualitative methods (in-depth interviews) to understand why some smokers successfully quit without using evidence-based cessation methods. More precisely, grounded-theory methodology is used to identify the reasons why smokers quit unaided. A total of 21 Australian ex-smokers were interviewed. This is an interesting paper in that it tries to identify all potentially relevant reasons, not restricted to those that are treatment related or having to do with awareness of treatment. The qualitative method using NVivo seems well executed. The paper is very well written and produces important and potentially very relevant findings for the field of smoking cessation. I have some minor points that the authors can use to improve the paper and two somewhat larger issues. The first is about the lack of substantiation of how the data for Table 1 were selected. The second has to do with the (in my view) Australian-centeredness of the discussion of the findings and lack of better appreciation of what cultural factors might mean for the generalizability of findings and for suggestions for future research. Finally, I propose two alternative interpretations of the findings using a psychological perspective. Minor points. P7, line 14. Why select to those who quit in previous 6 – 24 months? I think this is a very reasonable window, because after 6 months very little relapse occurs and longer than 24 months poses greater risks for recall bias etc. An explanation along these line would be nice. P7, line 18-20. Please indicate with how many did you start the study (i.e., the purposively sampled group) and how many where then added until theoretical saturation was reached (which happened with the 21th participant)? Table 1 The use of Table 1 in the introduction section raises some

	questions. In the introduction (p5, line 21-29) it is stated that many of the research questions in “almost all” previous research were dominated by the premise that assistance is the right choice for all. It is unclear to what extent the overview of the literature in Table 1 is the outcome of a systematic review of the literature and whether these studies indeed used this predetermined moral ‘frame’ as starting point. How can this be shown? Some further explanation seems warranted. Further, using the wording “almost all research” suggests that this table captures all research to date on this topic. On p8, line 46 it is suggested that the table reflects “the smoking cessation literature”. So, how were these studies selected, one wonders? Are they representative? Inclusion and exclusion criteria need to be clarified. This is important, since the study results are presented and repeatedly contrasted to the findings from other studies as presented in Table 1. This table should preferably also be part of the results section, not the introduction. But this would require to include the methodology behind the table to the method section as well and this would mean that the whole paper would be broadened. But I believe given the importance of this table to the paper, this extra effort is justified. Now we come to my second issue. There should be a discussion about the generalizability of the findings in light of the tobacco control context of Australia and of cultural factors. First, Australia is much more advanced in tobacco control than most countries, with smokers being more of an outcast and using assistance for quitting smoking being more tainted with being something for ‘losers’ and the weak. This might indeed result in smokers who “seemed to have reached a point where they regarded smoking to be their problem and quitting to be their personal responsibility”(p12, line 49-50). So, a discussion of the findings in light of Australia’s unique tobacco control situation msut be an important addition to the discussion section. Second, cultural factors play a crucial role, as is recognized on p16, line 27-40. However, it is not discussed how unique Australia might be in this regard. For example, it is concluded that “this key concept, being serious, is one we believe is critically important to smokers and one we are exploring further in our ongoing research”. Based on the results of this study, this line should read “…. critically important to many Australian smokers”. There are obviously large cultural differences in how smokers look at quitting and seeking assistance with quitting. See for example Hofstede’s cultural dimensions. Australia has a culture which strongly values individualism, and it is also very ‘masculine’ and values doing things yourself. This is completely different in cultures which are predominantly feminine (which value seeking help and support) and collectivist. To what extent is the focus on (and interest in) individualism and unassisted quitting typical for Australia? This seems a crucial question to me and must be addressed in the discussion. I think that is it crucial that this study is replicated in other cultural contexts and in countries that are less advanced in tobacco control, in order to say something about whether the findings are applicable across countries, cultural dimensions and stages of the tobacco epidemic. A recommendation for future research along these lines is important to make.

	In addition to the cultural factors, the findings can also be interpreted psychologically. A see at least two ways that have not been considered in the paper. It would be good to consider including these. First, an important finding is that these successful unaided quitters had great confidence in their ability to quit on their own. In psychological terms this reflects a high level of self-efficacy expectations to be able to quit. This is generally higher in higher educated smokers. This raises the issue of whether the findings are also applicable to low educated smokers, who might have less coping skills and less self-confidence. This should be discussed. Second, a limitation of the paper is that only successful ex-smokers are included. Through a mechanism of self-attribution they are likely to reflect more positively on their accomplishment and are more likely to attribute this to their own doing (internal, stable factors) and not to outside factors, while previous unsuccessful attempts are more likely to be attributed to external factors, such as failing assistance from a GP or community centre. A discussion of the findings in light of attribution theory seems very important.

