

# Is students' qualitative feedback changing, now it is online?

Gakhal, S. & Wilson, C.

Author post-print (accepted) deposited by Coventry University's Repository

## Original citation & hyperlink:

Gakhal, S & Wilson, C 2019, 'Is students' qualitative feedback changing, now it is online?' *Assessment and Evaluation in Higher Education*, vol. 44, no. 3, pp. 476-488.

<https://dx.doi.org/10.1080/02602938.2018.1521371>

DOI 10.1080/02602938.2018.1521371

ISSN 0260-2938

ESSN 1469-297X

Publisher: Taylor and Francis

*This is an Accepted Manuscript of an article published by Taylor & Francis in Assessment and Evaluation in Higher Education on 30/10/2018, available online: <http://www.tandfonline.com/10.1080/02602938.2018.1521371>*

Copyright © and Moral Rights are retained by the author(s) and/ or other copyright owners. A copy can be downloaded for personal non-commercial research or study, without prior permission or charge. This item cannot be reproduced or quoted extensively from without first obtaining permission in writing from the copyright holder(s). The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the copyright holders.

This document is the author's post-print version, incorporating any revisions agreed during the peer-review process. Some differences between the published version and this version may remain and you are advised to consult the published version if you wish to cite from it.

## **Research Article**

### **Is students' qualitative feedback changing, now it is online?**

Sandeep Gakhal<sup>a\*</sup> and Caroline Wilson<sup>b</sup>

*<sup>ab</sup>Research Centre for Global Learning: Education and Attainment, Coventry University*

\*For correspondence please contact [Sandeep.Gakhal@coventry.ac.uk](mailto:Sandeep.Gakhal@coventry.ac.uk)  
Dr Caroline Wilson [Caroline.Wilson@coventry.ac.uk](mailto:Caroline.Wilson@coventry.ac.uk)

#### ***Notes on contributors***

Sandeep Gakhal and Dr Caroline Wilson work as part of the Research Centre for Global Learning: Education and Attainment at Coventry University, UK. Sandeep Gakhal, a Research Assistant, undertakes research in student satisfaction, teaching excellence and equity and attainment. Dr Caroline Wilson, a Research Fellow, is a social scientist whose areas of expertise include behaviour change and the student experience.

## **Abstract**

Student feedback can be used to enable institutions to achieve the best possible outcomes for students through informing changes which enhance the quality of teaching and learning. Following the introduction of an online survey platform to gather student feedback at a top-performing UK university, anecdotal concerns raised by academics suggested students were being more critical. This exploratory study investigated the effects of switching from a paper to an online survey by comparing the open-ended responses between the two methods of collection. The main contribution of this study is the development of an analytical framework which can be used by other institutions to evaluate student comments, in order to understand and improve the student experience. Three key findings in this study were uncovered. Firstly, the quality of student feedback is not undermined by a switch to a more efficient online collection. Secondly, student comments via both methods of collection predominately continue to focus on fulfilling basic needs, such as study resources. Finally, a small number of comments online revealed a lack of behavioural constraint and were considered to be inappropriate. These findings have important policy implications for the global higher education sector, highlighting the need for students to be given guidance on providing constructive feedback.

**Key words: Student surveys, social media, online disinhibition, higher education.**

## **Introduction**

Advances in technology are enabling greater collection and use of consumer data than ever before, in a wide range of sectors (Competition and Markets Authority 2015). In the higher education sector, many institutions have moved from paper-based to online student feedback surveys to assess the quality of teaching (Treischl and Wolbring 2017). The potential benefits of switching to online surveys include greater flexibility and convenience (Anderson, Cain, and Bird 2005; Stowell, Addison, and Smith 2012), reduction in time (Donovan, Mader, and Shinsky 2006) and administrative and processing costs (Mau and Opengart 2012). Furthermore, online surveys result in more comprehensive comments (Burton, Civitano, and Steiner-Grossman 2012) as well as enabling the rapid turnaround of results (Crews and Curtis 2011). That being said, when switching to online communication, students may be adopting the informal language found in social media interactions (Rowe 2014). Research has shown that users are likely to feel less constrained when communicating online, otherwise known as the ‘online disinhibition effect’ (Lapidot-Lefler and Barak 2012). At extremes, this disinhibition can involve the use of offensive language, aspersions and threatening behaviour that individuals would typically not engage in offline (Suler 2004), with anonymity being shown to be a major causal factor (Lapidot-Lefler and Barak 2012). Equally, student feedback in online surveys has been found to be ‘abusive’ and ‘unprofessional’ (Tucker 2014). This coincides with concerns aired by teaching staff at a top-performing UK university (awarded a gold rating in the Teaching Excellence Framework (TEF) in 2017, as published by the Higher Education Funding Council in England) that students are being more critical online. This raises questions around whether students may be adopting the types of disinhibited behaviours, typically associated with social media platforms such as Facebook, when using their own electronic devices to provide feedback.

