

1 **Title:** Roles and Functions of a Non-Academic Medical School Facebook Page from the Student Perspective:
2 A Study of Usage and Survey Data

3
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5
6 **Author names:**

- 7 1. Qi Zhuang Siah
- 8 2. Ella Sykes
- 9 3. Caitlin Golaup
- 10 4. Julie Browne

11
12 **Affiliations:**

- 13 1. Final Year Medical Student. School of Medicine, Cardiff University, Heath Park, Cardiff, CF14
14 4XN, UK
- 15 2. Final Year Medical Student. School of Medicine, Cardiff University, Heath Park, Cardiff, CF14
16 4XN, UK
- 17 3. Student Engagement & Recruitment Team. Cardiff University School of Medicine, Centre for Medical
18 Education, Cardiff, CF14 4YU, UK
- 19 4. Senior Lecturer in Academic Practice. Cardiff University School of Medicine, Centre for Medical
20 Education, Neuadd Meirionnydd, Cardiff, CF14 4YS, UK

21
22 **ORCID (Open Researcher and Contributor Identifier):**

23 <https://orcid.org/0000-0002-1172-8203>

24 <https://orcid.org/0000-0002-8694-4517>

25 <https://orcid.org/0000-0001-6384-2692>

26 <https://orcid.org/0000-0003-2712-3812>

27
28 **About the author:** Qi Zhuang Siah and Ella Sykes are current fourth year medical students (MBBCh) of
29 Cardiff University, Wales, United Kingdom. They are student administrators of the C21 Facebook page and
30 are both co-first authors for this paper. Caitlin Golaup is the team leader of the Student Engagement &
31 Recruitment Team at Cardiff University School of Medicine. Julie Browne is a Senior Lecturer in Academic
32 Practice and also the Course Lead for Intercolated BSc in Medical Education at Cardiff University.

33 **Corresponding author email:** BrowneJ1@cardiff.ac.uk

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38 C21' Facebook group in 2015 and was listed among the top 50 most influential higher education professionals
39 using social media by JISC, a charity championing the use of digital technologies in the UK education and
40 research. ES has been one of the page admins since 2018. QZS became an admin in August 2020, after the
41 project ended, and so declares no conflict of interest. JB declares that she has no conflict of interest.

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 2 email [dated October 15th, 2019] that as this study was primarily evaluative, formal ethical approval was not
 3 required.

4
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Contributor Role	Role Definition	Authors			
		1	2	3	4
Conceptualization	Ideas; formulation or evolution of overarching research goals and aims.	X	X	X	X
Data Curation	Management activities to annotate (produce metadata), scrub data and maintain research data (including software code, where it is necessary for interpreting the data itself) for initial use and later reuse.	X	X		
Formal Analysis	Application of statistical, mathematical, computational, or other formal techniques to analyze or synthesize study data.	X	X		
Funding Acquisition	Acquisition of the financial support for the project leading to this publication.				
Investigation	Conducting a research and investigation process, specifically performing the experiments, or data/evidence collection.	X	X		
Methodology	Development or design of methodology; creation of models	X	X		X
Project Administration	Management and coordination responsibility for the research activity planning and execution.	X	X		X
Resources	Provision of study materials, reagents, materials, patients, laboratory samples, animals, instrumentation, computing resources, or other analysis tools.	X	X		X
Software	Programming, software development; designing computer programs; implementation of the computer code and supporting algorithms; testing of existing code components.	X	X		
Supervision	Oversight and leadership responsibility for the research activity planning and execution, including mentorship external to the core team.			X	X
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Visualization	Preparation, creation and/or presentation of the published work, specifically visualization/data presentation.	X			
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 11 **Personal, Professional, and Institutional Social Network accounts.**

- 12 • **Facebook:** C21 FBP <https://www.facebook.com/CardiffC21/>
- 13 • **Twitter:** Qi Zhuang Siah - @siahqz; Julie Browne - @GreyLiterature

14
 15 **Discussion Points:**

- 16 1. Non-academic Facebook pages of a medical school facilitate student engagement with the medicine
 17 course, provide social support, and promote professional networking within and beyond the medical
 18 school community.

- 1 2. Should medical school social media pages act as a supplement to, or a replacement for, the more
- 2 traditional forms of medical school-student communication such as email?
- 3 3. Are Facebook pages perceived by students as an appropriate medium of communication between
- 4 themselves and their medical school?
- 5 4. Non-academic Facebook pages of a medical school should ensure diversity of administrators to
- 6 reflect the diversity of the student body and should place a particular focus on the advertisement of
- 7 medicine-related opportunities to students.

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1 **ABSTRACT**

2

3 **Background:** Facebook is a well-established social networking platform that is commonly used by medical
4 schools as an educational resource, but there are few studies assessing the roles of a non-academic
5 Facebook page in medical education. Cardiff University uses Facebook primarily as a student support and
6 engagement platform through its 'C21' Facebook Page; this study aimed to explore the use of the page by
7 students, as well as their perceptions on the value of the page and the appropriateness of social media use by
8 the medical school.

9

10 **Methods:** Authors collected and analyzed C21 Facebook Page usage data to obtain descriptive information
11 on reach, engagement and content. They also distributed an anonymized survey to evaluate and explore
12 users' interest in, experience of and engagement with the content.

13

14 **Results:** Of the 1021 posts on the page in 2019, the highest post-engagement rate occurred in the *Student or*
15 *Staff News* category (13.5%) and the lowest in *Medical Research News* (3.5%). Survey feedback on the page
16 was overwhelmingly positive (n=89; 84.8%), and respondents reported a high degree of trust (n=95; 90.5%) in
17 the page. Students would like to see more 'Curriculum Vitae (CV)-building' *Opportunities* advertised on the
18 page.

19

20 **Conclusion:** The C21 Facebook Page is an important resource in developing community within the medical
21 school and facilitating student engagement with both the C21 course and wider medical opportunities. It is
22 perceived as an appropriate channel of communication between the medical school and students.