REVIEWER	Sarah Edwards Dalla Lana School of Public Health, University of Toronto, Toronto, Ontario, Canada Brant County Health Unit, Brantford, Ontario, Canada
REVIEW RETURNED	04-Feb-2015

GENERAL COMMENTS	The authors present a qualitative study exploring why recent smokers choose to quit without assistance. They provide an in depth review of the literature in this area to convincingly support both their research question and chosen methods. Using theoretical sampling and in-depth interviews, the authors present some novel findings that give insight into why smokers choose not to seek assistance including prioritizing either their own or members of their social circle's 'lived experience' around quitting with and without assistance, weighing the costs and benefits of using assistance and beliefs held around both personal identity and responsibility. This work is a welcome addition to the existing literature as it goes beyond the typically cited reasons of ignorance and cost for not using assisted methods to stop smoking. Of note, my own expertise lies in quantitative research so I cannot provide expert review of the qualitative methods used; however, they do appear sound and a particular strength is the diversity of the sample spanning sex, age, and socioeconomic status. Here are my comments for the authors: 1) I'm curious about the definition provided on unassisted smoking; that is, not having consulted with a GP, called a quit line or used some form of pharmacotherapy. Would this cover all options for one-on-one or group counseling support? It's possibly a jurisdictional difference where such counseling is provided by other health care practitioners (e.g. nurses) in some areas with no consult with a GP necessary. I am not concerned the participants were misclassified, just that the definition of unassisted appears to be very specific in this research. 2) Manuscript could be shortened, particularly through the results section pages 11-13 where some information is repeated in the

	several paragraphs under each theme identified and overlaps with the discussion in some areas. 3) Recommend deleting lines 44-47 on page 17 under 'Conclusion' section unless there is a reference to support the assumption that physicians believe smokers attempting to quit on their own is irrational.

VERSION 1 – AUTHOR RESPONSE

Reviewer 1: Marc Willemsen
Department of Health Promotion, University of Maastricht, the Netherlands

Overview
This paper uses qualitative methods (in-depth interviews) to understand why some smokers successfully quit without using evidence-based cessation methods. More precisely, grounded-theory methodology is used to identify the reasons why smokers quit unaided. A total of 21 Australian ex-smokers were interviewed.

This is an interesting paper in that it tries to identify all potentially relevant reasons, not restricted to those that are treatment related or having to do with awareness of treatment.

The qualitative method using NVivo seems well executed. The paper is very well written and produces important and potentially very relevant findings for the field of smoking cessation.

I have some minor points that the authors can use to improve the paper and two somewhat larger issues. The first is about the lack of substantiation of how the data for Table 1 were selected. The second has to do with the (in my view) Australian-centeredness of the discussion of the findings and lack of better appreciation of what cultural factors might mean for the generalizability of findings and for suggestions for future research. Finally, I propose two alternative interpretations of the findings using a psychological perspective.

Comment 1
P7, line 14. Why select to those who quit in previous 6 – 24 months? I think this is a very reasonable window, because after 6 months very little relapse occurs and longer than 24 months poses greater risks for recall bias etc. An explanation along these line would be nice.
Response
Thank you for drawing our attention to this omission. A brief explanation for why we chose ex-smokers who quit within these time points has been added to the Methods, along with supporting references (Methods, page 5, lines 15–17).
'Eligible participants were ex-smokers who had quit unassisted in the previous 6 months to 2 years. Risk of relapse to smoking, which reduces with time quit,{Marlatt 1988}{Hughes 2008} was balanced against potential for recall bias.{Borland 2012a}'

Comment 2
P7, line 18-20. Please indicate with how many did you start the study (i.e., the purposively sampled group) and how many where then added until theoretical saturation was reached (which happened with the 21th participant)?
Response
We have clarified how many participants were purposively sampled and how many were theoretically sampled (Methods, page 5, line 20–22).
'Eligible participants were initially purposively sampled (n=9), and then theoretically sampled on the basis of their screening information (n=12).'

