# PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

# **ARTICLE DETAILS**

TITLE (PROVISIONAL)	A qualitative analysis of the Three Good Things intervention in health care workers
AUTHORS	Rippstein-Leuenberger, Karin; Mauthner, Oliver; Sexton, Bryan; Schwendimann, Rene

# **VERSION 1 - REVIEW**

REVIEWER	Dr D Rogers
	University of Pretoria
	South Africa
REVIEW RETURNED	13-Jan-2017

GENERAL COMMENTS	"Resilience in health care workers: Responses to the question 'what went well today?' A thematic analysis "
	I would like to thank and congratulate the authors for doing research in this important area, especially in a context such as ICU nursing. As identified burnout (etc) is a significant problem and efforts to reduce it should be studied and shared.
	Your analysis of the 1300 responses of the participants clearly paints a picture of the elements that contributed to a good day, and you have derived themes from this which are well supported.
	I support your findings into those elements that contributed to positive emotions and positive psychology for the participants, but am concerned when you extend this to claim that it contributes to workplace resilience.
	To help address this concern it would help if you could address the following issues:
	The purpose of this study was to explore which factors are meaningful for neonatal intensive care unit (NICU) health personnel in view of workplace resilience
	I am concerned that you asked the participants the question
	"What was three things that went well today and what was your role in bringing them about"
	And then from that assert that this represents that participants views on meaningful factors in view of workplace resilience. Braun and Clarke ( your reference No 13.) warn

"The fourth pitfall is a mismatch between the data and the analytic claims that are made about it. In such an (unfounded) analysis, the claims cannot be supported by the data"

As none of the quotes you have supplied mention resilience how did you make sure that your analysis of the data matched the participants views on "FACTORS FOR WORKPLACE RESILIENCE".

Triangulation or Respondent Validation may help here but I am concerned that this seems a weakness of this study.

To try put this point into the context of this study can you provide any specific evidence from your data to support the following statements which were made.

The relatively simple tool 'Three Good Things' helps to focus on positive emotions which in turn support resilience building.

I can see support for the focus on positive emotion but did your study show clear resilience building? Are you inferring this from the general theory, in which case how are you certain it will work in this context?

These findings demonstrate that achieving work satisfaction and life balance was most meaningful for NICU professionals and provides an important pillar in building resilience and preventing burnout

I have two concerns about this claim, the first is the use of the word most which can indicate a degree of comparison which qualitative research is not designed to establish. Secondly can you support with quotes from your data that your participants suggested that this was important in the context of resilience or burnout.

what stands out are activities that focus on self-care provide a particular challenge for healthcare workers. Although self care was often mentioned in statements by participants and captured in the theme about 'making meaningful use of self-determined time', these activities often came last

I am not disagreeing with your assertion, it is often claimed, but to have this as a finding of this study I would like you to support it with quotes from your data, this helps the reader establish whether your are simply expressing an opinion or are relaying the findings from this study.

- 2. Is resilience context specific. To me this is a crucial issue as you identify at the start that healthcare workers, and specifically ICU personnel are at higher risk of burnout and PTSD. Will general measures to improve resilience work in this context? A lot of your theory is based on the APA recommendation to the general public, but you then start your study by focussing on a specific high risk population who face challenges like moral fatigue, sometimes daily deaths and possible iatrogenic trauma that the general population do not face. Can you show any evidence that general APA guidelines are relevant to this specific population.
- 3. In your data collection methods you mention you collected data pre and post intervention on questions to measure participant

happiness. What did this show and why is this not mentioned again.
4. The high drop out rate
2/3 of your participant were unable to complete this study intervention for 14 days despite it being a trial and daily reminders.
Your reference 12 states
"Not surprisingly, the degree to which participants actively continued their assigned exercise on their own and beyond the prescribed oneweek period mediated the long-term benefits".
For this intervention to have broader use, in terms of resilience, ideally it should have a sustained benefit. The high drop our rates over a fairly brief period raises questions whether this intervention can achieve this. Shift work is a reality in the most ICU contexts,

REVIEWER	Willibald Ruch Department of Psychology University of Zurich Switzerland
REVIEW RETURNED	23-Jan-2017

deeper discussion on this point.

