PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Self-harm and social media: Thematic analysis of images posted on three social media sites
AUTHORS	Shanahan, Nicola; Brennan, Cathy; House, Allan

VERSION 1 – REVIEW

REVIEWER	Gregory Simon Kaiser Permanente Washington Health Research Institute, USA
REVIEW RETURNED	05-Nov-2018

GENERAL COMMENTS	The topic is certainly interesting and timely. The methods are generally sound, and the presentation is generally clear. My main concern is lack of detail regarding the sampling of images. If this work claims that the images included are representative, then it is necessary to provide more detail regarding exact methods for search, numbers of results returned from each source, number excluded for specific ineligibility reasons - all reported for each of the three social medial platforms. Minor comments: - The decision to exclude images posted by mental health charities seems odd. Could the authors explain/justify this? If the goal is to represent images that a user would encounter after a specific search, then these images would seem to be relevant. - Can the authors provide more detail regarding assessment/classification of images as positive toward self-harm? This is the issue of greatest concern from a clinical or public health perspective.

REVIEWER	Di Bailey Professor of Mental Health and Associate Dean Research Social Sciences Nottingham Trent University England
REVIEW RETURNED	16-Nov-2018

GENERAL COMMENTS	This was an interesting study in an under researched area. There are several ways in which the paper could be revised that would improve its contribution and replicability. It would be useful to understand how self-harm was defined for the purposes of the study which becomes important as eating disorders are referred to as a type of self-harm later on in the manuscript. This needs some justification/discussion as many studies exclude eating disorders as a form of self-harm because of motivational/cognitive differences underpinning the behaviours. In the introduction on page 4 it would also be useful to explain that gender differences in self-harm are to a degree related to methods: for example less gender differences in

	self-poisoning and OD than for self-injury (cutting primarily). This in part explains why males present as it's often more serious. Also in the introduction the third paragraph is somewhat vague about how social media is thought to encourage self-harm and similarly in para 4 of the introduction you could be more specific about the particular cause for concern you were interested in exploring. In terms of the methods please can you provide a little more detail explaining how the one day in 2016 was arrived at - was it purely random, weekday? weekend? why not both? and did you have any reason to suspect one day would be any different to another? You refer to the 200 most recent images in line 28 on page 5 and could do with a linking sentence here just to make it really clear that you took 200 from the three different sites resulting in 602 images in total - I'm not sure it's clear how you got to the 602 so just check this. Also in terms of your method, and maybe for further reflection in the limitations - is there any suggestion that males post post or less on social media than females? I would be interested to know whether you were aware of any bias in posting generally and as we understand self-harm to be a gendered issue how you might have tried to control for any bias in your method/ image selection. You do not say whether your themes were checked in any way for reliability -for example was any cross-checking/consensus done by the researchers once the images were captured? or was there any pilot work before analysis to support the reliability of the thematic approach? I accept that this is unlikely in doctoral research but this might be something you want to think about for similar studies in future. In terms of findings you state that there were a much higher proportion of women represented in the visual content. This might have been expected if we know that women generally post more than men. You might want to comment on this? You mention there were few graphic images - which is rather vague maybe you could quantify this a bit more for example if 50 - less than 10% of images. Your theme of identity and belonging I think is a theme that could be detected in posts for other reasons (for example mental health and health issues generally) than just posts tagged self-harm. I think it would be useful to discuss this a bit more and link in the body of literature that suggests social media can fulfill a useful function as a form of peer support for young people. Finally on page 6 line 16 I think you meant to say portrayed as moderate self-injury. These are all minor amendments that should add to the robustness of the paper.

VERSION 1 – AUTHOR RESPONSE

Reviewer 1:
My main concern is lack of detail regarding the sampling of images. If this work claims that the images included are representative, then it is necessary to provide more detail regarding exact methods for search, numbers of results returned from each source, number excluded for specific ineligibility reasons - all reported for each of the three social medial platforms.

We have added this detail into the methods section.

The decision to exclude images posted by mental health charities seems odd. Could the authors explain/justify this? If the goal is to represent images that a user would encounter after a specific search, then these images would seem to be relevant.