Despite the dramatic impact that social media has had on the way individuals connect with one another (Rowe 2014), the associated links between behaviours adopted on social media platforms and survey feedback are yet to be explored. This is particularly important as student surveys are commonly used in higher education (Moskal, Stein, and Golding 2016) in order to inform changes to teaching and learning (Tucker 2014); therefore the effects of moving to an online survey platform should be investigated. Consequently, this study examines the implications of seeking more efficient ways to gather student feedback, by specifically exploring links to the ways in which individuals communicate with one another through social media platforms.

## **Literature Review**

### ***Comparing paper with online student surveys***

Various studies have compared differences in paper and online surveys by, for example, exploring response rates, ratings, length of comments and whether such comments are positive/negative (e.g. Morrison 2011; Stowell, Addison, and Smith 2012; Perrett 2013). Such studies have revealed that students provide longer and more detailed comments in online surveys (e.g. Fike, Doyle, and Connelly 2010; Burton, Civitano, and Steiner-Grossman 2012). Reasons for this include students possibly being able to type comments more quickly, as opposed to writing them by hand, and without the fear of being identified (Fike, Doyle, and Connelly 2010). There are mixed findings in regards to the tone of student comments, with some studies indicating no differences (e.g. Morrison 2011; Stowell, Addison, and Smith 2012) whilst others report more positive (e.g. Burton, Civitano, and Steiner-Grossman 2012) or more negative comments (Donovan, Mader, and Shinsky 2006) in online surveys. In a separate study, Tucker (2014) investigated 30,684 comments from 17,855 online surveys, in which 13 comments were considered as abusive (e.g. racist or sexist) and 46 comments as

unprofessional; (use of terminology not considered appropriate in a professional environment, e.g. ‘crap’). Flodén (2017) found that teachers who receive negative feedback are likely to experience adverse feelings and also implement unwarranted changes, which reinforces the need to understand the implications of gathering feedback online.

### ***Social media platforms and communication***

Social media has grown in popularity and includes networking sites such as Facebook (Ryan et al. 2017), which reported over one billion daily active users at the end of 2017 (Facebook 2018). While the use of social media is clearly popular, there is a concern that it has resulted in negative communicating practices which are both derogatory and offensive (Rowe 2014). Online and offline behaviours can be different, with users releasing suppressed negative emotions and mirroring those behaviours they would ideally like to display in real-life (Vural 2015). Controversial content has been found on student Facebook profiles which include profanity and inappropriate material (Shelton and Skalski 2014). Other social media platforms such as Snapchat are gaining momentum (Knight-McCord et al. 2016), with adolescents and young adults in particular leaving Facebook for Snapchat (Sarkar et al. 2018). Snapchat allows users to share messages that are deleted after a given period of time (Piwek and Joinson 2016) and has been linked to sexually explicit and inappropriate content (Utz, Muscanell, and Khalid 2015). In light of the inappropriate behaviours exhibited on such social media platforms, students may be adopting similar behaviours when student satisfaction feedback is collected through an online survey platform.

### *Uses and gratifications and Maslow's hierarchy of needs*

The 'uses and gratifications' (U&G) theory and Maslow's 'hierarchy of needs' can be adapted to evaluating student feedback. Both frameworks are suitable for exploring the implications of switching to an online survey platform and gaining a better understanding of students' needs. U&G traditionally focuses on understanding the reasons individuals interact with various forms of media such as television and radio (Weiyang 2015). The approach has evolved over time and has been applied specifically to study the use of social media (Whiting and Williams 2013). Amongst the many different forms of social media, Leung (2013) focused on identifying the primary motivations for using online forums, blogs and Facebook, across different generations. The five gratifications sought were identified as follows: (1) 'social/affection needs' (2) 'venting negative feelings' (3) 'recognition needs' (4) 'cognitive needs' and (5) 'entertainment needs'. In addition, particularly the net generation, (those born in the digital age), were found to often turn to online forums to vent negative feelings. Using Leung's five gratifications, Morehead, O'Hallarn, and Shapiro (2016) analysed comments posted on an online forum, and due to the intensity surrounding venting negative feelings, suggested that such platforms do provide an avenue for disinhibited interactions to occur.

While U&G focuses on the gratifications that individuals seek when using social media, Maslow's needs-based theory (1943) instead focuses on the specific needs of individuals in everyday life, with some taking priority over others. Maslow's needs (1943) are organised in the form of a pyramid, it starts with the most fundamental need for survival, with individuals working towards satisfying basic needs, before reaching to fulfill higher-order needs. The five different levels are as follows: (1) Physiological needs – basic necessities required for survival (i.e. food, water and accommodation);

(2) Safety and security needs - includes good health, personal stability and financial security; (3) Love and belonging - acceptance and affection sought through personal relationships and engaging in social groups; (4) Self-esteem - self-worth, accomplishment and being valued by others, and (5) Self-actualisation - personal growth and fulfilment. The needs based theory has been applied across various sectors including social media (Choudhury and Alani 2014), which demonstrates that it can also be adapted to evaluate student feedback and explore the switch to online collection.