### **GENERAL COMMENTS**

The present study aims to explore factors that are relevant to building workplace resilience in health personnel working in a neonatal intensive care unit in the USA. The positive psychology exercise "Three good things" has been assigned to participants during a period of 14 days. Participants were prompted each day to write down three things that went well that day and their role in it. Qualitative data has been analysed through thematic analysis and three major themes resulting from the "Three good things" exercise have been identified, namely "Having a good day at work", "having supportive relationship", and "making meaningful use of self-determined time".

what does that mean for this intervention. I think there needs to be a

In general, the topic of workplace resilience in the health care setting is timely and very important. Furthermore, positive psychology interventions can be effective in enhancing well-being. A strength of this study is the understanding of the factors that contribute to a good thing experienced during the day in individuals working in the health care sector. However, there are some significant limits to the study.

### Major points:

Throughout the manuscript numerous claims or statements are being made without indication of their source or that seem not to result clearly from the study. For instance:

Page 4, 5: "Research showed that resilience is a complex combination of one's traits, temperament, and learned coping skills." Please give a reference here.

Page 2, 42: "The 'Three Good Things' exercise fosters wellbeing and supports the importance of selfcare for health care workers". Based on the study results, it is not possible to draw the aforementioned conclusion.

#### Introduction:

The literature review is very limited and gaps in current research and the need for the study being reported are not presented. There is no clear introduction of the study aim and research question. Moreover, the reasoning of the authors seems to be that the exercise of three good things produces positive emotions and subsequently enhances the participant's resilience. Furthermore, they suggest that the content of the three good things could be considered as factors for building resilience. However, the study design does not allow such a conclusion.

## Recruitment and Sample

How many participants have been invited to the study? Please give a description of the sample.

#### Results:

The theme "Having a good day at work" seems to be very broad.. Moreover, it seems to lack internal coherence and distinction. For instance, good teamwork and supportive co-workers are subsumed under the theme "Having a good day at work" but could also be assigned to the theme "Having supportive relationships". Please consider redefining or refining of this theme.

Please make a selection of the illustrative extracts and reduce the number of examples. The reader will already get a good picture when reading these.

Please elaborate on the second part of the question that is about the role of the participants in experiencing the three good things.

#### Limitations:

Please elaborate on the implications of the small sample size for the findings. Reflect also on the consequence of the covenenience sample used in this study.

### Minor points:

## Introduction:

The field of Positive Psychology is typically introduced and described referring to the article of Seligman and Csikszentmihalyi (2000)

Regarding the current research status on positive psychology interventions you could refer to the following two meta-analysis: Bolier et al. (2013) and Sin and Lyubomirsky (2009)

## Language:

Please have a revision of the manuscript checked by a native speaker of English.

The manuscript contains various grammatical errors and incorrect sentences.

## Literature:

Bolier, L., Haverman, M., Westerhof, G. J., Riper, H., Smit, F., & Bohlmeijer, E. (2013). Positive psychology interventions: A meta-analysis of randomized controlled studies. BMC Public Health, 2013, 13, 119. doi: 10.1186/1471-2458-13-119

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive Psychology: An introduction. American Psychologist, 55, 5-14. doi:

10.1037/0003-066X.55.1.5
Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta-analysis. Journal of Clinical Psychology, 65, 467-487. doi: 10.1002/jclp.20593

### **VERSION 1 – AUTHOR RESPONSE**

Reviewer 1 - Comments Dr D Rogers, University of Pretoria, South Africa

I would like to thank and congratulate the authors for doing research in this important area, especially in a context such as ICU nursing. As identified burnout (etc) is a significant problem and efforts to reduce it should be studied and shared. Your analysis of the 1300 responses of the participants clearly paints a picture of the elements that contributed to a good day, and you have derived themes from this which are well supported.

