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Is Social Media Contributing to an Unhealthy Fixation with Health?

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Abstract

Orthorexia Nervosa (ON) describes a pathological, unhealthy fixation with eating healthy food. This study intends to further understand ON and its possible link to the use of social media, and specifically, to test the prevalence of ON in an opportunity sample with the use of two ON measures – the ORTO-15 and the Tereul Orthorexia Scale (TOS); to use and validate a new ON measure (TOS); to examine the relationship between ON and social media use, with a focus on Instagram users; and to further understand the participants' interpretations of the possible link between eating patterns and social media use. This study uses a convergent design and a mixed methods approach, which employs both statistical and thematic analysis (TA). Data from 201 participants suggested a high prevalence of ON across the sample, and the results also reinforced the validity of the TOS measure (α = .86). ORTO-15 scores showed significant differences between age groups, genders, and Instagram users and non-Instagram users. The TA generated three overall themes: 'The Importance of Belonging', 'Health as Art' and 'Craving'. The high prevalence in the sample may have been a result of the researcher's recruitment method, and the ON measures may have categorised individuals on non-medically prescribed diets as 'orthorexic'. Both the quantitative and qualitative results offer evidence to support a possible link between ON and social media use, specifically Instagram. Further research should be done to establish official criteria and measures for ON and the effect of social media on eating patterns.

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Introduction

Steven Bratman devised the term 'Orthorexia Nervosa ' in order to describe a pathological, unhealthy fixation with eating healthy food [1]. The word orthorexia is derived from the Greek words *orthos* meaning right and *orexis* meaning appetite. The wish to consume healthy foods is not a condition in itself, but a single-minded fixation and obsessive preoccupation with eating healthy foods may lead to increased levels of stress and anxiety about food [2].

The current social and cultural environment seems to encourage the proliferation of conditions such as ON, as individuals are increasingly preoccupied with health and the appearance of health online. ON references in the media have been extensive, and research regarding ON has grown in the past few years. The research has, however, been restricted by the lack of both clear diagnostic criteria and a valid and reliable measurement tool. It is clear throughout the literature that a good measurement tool cannot be developed without clear criteria being established, despite ORTO-15 having become the most widely used measurement tool for ON [3]. The measurements of prevalence, possible links to demographic data, use of social media and causal factors have all therefore been problematic.

The current study intends to enhance our understanding of ON by examining the prevalence of ON in an opportunity sample; assessing whether there is a relationship between ON scores and the use of social media; analysing participants' understanding of the aforementioned potential link; and exploring the reliability and validity of a new ON measure. Given that most ON research uses a single measure for ON, which has led to varied results, the study employs the ORTO-15 as well as a proposed new measure which attempts to compensate for the limitations of the ORTO -15 and introduces a 'healthy Orthorexia' threshold. The Tereul Orthorexia Scale (r = .43) consists of 17 items, which aim to evaluate a healthy preoccupation with diet, and the negative social and emotional influence of rigid adherence to a healthy eating programme [4].

The study adopts the ideas proposed in a recent study by Turner and Lefevre in order to build upon earlier systematic data [5]. The study attempted to examine the associations between social media use and ON indications, with the use of an online survey examining social media use and eating behaviours. The study indicated that a higher level of Instagram use was related to a greater predisposition for ON [5].

The study aims to compensate for the shortcomings in quantitative exploration of ON, and the difficulties in measurement, by also using a qualitative approach to offer deeper insight into the potential link between ON and social media use. The study aims to contribute to a greater understanding of the motivators for 'healthy' eating and of the current climate contributing to ON, by exploring through the use of probing questions the participants' understanding of the impact of social media on their eating patterns.

Experimental Procedure

The 201 participants were recruited in two phases. The initial sample recruited included 154 participants, of whom 127 were Instagram users and 18 were non-Instagram users. As the power analysis conducted suggested that a minimum of 26 non-Instagram users was necessary for conducting the Mann-Whitney U test, the researcher engaged in further recruitment. The advertisements and brief for the study did not use term ON, to avoid influencing participants. The study was advertised as a study on eating patterns and social media usage. The online survey was generated using the online data collector, Qualtrics.