### ***Aims of the study***

As discussed earlier, studies have compared the differences between paper and online surveys and the ways in which individuals interact with one another on social media networking sites. However, to date, no known studies have explored the associated links between survey feedback and the behaviours adopted on social media networking sites. This is of particular interest due to the concerns that students at the UK university selected in this study are being more critical since moving to an online survey platform. Furthermore, given the importance of student surveying in enhancing the student experience, investigating the effects of switching to an online platform has significant implications for institutions both globally and the sector as a whole. Hence, this study explored the following questions:

- (1) Are students providing longer and more detailed comments online than on paper?
- (2) Are students providing more negative comments online compared to paper?
- (3) Do student comments online and paper differ according to students' needs?
- (4) Do student comments exhibit online disinhibition?



## **Materials and methods**

### ***Sample***

This study examined student comments collected through paper and online module evaluation surveys at a UK university. Fifty-two modules surveyed online in 2015-16 were compared with the same 52 modules surveyed on paper in 2014-15. In addition to the 104 modules, a further 52 modules surveyed on paper in 2015-16 were analysed, the same year the online survey was piloted, in order to address any threats to the study's internal validity (Robson 2002). Specifically, whether any differences in feedback were due to changes to the students' learning environment over time rather than the switch to online collection. In total, the open-ended responses of 156 selected modules across four faculties were analysed using both quantitative and qualitative methods.

### ***Instrument***

Student satisfaction feedback is collated anonymously across the institution by asking students to complete a survey for each of their modules. The survey consists of 19 closed questions, ranging from definitely agree to definitely disagree and includes a 'not applicable' option. The questions are grouped according to the following themes: teaching, online tools, assessment and feedback, academic support, organisation and management and learning resources. An additional question regarding students' overall satisfaction is also included. At the end of the survey there are two open-ended questions (a) Please identify up to three things you think are good about this module (b) What changes to this module or its delivery would improve your learning?

The online survey, hosted by the Bristol Online Survey platform, was trialled in autumn 2015. During this period some students completed paper surveys and others completed online surveys. Following the autumn collection period, the institution switched to

gathering student feedback fully online. All modules surveyed online in the autumn of 2015-16 were randomly sorted using Microsoft Excel 2013. The resultant modules were then reviewed to determine whether they had been surveyed during the same period of the previous year on paper (2014-15). Where matches were found, both sets of open responses were transcribed and uploaded into NVivo to enable a comparison to be drawn.

### ***Procedures***

Firstly, responses to the two open-ended questions were block-coded according to whether they were positive, negative or unclear (Table 1). While responses to the two questions (three good things/changes to improve) may fall naturally into positive or negative categories, there were exceptions, with some students mis-reading the questions and/or combining responses to both questions. Any comments that were both mixed, e.g. *‘Textbook is good for revision and when doing essays however not so much for actually learning the topic initially’*, and/or incomplete were coded to unclear.

[Insert Table 1]

Secondly, responses to the two open-ended questions (in this round each of the comments were coded separately, not block-coded, i.e. each of the three good things) were categorised according to students’ needs, irrespective of whether they were positive/negative.

The authors of this study developed a framework for categorising student comments by adapting the gratifications that individuals seek to fulfil in their daily lives and when using social media. Maslow’s two lower level human needs (‘physiological needs’ and ‘safety and security needs’) and Leung’s (2013) five specific needs for using social

media ('social/affection needs', 'venting negative feelings', 'recognition needs', 'cognitive needs' and 'entertainment needs') were adapted due to their relevance and suitability, as discussed earlier. The gratification categories relating to students' needs are detailed in Table 2.

[Insert Table 2]

Leung's (2013) 'recognition needs' refer to individuals seeking admiration from others when using social media. In relation to student feedback, this category was broadened to include comments relating to employability skills/personal and professional development. This was due to student comments being less concerned with attracting attention or admiration, but instead with their skills, abilities and personal qualities. Furthermore, student comments coded to the venting negative feelings category, which aired discontent, anger or frustration, were also reviewed against the university's student charter to determine if there was any evidence of disinhibited behaviours. The student charter outlines the responsibilities of the university and its expectations of students to behave in ways that are both respectful and courteous towards fellow students and university staff. Although the student charter is not a binding contract, students are encouraged to read the student charter prior to their arrival.

Thirdly, to assess the level of agreement between the authors in terms of coding the responses, Cohen's kappa coefficient (1968) was calculated using a 'coding comparison query' in NVivo. There is no agreed benchmark for coder agreement, but above 80-90% agreement is considered as a 'minimum' (Saldana 2016:37). In accordance with

Cicchetti and Sparrow (1981) and subsequently Cargo et al. (2015) kappa values were evaluated as fair (0.40-0.59), good (0.60-0.74) or excellent (0.75-1.0).

Finally, to compare differences between the length of comments in paper and online surveys, the total number of words used were calculated and a Mann-Whitney U test was undertaken. Chi-square tests were also performed to determine if there is a relationship, that is, a difference between the type of survey and the tone of comments (positive, negative or unclear) as well as the different types of feedback relating to students' needs.

