



How occupational therapy practitioners use virtual communities on the Facebook social media platform for professional learning: A critical incident study

J. Y. Teoh

To cite this article: J. Y. Teoh (2021): How occupational therapy practitioners use virtual communities on the Facebook social media platform for professional learning: A critical incident study, *Scandinavian Journal of Occupational Therapy*, DOI: [10.1080/11038128.2021.1895307](https://doi.org/10.1080/11038128.2021.1895307)

To link to this article: <https://doi.org/10.1080/11038128.2021.1895307>



© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 14 Mar 2021.



Submit your article to this journal [↗](#)



Article views: 218



View related articles [↗](#)



View Crossmark data [↗](#)

How occupational therapy practitioners use virtual communities on the Facebook social media platform for professional learning: A critical incident study

J. Y. Teoh* 

School of Medicine, Cardiff University, Cardiff, UK

ABSTRACT

Background: As the use of social media to mediate learning in the occupational therapy profession gains increasing recognition, calls for tangible guidance with concrete and platform-specific examples have also become prominent.

Aims: This study aims to describe and analyse the various learning activities qualified occupational therapy practitioners engage with in professional communities known as 'groups' on the Facebook social media platform.

Method: Forty-nine ($n = 49$) practitioners eligible for registration with the Health and Care Professions Council in the United Kingdom completed online questionnaires to produce one-hundred and ten ($n = 110$) critical incident reports. Data were thematically analysed.

Results: Six learning activities were inductively identified: (1) Acquisition of New Ideas; (2) Reinforcement of Existing Knowledge; (3) Adjustments to Existing Knowledge; (4) Learning about Resources; (5) Learning related to Career Advancement; (6) Learning related to Hidden Curriculum.

Conclusion: This study showcases the varied ways occupational therapy practitioners learn through Facebook Groups, evidencing the utility of this professional learning environment.

Significance: Findings enable occupational therapy practitioners to better evaluate which activities to engage in on Facebook Groups for learning and development of higher-quality professional practice. Further research examining the utility of Facebook Groups for professional learning in contrast to other social media platforms is recommended.

ARTICLE HISTORY

Received 16 February 2020

Revised 17 February 2021

Accepted 20 February 2021

KEYWORDS

Social media learning; Facebook groups; continuous professional development; professional learning; virtual communities; communities of practice; professional communities; online communities; informal learning communities; critical incident technique

Introduction

Occupational therapy practitioners have encountered distrust and scepticism towards social media for professional use in some workplaces [1]. However, the use of social media as a tool for professional learning is rising in popularity due to its fiscal and temporal accessibility, speed of access to the latest information, opportunities for networking which lead to collaboration, as well as diverse knowledge sharing and exchange beyond one's immediate physical environment [1–4]. Professional social media use has also become increasingly widespread with the establishment of the World Federation of Occupational Therapy (WFOT) international social media advisory group, as well as the release of a position statement

[5]. Research has been conducted on the use of social media by WFOT member organisations [6]; and guidelines have been published by some of the most established national professional organisations [7,8]. At the grassroots level, professional networks and communities on social media platforms such as Facebook and Twitter are also popular [9–11].

Most published empirical research on social media and learning in occupational therapy involves pre-registration students [12–15]. Only two articles have focussed particularly on qualified practitioners [1,3]. Social media learning experiences can vary between students and practitioners, with the former enjoying more opportunities to learn in a structured, guided setting than the latter [1,15]. While practitioners

CONTACT J. Y. Teoh  teoh.jouyin@gmail.com; jouyin.teoh@brunel.ac.uk  London School of Occupational Therapy, Brunel University London, Mary Seacole Building, Kingston Lane, Uxbridge, Greater London, UB8 3PH, United Kingdom

*The study was conducted under Cardiff University. However, the author is now based at Brunel University London, United Kingdom.

This article has been corrected with minor changes. These changes do not impact the academic content of the article.

© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

generally have positive perceptions of social media use for professional learning, the lack of tangible and concrete guidance around its use poses a significant challenge [1]. Practitioners perceive the guidance on social media learning provided by professional bodies as too generic and inadequate to evidence their learning experiences in line with audited continuing professional development (CPD) purposes. Thus, a need has been established for tailored, platform-specific research. These calls for more concrete and tangible guidance have also been echoed in the research on students' perspectives [14,15].

Aligned with the calls described above, this study explores the following research question: 'How do occupational therapists use virtual communities ('groups') on Facebook for professional learning?', with the aim to illuminate the various learning activities qualified occupational therapy practitioners already engage in. The selection of learning activities is essential for the development of higher-quality professional practice [16], hence the decision to make them a focal point of this study.