Comment 3
The use of Table 1 in the introduction section raises some questions. In the introduction (p5, line 21-29) it is stated that many of the research questions in “almost all” previous research were dominated by the premise that assistance is the right choice for all. It is unclear (a) to what extent the overview of the literature in Table 1 is the outcome of a systematic review of the literature and (b) whether these studies indeed used this predetermined moral ‘frame’ as starting point. How can this be shown? Some further explanation seems warranted.
Response
In response to (a) To what extent the overview of the literature in Table 1 is the outcome of a systematic review of the literature?
Thank you for highlighting this. Our original review of the literature was informal but we believe thorough, based primarily on extensive reading and citation checking of highly cited references relating to barriers to or issues relating to use of assistance. Our original intention was not to produce a systematic review but a comprehensive review of the current literature against which we could contextualize our current study.
However, given that we go on to compare and contrast the results of our current study against the existing literature we accept the reviewer’s suggestion that readers would benefit from greater transparency surrounding our methodology. In order to achieve this we have re-performed the literature review. We now include a complete account of the search strategies (Methods, page 4, lines 26–35 and page 5, lines 1–3). The results of the search have been moved from the Introduction to the Results section (Results, page 8, Table 2).
‘We searched MEDLINE via OvidSP, PsycINFO via OvidSP, and CINAHL via EBSCO in February 2015 for articles reporting on use or non-use of smoking cessation assistance (see Supplementary File 1 for search terms). We complemented this search strategy by handsearching the reference lists of relevant papers. Articles were included if: (1) the article reported on non-use of smoking cessation assistance; (2) the article was published in 2000 or later; and (3) the article was in English. Articles were excluded if (1) they reported only on the characteristics or demographics of smokers who did not use assistance; (2) the study was evaluating the feasibility of a smoking cessation intervention; or (3) the study reported only on specific subpopulations such as pregnant women, youth or prisoners. We identified 1066 articles of which 14 met the inclusion criteria (Figure 1). The included papers were not critically appraised for quality as our intent was not to synthesise the results of the studies but to report on how the issue is currently framed.’
We have also included a supplementary file reporting on our search strategy (Supplementary File 1. Search strategies and results of literature search) and a new figure (Figure 1. Identification and screening of eligible articles for inclusion in the literature review) detailing the number of articles included or excluded at four key stages (identification, screening, eligibility and inclusion) of the literature review.

The results of the literature search (Results, page 8, Table 2) have been updated to include four additional references (Mooney 2006; Cobb 2013; and Willems 2012; Vogt 2010), which provide further support for the issues already documented in Table 2, and identify an additional issue (the impact of social norms relating to use of assistance or perception of assistance users).

Response
In response to (b) whether these studies indeed used this predetermined moral ‘frame’ as starting point?
We have removed the paragraph (Introduction, page 4, line 7) making these claims.

Comment 4
Further, using the wording “almost all research” suggests that this table captures all research to date on this topic. On p8, line 46 it is suggested that the table reflects “the smoking cessation literature”.

So, how were these studies selected, one wonders? Are they representative? Inclusion and exclusion criteria need to be clarified. This is important, since the study results are presented and repeatedly contrasted to the findings from other studies as presented in Table 1.
Response
We believe we have addressed the reviewer's concerns in our response to comment 3.

Comment 5
This table should preferably also be part of the results section, not the introduction. But this would require to include the methodology behind the table to the method section as well and this would mean that the whole paper would be broadened. But I believe given the importance of this table to the paper, this extra effort is justified.
Response
Thank you for this suggestion. This table has now been moved to the results section (Results, page 8, Table 2). The methods section has been expanded to include the methodology used in the literature review, including search terms, databases searched, inclusion and exclusion criteria, search results (Methods, page 4, lines 26–35 and page 5, line 1–3; Supplementary file 1. Search strategies and results of literature search; Figure 1. Identification and screening of eligible articles for inclusion in the literature review).