## **Results**

The open-ended comments provided in paper and online surveys were analysed using NVivo, as well as the levels of agreement between coders. Statistical analyses were also performed to assess differences between the two methods of data collection according to the outcomes of interest. The results are presented in the subsequent sections.

### ***(1) Number of written student comments (Paper vs Online)***

From 52 modules surveyed on paper, there were a total of 1392 respondents and for the same 52 modules surveyed online there were 1259 respondents. There were a similar number of respondents for both methods of collection. Students used a total number of 14,028 words when providing comments to the open-ended questions on paper, compared to 18,294 words when providing comments online. A Mann-Whitney U test was performed to evaluate the differences between the total number of words according to the method of collection and the analysis showed no statistically significant differences ( $U=1089$ ,  $p=0.087$ ).

### ***(2) Number of positive and negative student comments – (Paper vs Online)***

Chi-square analysis determined whether there were differences in the proportion of comments (positive, negative and unclear) according to the type of survey. As illustrated in Table 3, the paper survey had an observed frequency of 811 positive comments and an expected frequency of 888. In contrast, the online survey had an observed frequency of 881 and an expected frequency of 804. The differences between the observed and expected frequencies were found to be statistically significant

( $\chi^2=39.29$ ,  $df=1$ ,  $p<0.001$ ), with the online survey being more likely to elicit positive comments than the paper survey. Similarly, this was also the case for negative comments ( $\chi^2=10.12$ ,  $df=1$ ,  $p=0.001$ ). No statistical differences were found relating to the type of survey and unclear comments.

While the findings demonstrate that positive and negative comments statistically significantly differed according the type of survey, effect size measures were used to establish whether these differences were meaningful. Cohen (1988:79) suggested that phi effect sizes should be interpreted as follows: 0.1 - small effect, 0.3 - medium effect and 0.5 - large effect. In line with these guidelines, only effect sizes 0.1 or above in this study are considered as noteworthy. Phi indicated a small effect size (-.122) for positive comments and a negligible effect size (-.062) for negative comments.

[Insert Table 3]

### ***Positive and negative comments – Paper comparative group***

To determine if any differences in feedback may be due to changes to the students' learning environment between 2014-15 and 2015-16, rather than the switch to an online survey platform, 52 modules surveyed on paper in 2015-16 were also analysed (the same year online collection was piloted). These were compared with the 52 modules surveyed on paper in 2014-15. In total, there were 1392 respondents on paper in 2014-15 and 1874 in 2015-16. A chi-square analysis indicated that the proportion of positive comments ( $\chi^2=26.38$ ,  $df=1$ ,  $p<0.001$ ) and negative comments ( $\chi^2=30.57$ ,  $df=1$ ,  $p<0.001$ ) on paper in 2015-16 were statistically significantly different to those on paper in 2014-15 (Table 4). These differences had negligible effect sizes, (-.090 for

positive comments and -.097 for negative comments), which in turn alleviates concerns regarding internal validity.

[Insert Table 4]

### ***(3) Comments relating to students' needs (Paper vs Online)***

In respect of the 104 modules (paper vs online), further analysis of the student comments was undertaken. All comments, irrespective of tone, were coded according to students' needs, using the analytical framework (Table 2) developed by the authors, to better understand the student experience. The majority of the comments were successfully coded. Any comments that could not be coded were categorised as 'other needs'. A second round of coding was undertaken in regards to the venting negative feelings category due to it overlapping with other categories. For instance, comments related to physiological needs which aired discontent, anger or frustration were also coded to venting negative feelings.

Chi-square analysis revealed that the proportion of comments relating to physiological needs ( $\chi^2=41.42$ ,  $df=1$ ,  $p<0.001$ ), cognitive needs ( $\chi^2=39.01$ ,  $df=1$ ,  $p<0.001$ ), social needs ( $\chi^2=9.94$ ,  $df=1$ ,  $p=0.002$ ), safety and security needs ( $\chi^2=8.08$ ,  $df=1$ ,  $p=0.004$ ), entertainment needs ( $\chi^2=5.93$ ,  $df=1$ ,  $p=0.015$ ), venting negative feelings ( $\chi^2=6.84$ ,  $df=1$ ,  $p=0.009$ ) and other needs ( $\chi^2=6.10$ ,  $df=1$ ,  $p=0.014$ ) were statistically significantly different online, compared to paper. There were more likely to be comments relating to the gratification categories online than on paper except for recognition needs ( $\chi^2=0.293$ ,  $df=1$ ,  $p=0.588$ ), where there appeared to be a statistically similar pattern of comments.

As discussed earlier, estimating the effect sizes of statistically significant results is an important consideration. Effect sizes were negligible for social needs (-.061), safety and security needs (-.055), entertainment needs (-.047), other needs (-.048) and venting negative feelings (-.051). Small effect sizes were found for physiological needs (-.125) and cognitive needs (-.121).