Learning via professional communities on the Facebook social media platform

This study focuses on qualified occupational therapy practitioners' learning experiences in virtual communities on the Facebook social media platform known as 'groups' in contrast to previous research which explored the use of Twitter [1] and a now-defunct Yahoo Group [3]. Facebook Groups have distinct boundaries limiting access to their content. Three types of Facebook Groups exist: 'Public' groups where content can be viewed by non-members and non-Facebook users; 'Private and Visible' groups which can be found *via* the 'Search' function on Facebook with content restricted to members only, and 'Private and Hidden' groups which do not appear in the search results. Membership in groups belonging to the last category can only be accessed upon invitation by existing members, while Facebook users can voluntarily apply for membership to groups that are Public, as well as Private and Visible.

The professional Facebook Groups explored in this study are either Public, or Private and Visible. Membership is typically vetted by administrators and moderators, and usually restricted to occupational therapy practitioners and students enrolled into a pre-registration occupational therapy programme. Members can initiate new 'posts', leave 'comments' in response to posts or even in response to specific

comments which will then form a 'comment thread'. Thus, all discussions in response to a post or its comments are contained within the boundaries of the initial post itself. Members can use the 'search' function within groups to retrieve old posts and comments which correspond with specific keywords and other customisable criteria such as poster identity and date of post.

Professional Facebook Groups specific to the occupational therapy profession are well established, with the biggest boasting of memberships in the tens of thousands from around the world. These include 'Pediatric Occupational Therapists' and 'OT4OT' with memberships of approximately 36,000 and 30,000 people at the time this study was conducted [9,11]. These Facebook Groups are grassroots-led initiatives not established by any specific professional organisation or authority, although some may have developed a more formal structure over time.

Theoretical underpinnings: situated learning in virtual communities

The concept of learning through communities existed long before Facebook and social media. It was pioneered by Lave and Wenger [17] through their discussions around situated learning, also known as learning in context. It involves knowledge acquired through engagement in activities presented in authentic contexts; thus, it is distinct from the acquisition of knowledge separate from context, such as learning *via* reading a book or by taking lessons in a classroom. Situated learning falls under the umbrella of social constructivist learning theories [18] which consider knowledge to be situated both within and outside learners. Learners are regarded as already possessing prior knowledge from past experiences which influence their interactions with the learning environment. Thus, they do not enter a learning context as a blank slate for knowledge acquisition. Instead, both prior knowledge from past experiences and knowledge newly acquired from interactions with surroundings are combined to ascribe meaning to the new lessons they will learn. As a result, it can be said that no two socially constructed learning experiences are alike despite exposure to similar interactions within an environment.

Methodology

Situated learning theories align with subjectivist views of knowledge acquisition and development [17].

Learning is produced through the social interactions between the various Facebook group members and as a result, is continually being revised. Learning does not exist as a definitive entity at any given point in time, with different versions of learning experienced by different individuals and constantly changing as an aggregate [19]. As this study intends to gain a better understanding of the status quo by understanding how participants make sense of the world around them, the interpretivist paradigm of subjectivist epistemology is most suited for its purpose. Subjectivist epistemology acknowledges that the way individuals interpret knowledge is subject to circumstances, whereas the interpretivist paradigm attempts to present knowledge as it is understood by said individuals [20]. Situated learning theories align with interpretivist perspectives of epistemology, as the lessons gained are determined by how learners interpret the results of their interactions with their surroundings [21].

Participants in this study all shared a common professional background as qualified occupational therapy practitioners eligible for registration with the Health and Care Professions Council (HCPC) in the United Kingdom (UK). However, they have trained under different pre-registration programmes, come from different cultural backgrounds and encountered different life experiences which in turn shape the lenses from which they view their interactions and lessons learnt from participating in professional communities on Facebook. A qualitative methodology was used to adequately capture the diversity of participants' perspectives for exploratory purposes.