I support your findings into those elements that contributed to positive emotions and positive psychology for the participants, but I am concerned when you extend this to claim that it contributes to workplace resilience.

To help address this concern it would help if you could address the following issues:

1. The purpose of this study was to explore which factors are meaningful for neonatal intensive care unit (NICU) health personnel in view of workplace resilience I am concerned that you asked the participants the question "What was three things that went well today and what was your role in bringing them about" And then from that assert that this represents that participants views on meaningful factors in view of workplace resilience. Braun and Clarke ( your reference No 13.) warn "The fourth pitfall is a mismatch between the data and the analytic claims that are made about it. In such an (unfounded) analysis, the claims cannot be supported by the data" As none of the quotes you have supplied mention resilience how did you make sure that your analysis of the data matched the participants views on "FACTORS FOR WORKPLACE RESILIENCE".

Triangulation or Respondent Validation may help here but I am concerned that this seems a weakness of this study. To try put this point into the context of this study can you provide any specific evidence from your data to support the following statements which were made.

The relatively simple tool 'Three Good Things' helps to focus on positive emotions which in turn support resilience building.

I can see support for the focus on positive emotion but did your study show clear resilience building? Are you inferring this from the general theory, in which case how are you certain it will work in this context?

These findings demonstrate that achieving work satisfaction and life balance was most meaningful for NICU professionals and provides an important pillar in building resilience and preventing burnout I have two concerns about this claim, the first is the use of the word most which can indicate a degree of comparison which qualitative research is not designed to establish. Secondly can you support with quotes from your data that your participants suggested that this was important in the context of resilience or burnout.

What stands out are activities that focus on self-care provide a particular challenge for healthcare workers. Although self care was often mentioned in statements by participants and captured in the theme about 'making meaningful use of self-determined time', these activities often came last. I am not disagreeing with your assertion, it is often claimed, but to have this as a finding of this study I would like you to support it with quotes from your data, this helps the reader establish whether your are simply expressing an opinion or are relaying the findings from this study.

RESPONSE 1: We thank the reviewer for his thoughtful comment regarding the association between

the "three good things" positive psychology exercise and workplace resilience. We carefully reconsidered the focus of our study and its results. To be congruent with what we identified based on the participant statements and quotes, we avoided unjustified claims. Accordingly, we revised the title, made the research gap explicit and restated the study purpose, including the line of argumentation towards well-being rather than resilience as appropriate. (Pages 4-6, 11).

2. Is resilience context specific. To me this is a crucial issue as you identify at the start that healthcare workers, and specifically ICU personnel are at higher risk of burnout and PTSD. Will general measures to improve resilience work in this context?

A lot of your theory is based on the APA recommendation to the general public, but you then start your study by focussing on a specific high risk population who face challenges like moral fatigue, sometimes daily deaths and possible iatrogenic trauma that the general population do not face. Can you show any evidence that general APA guidelines are relevant to this specific population?

RESPONSE 2: Indeed, resilience was used as a framework for professionals acting under complex and demanding working conditions. Given that healthcare professionals as individuals are also citizens, family members and employees, we consider it appropriate to use the APA guidelines, which offer a broad frame of reference for the positive experiences and evolving themes derived from their quoted statements. Given the available dataset, which represented a collection of unstudied statements, we intended to highlight the types and characteristics of health professionals' positive experiences over a series of work and private life days as prompted by the Three Good Things exercise (Page 6).

3. In your data collection methods you mention you collected data pre and post intervention on questions to measure participant happiness. What did this show and why is this not mentioned again.