23

24 **Key Words:** social media, medical education, social support, medical faculty, medical students

25

1 INTRODUCTION

2 In the 21st century, Social Networking Sites (SNS) play an enormous role in the way we communicate and
3 learn.¹ Facebook is one of the most well-established SNS across the globe. Registering just under three billion
4 active users as of second quarter of 2021,² it serves as a valuable tool for knowledge exchange. Official
5 institutions often use Facebook to publish and disseminate content to wide audiences.³ Facebook pages have
6 thousands of followers, but their reach may stretch far beyond their immediate followers as posts are widely
7 'shared' and 'liked'.

8
9 In February 2012, the *Cardiff University C21 Facebook page* (C21 FBP)
10 (<https://www.facebook.com/CardiffC21/>) was founded by medical students at Cardiff University as a forum for
11 undergraduates to discuss the upcoming implementation of a new MBChB curriculum, known as C21. In May
12 2012, the student administrators requested staff assistance with answering questions requiring official input.
13 Today, C21 FBP has evolved into an established resource with a following of 3,002 (as of 20 December 2020)
14 current, former and prospective students, parents and faculty members. Posts are curated by a Cardiff
15 University staff member, who oversees the page, and seven trained student administrators. Contributors to
16 the page are advised that posts should be 'fun, educational, diary-related, current affairs or celebrating staff
17 and student achievement'. Notably, the C21 FBP does not use Facebook's 'boost' function to increase reach
18 or engagement of posts, as its administrators work on an entirely voluntary basis, and there is no funding
19 available for the purposes of 'boosting' posts. Boosting is an advertising option offered by Facebook to further
20 promote the content of the page to a wider audience beyond the usual page followers.⁴

21
22 Previous papers on Facebook use within the medical community mainly focus on educational outcomes pre-
23 and post-Facebook use. They assess the role of Facebook as an educational resource in three categories:
24 stimulation of subject discussion, delivery of formative assessment and supplementary teaching content.^{3,5-11}
25 Facebook groups and pages have been shown to enhance students' learning experience and positively
26 influence educational interactions between students and instructors,¹¹⁻¹³ as well as promoting digital
27 professional development.¹⁴⁻¹⁶

28
29 The C21 Facebook Page in our study is not academically-oriented – that is to say, while it carries scholarly
30 content, it is not used as a platform for instruction or study guidance - and is better described as a student
31 support platform. There are few existing studies which assess the potential role of non-academic Facebook
32 pages for medical institution; Nicolai et al reported in depth on the use of Facebook groups by medical
33 students,¹⁷ but there was no active involvement of medical faculty in the groups they studied. Our work builds
34 on their conclusion that 'universities could feed relevant information to [student Facebook] groups, increasing
35 their reach and interacting more closely and directly with their students', by exploring the functions of a page
36 where medical school faculty collaborate with students on SNS.

37
38 In addition, although there is an existent body of literature describing the use of social media by academic
39 organisations, research into the perspectives of those using these platforms is limited. In March 2020, Eaton
40 et al called for qualitative inquiry into the experiences of users of professional organisations' Facebook

1 pages;¹⁸ our study goes some way to answering this call by combining analytical page data with input from
2 current users on how they perceive and engage with one such page, the C21 FBP.

3
4 In this study, we assess the functions of the C21 FBP. Our primary aim is to explore how it is used to provide
5 social and subject-related support, advice and digital professional development to students, and how this is
6 perceived by page users. The secondary aim is to address the appropriateness and value of Facebook use by
7 a professional organisation such as a medical school.

9 **MATERIALS AND METHODS**

10 As our work is directly aimed at practical questions with the aim of improving or enhancing a service, we took
11 a pragmatic approach to data collection. We therefore made use of readily available monitoring data on
12 frequency and scope of page usage, along with a survey aimed at producing richer, descriptive data to supply
13 insights into how student users perceive the page and what effects it might have on their engagement with the
14 Cardiff MBCh courses. Ethical approval was waived by the School of Medicine Ethics Committee of Cardiff
15 University School of Medicine.

17 **Phase 1**

18 The first part of our study explored how frequently C21 FBP was used and if there were patterns in the data
19 indicating user preferences for certain material. User engagement data for the period 1st January 2019 to 31st
20 December 2019 was extracted from the page on 8th May 2020 using Facebook's 'Insight' function. Posts were
21 sorted into six categories: *Opportunities*, *Health News*, *Medical Research News*, *Student or Staff News*, *Dates*
22 *for the Diary* and *Other* (e.g. *Congratulations*, *greetings*). For each category, data on the total number of posts,
23 total page users who had posts enter their screen (**Reached**) and total number of engagements (likes,
24 comments, shares and clicks) (**Engagement**) was extracted. We used these data to calculate average reach,
25 average engagement and percentage of average engagement (**average engagement/average reach**) for
26 each category.

28 **Phase 2**

29 In the second part of the study, we used an anonymised survey (*Appendix*) to gain insight into the
30 experiences and perceptions of C21 FBP users and to explore views on its appropriateness and value.
31 Survey methodology was chosen as this research is a follow up to a 2015 pilot survey study of the C21 FBP
32 and we were hoping to be able to compare findings.¹⁹ We used secure Cardiff University software to develop
33 the survey, using a mixture of set response, scaled and open-ended questions. It was advertised to the
34 student body via the C21 FBP itself, through email and via Cardiff University's eLearning platform. Posters
35 inviting responses to the survey were also displayed in student areas such as libraries and common rooms.
36 To be included, the respondent must simply be a user or follower of the C21 FBP. The inclusion criteria were
37 set deliberately broadly in the expectation that response rates would be low and respondents would consist
38 almost entirely of current Cardiff University medical students, which subsequently proved to be the case. We
39 excluded any respondents who were not followers of the page or who had not been aware of it before
40 completing the survey, or who had no connection to Cardiff University School of Medicine. A separate section
41 at the end of the main survey invited responses from those who were current Cardiff medical students.