Data collection method

The Critical Incident Technique (CIT) [22] was used to qualitatively elicit data on participants' learning experiences in Facebook professional communities. This method enables understanding of the human stories behind interactions and outcomes of tangible, concrete incidents grounded in real life through its focus on participant narratives. [23]. Thus, the CIT is compatible with the learning needs of practitioners expressed earlier in the paper. Participants were asked to describe incidents of typical and atypical learning experiences on Facebook Groups *via* the use of a text-based online questionnaire developed based on guidance provided by Tripp [24]. Justification was obtained for their perceptions of incidents as typical or atypical, as well as how they were significant to learning. The questionnaire was hosted on the

Qualtrics platform. Multimedia design principles such as the Cognitive Load Theory and Cognitive Theory of Multimedia Learning were applied for a more fluid user experience [25,26]. Cognitive Load Theory recognises limitations to working memory capacity [25], while the Cognitive Theory of Multimedia Learning seeks to reduce cognitive load through the presentation of information through various formats [26]. Steps to address cognitive load in this study were taken to reduce chances of participants giving up before completion and included separating sets of questions into distinct pages as well as providing both graphical and textual representations of content. Pilot testing was implemented on occupational therapists who were not eligible for registration with HCPC but with experiences of online learning in Facebook communities as it was likely that this demographic would yield similar narratives to participants. Changes were made based on the consistency and accuracy of pilot participant responses.

Typical disadvantages to the use of text-based online questionnaires for asynchronous qualitative data collection were not an issue for this study. Despite the lack of non-textual cues such as facial expressions, tone of voice, and body language, as well as reduction of researcher control which can potentially compromise robustness of data [27], text-based self-reports to elicit responses using the CIT have been found to be as effective as face-to-face interviews from as early as the 1950s [22]. Besides, research on participants of a similar profile has reported success with text-based online data collection [1]. Furthermore, pilot participants reported preference for this method over real-time interviews as it enabled responses at their own convenience. Participants used the autonomy over time and space this method provides to develop more thoughtful and reflexive responses, facilitating richer and more elaborate qualitative data elicitation [27].

Ethics

The Ethics Committee at the Cardiff University Centre for Medical Education approved this study on 21 June 2018. Data was collected in July 2018. The link to the online questionnaire was prefaced with an information sheet for participants explaining the study details, followed by a consent form. Participants had to click a button indicating their consent before proceeding with the questions.

Participant recruitment and sampling

Participants were recruited through purposive sampling of personal networks, self-selection sampling through advertisements posted on the relevant Facebook Groups, and snowball sampling through shared Facebook posts by study participants. A link to the online questionnaire for data collection was sent to 102 self-identified qualified occupational therapy practitioners eligible for registration with HCPC who used Facebook Groups for professional learning.

Analysis

An inductive and thematic approach to data analysis was used to explore participants' experiences in detail without the limits of predefined theories and preserve the richness of their diverse experiences [19]. Data analysis occurred simultaneously alongside data collection to enable identification of saturation point - a necessary part of CIT credibility cheques as described further below. At the preliminary stage, analysis was carried out using techniques by Ryan and Bernard [28]: Participants' narratives were extracted from the questionnaire platform into a document, proofread and key phrases that made sense underlined. Repetitions in patterns were identified and highlighted in multiple colours, with similarities grouped under a common colour. The remaining unmarked text was further compared against the marked ones for similarities and differences. The text was then extracted into summarised snippets, coded, and organised once again into a spreadsheet.

Credibility cheques specific to CIT were then implemented to prevent potential compromises to data validity such as recall bias, individual perception, and honesty [29]. The reliability and validity of a CIT study increases proportionate to thorough employment of these cheques. These cheques as documented by Butterfield and colleagues [29] include: (1) data saturation, (2) calculating participation rates, (3) independent extraction of critical incidents, (4) interview fidelity, (5) descriptive validity, (6) interpretive validity, (7) independent coding, (8) submitting tentative themes and categories arising from data analysis to two or more experts in the field, (9) theoretical validity of emergent categories.

Saturation in CIT (Check 1) is reached when an additional 100 incidents to the data set only yields 2–3 extra themes [22,29]. Emergent themes can be validated through Check 2, when a pattern of similar incidents reported by a minimum 25% of participants has been identified [29,30]. This aligns with the

assertion by Flanagan [22] that the more independent participants who report similar incidents the higher the significance of the theme to study aims. Implementation of these credibility cheques specific to this study are elaborated upon further in the Results section. This study has adapted implementation of Cheques 3–5 for the online questionnaire format, as the original recommendations by Butterfield and colleagues [29] were specific to the medium of verbal interviews. When applying Check 3 to interviews, critical incidents would be extracted from narratives by an independent coder and compared against those extracted by the researcher. The higher the level of agreement, the higher the validity of the incidents. In contrast, online questionnaires asking participants to 'describe a specific example of an incident' omits the need for an independent coder as incident boundaries have already been determined by participants. Thus, agreement is determined through the researcher following the participants' lead. With Check 4, Butterfield and colleagues [29] recommended having an expert familiar with CIT listening to audio samples of interviews to check for leading questions and to ensure consistency in terms of how the method has been deployed across participants. Adapting this credibility check for an online questionnaire involved submitting questions to an expert in the CIT method for review, followed by pilot-testing to confirm consistency and accuracy of responses. The fixed nature of the online questionnaire where all participants access a single set of questions presented in the exact same manner through a central web link also helped to safeguard consistency.