[Insert Table 5]

- *Physiological and cognitive needs*

Table 5 illustrates that comments relating to physiological and cognitive needs are most common. This is reflected by the frequency of such comments on both paper and online. Students typically refer to the absence of, or comment on, basic resources, such as textbooks and physical hand-outs, as well as general housekeeping issues such as timekeeping. For both paper and online, student comments relating to cognitive needs tended to focus on three key themes. Firstly, stimulating and sustaining students' interest, e.g. *'maybe more activities such as a role play as sometimes studnets [sic] may lose engagement as majority of it is just talking'*, secondly, students' gaining a clear understanding of the content being taught, and finally broadening and deepening students' knowledge, e.g. *'Gives us greater in depth explanation of how emergency services operates'*.



- Social and affection needs/ Safety and security needs

The comments coded to social and affection needs were very much focused on support, feedback, passion and enthusiasm, e.g. *‘Both teachers are friendly, enthusiastic and always willing to help’*. Safety and security needs particularly emphasised clear expectations, structure and organisation, e.g. *‘Knowing in advance what the coursework is, whan [sic] its [sic] due and whats [sic] required’*.

- Recognition and entertainment needs

There were few comments in regards to entertainment and recognition needs. Entertainment needs refers to various/all aspects of the module being entertaining, pleasurable and enjoyable. Similarly, there were fewer comments for recognition needs regarding professional development and work experience skills, e.g. *‘Working in groups with people we arent [sic] used to working with to help us in the future’*.

- Venting negative feelings

Thirty-six comments provided on paper were coded to the venting negative feelings category, in comparison to 56 comments online. From 36 comments provided on paper, 17 comments were directly concerned with the poor management of students including late comers and disruptive students, e.g. *‘Making sure people are quyite [sic] on [sic] lectures so that others can learn’*. Eleven comments were critical of the teachers, e.g. *‘Teachers need to fully understand themselves what they are teaching’*, and two related to lecturers needing to be given more respect. The remainder of the comments concerned the lack of structure and organisation of the module.

The 56 comments provided online were rather personal, consumer-orientated and reflected the informal nature of language typically found on social media platforms. Twenty-four (almost half) of the comments were directly critical of teachers, teacher's personal attributes, skillset and competence. For example, '*[Name] makes mistakes in her lectures and seminars that she fails to recognise*'. The remainder of the 56 comments varied in content and were associated with, for instance, the module as a whole or its teaching content, e.g. '*make it more [name of subject] related as that's the course I came to study*'. Furthermore, there were issues associated with resources, e.g. '*Incomplete lecture notes online can be inconvenient in the event of lost notes*', and fellow students, e.g. '*Certain students interrupt lectures with unnecessary questions*'. Amongst the comments, there was also evidence of students viewing themselves as customers, e.g. '*The lecturer goes away for one day. Means one lecture day less. Unversly [sic] should have [sic] compensate the time lost. E.g. [sic] extra teaching days*'.

#### ***(4) Student comments – Online disinhibition***

Student comments on both paper and online coded to the venting negative feelings category were also reviewed against the university's student charter, to investigate any evidence of disinhibited behaviours. Eight student comments online demonstrated evidence of disinhibited behaviours, thus breaching the student charter, and were deemed to be inappropriate. For example, '*I believe that the seminar leader does not have the necessary skill and talent to be lecturing*'.

### ***Inter-rater reliability***

Inter-rater reliability was performed on a sample of 24 modules with comments coded according to positive or negative, which demonstrated 95.51% agreement and a kappa coefficient of .78. Such a high level of agreement was observed due to the majority of the feedback being clearly signposted by students as 'three good things about the module' and 'changes to improve the module'. As such, coding was subsequently completed by one of the authors.

The same principles, as above, were also applied to the gratification categories relating to students' needs, with an inter-rater agreement of 95.32% and a kappa coefficient of .81. The high inter-coder reliability is considered to be due to a detailed discussion, prior to coding, around the gratification categories (Table 2). As a result, student comments were much easier to routinely code.

### **Discussion**

This exploratory study had four main objectives, with the overarching aim to investigate the implications for the university and the higher education sector in regards to switching from paper to online surveying.

The first objective was to investigate whether students were providing longer and more detailed comments online than on paper. Students used more words online, compared to paper, when responding to open-ended questions, but this difference was not found to be statistically significant. Therefore, the findings of this study are in part consistent with other studies which have demonstrated that students provide more comprehensive comments online (e.g. Fike, Doyle, and Connelly 2010; Burton, Civitano, and Steiner-Grossman 2012).

The second objective was to explore whether the comments provided online were more negative, compared to paper. Despite other studies reporting mixed findings, (e.g. Donovan, Mader, and Shinsky 2006; Burton, Civitano, and Steiner-Grossman 2012) this study found that the online survey was more likely to elicit both positive and negative comments compared to paper. The effect size was small in regards to positive comments and negligible for negative comments. These findings alleviate the concerns of teaching staff that students are being more critical since transitioning to an online survey. Furthermore, they reassure stakeholders and academic institutions that switching to a more efficient online collection does not undermine the process.