1
2 In line with principles of parsimonious analysis, apart from asking for participants' role (and confirmation that
3 they were Cardiff students and details of their year of study), demographic data were not collected. Age,
4 gender and ethnicity were not considered to be relevant to our research questions. Data collection was carried
5 out between January and March 2020. The data were then extracted and analysed thematically (through a
6 process of coding and inductive theme generation) to provide descriptive results. In order to minimise the risk
7 of bias and in an attempt to maintain objectivity in our data analysis, frequent meetings of the research team
8 were held in which issues of interpretation and potential bias were resolved among the group.
9

10 RESULTS

11 *Phase 1*

12 There were 1021 posts on the C21 FBP between 1st January and 31st December 2019. These were
13 categorised and counted based on the content of the post (**Table 1**).
14

15 We also collected **Reached** and **Engagement** data for each category. The percentage of average
16 engagement was highest in the *Student or Staff News* category (13.5%). Full results for **Reached** and
17 **Engagement** are displayed in **Table 2** and **Figure 1**.
18

19 At the end of December 2019, the page had cumulative likes of 2593 and an average daily total reach of
20 1622. The lifecourse of the C21 FBP is depicted in **Figure 2**.
21

22 *Phase 2*

23 *Demographics of respondents*

24 There were 120 respondents to the survey; 117 were current Cardiff University medical students, two were
25 Cardiff University staff and one was a prospective medical student. Currently, Cardiff University School of
26 Medicine hosts around 1,000 undergraduate medical students and approximately 1,100 postgraduate medical
27 students. Since the survey was anonymised, the level of qualification was not provided by the respondents.
28 Therefore, the response rate of our survey ranged from 5% to 10% since our target population was current
29 medical students.
30

31 Fifteen respondents had 'never heard of' and were 'not following' the C21 FBP and so were not eligible to
32 complete the remainder of the survey. As such, all subsequent analysis uses a total participant number of
33 105.
34

35 *Interest in posts on the page*

36 Using the categories of posts identified in Phase 1 of our study, we asked respondents which type of post on
37 the C21 FBP interested them most. The results (**Figure 3**) show that interest is spread across the different
38 types of posts on the page, with *Opportunities*, *Health News* and *Dates for the Diary* all amassing greater than
39 20% of responses.
40

41 *Engagement with the C21 FBP*

1 Posts from the C21 FBP are seen once per week or more frequently by 76.0% (n=80) of respondents. Of the
 2 remainder, 11.0% (n=12) see posts once a month, 6.0% (n=6) less than once per month and 7.0% (n=7)
 3 reported seeing no posts at all from the C21 FBP, despite being followers.

4
 5 Respondents were able to select one or more ways in which they engaged with the C21 FBP. Liking a post on
 6 the page was the most common form of engagement, with almost three-quarters of respondents (n=77; 73%)
 7 having done so. Results are summarised in **Figure 4**. *Other* in our Figure 4 refers to activities which are not
 8 described by the remaining selections, including tagging others in the comment section.

9 10 *Trust in the C21 FBP*

11 The 2015 study found that “a significant minority of survey respondents had used the page to complement
 12 their offline behaviour”; it was therefore felt important in this new study to explore the degree to which
 13 respondents felt that information on the pages could be trusted.¹⁹ Respondents were asked to rate, on a five-
 14 point scale, how far they agreed with the statement, ‘the information provided by the C21 FBP is trustworthy’.
 15 The majority of respondents (n=95; 90.5%) agreed or strongly agreed, whilst 2.9% (n=3) disagreed or strongly
 16 disagreed.

17
 18 Current Cardiff medical students responding to the survey were also asked to rate their agreement with the
 19 statement, ‘the information provided by the regular emails from Cardiff University is trustworthy’. Again, most
 20 (n=86; 84.3%) agreed or strongly agreed, with only 1.0% (n=1) disagreeing or strongly disagreeing (**Figure 5**).

21 22 *Satisfaction with the course*

23 Using the five-point scale as above, current Cardiff medical students were asked to rate how far they agreed
 24 with the statement ‘I am more satisfied with the C21 medicine course after interacting with the C21 FBP’. There
 25 was strong agreement from 10.8% (n=11) of respondents, with a further 25.5% (n=26) agreeing. The majority of
 26 respondents (n=54; 52.9%) were neutral on the statement.

27 28 *Appropriateness of social media use by the medical school*

29 This was an area of enquiry that had not been explored in the earlier study but was felt necessary in view of
 30 recent public discourses around Facebook. All respondents were asked whether they felt it was appropriate
 31 for the medical school to interact with students/prospective students/graduates via the C21 FBP. Overall,
 32 82.9% (n=87) agreed or strongly agreed that it was, compared with 4.8% (n=5) who disagreed or strongly
 33 disagreed.

34 35 *Content of the page*

36 When asked what they would like to see more of on the C21 FBP, the most frequently mentioned theme was
 37 *Opportunities*, particularly those relating to research or other ‘Curriculum Vitae (CV)-building’ activities,
 38 followed by *Events* and *Dates for the Diary*. There was also a call for more student-oriented content and better
 39 representation of the student body, as well as for revision materials and resources to be published on the
 40 page.