Butterfield and colleagues [29] suggested the use of audio-recording and transcribing of interviews to preserve accuracy of participants' accounts as part of Check 5. As online questionnaires require participants to type their own narratives, they safeguard descriptive validity through mitigating researcher mistakes in data documentation. However, participant cross-checking was still necessary to ensure interpretive validity (Check 6). To support this process, a form field in the questionnaire to include participants' preferred contact details with their submission was made available. An accompanying explanation was provided, clarifying that the researcher might reach out during analysis to confirm interpretation of responses. A colleague was engaged as an independent coder to contribute towards Check 7. As per Butterfield and colleagues' [29] suggestions, the coder was provided with the following to sort: titles of emergent themes and corresponding descriptors, as well as a sample of

Table 1. Identified themes and participant rate.

	Themes	No. incidents	%	No. Participants reporting incidents under this theme
1	Acquiring New Ideas	37	33.64	25
2	Reinforcement of Existing Knowledge	18	16.36	16
3	Adjustments to Existing Knowledge	14	12.73	13
4	Learning about Resources	7	6.36	6
5	Learning related to Career Advancement	14	12.73	12
6	Learning related to Hidden Curriculum	20	18.18	18
	Total	110	100	

25% of randomly chosen critical incidents. The results were then submitted to health professions educators familiar with the CIT for review consistent with Check 8. Finally, Check 9 was confirmed through scrutinising the emergent themes and categories with the literature to determine theoretical agreement [29] as demonstrated in the reported analysis of findings below.

Results

Forty-nine participants completed and submitted responses, generating 110 critical incidents in total. Through concurrently occurring data collection and analysis, four of the six key themes identified (Table 1) emerged in the first 4 reported incidents, whereas the remaining two themes emerged in Incidents 6 and 10. Thus, the saturation point for this study was exceeded after 104 incidents. As described above, themes were identified when a minimum 25% of participants – 12 in the context of this study - reported incidents that fall under a similar pattern. This was applicable to all themes but Theme 4 (Table 1). While only 6 participants reported incidents under Theme 4, the decision to keep it distinct from Theme 1 was due to a disproportionately high number of incidents already assigned to the latter [29]. This decision was further reinforced by theoretical validity based on findings from other studies of Facebook use from professional learning [31].

Theme 1: acquisition of new ideas

The acquisition of new ideas and up-to-date knowledge on practice is a priority for occupational therapy practitioners seeking membership in grassroots-initiated virtual communities. Similar results have been reported in other studies examining experiences of teachers and healthcare professionals [1,4,32,33].

I saw a discussion about the Recovery Model. It was a topic that appeared repeatedly over a long period of time. It caught my attention because it is one of the

guiding models used by an NGO that I work with. I was an observer/listener to the conversation on fb. The most significant thing I learnt was that mental health users had proposed something called an un-recovery star to complement the recovery star tool. It made me connect the idea to the existing PEO model in OT and wonder why we as OTs were not giving enough time for addressing disabling environmental factors in mental health. I included this point in my next training session for community mental health workers and peer support workers. (Participant 22)

This incident illustrates how ‘lurking’ can translate into tangible learning outcomes. ‘Lurking’ occurs when members of a virtual community do not participate in discussion and engage purely *via* observation. This behaviour may be perceived to compromise co-creating interactions that sustain the value of virtual communities [34]. Thus, questions have been raised about lurking members’ reasons for remaining in a group despite their apparent non-participation [4]. In contrast, lurking has also been acknowledged as a form of legitimate peripheral participation (LPP) in situated learning [31,33]. LPP consists of learning activities someone new to a particular context may engage in which are incrementally related to the main activities prevalent in that context and can potentially lead on to further opportunities for the newcomer to increase their degree of participation. A total of 10 study participants reported engaging in lurking as LPP across all themes (Participants 16, 18, 22, 29, 31, 36, 37, 41, 43, and 49).