Participants were initially presented with a brief outlining the aim of the study, and a consent form. When participants signed the consent form, they were asked their age and were excluded from the study if they were below the age of 18. Participants were then asked whether they had a current diagnosis of an eating disorder or were on a medically prescribed diet. If participants were under 18, had a current diagnosis of an eating disorder or were on medically prescribed diets, they were automatically shown the last page of the survey that thanked them for their participation and showed them a brief outlining more specific details about the study. If participants continued, they were asked their level of education, gender, ethnicity and country of residence. They were then asked to answer questions that related to their ideas and attitudes towards food by completing the TOS and were asked to

select the response that best described their eating patterns in the ORTO-15 [4] [6]. After completing the two ON scales, participants were asked which social media channels they used, how often they accessed them, how much time they spent on them and the type of content to which they were typically exposed. Following this, they were presented with the probing questions regarding their understanding of the potential link between their eating patterns and use of social media.

Once all questions were filled out and completed, participants were asked whether they would like to provide their email in order to enter a draw giving them the chance to win a £50 Amazon voucher. At the end of the survey, a brief appeared outlining more specific aims of the study, as well as the researcher's and research supervisor's contact details if participants had any further questions.

The data was analysed using the Statistical Package for Social Sciences (SPSS) Software. The factors available for analysis were demographic information: age, gender, ethnicity, country of residence and education level, ON scores from both measures: ORTO-15 and TOS and data on social media use: social media channels used, frequency of use, time spent and typical feed content [6] [4]. The majority of the data were generated and coded automatically by Qualtrics, allowing it to be downloaded directly into Excel and SPSS format. The questionnaires were coded in accordance with the appropriate scoring for each item.

Materials and Methods

The study used self-reporting online questionnaires to obtain the data. The questionnaires included a question regarding whether the participants had a current diagnosis of an eating disorder or were on a medically prescribed diet, in order to exclude them from the study. The questionnaire also involved questions regarding the participants' demographic groups; measures from the TOS the ORTO-15 the social media channels used; frequency of access to social media; time spent on social media and content of feed; as well as probing questions regarding the participants' understanding of the possible effect on their eating patterns of specific social media channels, frequency of access and exposure time to social media, and the content of their social media feeds [4] [6].

Demographics

The questionnaire collected basic demographic information such as age, gender, level of education, ethnicity and country of residence. Personal demographic information collected was limited in order maintain participants' anonymity.

- Orthorexia Nervosa Measures
- Tereul Orthorexia Scale

The Tereul Orthorexia Scale (r = .43) consists of 17 items, which aim to evaluate a healthy preoccupation with diet, and the negative social and emotional influences of rigidly following a 'healthy' eating plan [4]. This scale therefore attempts to measure orthorexia in two distinct dimensions: Healthy Orthorexia (HeOr) with nine items which includes questions such as 'I mainly eat foods that I consider to be healthy'; and Orthorexia Nervosa (OrNe) with eight items which involves questions such as 'Thoughts about healthy eating do not let me concentrate on other tasks'. Answers are given on a 4-point scale ranging from 0 = Completely disagree to 3 = Completely agree.

ORTO-15

The ORTO-15 is developed from the dichotomous measure established by Bratman and Knight and expands the original measure to include 15 items (Cronbach's alpha = 0.78) intended to measure symptoms of ON. Answers to every item are based on a 4-point Likert scale, representing 'always', 'often', 'sometimes', and 'never' [4] [2].

Answers that indicate ON symptoms are scored 1 on the scale whilst 4 indicates normal eating behaviours. A sum of the scores for each item is calculated to give the overall ORTO-15 score. Total scores of under 40 points meet the criteria for ON. Examples of ORTO-15 questions include, 'Do you allow yourself any eating transgressions?' and 'Do you think that on the market there is also unhealthy food?'

Social Media Measure

The study emulated the questionnaire on social media used by Turner and Lefevre, which included questions regarding social media outlets such as Instagram, Facebook, Twitter, Pinterest, Google +, Tumblr and LinkedIn, but did not find any significant link between ON scores and use of social media channels

apart from Instagram [5]. Although the current study used the same questions, it included slightly different social media channels and gave the participants the option of 'no social media use'. The following questions, and possible answers, were included in the social media measure:

Which social media channels do you use? Instagram, Facebook, Twitter, Snapchat, LinkedIn, I don't use social media.

How often do you access (Instagram, Facebook, Twitter, Snapchat, LinkedIn)? Less than once per month, 1-3 times per month, once a week, 2-3 times per week, 4-5 times per week, once a day, several times per day, I don't access social media.

On a typical day where you access (Instagram, Facebook, Twitter, Snapchat, LinkedIn) how much time do you spend on it in total? Less than 15, 15-30, 31-60, 60+ mins, I don't access social media.