The third objective was to determine whether student comments online and paper differ according to students' needs. An analytical framework, underpinned by the uses and gratifications (U&G) theory and Maslow's hierarchy of needs, was developed in order to categorise student comments. In most instances, the adapted framework was found to be well suited for categorising student comments. The proportion of comments relating to almost all of the gratification categories (except for recognition needs), were statistically significantly different online compared to paper, with more likely to be observed online. Effect sizes were negligible for all of the gratification categories, except for physiological and cognitive needs which were considered small.

Comments relating to physiological needs (i.e. study resources and timekeeping), and cognitive needs (i.e. invoking interest and engagement) were most common in regards to both methods of collection. Within Maslow's model, satisfying physiological needs is most important, therefore if an individual is most concerned by physiological needs all others may become absent or ignored (Maslow 1943). Equally, if students' basic

study needs have not been fulfilled this may impact on their learning experiences and levels of engagement, and prevent them from focusing on other needs. For example, fewer comments in comparison to physiological needs were coded to recognition needs and this category was broadened to include personal development and employability skills. Given the need for graduates to be equipped with a wide range of skills and experience in a competitive labour market (Beaumont, Gedye, and Richardson 2016), more comments on this may have been expected. With student satisfaction remaining high on the agenda due to its impact on university league tables and the Teaching Excellence Framework (TEF) (Gakhal, Wilson, Broughan, and Sparks 2017), a key finding of this study is that meeting students' basic needs continues to be of great importance. This underlines the importance of using the framework developed in this study to categorise student comments according to their needs. Furthermore, it highlights that irrespective of various initiatives to improve the student experience; first and foremost institutions must ensure that students' basic needs are being met.

The final objective of this study was to determine if there was any evidence of the online disinhibition effect when switching to an online survey platform to gather student satisfaction data. All comments coded to the venting negative feelings category were reviewed in line with the university's student charter to reveal any disinhibited behaviours. After reviewing all of the comments coded to the venting negative feelings category, eight comments provided online (none on paper) were not found to be in line with the behaviours described in the student charter and thus deemed to be inappropriate. This is similar to previous findings (Tucker 2014). Students appear to be less disinhibited when providing feedback online, demonstrating the value of the online platform in providing an avenue for students to provide open and honest evaluations

which can enable the most improvements to be made. However, such evaluations must also be constructive. Providing students with guidance would encourage a constructive feedback culture in higher education institutions and support students as future employers/employees in preparing for performance appraisals. At the same time, it would also support an inclusive workplace that is respectful to all, which is particularly important given that teachers who receive negative feedback are likely to experience adverse feelings (Flodén 2017). There would also be value in the student charter explicitly referring to providing constructive feedback and for students to be asked to sign the student charter to confirm that they have reviewed the document.

While the findings of this study offer new insights into links between online survey platforms, social media communications and, evaluating student feedback, it has some limitations. The effect sizes of the statistical significant findings were in some cases not interpreted as meaningful and therefore not considered as important. That being said, this study was primarily undertaken due to concerns aired by teaching staff that students were being more critical since transitioning to an online survey and this does not appear to be the case. No meaningful differences were found between online and paper in regards to the proportion of negative comments. However, guidance on providing constructive feedback has been recommended on the basis that a small number of comments online (coded to the venting negative feelings category) demonstrated disinhibited behaviours.

Students who completed the online and paper surveys for each module did not all provide open-ended comments; nevertheless the comments provided were representative of students' opinions. Not all of the student comments could be coded to

the gratification categories and instead were coded to 'other needs'. The lower number of comments coded to entertainment needs suggests that in the future it would not be useful to retain entertainment needs within the framework. Although fulfilling entertainment needs is associated with online communication, it does not appear to be an area of concern and thus has limited value in terms of improving the student experience. In this study, the comments in the venting negative feelings category were reviewed against the student charter to explore whether the switch to an online survey platform facilitated disinhibited behaviours. However, if this is not the intention then this category is not required, as the comments coded within this category were also coded to the other categories. Despite its limitations, the framework provides a useful and innovative approach to further understanding and improving the student experience.

## **Conclusion**

This is the first known exploratory study to have examined student feedback through a lens of social media uses and gratifications. It offers several findings of relevance to both the institution examined in this study and the wider global sector. Using student feedback from a single UK institution, this study demonstrates the way in which a novel and systematic approach can be undertaken to make significant use of qualitative comments in order to implement change and improve the quality of the student experience. This approach, along with quantitative measures, enables a more consistent approach in determining what students find most valuable and in turn identifying potential areas for improvement.

Further research could examine inter-relationships between the categories within the framework. This may include whether there is a 'hierarchy' of study needs, such as if students' basic needs are fulfilled, what other needs do students then seek to fulfil and in which order? The social and affection needs category presents challenges in recreating the same level of contact, clearly valued by students, within larger teaching groups or via online delivery. As a result, it would be worthwhile to compare online modules with traditional on-campus modules using the same framework, exploring the ways online modules differ. Finally, given that this exploratory study was primarily undertaken due to concerns raised by teaching staff, it would be interesting to examine the impact of student evaluations on teachers.

### **Funding details**

The study received no specific grant from any funding agency.

### **Declaration of interest of statement**

The authors do not have any conflicts of interest to declare regarding the research, authorship and publication of this article.