RESPONSE 3: We first referred to these pre- and post intervention data to indicate the broader context of the project. Unfortunately, these are unpublished data. Yet, we were primarily interested in the content of the various statements prompted from the three good things responses and its overarching themes. Accordingly we revised the sentences in the design and sample section (Page 6): In their project pre and-post intervention happiness of participants was measured (unpublished data). The present study focused on the content of the written statements that were provided by the study participants during the 'Three Good Things' intervention.

4. The high drop out rate 2/3 of your participant were unable to complete this study intervention for 14 days despite it being a trial and daily reminders. Your reference 12 states" Not surprisingly, the degree to which participants actively continued their assigned exercise on their own and beyond the prescribed one-week period mediated the long-term benefits".

For this intervention to have broader use, in terms of resilience, ideally it should have a sustained benefit. The high drop our rates over a fairly brief period raises questions whether this intervention can achieve this. Shift work is a reality in the most ICU contexts, what does that mean for this intervention. I think there needs to be a deeper discussion on this point.

RESPONSE 4: We agree with the reviewer's assessment of the relatively high dropout rate, i.e., not completing the entire 14 days exercise. For analytic purposes, i.e., availability of full description of statements, we focused on completed exercise rounds at the expense of relying on fewer than half of potential responses. Yet, we further elaborate on the implications of the Three Good Things exercise as a useful means of boosting positive emotions of health professionals employed in shift work settings. We have adapted the limitation section (Page 13) to read "Only one third of the participants provided answers for all fourteen days of the exercise, while the others provided answers only for the

first few days and have been excluded from further analysis due to a lack of full description of statements per day."

#### Reviewer 2 - Comments

Prof. W. Ruch, Department of Psychology, University of Zurich, Switzerland

The present study aims to explore factors that are relevant to building workplace resilience in health personnel working in a neonatal intensive care unit in the USA. The positive psychology exercise "Three good things" has been assigned to participants during a period of 14 days. Participants were prompted each day to write down three things that went well that day and their role in it. Qualitative data has been analysed through thematic analysis and three major themes resulting from the "Three good things" exercise have been identified, namely "Having a good day at work", "having supportive relationship", and "making meaningful use of self-determined time".

In general, the topic of workplace resilience in the health care setting is timely and very important. Furthermore, positive psychology interventions can be effective in enhancing well-being. A strength of this study is the understanding of the factors that contribute to a good thing experienced during the day in individuals working in the health care sector. However, there are some significant limits to the study.

## Major points:

Throughout the manuscript numerous claims or statements are being made without indication of their source or that seem not to result clearly from the study. For instance:

Page 4, 5: "Research showed that resilience is a complex combination of one's traits, temperament, and learned coping skills." Please give a reference here.

RESPONSE: We thank the reviewer for these critical hints. We carefully reviewed our statements made in the manuscript and revised the text as appropriate and added the references as suggested.

Page 2, 42: "The 'Three Good Things' exercise fosters wellbeing and supports the importance of selfcare for health care workers". Based on the study results, it is not possible to draw the aforementioned conclusion.

RESPONSE: We agree and revised this sentence in the conclusion (abstract) to make the statement congruent with our findings (Page 2). It reads now: As the 'Three Good Things' exercise highlights the importance of self-care in healthcare workers and appears to promote wellbeing, it might ultimately strengthen resilience.

## Introduction:

The literature review is very limited and gaps in current research and the need for the study being reported are not presented. There is no clear introduction of the study aim and research question. Moreover, the reasoning of the authors seems to be that the exercise of three good things produces positive emotions and subsequently enhances the participant's resilience. Furthermore, they suggest that the content of the three good things could be considered as factors for building resilience. However, the study design does not allow such a conclusion.

RESPONSE: We expanded the literature review to include relevant references, identified gaps to justify the need for our study, and re-focused our study purpose (Page 4-6). Furthermore, given the nature of our study, we revised our line of argumentation "from Three Good Things to resilience building".

Recruitment and Sample

How many participants have been invited to the study?

Please give a description of the sample.