1 When asked whether there was anything they would like to see less of on the C21 FBP, 13.3% (n=14) of
 2 respondents provided an answer. These included news articles which some perceived as 'random', 'spam-
 3 like' and 'biased/misleading'. Others (n=4) highlighted 'memes/comedy posts' as unnecessary on the page.
 4

5 *Feelings towards the C21 FBP*

6 Respondents were asked to describe the C21 FBP in a single word. Our thematic analysis found that the
 7 majority of words chosen were positive in sentiment (n=89; 84.8%). 'informative', 'interesting' and 'useful' were
 8 those most commonly mentioned.
 9

10 A minority of respondents (n=4; 3.8%) selected a word which we broadly classified as 'negative'; these
 11 included 'chaotic' and 'insufficient' although the latter may have indicated that the respondent wished for more
 12 content rather than that the existing content was weak.
 13

14 Further comments or thoughts about the C21 FBP were provided by 12.4% (n=13) of respondents. These
 15 were varied but universally positive in nature. Several respondents commented on the value of the page to
 16 them as students and felt that it should be advertised more in order to reach as much of the medical student
 17 body as possible.

18 *'I think it's a valuable page and I enjoy seeing posts'*

19 *'It's great! Definitely keep an eye on it to know what's going on'*
 20

21 *Appropriateness of social media use by the medical school*

22 One-fifth (n=21) of respondents commented on the appropriateness of social media usage by the medical
 23 school. Over half (n=13; 62.0%) of these were positive and reflected a feeling that social media provides an
 24 efficient and accessible way of sharing information with students.

25 *'I think social media alongside the medical school is incredibly important in bridging the gap of how*
 26 *students view information. Most students spend most of their time on social media.'*

27 *'I think it makes information hugely more accessible'*
 28

29 Six respondents felt that medical school social media use was appropriate only under certain conditions.
 30 Maintenance of professionalism, vetting of content and acquisition of consent before posting about individual
 31 students were all regarded as important prerequisites for appropriate use of social media by the school. It was
 32 felt that critical, 'need-to-know' information was better shared using traditional formal communication methods
 33 (e.g. email) than via social media.

34 *'I think it's very appropriate to engage with social media as most young people engage with it, as long*
 35 *as the content is vetted, reliable and doesn't share personal information without consent. It is more*
 36 *useful to have the page than a physical newsletter as people won't really read that.'*

37 *'It is good for sharing student news and interesting news articles, but I wouldn't like it if they used it for*
 38 *more formal communications.'*
 39

1 DISCUSSION

2 ***How social media is used to provide resources, support and professional development***

3 The C21 FBP promotes student engagement with the Cardiff Medicine course; 23.8% of respondents had
4 joined a student club or activity because of a post on the page, and over one third agreed that their
5 satisfaction with the course is increased by interaction with the Facebook page. Survey respondents were
6 also keen for more revision material to be shared on the page. This indicates that the C21 FBP is a useful
7 academic resource for students.

8
9 Our findings also show that the C21 FBP plays a role in developing a sense of community within Cardiff
10 School of Medicine. Posts announcing *Student or Staff News* have the highest reach and engagement rates
11 of all categories; students use the page to keep abreast of and celebrate the successes of their peers. This is
12 consistent with the analysis of Eaton et al,¹⁸ who reported that Facebook groups can be used to openly share
13 motivation and social support for colleagues and so foster professional and personal social cohesion. The
14 C21 FBP also promotes student participation in university activity beyond the confines of online networks;
15 more than one in five respondents to our study had joined a student club or activity advertised on the page.
16 Sense of involvement in a community, both virtual and in-person, has been shown to be an important factor in
17 social identity formation²⁰ and the C21 FBP helps to facilitate this.

18
19 In addition, the C21 FBP allows professional development and engagement with medical professionals
20 beyond the confines of the medical school. Medical research news and opportunities posted on the page, for
21 example, are able to reach thousands of medical students. Although the percentage of average engagement
22 with these posts is low (3.5% and 4.65% for *Medical Research News* and *Opportunities*, respectively), we
23 believe this reflects the wide reach of the posts relative to the usually specialist appeal of opportunities
24 advertised, such as prizes, competitions or bursaries. Indeed, *Opportunities* were the most frequently cited
25 category of post that students wanted to see more of on the page, suggesting that – although they rarely
26 engage with the posts themselves – students benefit from seeing opportunities advertised as this increases
27 the likelihood of one being applicable to them. More than one in ten respondents had applied for a grant, job
28 or other opportunity advertised on the page. Several papers have reported on the use of social media to
29 facilitate professional development and networking between physicians, and the opportunities online
30 communities present for collaboration beyond the confines of geographical location.^{21,22} Our study suggests
31 that the same is true for medical students who, despite being earlier in their medical careers, use social
32 networks such as the C21 FBP to engage with an established network of physicians who will eventually
33 become their professional colleagues.

34 35 ***Interest in and perception of the C21 FBP***

36 With the exception of *Student and Staff News*, engagement with posts of all categories on the C21 FBP is
37 consistent and page users show no consensus when asked which type of post on the page interests them
38 most. This broad spectrum of engagement and interest reflects the diversity of the page audience and
39 suggests that there is variance in the ways that individuals use the page.

1 Despite, and perhaps by virtue of, the heterogeneous nature of the C21 FBP, students overwhelmingly
 2 perceive it positively. It is clear that universal satisfaction with the page will never be a reality; respondents
 3 simultaneously described the page as '*varied*' and '*chaotic*', and some suggested that they wanted to see less
 4 '*medical school gossip*' whilst others felt '*gossip is good stuff*'. These incongruities may be viewed as an
 5 irreconcilable failing of the page, or another marker of its broad appeal; students who characterise the page
 6 as '*informative*' and '*interesting*' do not seem to be deterred by posts on the page which are not directly
 7 relevant to them. One of the documented strengths of social media is users' ability to self-select the content
 8 that appeals to them in order to create a 'Personal Learning Environment' which suits their individual learning
 9 and professional development needs.²³

10
 11 Our study results show that trust in the C21 FBP is high. This high degree of trust is important in maintaining
 12 the professional nature of the page and ensuring that it is aligned with the wider professional image of the
 13 School of Medicine. Trust in the information provided by the page is comparable to that in the information
 14 provided by Cardiff University emails, indicating that students perceive the Facebook Page as a legitimate
 15 extension of the core university communication channels. A minority of students commented on the
 16 occasional sharing of '*biased/misleading*' news articles on the page; this is in spite of careful staff oversight
 17 and rigorous systems to ensure that articles are as objective as possible and again is likely to arise from the
 18 breadth of the content rather than inaccurate information.