Comment 6
Now we come to my second issue. There should be a discussion about the generalizability of the findings in light of the tobacco control context of Australia and of cultural factors.
First, Australia is much more advanced in tobacco control than most countries, with smokers being more of an outcast and using assistance for quitting smoking being more tainted with being something for 'losers' and the weak. This might indeed result in smokers who "seemed to have reached a point where they regarded smoking to be their problem and quitting to be their personal responsibility"(p12, line 49-50). So, a discussion of the findings in light of Australia's unique tobacco control situation must be an important addition to the discussion section.
Response
A paragraph has been added to 'Implications and future research' (Discussion, page 17, lines 25–29) to address this point (and also the points raised in Comment 7b and 8)
'Cultural values are likely to play a role in the choice to use assistance or not, and future research should explore these issues in other cultures. It would be useful to replicate this study in other cultural contexts and in countries less advanced in tobacco control to determine whether the study findings are applicable across countries, cultural dimensions and stages of the tobacco epidemic.'

Comment 7
Second, cultural factors play a crucial role, as is recognized on p16, line 27-40. However, it is not discussed how unique Australia might be in this regard. For example, it is concluded that "this key concept, being serious, is one we believe is critically important to smokers and one we are exploring further in our ongoing research". (a) Based on the results of this study, this line should read "…. critically important to many Australian smokers". (b) There are obviously large cultural differences in how smokers look at quitting and seeking assistance with quitting. See for example Hofstede's cultural dimensions. Australia has a culture which strongly values individualism, and it is also very 'masculine' and values doing things yourself. This is completely different in cultures which are predominantly feminine (which value seeking help and support) and collectivist. To what extent is the focus on (and interest in) individualism and unassisted quitting typical for Australia? This seems a crucial question to me and must be addressed in the discussion.
Response
(a) The suggested change has been made (Discussion, page 15, line 20):
'This key concept, being serious, is one we believe is critically important to Australian smokers and one we are exploring further in our ongoing research.'

(b) We unreservedly accept the reviewer's point that the meaning of smoking and quitting and using assistance might differ between cultures, but we are not entirely in agreement with the reviewer's generalisations about the nature of Australian culture. We agree that the study needs to be replicated in other countries in order to know how transferable it is. A paragraph has been added to 'Implications and future research' (Discussion, page 17, lines 25–29) to address this point.
'Cultural values are likely to play a role in the choice to use assistance or not, and future research should explore these issues in other cultures. It would be useful to replicate this study in other cultural contexts and in countries less advanced in tobacco control to determine whether the study findings are applicable across countries, cultural dimensions and stages of the tobacco epidemic.'

Comment 8
I think that is it crucial that this study is replicated in other cultural contexts and in countries that are less advanced in tobacco control, in order to say something about whether the findings are applicable across countries, cultural dimensions and stages of the tobacco epidemic. A recommendation for future research along these lines is important to make.
Response
Thank you for this suggestion. We have added a sentence to 'Implications and future research'(Discussion, page 17, lines 25–29) to address this comment.
'Cultural values are likely to play a role in the choice to use assistance or not, and future research should explore these issues in other cultures. It would be useful to replicate this study in other cultural contexts and in countries less advanced in tobacco control to determine whether the study findings are applicable across countries, cultural dimensions and stages of the tobacco epidemic.'

Comment 9
In addition to the cultural factors, the findings can also be interpreted psychologically. A see at least two ways that have not been considered in the paper. It would be good to consider including these.
(a) First, an important finding is that these successful unaided quitters had great confidence in their ability to quit on their own. In psychological terms this reflects a high level of self-efficacy expectations to be able to quit. This is generally higher in higher educated smokers. This raises the issue of whether the findings are also applicable to low educated smokers, who might have less coping skills and less self-confidence. This should be discussed.
Response
Having confidence in their ability to quit on their own was one of the findings we reported, and is in line with previous smoking cessation research. However, our participants came from both high and low educational backgrounds and this belief in their own ability was expressed by smokers from different educational backgrounds. We believe that to make a comment on confidence (and self-efficacy) and educational status would go beyond our data. Furthermore, the primary focus of our paper is the previously unreported explanations smokers offer for why they quit unassisted, which is why we have not discussed confidence in their ability to quit on their own at length.