RESPONSE: We provided the requested information total sample in the "Recruitment and sample" section (Page 6).

## Results:

The theme "Having a good day at work" seems to be very broad.. Moreover, it seems to lack internal coherence and distinction. For instance, good teamwork and supportive co-workers are subsumed under the theme "Having a good day at work" but could also be assigned to the theme "Having supportive relationships". Please consider redefining or refining of this theme.

Please make a selection of the illustrative extracts and reduce the number of examples. The reader will already get a good picture when reading these.

Please elaborate on the second part of the question that is about the role of the participants in experiencing the three good things.

RESPONSE: We refined this theme accordingly for a better distinction and reduced the examples to illustrate the theme. (graph only 3 statements each!)

#### Limitations:

Please elaborate on the implications of the small sample size for the findings. Reflect also on the consequence of the convenience sample used in this study.

RESPONSE: We revised the limitations of our study as requested (Page 13). It now reads: The convenience study sample definitely limits generalization of findings. However, its in-depth information about a variety of positive experiences contributes to the understanding of healthcare professionals' subjective well-being i.e., what they think and feel when asked what went well today.

# Minor points:

## Introduction:

The field of Positive Psychology is typically introduced and described referring to the article of Seligman and Csikszentmihalyi (2000).

Regarding the current research status on positive psychology interventions you could refer to the following two meta-analysis:

Bolier et al. (2013) and Sin and Lyubomirsky (2009)

RESPONSE: We added the suggested references to support our statements (Page 4-5).

## Language:

Please have a revision of the manuscript checked by a native speaker of English.

The manuscript contains various grammatical errors and incorrect sentences.

RESPONSE: The manuscript was thoroughly checked and edited by a professional editor (pages 4-7; 11-13).

## Literature:

Bolier, L., Haverman, M., Westerhof, G. J., Riper, H., Smit, F., & Bohlmeijer, E. (2013). Positive

psychology interventions: A meta-analysis of randomized controlled studies. BMC Public Health, 2013, 13, 119. doi: 10.1186/1471-2458-13-119

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive Psychology: An introduction. American Psychologist, 55, 5-14. doi: 10.1037/0003-066X.55.1.5

Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta-analysis. Journal of Clinical Psychology, 65, 467-487. doi: 10.1002/jclp.20593

RESPONSE: We thank the reviewer for mentioning these relevant references which have been included in the manuscript.

### **VERSION 2 – REVIEW**

REVIEWER	Dr D Rogers University of Pretoria Dept of Family Medicine
	South Africa
REVIEW RETURNED	15-Mar-2017

## **GENERAL COMMENTS**

To the authors, I appreciate your willingness to edit and improve the paper and for the most part am happy with the improvements. However I there are still two areas that I feel need some revisions 1.

"Happiness and depression were evaluated prior to the study's commencement, and then followed up after one and six months. Results highlight that participants who performed this exercise were happier and less depressed at the one-month follow-up, as well as at the six-month follow-up, than at baseline 15."

Your unpublished data appears to support this but if the data is not published then we cant really critically appraise this, and you give reference to a previous study to support this, but the methods and instruments you used are not described at all, so it is not possible to see if you can legitimately claim these similar outcomes or not. I feel either you need to publish your data and your methods of arriving at this data, which involved a major rewriting exercise, or you should not mention it at all.

2

"What is brought to the foreground here is a risk that healthcare professionals put everyone's interest and needs ahead of their own and lack the importance of self-care. By doing so healthcare workers are falling short of looking after their own wellbeing and run the risk of not being able to rebound from adversity and overcome difficult circumstances in one's life"

I appreciate you are describing this as a risk not a reality, but I still feel you need to support how you arrived at this conclusion, your discussion mention the good things described by your participants, but at no point do your quotes indicate evidence that health workers put themselves last, or lack the important of self care, or . I am not disagreeing with your assertion here, but without any evidence to back it up, it is not clear how you arrived at this conclusion, could you deepen your discussion at this point to address this.

