

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Experiences and perception of character strengths among patients with breast cancer in China: A qualitative study
AUTHORS	Yan, Tingting; Chan, Carmen Wing Han; Chow, Ka; Li, Mingzi

VERSION 1 – REVIEW

REVIEWER	Liu, Jun-E Capital Medical University
REVIEW RETURNED	03-May-2022

GENERAL COMMENTS	<p>Thank you for the opportunity to review your manuscript. This qualitative study explores the Chinese patients' experience on character strengths for breast cancer. Overall, I think the article has the potential to make a useful contribution. I have made a few suggestions below which I hope will improve the readers' understanding of your study.</p> <p>Introduction and Theoretical framework:</p> <ol style="list-style-type: none">1. The Introduction does not build a logical statement. For example, when the term "character strengths" is mentioned in the first paragraph, it should be first defined instead of being put into the third paragraph for elaboration. Please adjust the order of the paragraphs.2. The necessity of the character strengths of Chinese breast cancer patients should be further elaborated. For example, please clarify what breast cancer patients' character strengths are in Western and analyze why it is not applicable to the Chinese.3. The paper should be concise. Please delete unnecessary repetition of content. For example, the description of the positive effect of character strengths appeared several times. <p>Methods:</p> <ol style="list-style-type: none">1. Regarding the recruited participants, did it take into account that breast cancer patients of different ages and disease duration, etc have different experiences of character strengths? Were the effects of these factors taken into account in validating saturation? Please provide further clarification.2. From the results, it appears that this study was selected to interview patients with significant character strengths. Please clarify how this was judged and selected.3. The interview guide lacks logic and scientificity. For example, Question 4, Question 8 and Question 10 are leading questions, and the content of Question 8, Question 9 and Question 10 are repetitive. <p>Results:</p>
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	<p>The participants' main character strengths were consistent with the VIA classification, but the words had been changed, for example, "Emotional strengths" instead of "Courage". What is the reason for those expressions?</p> <p>Discussion:</p> <ol style="list-style-type: none"> 1. The overall discussion is not in-depth enough. For example, please discuss whether there is a relationship between the different character strengths of breast cancer patients and their age, disease duration, education level, etc. 2. The discussion is not logical enough. It is suggested to discuss the results in the order in which they were presented above, discussing character strengths first, then positive outcomes and expectations of identifying and using character strengths.
REVIEWER	Vyas, Navya Manipal Academy of Higher Education
REVIEW RETURNED	30-Aug-2022
GENERAL COMMENTS	Good research . Need to improve on the written english

VERSION 1 – AUTHOR RESPONSE

Responses to the comments of Reviewer #1

Comments to the Author

Thank you for the opportunity to review your manuscript. This qualitative study explores the Chinese patients' experience on character strengths for breast cancer. Overall, I think the article has the potential to make a useful contribution. I have made a few suggestions below which I hope will improve the readers' understanding of your study.

Introduction and Theoretical framework:

1. The Introduction does not build a logical statement. For example, when the term "character strengths" is mentioned in the first paragraph, it should be first defined instead of being put into the third paragraph for elaboration. Please adjust the order of the paragraphs.

Response: Thank you so much for your valuable comment. The definition of "character" and "character strengths" were moved to the first paragraph where the term was first mentioned.

2. The necessity of the character strengths of Chinese breast cancer patients should be further elaborated. For example, please clarify what breast cancer patients' character strengths are in Western and analyze why it is not applicable to the Chinese.

Response: Thank you so much for your significant comments and detailed suggestions. We explained that character strengths of Western breast cancer patients still remained unclear. In the last paragraph of Introduction, *"However, there is a gap in the literature concerning how breast cancer patients identify their own strengths and use them."* Thus, *"The applicability of the VIA classification among Chinese breast cancer patients is still unclear."* In addition, *"Cultural values, such as collectivism, the importance of family, Confucianism and Buddhism could strongly determine how character strengths are expressed and the associated behaviour patterns. This means that cultural factors play an important role in the theory of strengths."* There are many aspects to this question. In conclusion, firstly, VIA has not been used in breast cancer patients in China; secondly, Chinese culture and specific situations can affect the expression of character strengths; finally, breast cancer is a unique physiological and psychological state, the relevant breast cancer groups will have specific situational strengths and manifestations. This part was also mentioned in the theoretical

framework and discussion. *“Moreover, researchers have highlighted the specific differences in the mental functioning of patients with various diseases and that of healthy individuals [26]. Therefore, a study of the character strengths of breast cancer patients within the Chinese context is expected to further strengthen the theoretical VIA classification.”*

3. The paper should be concise. Please delete unnecessary repetition of content. For example, the description of the positive effect of character strengths appeared several times.