19 20 ***Appropriateness of social media use by medical schools***

21 The majority of respondents to our survey felt it was appropriate for Cardiff School of Medicine to use social
 22 media to connect with students. This perhaps reflects the widespread use of social media. With networks such
 23 as Twitter and Facebook already used widely by healthcare professionals and organizations, social media is
 24 increasingly perceived as a legitimate means of professional knowledge sharing, and thus students feel it is
 25 appropriate for the medical school to participate in this.²⁴ The efficiency and accessibility of social media
 26 makes it an expedient channel of communication from the perspective of medical students.

27
 28 There were some concerns that this expediency carried potential risks such as failure to maintain professional
 29 boundaries by faculty members and students, and concerns that the C21 FBP might be used as a sole means
 30 for sharing essential information. Although these risks are perceived rather than real, they are consistent with
 31 previous studies which have cited privacy concerns, unprofessional and unethical behaviour and
 32 inconsistencies in degree of student engagement as potential challenges to use of social media in medical
 33 education and professional development.^{21,25-27} It will be the task of the C21 FBP to continue to reassure users
 34 that it is well-run and that all risks to quality have been eradicated, mitigated or controlled for.

35 36 **Limitations**

37 A limitation of our study is the low response rate (n=120; 8%) compared with the >2500 page 'followers' who
 38 were eligible to take part. The small sample size means that there is potential for responder bias in our
 39 results; it may be that only those with strong feelings about the page responded and so our findings are not
 40 reflective of the wider page usership. However, the responses collected do not suggest that this is the case as
 41 most offered measured feedback on the page, with both praise for its strengths and fair constructive critique.

1 Another limitation is that C21 FBP carries bilingual content (English and Welsh languages), but the survey
2 was not offered in Welsh language. While we assume that some of the survey respondents were Welsh
3 speakers, it was not part of the study aims to explore this specific group's views.
4

5 **Conclusion**

6 This study has found the C21 FBP to be an important resource in developing a sense of community within
7 Cardiff School of Medicine and facilitating student engagement with both the C21 course and wider medical
8 opportunities, which page users value, trust and feel is appropriate. As such, the authors of this study feel the
9 use of non-academic Facebook pages by medical schools to engage with students is beneficial and should be
10 encouraged. Reflecting on the findings of our research, we make the following recommendations for the
11 development of such pages:

- 12 1. The C21 FBP is seen as an optional supplement to the core communication channels used by Cardiff
13 School of Medicine. **Medical school Facebook pages should not be used in favour of emails to**
14 **disseminate important official information;** students prefer this to come from a traditional
15 communication channel such as email.
- 16 2. C21 FBP users appreciate the diversity of content on the page but would like to see greater diversity
17 of representation of the student body. Efforts should be made to **recruit student page administrators**
18 **who are representative of the diverse nature of the medical student body.**
- 19 3. The posting of medical research posts, prize competition, jobs and other opportunities is a key
20 attraction of the C21 FBP for many users. As such, it would be of benefit for medical school Facebook
21 pages to **focus on promotion of medicine-related opportunities.**
- 22 4. The C21 FBP has a legitimate and trustworthy reputation. **Ensuring the validity and high scientific**
23 **quality of news articles posted on university Facebook pages** is important to maintain a professional
24 reputation. Careful oversight from qualified staff and effective collaboration between staff and student
25 administrators is key to ensuring quality is maintained.

26
27 Future studies investigating the use of non-academic Facebook pages by medical students would be useful to
28 help support the limited body of evidence in this area. Such research would benefit from the recruitment of a
29 larger group of participants and collection of further qualitative information on how pages are used by
30 students, for example via focus groups.
31

1 **SUMMARY - ACCELERATING TRANSLATION**

2
3 The title of our study is “Roles and Functions of a Non-Academic Medical School Facebook Page from the
4 Student Perspective: A Study of Usage and Survey Data”.

5 In February 2012, the Facebook page “Cardiff University C21” was founded by medical student
6 representatives at Cardiff University with the aim of creating an official forum for undergraduates to discuss
7 the implementation of the newly formed curriculum, “C21”. “C21” was due to substitute the traditional system
8 in September 2013. This social media platform served as a potential medium for students to receive the latest
9 information about curriculum changes at the beginning of the uncertain transition period. In May 2012, the
10 student administrators requested representation from the School of Medicine on the Facebook page to help
11 answer questions which required an official input. A case study was completed by Abreu and Stephenson in
12 2015 to explore the evolution and functionality of the “Cardiff University C21” Facebook Page. Their results
13 showed that, initially, the Facebook page was not well received, but across a period of a few months it steadily
14 garnered interest from the target audience. It is notable that a surge in the popularity of the page followed the
15 introduction of official School of Medicine input. The page recorded over 200 page likes in the first 15 months
16 following its launch. With an effective advertising campaign employed by the new intake of student
17 administrators in December 2013, the page surged in popularity, reaching almost 600 page users daily on
18 average in April 2014. Further growth was observed after September 2014 after a further publicity drive.
19 Overall, cumulative page likes quadrupled (800 page likes) over a period of two years. Abreu and
20 Stephenson’s study also considered the use of the page by medical students. They found that students used
21 the page to complement their offline behaviours, particularly through attending events advertised on the page
22 and studying topics on the curriculum further as a result of Facebook Page posts. A majority (61.7%) of
23 respondents to the 2014 study felt more or much more satisfied with the medical course as a result of using
24 the page.