If these two issues can be addressed I would be happy to accept this paper.
triis paper.

REVIEWER	Doris Baumann
	University of Zürich, Switzerland
REVIEW RETURNED	14-Mar-2017

# **GENERAL COMMENTS**

Thank you for the revised manuscript. The authors have replied to some comments and made changes to the manuscript, but there are still a few parts that need further improvement. I find merit in your work and the resulting themes from the positive psychology exercise might reveal how the well-being of health care personnel might be further enhanced.

- 1. Title: Please consider rewriting the first part of the title, as it might not be clear for the reader what you are referring to. You probably link it to the three emerging themes, although, it could also be interpreted as another expression for the "Three good things". The second part is very concise and descriptive.
- 2. Abstract: I can see that you have elaborated and improved the abstract. However, two sections need further adjustments.
- a. Usually and as far as I know, the description of the sample is presented in the methods section (not in the results section). Consider adjusting this part.
- b. I agree to the content of the conclusion. Please revise the second sentence in terms of wording. "As the 'Three Good Things' exercise acknowledging the importance of self-care in healthcare workers and appears to promote wellbeing, it might ultimately strengthen resilience"
- 3. Positive Psychology Interventions:
- Section: page 4, lines 56-58 and 5, lines 3-7: I think you did do right in referring to the article of Seligman and Csikszentmihalyi (2000) for introducing the discipline of Positive Psychology. In order to adequately describe the field, consider also mentioning the study of positive individual characteristics and positive institutions—as this seems to be where people agree these days.
- Page 5, 9-15: In 2011 Seligman developed his theory of happiness and introduced the PERMA-model (positive emotions, engagement, relationships, meaning, accomplishments) further. Refer to the present model as well as it represent the most current thinking in this field.
- Page 5, 11-15: To my knowledge you are referring here to findings of the following study: Peterson, C., Park, N., & Seligman, M. E. P. (2005). Please verify.
- 4. Results: As I have mentioned in my first review, does the results section include too many illustrative extracts and I suggest making a selection
- 5. Discussion: You might reflect very briefly on contextual factors that can hinder health care workers' well-being, which are not explored in this study, but may be worth of mentioning. In order to enhance workers' well-being it might be reasonable not only to intervene on the individual level, but also on the organizational level by adjusting unfavorable work conditions.
- 6. Conclusion: Lines 45-47 (According to current science, ...). This requires a reference.
- 7. Language and grammar: As mentioned in the previous review, the manuscript contains various language errors. Not being a native

speaker myself I do find many. For example, page 2, line 21-25: "In a tertiary care medical center, neonatal intensive care unit (NICU) healthcare professionals (n=32; 91% female) participating in a 14-day online "Three Good Things" intervention and survey were sent daily email reminders to reflect on and respond to the questions: 'What are the three things that went well today?" and "What was your role in bringing them about?". Please reword, for example: In a tertiary care medical center, neonatal intensive care unit (NICU) healthcare professionals (n=32; 91% female) participated in a 14-day positive psychology online intervention called "Three Good Things". Daily email reminders were sent to the participants to reflect on and respond to the questions: 'What are the three things that went well today?" and "What was your role in bringing them about? I would suggest to have a native speaker of English proofread the article.

## Literature:

Peterson, C., Park, N., & Seligman, M. E. P. (2005). Orientations to happiness and life satisfaction: The full versus the empty life. Journal of Happiness Studies, 6, 25-41. Seligman, M. E. P. (2011). Flourish. New York, NY: Simon & Schuster.

## **VERSION 2 – AUTHOR RESPONSE**

#### Reviewer 2

Doris Baumann, University of Zürich, Switzerland

Thank you for the revised manuscript. The authors have replied to some comments and made changes to the manuscript, but there are still a few parts that need further improvement. I find merit in your work and the resulting themes from the positive psychology exercise might reveal how the well-being of health care personnel might be further enhanced.