### **Data availability statement**

The data that support the findings are not publicly available due to the sensitivity and nature of the research.



## References

- Anderson, H. M., J. Cain, and E. Bird. 2005. "Online Student Course Evaluations: Review of Literature and a Pilot Study." *American Journal of Pharmaceutical Education* 69 (1): 34–43.
- Beaumont, E., S. Gedye, and S. Richardson. 2016. "'Am I Employable?': Understanding Students' Employability Confidence and Their Perceived Barriers to Gaining Employment." *Journal of Hospitality, Leisure, Sport and Tourism Education* 19: 1–9. doi:10.1016/j.jhlste.2016.06.001.
- Burton, W. B., A. Civitano, and P. Steiner-Grossman. 2012. "Online versus Paper Evaluations: Differences in Both Quantitative and Qualitative Data." *Journal of Computing in Higher Education* 24 (1): 58–69. doi:10.1007/s12528-012-9053-3.
- Cargo, M., I. Stankov, J. Thomas, M. Saini, P. Rogers, E. Mayo-Wilson, and K. Hannes. 2015. "Development, Inter-Rater Reliability and Feasibility of a Checklist to Assess Implementation (Ch-IMP) in Systematic Reviews: The Case of Provider-Based Prevention and Treatment Programs Targeting Children and Youth." *BMC Medical Research Methodology* 15:73. doi:10.1186/s12874-015-0037-7.
- Choudhury, S., and H. Alani. 2014. "Exploring User Behavior and Needs in Q & A Communities." In: *Proceedings of the European Conference on Social Media: ECSSM 2014, Academic Conferences and Publishing International Limited*, 80–89.
- Cicchetti, D. V., and S. A. Sparrow. 1981. "Developing Criteria for Establishing Interrater Reliability of Specific Items: Applications to Assessment of Adaptive Behavior." *American Journal of Mental Deficiency* 86 (2): 127–37.
- Cohen, J. 1968. "Weighted Kappa: Nominal Scale Agreement Provision for Scaled

- Disagreement or Partial Credit.” *Psychological Bulletin* 70 (4): 213–20.  
doi:10.1037/h0026256.
- Cohen, J. 1988. *Statistical power and analysis for the behavioral sciences*. 2nd ed.  
Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Competition and Markets Authority. 2015. “The Commercial Use of Consumer Data  
Report on the CMA’s Call for Information.” June 2015. Accessed 19 February  
2018.  
[https://gov.uk/government/uploads/system/uploads/attachment\\_data/file/435817/  
The\\_commercial\\_use\\_of\\_consumer\\_data.pdf](https://gov.uk/government/uploads/system/uploads/attachment_data/file/435817/The_commercial_use_of_consumer_data.pdf).
- Crews, T. B., and D. F. Curtis. 2011. “Online Course Evaluations: Faculty Perspective  
and Strategies for Improved Response Rates.” *Assessment & Evaluation in  
Higher Education* 36 (7): 865–78. doi:10.1080/02602938.2010.493970.
- Donovan, J., C. E. Mader, and J. Shinsky. 2006. “Constructive Student Feedback:  
Online vs. Traditional Course Evaluations.” *Journal of Interactive Online  
Learning* 9 (3): 283–96.
- Facebook. 2018. “Facebook Reports Fourth Quarter and Full Year 2017 Results.”  
January 2018. Accessed 1 March 2018.  
[https://s21.q4cdn.com/399680738/files/doc\\_news/Facebook-Reports-Fourth-  
Quarter-and-Full-Year-2017-Results.pdf](https://s21.q4cdn.com/399680738/files/doc_news/Facebook-Reports-Fourth-Quarter-and-Full-Year-2017-Results.pdf).
- Fike, D. S., D. J. Doyle, and R. J. Connelly. 2010. “Online vs. Paper Evaluations of  
Faculty: When Less Is Just as Good.” *The Journal of Effective Teaching* 10 (2):  
42–54.
- Flodén, J. 2017. “The Impact of Student Feedback on Teaching in Higher Education.”  
*Assessment & Evaluation in Higher Education* 42 (7): 1054–68.  
doi:10.1080/02602938.2016.1224997.