25 The rapid evolution of digital technology and social media in the five years since the original study means we
26 feel it is important to assess how the role of the page, and student perception of it, may have changed over
27 time. Our primary aim is to explore how social media (as a networked community) may be used to provide
28 social and subject-related support and advice, and to promote digital professional development, to students.
29 The secondary aim is to address the appropriateness and value of Facebook use by a professional
30 organisation such as a medical school.

31
32 We adopted a mixed method of analysis (quantitative and qualitative analyses) in this research. Our
33 methodology encompassed two main phases. Phase 1 was quantitative-based which also involved basic
34 descriptive statistical analysis. In phase 2, an anonymised survey was distributed among potential
35 respondents from January to March 2020. A thematic analysis was then conducted to qualitatively appraise
36 the survey results.

37
38 The C21 FBP promotes student engagement with the Cardiff Medicine course; 23.8% of respondents had
39 joined a student club or activity because of a post on the page, and over one third agreed that their

1 satisfaction with the course is increased by interaction with the Facebook page. Our findings also show that
2 the C21 FBP allows professional development and engagement with medical professionals beyond the
3 confines of the medical school.

4

5 In conclusion, this study has found the C21 FBP to be an important resource in developing a sense of
6 community within Cardiff School of Medicine and facilitating student engagement with both the C21 course
7 and wider medical opportunities, which page users value, trust and feel is appropriate.

8

Accepted, in-press

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1 **TABLES AND FIGURES**2
3
4**Table 1 Type and Number of Posts on the C21 FBP in 2019**

	Number of posts made	Percentage (%)
Type of post		
Dates for the diary	112	11.0
Health news and general interest	226	22.1
Medical research news	129	12.6
Opportunities	206	20.2
Other	199	19.5
Student/staff news	149	14.6
Total	1021	100.0

5

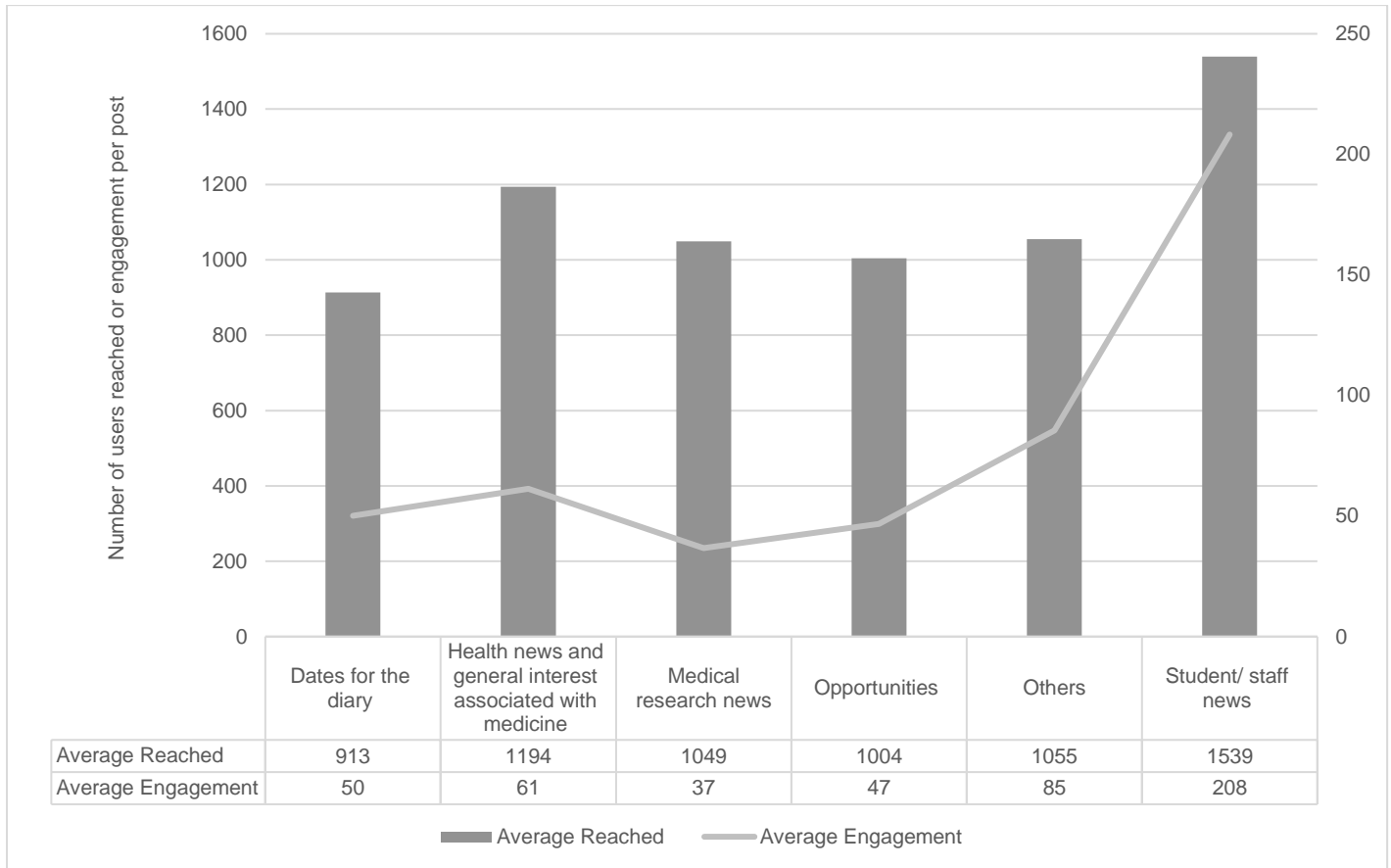
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1
2 **Table 2 Reached and Engagement Data per Post**

	Total reach of all posts	Total engagement with all posts	Average reached	Average engagement	Percentage of average engagement / average reached (%)
Type of post					
Dates for the diary	102309	5618	913	50	5.48
Health news and general interest	269801	13842	1194	61	5.11
Medical research news	135345	4733	1049	37	3.53
Opportunities	206800	9616	1004	47	4.68
Other	209927	17014	1055	85	8.06
Student/staff news	229353	31025	1539	208	13.52