1.) Title: Please consider rewriting the first part of the title, as it might not be clear for the reader what you are referring to. You probably link it to the three emerging themes, although, it could also be interpreted as another expression for the "Three good things". The second part is very concise and descriptive.

RESPONSE: Thank you for this important comment. We shortened the title as follows: "A qualitative analysis of the Three Good Things intervention in health care workers."

- 2.) Abstract: I can see that you have elaborated and improved the abstract. However, two sections need further adjustments.
- a.) Usually and as far as I know, the description of the sample is presented in the methods section (not in the results section). Consider adjusting this part.

RESPONSE: We now provide sample information in the abstracts methods section

b.) I agree to the content of the conclusion. Please revise the second sentence in terms of wording. "As the 'Three Good Things' exercise acknowledging the importance of self-care in healthcare workers and appears to promote wellbeing, it might ultimately strengthen resilience"

RESPONSE: We slightly revised the wording of the second sentence as follows: The 'Three Good Things' exercise acknowledges the importance of self-care in healthcare workers and appears to promote wellbeing, which might ultimately strengthen resilience.

3.) Positive Psychology Interventions:

•Section: page 4, lines 56-58 and 5, lines 3-7: I think you did do right in referring to the article of Seligman and Csikszentmihalyi (2000) for introducing the discipline of Positive Psychology. In order to adequately describe the field, consider also mentioning the study of positive individual characteristics and positive institutions—as this seems to be where people agree these days.

RESPONSE: Thank you for the constructive hint. We added elements on how positive psychology works in organizations to complement the respective introduction.

•Page 5, 9-15: In 2011 Seligman developed his theory of happiness and introduced the PERMA-model (positive emotions, engagement, relationships, meaning, accomplishments) further. Refer to the present model as well as it represent the most current thinking in this field.

RESPONSE: We additionally refer to the PERMA model to be in line with current thinking in the field.

•Page 5, 11-15: To my knowledge you are referring here to findings of the following study: Peterson, C., Park, N., & Seligman, M. E. P. (2005). Please verify.

RESPONSE: Thank you for this comment. While verifying the paragraph we realized its confusing description of elements of our own Three Good Things study, which does not belong here. Accordingly, we revised the paragraph focusing on the study we initially referred to, namely Seligman, Steen, Park et al 2005 (as cited).

4.) Results: As I have mentioned in my first review, does the results section include too many illustrative extracts and I suggest making a selection.

RESPONSE: Thank you for insisting on this. We scrutinized our results section with regard to the illustrative extracts and reduced the number of respondents' quotes.

5.) Discussion: You might reflect very briefly on contextual factors that can hinder health care workers' well-being, which are not explored in this study, but may be worth of mentioning. In order to enhance workers' well-being it might be reasonable not only to intervene on the individual level, but also on the organizational level by adjusting unfavorable work conditions.

RESPONSE: Thank you for this comment. We now mention contextual factors that might be important to health care workers, allowing us to focus on system-level interventions to improve working conditions.

- 6.) Conclusion: Lines 45-47 (According to current science, ...). This requires a reference. RESPONSE: We added two references.
- 7.) Language and grammar: As mentioned in the previous review, the manuscript contains various

language errors. Not being a native speaker myself I do find many. For example, page 2, line 21-25: "In a tertiary care medical center, neonatal intensive care unit (NICU) healthcare professionals (n=32; 91% female) participating in a 14-day online "Three Good Things" intervention and survey were sent daily email reminders to reflect on and respond to the questions: 'What are the three things that went well today?" and "What was your role in bringing them about?". Please reword, for example: In a tertiary care medical center, neonatal intensive care unit (NICU) healthcare professionals (n=32; 91% female) participated in a 14-day positive psychology online intervention called "Three Good Things". Daily email reminders were sent to the participants to reflect on and respond to the questions: 'What are the three things that went well today?" and "What was your role in bringing them about? I would suggest to have a native speaker of English proofread the article.