If you do use Instagram please rank the order in which the following content types typically appear on your feed, with the first being the one most frequently emerging. Friends (posing with other friends, at least two human faces in photo), food (recipes, cakes, drinks, etc.), gadget (electronic goods, tools, motorbikes, cars, etc.), captioned photo (pictures with embedded text, memes), pet, selfie (self-portraits where only one human face is present), fashion (shoes, makeup, personal belongings).

Probing Questions

In order to gain insight into the participants' understanding of the possible links between social media use and eating patterns, participants were asked to respond to the following probing questions.

'Do you think social media affects your eating? If so, how? Please elaborate.' 'Do you think certain social media channels have a larger effect on your eating? If so, how? Please elaborate.' 'Do you think the content on your newsfeed or the content you upload has an effect on your eating? If so, how? Please elaborate.' 'Do you think the frequency and the time you spend on social media affects your eating? If so, how? Please elaborate.'

There was no word limit to the probing questions.

Results

The participants' age ranged from 20 to 70 (M=32.92, SD=9.624). 34% of the sample was male and 66% was female. Most participants had a Master's degree or equivalent, were White and came from Cyprus or the UK.

The Kruskal-Wallis H test showed that there was a statistically significant difference in ORTO-15 scores between age groups (H(3)=13.16, p=0.004). The test suggested that Generation Z (M=39.75) and Millennials (M=38.75) were more likely to rate highly on ON scores using the ORTO-15 measure than Generation X (M=41.93) and Boomers (M=44.56).

The Mann-Whitney U Test revealed no significant differences in the HeOr scores of Males (M=20.73) and Females (M=22.04), U = 4123, z = -1.57, p = 0.12. It also generated no significant differences in the OrNe scores of Males (M=12.49) and Females (M=13.58), U = 4096.50, z = -1.64, p = 0.10. The Mann-Whitney U test indicated that ORTO-15 scores were significantly greater for Males (M=39.06) than Females (M=38.24), U = 3668, z = 2.11, p = 0.03, suggesting a higher likelihood of ON in Females.

Out of 201 participants, 146 scored below the threshold value of 40 for ON on the ORTO-15 scale. This resulted in a 72.63% prevalence in the sample. There were no thresholds reported for the TOS (Barrada & Roncero, 2018), hence prevalence of HeOr and OrNe in the sample using this measure was not computed.

An internal consistency reliability analysis on the 201 responses resulted in Cronbach's alpha of 0.86 for all 17 items, Cronbach's alpha of 0.84 for the nine items identifying HeOr and Cronbach's alpha of 0.79 for the eight items measuring OrNe. The internal consistency for the ORTO-15 produced a Cronbach's alpha of 0.76. The Spearman's rho correlation coefficient indicated that there were significant correlations between HeOr, OrNe and ORTO-15. Findings showed a correlation between HeOr and the ORTO-15 rs=-0.28, p=0.00 and between OrNe and ORTO-15 rs=-0.55, p=0.00. The above findings denote that the TOS is therefore internally consistent, valid and reliable.

The Mann-Whitney U Test revealed a significant difference in the ORTO-15 scores of Instagram users

(M=38.77, n=146) and non-Instagram users (M=41.35, n=55), U = 3044, z = –2.64, p = 0.008. Hence there is evidence to suggest that Instagram users are more likely to score higher on ON symptoms on the ORTO-15 than non-Instagram users.

In order to examine the participants' understanding of the potential link between ON and social media use, the probing questions were analysed using thematic analysis and the six-phase model outlined by Braun & Clarke [7]. Three main themes and nine subthemes developed from the analysis. The first main theme is 'The Need to Belong (Inclusivity/ Exclusivity)', which tried to encompass the psychological and basic human need to belong, and feel accepted within a social group [8]. The theme also attempts to incorporate the contrast in feelings that being a part of something, being included, can generate and the feelings that can manifest when individuals feel excluded, all of which seem to be illustrated on social media.

The first main theme of 'The Need to Belong (Inclusivity/Exclusivity)' consists of the sub-themes 'Stimulation To Do Something', which describes the use of social media for motivation or inspiration to try something new; 'Constant Comparisons', which encompasses the continuous access to social media and hence a perpetual exposure to appearance-related comparisons online; and 'Meeting Expectations' which relates to the feelings of pressure to adhere to an explicit set of regulations in order to belong.