We were interested in how the term self-harm is used in non-professional discourse so we excluded images selected by professionals/professional organisations, we have added an explanation into the methods section.

Reviewer 2:
This was an interesting study in an under researched area. There are several ways in which the paper could be revised that would improve its contribution and replicability. It would be useful to understand how self-harm was defined for the purposes of the study which becomes important as eating disorders are referred to as a type of self-harm later on in the manuscript. This needs some justification/discussion as many studies exclude eating disorders as a form of self-harm because of motivational/cognitive differences underpinning the behaviours.

We acknowledge that in professional discourse, eating disorders are commonly differentiated from self-harm. We were interested in the public discourse and so made the decision to include all images tagged as self-harm. We have provided more explanatory text in the introduction.

In the introduction on page 4 it would also be useful to explain that gender differences in self-harm are to a degree related to methods: for example less gender differences in self-poisoning and OD than for self-injury (cutting primarily). This in part explains why males present as it's often more serious.

We have added a note and two further references in the discussion.

Also in the introduction the third paragraph is somewhat vague about how social media is thought to encourage self-harm and similarly in para 4 of the introduction you could be more specific about the particular cause for concern you were interested in exploring

We have edited the introduction to make this clearer.

In terms of the methods please can you provide a little more detail explaining how the one day in 2016 was arrived at - was it purely random, weekday? weekend? why not both? and did you have any reason to suspect one day would be any different to another?

We have now indicated in the text that the day was chosen randomly by the first author and the most recent uploaded images then taken. There is no evidence to suggest that this timing would have an impact on the type of images we sampled. Social media posts on the topic tend to increase if there has been a recent story in popular media, otherwise there is little to guide one on how to sample so we took a pragmatic approach.

You refer to the 200 most recent images in line 28 on page 5 and could do with a linking sentence here just to make it really clear that you took 200 from the three different sites resulting in 602 images in total - I'm not sure it's clear how you got to the 602 so just check this.

We have clarified this in the text.

Also in terms of your method, and maybe for further reflection in the limitations - is there any

suggestion that males post post or less on social media than females? I would be interested to know whether you were aware of any bias in posting generally and as we understand self-harm to be a gendered issue how you might have tried to control for any bias in your method/ image selection.

We have modified the discussion to indicate that it is acknowledged that women do indeed use social media more than men.

You do not say whether your themes were checked in any way for reliability -for example was any cross-checking/consensus done by the researchers once the images were captured? or was there any pilot work before analysis to support the reliability of the thematic approach? I accept that this is unlikely in doctoral research but this might be something you want to think about for similar studies in future.

We have added a sentence that describes the involvement of all authors in theme development to increase the validity.

In terms of findings you state that there were a much higher proportion of women represented in the visual content. This might have been expected if we know that women generally post more than men. You might want to comment on this?

We have modified the discussion to indicate that it is acknowledged that women do indeed use social media more than men.

You mention there were few graphic images - which is rather vague maybe you could quantify this a bit more for example if 50 - less than 10% of images.

We have made the text more specific so the reader gets a clearer idea of the nature of the images included.

Your theme of identity and belonging I think is a theme that could be detected in posts for other reasons (for example mental health and health issues generally) than just posts tagged self-harm. I think it would be useful to discuss this a bit more and link in the body of literature that suggests social media can fulfill a useful function as a form of peer support for young people.

We have added a sentence and an additional reference about the potential of social media as a platform for peer support. We were mindful of article length so have only touched on this as an opportunity for further consideration

Finally on page 6 line 16 I think you meant to say portrayed as moderate self-injury.

We have clarified the text

VERSION 2 – REVIEW

REVIEWER	Gregory Simon Kaiser Permanente Washington Health Research Institute
REVIEW RETURNED	12-Dec-2018

GENERAL COMMENTS	My concerns have all been adequately addressed. I have no additional concerns.

REVIEWER	Di Bailey Nottingham Trent University England

REVIEW RETURNED	12-Dec-2018

GENERAL COMMENTS	The authors have satisfactorily addressed the areas for revision identified at initial review.