RESPONSE: Thank you for mentioning language and grammar issues again. Although our manuscript was professionally edited it seems to still have some language errors. We had it revised again and hope that the reviewer will find it comprehensible.

## Literature:

Peterson, C., Park, N., & Seligman, M. E. P. (2005). Orientations to happiness and life satisfaction: The full versus the empty life. Journal of Happiness Studies, 6, 25-41. Seligman, M. E. P. (2011). Flourish. New York, NY: Simon & Schuster.

RESPONSE: Thank you for the suggested literature, which we included in the introduction section.

#### Reviewer 1

Dr D Rogers, University of Pretoria, Dept of Family Medicine, South Africa

To the authors, I appreciate your willingness to edit and improve the paper and for the most part am happy with the improvements. However I there are still two areas that I feel need some revisions

1.) "Happiness and depression were evaluated prior to the study's commencement, and then followed up after one and six months. Results highlight that participants who performed this exercise were happier and less depressed at the one-month follow-up, as well as at the six-month follow-up, than at baseline 15."

Your unpublished data appears to support this but if the data is not published then we cant really critically appraise this, and you give reference to a previous study to support this, but the methods and instruments you used are not described at all, so it is not possible to see if you can legitimately claim these similar outcomes or not. I feel either you need to publish your data and your methods of arriving at this data, which involved a major rewriting exercise, or you should not mention it at all.

RESPONSE: Thank you for commenting on the unpublished data part. After careful review of this paragraph, we realized a confusing mix of study information. We therefore revised it to refer more clearly to Seligman's work. Yet, we decided not to further elaborate on our unpublished data and deleted this sentence.

2.) "What is brought to the foreground here is a risk that healthcare professionals put everyone's interest and needs ahead of their own and lack the importance of self-care. By doing so healthcare workers are falling short of looking after their own wellbeing and run the risk of not being able to rebound from adversity and overcome difficult circumstances in one's life"

I appreciate you are describing this as a risk not a reality, but I still feel you need to support how you arrived at this conclusion, your discussion mention the good things described by your participants, but at no point do your guotes indicate evidence that health workers put themselves last, or lack the

important of self care, or . I am not disagreeing with your assertion here, but without any evidence to back it up, it is not clear how you arrived at this conclusion, could you deepen your discussion at this point to address this.

RESPONSE: Thank you for this thoughtful comment which we addressed in the discussion section by revising the respective statement. It now reads: What this brings to the foreground is that, while self-care bolsters healthcare professionals' ability to rebound from adversity and overcome difficult circumstances, many downplay its importance

If these two issues can be addressed I would be happy to accept this paper. RESPONSE: We hope that we were able to satisfactorily address the reviewer's comments.

## **VERSION 3 – REVIEW**

REVIEWER	Doris Baumann University of Zurich, Switzerland
REVIEW RETURNED	13-Apr-2017

GENERAL COMMENTS	Thank you for the revised manuscript. The authors have replied to all my comments and considerably improved the article. My recommendation is therefore to accept the article. There is only one reference (nr. 13) that should be verified. To my knowledge you are referring here to Seligman (2011).
	Literature: Seligman, M. E. P. (2011). Flourish. New York, NY: Simon & Schuster.

# **VERSION 3 – AUTHOR RESPONSE**

## Reviewer 2

Doris Baumann, University of Zürich, Switzerland

Thank you for the revised manuscript. The authors have replied to all my comments and considerably improved the article. My recommendation is therefore to accept the article. There is only one reference (nr. 13) that should be verified. To my knowledge you are referring here to Seligman (2011). Literature: Seligman, M. E. P. (2011). Flourish. New York, NY: Simon & Schuster.

RESPONSE: Many thanks to the reviewer's last comment. We verified the cited literature and adapted the reference accordingly.