The second main theme is 'Health as Art', which attempts to encompass the notion that being healthy is projected in a certain way online, and comprises the subthemes 'What Healthy Bodies Should Look Like' which describes the beliefs presented on social media regarding what a healthy body looks like visually as well as what a healthy body should be consuming (eating) and doing (exercising); 'Cult of Social Media' which encompasses the echo chamber effects of social media use, and how businesses and individuals advertise themselves and their beliefs online; and 'Illusory Ideal' which relates to the artistry that goes into the alluring, edited images of food, bodies and health to which participants are exposed on Instagram.

The third main theme is 'Craving', which attempts to cover both the literal cravings for food that participants reported and a metaphorical longing, and includes the sub-themes 'Procrastination', which entails using social media to avoid doing specific tasks; 'Escape', which involves the use of social media to break free of the real world and engross oneself in the online domain; and 'Food Porn', which involves the glamourised visual presentation of food.

Discussion

The following includes direct quotations from the online responses received, some of which included grammatical errors.

The first main theme attempts to include both how belonging can contribute to improved wellbeing and how being excluded can generate negative emotions. Whilst many responses shared the positive effects of social media, and how it had been helpful for them to gain new information and ideas with regard to their eating and health, there were also responses indicating negative effects when participants were unable to meet the expectations raised or to emulate what others appeared to be doing online. The following response outlines an effect of social media use on a participant's eating, and how seeing others engage in exercise and healthy eating inspires them but leaves them feeling low when they cannot do the same: 'Yes it does affect my eating. Seeing other people exercise and eating healthy motivates me to do so, however due to the lifestyle and busy schedule I have, I can't keep up with being healthy which then results in me feeling guilty, stressed and depressed.'

The second main theme of 'Health as Art' attempted to encompass the notion that healthy appears in a certain way online, as participants elaborated on how health has a specific appearance, either to make it look appealing to the consumer, like an advertisement, or to adhere to the societal norms of what healthy and attractive food or bodies look like, with an emphasis on food being 'Instagrammable'. The following response offers evidence of this as it proposes that Instagram has a greater effect on their eating patterns, encouraging them to view content by strangers whom they are more likely to admire rather than that of their friends: 'Instagram is definitely the biggest one as a large proportion of people I follow on their I am not

personally connected to. They are more figures to "idolise" or attempt to emulate as to gain a physique like theirs etc. Facebook on the other hand is basically following your friends who are far less likely to "inspire" or "motivate".'

Another participant alludes to the counterfeit content they encounter on specific social media channels, and how it adheres to the thin and athletic ideals that have been related to healthism: 'Social media, such as Instagram & Facebook, that provoke the users to upload photographs of daily activities, such as eating, can sometimes be used to fool others of a false & unhealthy diet but being able to remain skinny & fit.' Further references to 'Unrealistic body images' and 'Seeing people with abs as being normal' were included in the responses by participants who show an awareness of deceptive online content, but not necessarily an immunity to the effects of exposure to such content.

Finally the third main theme of 'Craving' included both the literal cravings for food that participants reported and a metaphorical longing. Individuals seem to be constantly bombarded with images of food on social media as well as traditional media. Cravings for food can therefore be triggered by these food cues in the environment. Numerous responses offered evidence to support the effect of food cues on social media, by explaining that looking at images of food and videos of food being made or eaten created cravings for that specific food which could be healthy or unhealthy. The actual cravings that participants reported were evident in extracts like the following one, in which the participant reports that social media affects their eating patterns solely when they are exposed to what they deem as desirable food: 'The only way that it does affect my eating is if I see a picture of some yummy food (a bowl of pasta for example), I then have a craving for that!' Another participant added that being exposed to food imagery could lead to them thinking about that specific food throughout the day, and sometimes acting on their cravings: 'Yes, if I see doughnuts on my newsfeed I think of them all day. Sometimes I go and buy some, but not always.'

Previous findings regarding the link between age and ON have been inconclusive, with the majority of studies reporting either a link between ON and younger age, or no relation between the two. More research was needed to understand the link between age and ON, and specifically research employing older adults, as previous research was predominantly focussed on participants between the ages of 20 and 30. The current study benefitted from a wide range age range, between 20 and 70. However the majority of participants were Millennials, aged between 24 and 38. Findings regarding age and its link to ON scores suggested that younger participants, specifically those in Generation Z and Millennials, were more likely to display orthorexic traits than older participants from Generation X and Boomers. Responses to the probing questions also suggested that age might be a protective factor in the effects of social media on eating behaviours, which seems to support the quantitative findings. Participants mentioned an increased sense of self as a protective factor, suggesting that this may develop with age.