(b) Second, a limitation of the paper is that only successful ex-smokers are included. Through a mechanism of self-attribution they are likely to reflect more positively on their accomplishment and are more likely to attribute this to their own doing (internal, stable factors) and not to outside factors, while previous unsuccessful attempts are more likely to be attributed to external factors, such as failing assistance from a GP or community centre. A discussion of the findings in light of attribution theory seems very important.
Response
Thank you for your comments about attribution theory. We have added a paragraph to the Discussion (Discussion, page 15, lines 22–31).
'It should be noted that this study included only successful ex-smokers (quit for at least 6 months). Given that these individuals were interviewed in the context of a successful quit attempt, attribution theory{Weiner 1985} might provide some insight into the emergence of the themes of independence,

strength, self-control and personal virtue as components of the successful unassisted quit attempt as in these interviews. Attribution theory suggests a self-serving bias in attributions such that success is attributed to internal factors (such as personal virtue) and failure to external or situational factors. It might be informative to conduct some research with smokers who tried to quit on their own and failed, as well as with ex-smokers who successfully quit with assistance, in explore whether concepts relating to external or internal attributions emerge for these different groups of quitters.'

Reviewer 2: Sarah Edwards
Dalla Lana School of Public Health, University of Toronto, Toronto, Ontario
Canada Brant County Health Unit, Brantford, Ontario, Canada

Overview
The authors present a qualitative study exploring why recent smokers choose to quit without assistance. They provide an in-depth review of the literature in this area to convincingly support both their research question and chosen methods. Using theoretical sampling and in-depth interviews, the authors present some novel findings that give insight into why smokers choose not to seek assistance including prioritizing either their own or members of their social circle's 'lived experience' around quitting with and without assistance, weighing the costs and benefits of using assistance and beliefs held around both personal identity and responsibility.

This work is a welcome addition to the existing literature as it goes beyond the typically cited reasons of ignorance and cost for not using assisted methods to stop smoking. Of note, my own expertise lies in quantitative research so I cannot provide expert review of the qualitative methods used; however, they do appear sound and a particular strength is the diversity of the sample spanning sex, age, and socioeconomic status.

Comment 1
I'm curious about the definition provided on unassisted smoking; that is, not having consulted with a GP, called a quit line or used some form of pharmacotherapy. Would this cover all options for one-on-one or group counseling support? It's possibly a jurisdictional difference where such counseling is provided by other health care practitioners (e.g. nurses) in some areas with no consult with a GP necessary. I am not concerned the participants were misclassified, just that the definition of unassisted appears to be very specific in this research.
Response
Thank you for pointing this out. Our definition of unassisted cessation has been clarified as we do indeed include counseling from any healthcare provider as assistance, regardless of if it is from a GP, specialist, nurse or counselor, and it can be one-on-one or in a group setting (Introduction, page 3, lines 18–21).
'Smoking cessation researchers, advocates and healthcare practitioners have tended to emphasise that the odds of quitting successfully can be increased by using pharmacotherapies such as nicotine-replacement therapy (NRT), bupropion and varenicline{Cahill 2014} or behavioural support such as advice from a healthcare professional,{Stead 2013a}{Rice 2008}{Stead 2009a}{Lancaster 2008} or from a telephone quitline.{Stead 2013}'

Comment 2
Manuscript could be shortened, particularly through the results section pages 11–13 where some information is repeated in the several paragraphs under each theme identified and overlaps with the discussion in some areas.
Response
Thank you for this suggestion; we believe the current length is necessary to provide sufficient evidence and argument to support our claims. We have checked for repetition and have removed 3

lines from the Results (page 11, start of para 2) and 5 lines from the Discussion (page 14, start of para 2). We are happy to take advice from the Editor and will shorten the manuscript if it is believed to be necessary.

Comment 3
Recommend deleting lines 44-47 on page 17 under 'Conclusion' section unless there is a reference to support the assumption that physicians believe smokers attempting to quit on their own is irrational.
Response
We have modified this sentence (Conclusion, page 18, lines 2–3).
'A smoker's reluctance to use assistance to quit may sometimes be difficult to understand.'

VERSION 2 – REVIEW

REVIEWER	Marc Willemsen University of Maastricht, the Netherlands
REVIEW RETURNED	27-Mar-2015

GENERAL COMMENTS	No remaining comments. My concerns with the paper have all been adequately resolved by the authors. Good to see that the literature review update resulted in identification of an additional issue! I am content with the additional remarks in the discussion section regarding cultural relativity of the findings. I agree with the author's reply (comment 9) that commenting on self-efficacy and educational status would go beyond the data.