- Gakhal, S., C. Wilson, C. Broughan, and T. Sparks. 2017. "Evaluating student satisfaction at a top-performing UK university." *Student Engagement in Higher Education Journal* 1 (2): 54-70.
- Knight-McCord, J., D. Cleary, N. Grant, A. Herron, S. Jumbo, T. Lacey, T. Livingston, S. Robinson, R. Smith, and R. Emanuel. 2016. "What Social Media Sites Do College Students Use Most?" *Journal of Undergraduate Ethnic Minority Psychology* 2: 21–26.
- Lapidot-Leffler, N., and A. Barak. 2012. "Effects of Anonymity, Invisibility, and Lack of Eye-Contact on Toxic Online Disinhibition." *Computers in Human Behavior* 28: (2) 434–43. doi:10.1016/j.chb.2011.10.014.
- Leung, L. 2013. "Generational Differences in Content Generation in Social Media: The Roles of the Gratifications Sought and of Narcissism." *Computers in Human Behavior* 29 (3): 997–1006. doi:10.1016/j.chb.2012.12.028.
- Maslow, A. H. 1943. "A Theory of Human Motivation." *Psychological Review* 50 (4): 370–96. doi:10.1037/h0054346.
- Mau, R. R., and R. A. Opengart. 2012. "Comparing Ratings: In-Class (Paper) vs. Out of Class (Online) Student Evaluations." *Higher Education Studies* 2 (3): 55–68. doi:10.5539/hes.v2n3p55.
- Moskal, A.C.M., S. J. Stein, and C. Golding. 2016. "Can you increase teacher engagement with evaluation simply by improving the evaluation system?" *Assessment & Evaluation in Higher Education* 41(2): 286-300 doi:10.1080/02602938.2015.1007838.
- Morehead, C. A., B. O 'Hallarn, and S. L. Shapiro. 2016. "Tell Me How You Really Feel: Analyzing Debate, Desire, and Disinhibition in Online Sports News Stories." *International Journal of Sport Communication* 9 (1) 13–35.

doi:10.1123/IJSC.2015-0056.

- Morrison, R. 2011. "A Comparison of Online versus Traditional Student End-of-Course Critiques in Resident Courses." *Assessment & Evaluation in Higher Education* 36 (6): 627–41. doi:10.1080/02602931003632399.
- Perrett, J. J. 2013. "Exploring Graduate and Undergraduate Course Evaluations Administered on Paper and Online a Case Study." *Assessment & Evaluation in Higher Education* 38 (1): 85–93. doi:10.1080/02602938.2011.604123.
- Piwek, L., and A. Joinson. 2016. "'What Do They Snapchat about?' Patterns of Use in Time-Limited Instant Messaging Service." *Computers in Human Behavior* 54: 358–67. doi:10.1016/j.chb.2015.08.026.
- Robson, C. 2002. *Real World Research: A Resource for Social Scientists and Practitioner- Researchers*. 2nd ed. Oxford: Blackwell.
- Rowe, J. 2014. "Student Use of Social Media: When Should the University Intervene?" *Journal of Higher Education Policy and Management* 36 (3): 241–56. doi:10.1080/01587919.2014.899054.
- Ryan, T., K. A. Allen, D. L. Gray, and D. M. McInerney. 2017. "How Social Are Social Media? A Review of Online Social Behaviour and Connectedness." *Journal of Relationships Research* 8 (e8): 1–8. doi:10.1017/jrr.2017.13.
- Saldana, J. 2016. *The Coding Manual for Qualitative Researchers*. 3rd ed. SAGE Publications Ltd.
- Sarkar, U., G. M. Le, C. R. Lyles, D. Ramo, E. Linos, and K. Bibbins-Domingo. 2018. "Using Social Media to Target Cancer Prevention in Young Adults." *Journal of Medical Internet Research* 20 (6): e203.
- Shelton, A. K., and P. Skalski. 2014. "Blinded by the Light: Illuminating the Dark Side of Social Network Use through Content Analysis." *Computers in Human*

- Behavior* 33: 339–48. doi:10.1016/j.chb.2013.08.017.
- Stowell, J. R., W. E. Addison, and J. L. Smith. 2012. “Comparison of Online and Classroom-Based Student Evaluations of Instruction.” *Assessment & Evaluation in Higher Education* 37 (4): 465–73. doi:10.1080/02602938.2010.545869.
- Suler, J. 2004. “The Online Disinhibition Effect.” *CyberPsychology & Behavior* 7 (3): 321–26. doi:10.1089/1094931041291295.
- Treischl, E., and T. Wolbring. 2017. “The Causal Effect of Survey Mode on Students’ Evaluations of Teaching: Empirical Evidence from Three Field Experiments.” *Research in Higher Education* 58 (8): 904–21. doi:10.1007/s11162-017-9452-4.
- Tucker, B. 2014. “Student Evaluation Surveys: Anonymous Comments That Offend or Are Unprofessional.” *Higher Education* 68 (3): 347–58. doi:10.1007/s10734-014-9716-2.
- Utz, S., N. Muscanell, and C. Khalid. 2015. “Snapchat Elicits More Jealousy than Facebook: A Comparison of Snapchat and Facebook Use.” *Cyberpsychology, Behavior, and Social Networking* 18 (3): 141–46. doi:10.1089/cyber.2014.0479.
- Vural, Ö.F. 2015. “Positive and Negative Aspects of Using Social Networks in Higher Education: A Focus Group Study.” *Educational Research and Reviews* 10 (8): 1147–66. doi:10.5897/ERR2015.2144.
- Weiyan, L. 2015. “A Historical Overview of Uses and Gratifications Theory.” *Cross-Cultural Communication* 11 (9): 71–78. doi:10.3968/7415.
- Whiting, A., and D. Williams. 2013. “Why People Use Social Media: A Uses and Gratifications Approach.” *Qualitative Market Research: An International Journal* 16 (4): 362–69. doi:10.1108/QMR-06-2013-0041.