Findings suggested a higher likelihood of ON in females. The average scores for both genders were below 40 on the ORTO-15 scale, and therefore lay within the orthorexic range, which may be an indication of the high prevalence found in the study. The variance of ON scores was greater for males than females, suggesting that the male participants in the study had a wider range of ON scores than the females. This could imply that some males are very concerned about healthy eating whereas others have a minimal interest.

Although the prevalence of HeOr and OrNe in the sample was not computed due to the absence of cut -off points, it was apparent that participants' scores in both categories were relatively high, which matched the 72.63% prevalence found with the ORTO-15 measure. Barrada & Roncero outline a possible range of scores for HeOr (0, 27) and add that the mean score for HeOr in their study was quite low at M=12.52 [4]. Their participants also tested quite low for OrNe, with M=3.57 and the possible range is (0, 24). In the current study the average HeOr was M=21.59 which was significantly more than that in the TOS study [4]. This may suggest that the sample had what has been deemed as a healthy preoccupation with healthy eating without the adverse effects of ON. The OrNe in the current study was M=13.21 which again was much higher than the average of OrNe in the TOS study [4].

The high prevalence in the current study may be due to various factors. The sample was predominantly made up of Millennials (78.2%), who according to the current study seem to be more prone to ON than other age groups. More than half the sample was made up of females, 66%, who according to findings are again more likely to display orthorexic traits than males. The prevalence may have also been affected by the recruitment method or by response bias, as individuals who agreed to take part in the study may have done so because of an interest in healthy eating.

Other studies recognize that in the current environment ON behaviours can often be seen as socially acceptable and even commendable [9] [10]. Healthy lifestyle choices are currently praised and therefore it may be difficult for both the measures to distinguish between following a currently fashionable diet and pathological eating patterns. The high average of HeOr in the sample may suggest the former, but the high ORTO-15 prevalence and high OrNe scores suggest the latter. Brytek-Matera et al. explain that the appeal of healthy eating practices could generate an overestimation of ON behaviours in self-reporting measures, which could further explain the high prevalence in the current study [9].

The argument that ORTO-15 over-pathologises what could be deemed normative eating behaviour and detects individuals who are simply on diets does not explain the high scores generated for HeOr and OrNe [11] [12]. The TOS scale was developed in order to quantify both non-clinical healthy eating and pathological eating behaviours. Hence, if the sample were saturated with individuals on healthy diets who did not experience any of the detrimental effects of dieting, we would have expected high HeOr scores and low OrNe. Even so, the high prevalence found in the current sample raises the question whether ON could truly be deemed as pathological if it is highly present in a non-clinical population.

The findings from the reliability analysis suggested that the TOS measure has high internal consistency and seems to measure what it is supposed to do. Nevertheless, statistically significant differences between the ON scores of different demographics and between Instagram users and non-Instagram users were only apparent when using the ORTO-15 and not when using the TOS scale. This may be explained by the greater variance in ORTO-15 scores as the questions posed on the measure may have generated more polarised responses than the TOS. This may have been due to the different format of the ORTO-15 and TOS questions.

The high prevalence in the sample could also be explained by the large proportion of social media users, and specifically users of Instagram (29.67%), in the sample, with only 3.46% of the sample not using any social media platform. The content depicted on social media, and described in the probing questions, seems to have a direct effect on participants' view of themselves, their concern with health, their body image and food intake. Participants reported an abundance of health-promoting content online which encouraged them to eat healthy foods and to exercise in order to adhere to the socio-cultural ideals of health promoted online. Quantitative findings confirmed a link between social media and eating patterns, suggesting that individuals who accessed social media more frequently were more likely to describe their interest in healthy food as an important part of themselves and the way they understand the world.

Further results offered evidence to support Turner and Lefevre's findings of a link between Instagram use and ON, as Instagram users in the sample were more likely be within the orthorexic range than non-Instagram users [5]. This was further supported in the qualitative segment, as participants described this specific platform as having a greater influence due to its visual format.

Most studies examining the effect of social media on eating patterns have related adverse eating behaviours to online appearance-based comparisons and body image issues. These were noticeable in the current study as participants described idealised images of unrealistic body types adhering to the slim and toned physique that denotes healthism [13]. The high prevalence of ON in the sample and the responses of participants who report appearance-based comparisons suggest that weight and shape concerns may in fact be a factor in ON. Whilst Bratman previously highlighted the lack of weight and shape concerns in ON, the latest proposed diagnostic criteria take body image into consideration [14].