3

1 **Figure 1 Average Reached and Engagement Data per Post**

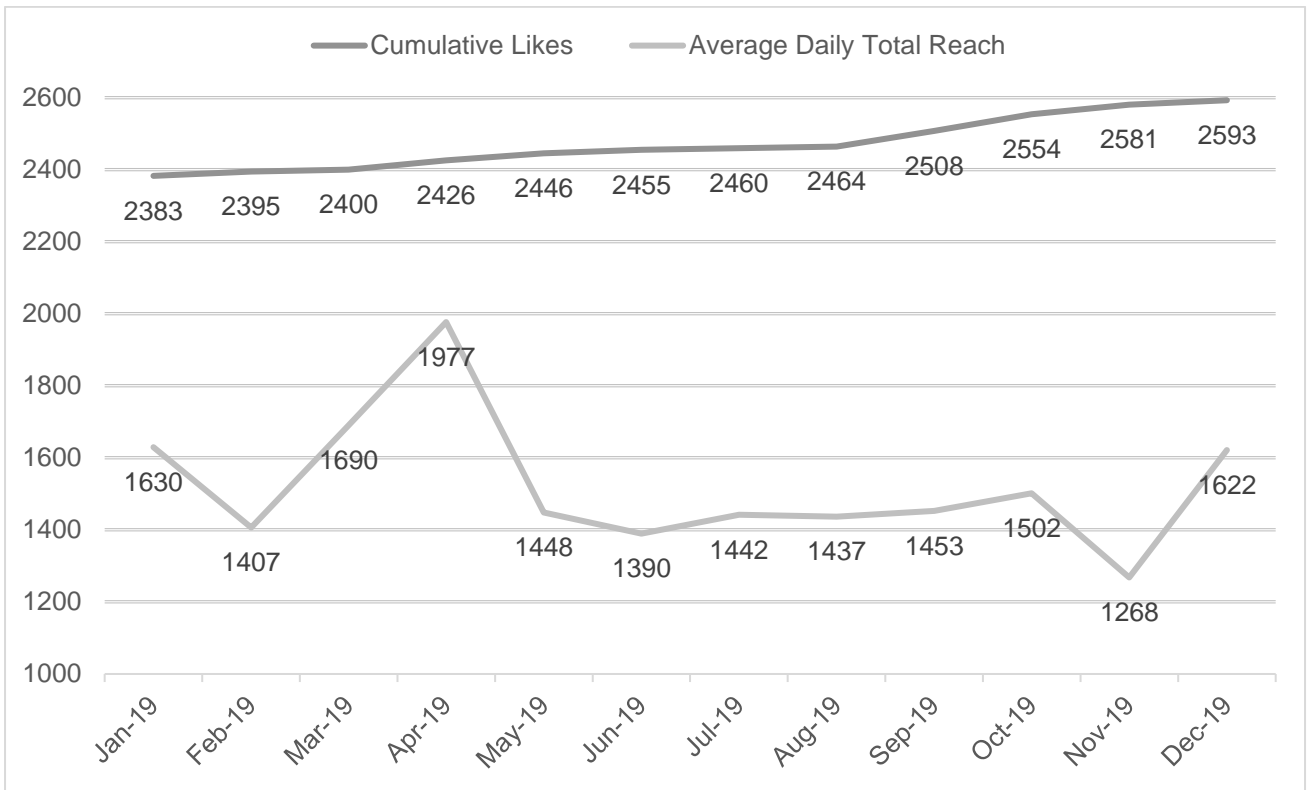


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1 **Figure 2 Cumulative Likes and Average Daily Total Reach of the C21 Facebook Page**