Response: Thank you so much for your valuable comment. The unnecessary repetition description of the positive effect of character strengths were deleted.

Methods:

1. Regarding the recruited participants, did it take into account that breast cancer patients of different ages and disease duration, etc have different experiences of character strengths? Were the effects of these factors taken into account in validating saturation? Please provide further clarification.

Response: Thank you for your comments. Our qualitative study aimed to provide an overview of the perceptions and experiences of character strengths among breast cancer patients. To achieve this aim, the maximum variation sampling method and purposive sampling technique to recruit participants to richly or densely describe the culture or phenomenon of interest, so the diversity of patients were scientific. Data saturation was indeed achieved through repetition (No new insights emerged from the interview data of the last two participants included) and confirmation of the information obtained by participants. The current research method is reasonable if we want to take into account breast cancer patients of different ages and other specific ranges, it may be the different direction of follow-up research in the future. Thank you for your far-sighted suggestions.

2. From the results, it appears that this study was selected to interview patients with significant character strengths. Please clarify how this was judged and selected.

Response: Thank you for your comments. The interviewees were not selected just because of their potential with significant character strengths. In this qualitative study, we use a descriptive and exploratory approach to uncover aspects of the experiences and perceptions of character strengths in Chinese women with breast cancer. The maximum variation sampling method and purposive sampling technique were followed to recruit participants. Furthermore, all the data was interviewed and extracted from the semi-structured individual interviews and their explanations of the interview questions. Our research has also been mentioned above, the theoretical framework VIA followed provides corresponding guidance in the research process, so the results can be displayed in a more standardized and logical manner through content analysis and frame analysis methods. Not obtained by selecting and evaluating interviewees.

3. The interview guide lacks logic and scientificity. For example, Question 4, Question 8 and Question 10 are leading questions, and the content of Question 8, Question 9 and Question 10 are repetitive.

Response: Thank you for your comments. The interview guide was informed by the positive psychology model of character strengths and the previous related cross-cultural qualitative literatures. In fact, questions 4, 8, 9, and 10 play a progressive role in promoting the deepening of the interview. It may be possible to reduce the number of questions to achieve a more efficient interview state, but the research team considered the theoretical evidence basis for the construction of the interview outline and the actual feasibility in clinical breast cancer patients. After revision by the expert team, the final decision was made. This version of interview guide with comprehensive instructions was relevant to the successful implementation of our research. Therefore, we believe that the interview guide presented in this edition still has some merit.

Results:

The participants' main character strengths were consistent with the VIA classification, but the words had been changed, for example, "Emotional strengths" instead of "Courage". What is the reason for those expressions?

Response: Thank you for your comment. The presentation of VIA classification has many versions around different countries in our world. We have mentioned the *description* and *Note* in and after the Table 2 *The Values in Action classification of virtues and character strengths* that this version are *the Character strength adapted from Peterson and Seligman (2004)*. It was not the "Emotional strengths" replaced the "Courage". In fact, the most common form of each dimension in the framework of character strength is the type of professionalism and scientific presented in our study's results. The formal description of "Wisdom & Knowledge" or "Courage" is more like a simple description that is easy to understand. So, this does not conflict with the framework of the Results section of this study.

Discussion:

1. The overall discussion is not in-depth enough. For example, please discuss whether there is a relationship between the different character strengths of breast cancer patients and their age, disease duration, education level, etc.

Response: Thank you for your comments. As mentioned earlier, the study design of this research was an exploratory qualitative study. It is a scientifically meaningful question to discuss whether the different character strengths of breast cancer patients are related to their age, course of disease, educational level, etc. But this is not within the aims and objectives of our research. Our team had explored the answers to this question in follow-up quantitative studies, and we appreciate your prospective suggestions.

2. The discussion is not logical enough. It is suggested to discuss the results in the order in which they were presented above, discussing character strengths first, then positive outcomes and expectations of identifying and using character strengths.

Response: Thank you for your comments. We have rearranged the logical flow of the discussion. The character strengths were discussed first, then positive outcomes and expectations, the identifying and using character strengths were moved to the end of this section.