Although many participants referred to idealised images of unrealistic bodies and constant image-based comparisons, this was not the only type of content that affected their eating patterns. Preoccupation with food has been related to eating disorders and ON and the rise of social media use and mobile access has contributed to increased exposure to images of food, recipes and cooking channels [1]. The online popularity of food is clear, as the hashtag '#food' is one of the 25 most popular hashtags on Instagram and was the second most popular content type on participants' feeds. Studies have indicated that social media could be used to influence actual food selection and participants reported cravings for specific foods when being exposed to this content online [15]. Participants added that they were likely to act upon these cravings, but described these behaviours, especially when the cravings were for what they deemed as unhealthy foods, as negative and guilt-inducing.

Findings also suggest that individuals adhering to strict and restrictive diets in pursuit of health may be more prone to expose themselves to this content, as is evident in other eating disorders. Acting upon the cravings induced by food-related online content could lead to negative emotions. This interpretation of cravings and the outcomes of acting upon them could suggest that ON is similar to other eating disorders, and supports the transdiagnostic nature of eating disorders. It could be suggested that the combination of unrealistic body images and the glamourisation of food on social media, specifically Instagram, generates an environment that promotes detrimental food thoughts and behaviours outlined in new ON criteria.

Conclusion

The study profited from a diverse sample population in regard to the age, gender, level of education and country of residence of participants; this was not present in prior research, as most previous studies regarding ON were limited to specific age groups, professions or student groups and cultures. One of the study's strengths was the large sample size, which was a result of the online survey employed. An online survey questionnaire was considered as the most effective method, given the study's methodology and epistemological positioning as well as its time and cost restraints.

However, online surveys are not without their shortcomings. As the setting of this method is uncontrolled, participants are able to complete the measure wherever they wish. Participants may have been able to complete the questionnaire without any interruptions or distractions, or may have filled it out whilst preoccupied with other tasks.

Self-selection bias in opportunity samples is also unavoidable, as participants who are interested in the topic of healthy eating or social media use were more likely to take part in the study. This may have resulted in a sample that was more concerned about healthy eating than the average population, and could explain the high prevalence of ON in the sample.

Participants may have not completed the whole questionnaire as it may have taken them longer to complete than expected, they may have been interrupted or they may not have felt comfortable answering certain questions. In the current study, the TOS measure was presented first, followed by the ORTO -15 scale, followed by a social media use measure and finally the probing questions. Participants had to complete two measures on quite similar content. This repetition may have been off-putting to participants and may have further contributed to order effects. Future studies could control for potential order effect by randomising the order of the measures for each participant.

Responses regarding the probing questions were of particular concern, as many of the themes were related to the thoughts, emotions and behaviours outlined in the ON measures. It is uncertain whether the questions provided theoretical support for the measures or were simply a result of recency and priming effects. The study could possibly have benefitted from fewer probing questions, which may have encouraged participants to elaborate on just one aspect of the link between eating patterns and social media use.

The findings from the current study regarding the link between age and ON suggest that younger participants are more prone to ON than older participants. Further studies could attempt to assess whether these findings reflected an existing inclination for healthy eating amongst younger individuals who tend to be more susceptible to online trends.

The notion that the ORTO-15 detects and over-pathologises individuals who are on diets is refuted by the high HeOr and OrNe scores in the sample [12]. Further studies could employ both measures, in order to successfully distinguish between the proportion of individuals pathologised as ON sufferers by ORTO-15 and individuals who are simply concerned with healthy eating without the detrimental effects of ON. Although results indicated that the TOS is a valid and reliable measure, it needs to be used in more studies in order further to quantify its ability to generate repeatable and consistent outcomes in different samples. Despite the current study's attempts to make up for the shortcomings of the lack of official diagnostic criteria and an official ON measure by utilising two measures and qualitative analysis, ON research and the current study have been limited due to this.

Furthermore, previous studies and the responses from participants in the current study all seemed to agree with the increased influence of the visual format of Instagram. Further work could explore possible effects of varying Instagram content, in order to provide further insight into whether images, videos, IGTV or live feeds are more influential. Finally, the findings regarding food content and cravings suggest that there is an abundance of food cues online that appear to affect individuals' real-life food choices. The combination of unrealistic body images and the online glamourisation of food may be contributing to an environment that promotes detrimental food thoughts and behaviours. Studies examining the variety of content online, not solely focussed on fitspiration or the effect on body image, may be beneficial to gain a deeper understanding of social media's contribution to ON.

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