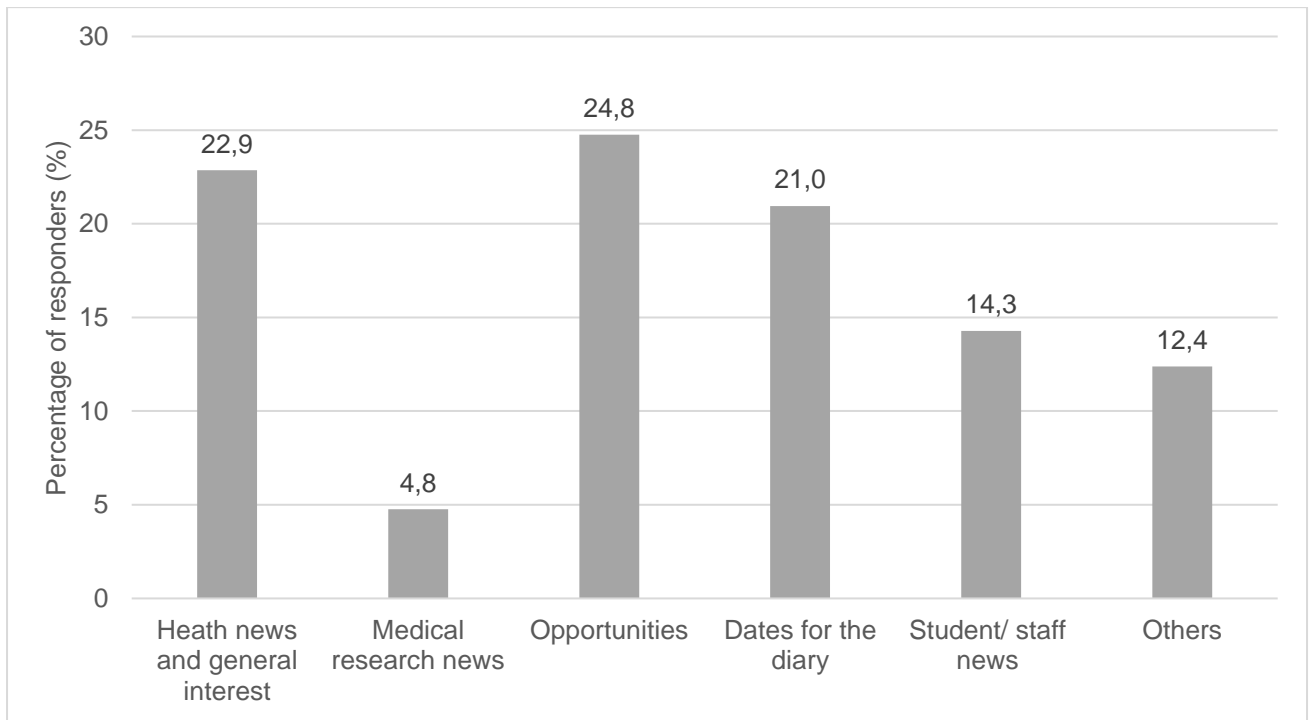
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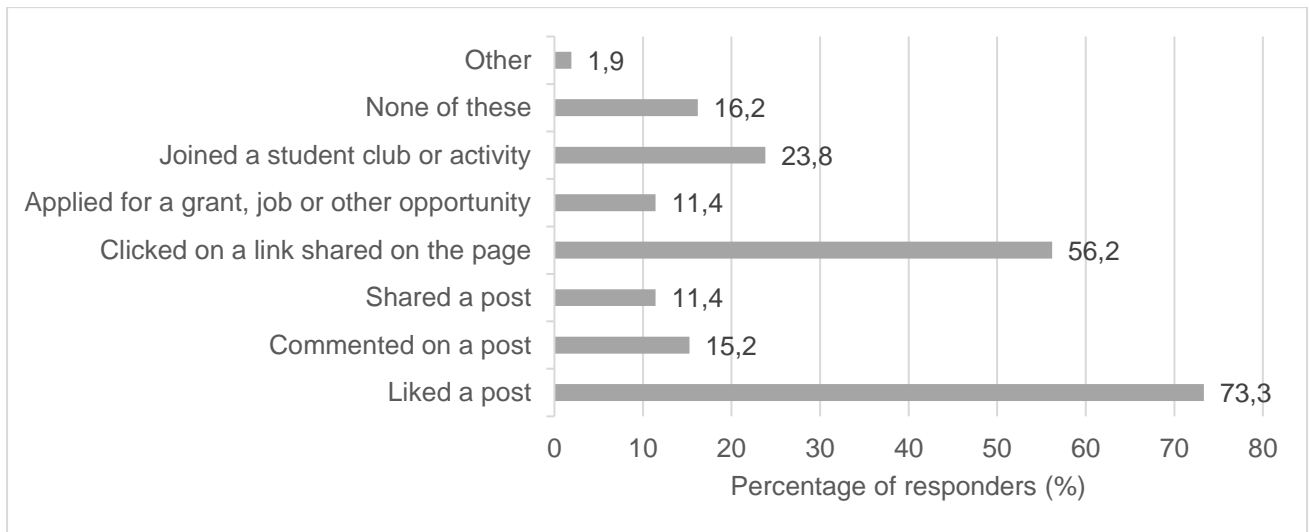
1 **Figure 3 Page User Interest in Different Types of Post**



2

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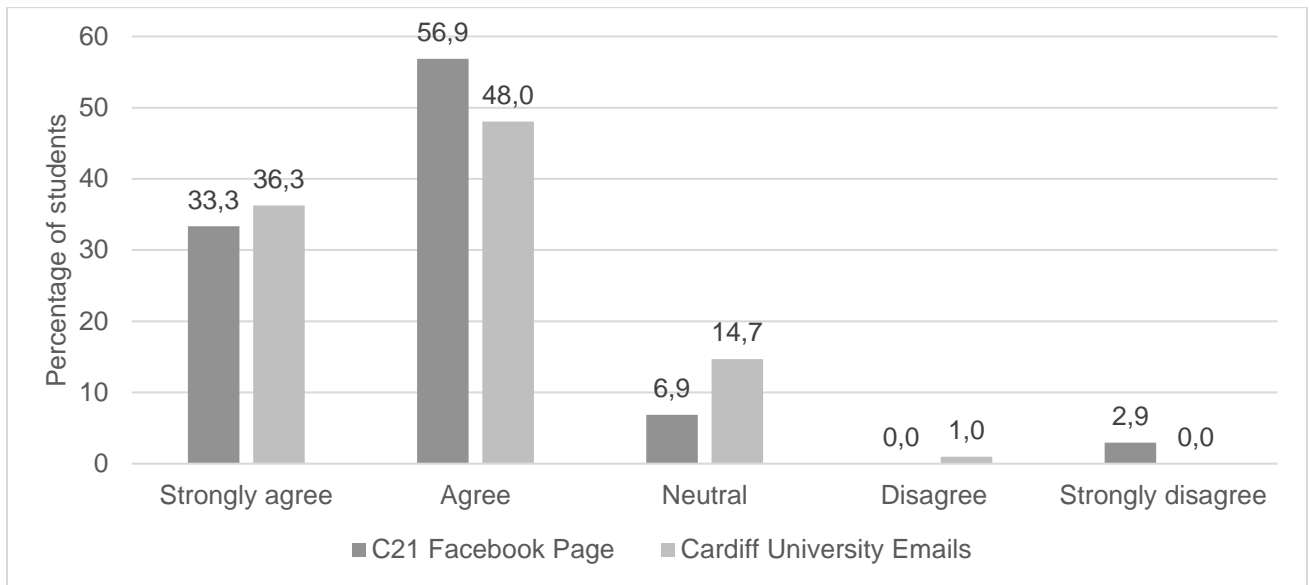
1 **Figure 4 Type of Engagement with Posts by Page Users**



2

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1 **Figure 5 User-rated Trustworthiness of Information on the C21 FBP Compared to University Emails**



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3

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