Responses to the comments of Reviewer #2

Comments to the Author

Good research. Need to improve on the written english.

Response: Thank you for your comment. We have sent the manuscript for editing to improve the written English.

VERSION 2 – REVIEW

REVIEWER	Liu, Jun-E Capital Medical University
REVIEW RETURNED	19-Sep-2022

GENERAL COMMENTS	<p>Thank you for the detailed response and the opportunity to review your manuscript. But I have the following additional suggestions which I hope will help you with your paper.</p> <ol style="list-style-type: none"> 1. In the Introduction, would it be more logical to switch the order of Paragraph 2 and Paragraph 3? Continued from the first paragraph, state clearly the positive impact of the character strengths and then describe how the character strengths are ignored. 2. With my comment in the last review "Regarding the recruited participants, did it take into account that breast cancer patients of different ages and disease duration, etc have different experiences of character strengths?", I want to know how you considered and achieved the maximum variation sampling? Because I didn't see it specifically stated in the paper, and some of the characteristics of the participants such as "Time since diagnosis" were shown as averages.
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	3. In the Data collection, "Each interview included eight questions designed to encourage discussion on perceptions and beliefs about character strengths (Table 1)", but there are 10 questions in Table 1. Please double-check and revise.
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VERSION 2 – AUTHOR RESPONSE

Responses to the comments of Reviewer #1

Comments to the Author

1. In the Introduction, would it be more logical to switch the order of Paragraph 2 and Paragraph 3? Continued from the first paragraph, state clearly the positive impact of the character strengths and then describe how the character strengths are ignored.

Response: Thank you for your comments. We agreed your suggestion and switched the order of Paragraph 2 and Paragraph 3. The details could be seen in the revised manuscript.

2. With my comment in the last review "Regarding the recruited participants, did it take into account that breast cancer patients of different ages and disease duration, etc have different experiences of character strengths?", I want to know how you considered and achieved the maximum variation sampling? Because I didn't see it specifically stated in the paper, and some of the characteristics of the participants such as "Time since diagnosis" were shown as averages.

Response: Sampling methods are only part of the research methodology and appear in papers as instrumental methods within the overall study. There are many other types of purposive sampling, such as homogeneous sampling, intensity sampling and stratified purposeful sampling, but the methods used are not usually overly described in the various studies with a wide range of methods, which are after all common knowledge within the field of qualitative research. It is often the key points of the overall implementation process and the study-specific findings and contributions that come into focus. Sampling method in this study is the maximum variation sampling method, one of the purposive sampling methods. Maximum variation sampling (sometimes referred to as maximum diversity sampling or maximum heterogeneity sampling) is a sampling method in which researchers attempt to collect data from the widest range of perspectives possible about a certain topic. By sampling individuals who are extremely different from one another (either in age, socioeconomic status, occupation, etc.). Researchers can gain a more wholistic view of some topic and can analyse a topic from many different standpoints. Therefore, in this study the interviewees included a diverse cross-section of ages, backgrounds and breast cancer stages. The characteristics of the participants such as "Time since diagnosis" were shown in manuscript were not for showing the successful implementation of the sampling methods in the methodology, but to demonstrate the approximate characteristics of the sample included, for a different purpose. In addition, the papers do not generally use all of the sample characteristics shown one by one to show whether the method is being practised correctly. If it has to be considered, the richness, diversity and stability of views in the results actually support this. Recruitment of interviewees was stopped when the data obtained were saturated. The symbol for reaching data saturation was that the last participants recruited did not differ from the opinions of previous interviewees or no new information emerged. In such cases, recruitment was stopped. This can help us understand the study topic. If data saturation has been reached, then there is no point in including a larger and more diverse sample. The implementation of research usually looks at the whole picture. But we also appreciate your suggestion.

3. In the Data collection, "Each interview included eight questions designed to encourage discussion on perceptions and beliefs about character strengths (Table 1)", but there are 10 questions in Table 1. Please double-check and revise.

Response: Thank you for your rigorous comments. We checked the typo in the text and corrected it to be consistent with the Table 1.

VERSION 3 – REVIEW

REVIEWER	Liu, Jun-E Capital Medical University
REVIEW RETURNED	06-Oct-2022
GENERAL COMMENTS	Thank you for the detailed response and the opportunity to review your manuscript.