Theme 2: reinforcement of existing knowledge

Many incidents under this theme were reported by participants as examples of typical encounters. Typical learning encounters can occur in seemingly trivial, unremarkable, and everyday incidents that make up routine behaviours when accessing professional Facebook groups [24]. One example is provided below:

(I encountered a) link to a video on the nervous system. (I was reminded of) the role of the

parasympathetic system and the importance of connecting body, mind, and the environment. E.g. Mindfulness, its relation to trauma, experienced by my client group. (I was an) Observer. (The video) reinforced the value of mindfulness and relaxation strategies. I also developed more empathy for clients. I (used the video with clients to) explain the impact of anxiety on the nervous system and resulting panic on clients' behaviour. Reinforce how we are victim of brain development rather than personal failures. (Participant 16)

Participant 16 described this learning encounter as typical for them because they generally prefer to consume information 'rather than actively engage in conversation.'. Such encounters have also been described as 'reminders or little light bulb moments (obtained from) looking through feed updates and learning from relevant information' (Participant 14) or for those who participate in discussions, 'it happens regularly, stretches me a little but is not outside my existing thinking or knowledge base' (Participant 30). These learning encounters were reported to boost confidence as well as provide affirmation of correct practice. These findings corresponded with existing research examining healthcare professionals' as well as teachers' participation in grassroots-initiated virtual communities [4,33]. Validation of practice through participation in community discussions enables an 'expert' sense of self to develop [33]. Thus, seemingly mundane and routine learning encounters should not be underestimated. Their inherent value can evolve over time with cumulative effects resulting in tangible offline outcomes, as illustrated through the following example:

What I started doing was commenting on it a bit more and because the feedback on it was quite good, I started to do that more often. And because of the feedback I got from that, I started to see myself as a bit more of having some experience in it ... and I shudder to use this word, but I think I've developed a bit of expertise around it. And I think I moved from somebody who kind of felt like they should comment to somebody who might be able to have something of value to say ... So, the feedback I got from being able to just offer information I'm aware of to other people because that is kind of the stuff that I'm interested in, that was very good. And I think from that, what I have taken into my attitudes about myself is that I can, to a certain extent, mentor and educate and shape thinking in this area. And because I've learnt that on social media, it has kind of challenged my impostor syndrome, I started to do it a lot more in real life. So, in the workplace I put myself out there as somebody who can help people in this area. I suspect very strongly that my social media presence is what got me speaking at the OT and (mental health condition) Conference. (Participant 48)

Theme 3: adjustments to prior knowledge

One key concern in many studies about learning in virtual communities is whether discussion quality can be superficial [32,33]. Concerns of veracity of information also exist, thus studies evidencing knowledge work processes in virtual communities for healthcare professionals are needed [4]. 'Knowledge work' involves the active production and management of knowledge, in contrast to 'information work' where knowledge is passively consumed without discussion or reflection [35]. Knowledge work involves critical reflection of newly acquired explicit knowledge through problem-solving and/or discussion; followed by integration with existing personal, theoretical and tacit knowledge gained through prior experiences. The presence of knowledge work can be identified in all learning encounters classified under this theme, as per the example below.

A post about using the Kawa Model within an NHS community mental health service, the original poster had outlined a project she had undertaken. It was the first post I'd seen of the model stepping beyond theory and into UK practice. (I learnt) that Kawa was being used within NHS services, that there is an effective method of applying the model within a UK patient demographic. Through a follow up PM, I gained access to the treatment plan, and was able to attempt to use it with a client group whilst on my final placement. The initial poster was self-reporting the end of the initial trial of this treatment method. I attempted to apply the learning on placement, unfortunately the service users did not connect with the concepts of the model, so although they completed Kawa drawings, they had limited connection to their self-perceived lived experience. (Through this, I learnt) that not every model is suitable for every person or situation, and I therefore couldn't work with just one conceptual model. (Now) I sort out additional experiences with MOHO and CMOP-E, to round out my practice. (I developed) a more diverse approach for which model I use with each patient. (And) it has made me accept the validity of all models, not just the ones I had used in my personal placements. (Participant 47)

Theme 4: learning about resources and materials

Past studies on teachers and occupational therapists have documented the use of virtual communities and networks on social media as an information source on the latest resources and materials to support professional development [1,31]. The learning encounters described under this theme provide confirmation that participants in this study also use professional

Facebook Groups for this purpose. An example is provided below.

I used the group to ask others advice regarding online resources for a student that I had. I was provided with a lot of valuable advice about articles, books and also YouTube & podcasts that might be useful. I have often seen other people receiving great advice on the page so I thought it would be useful for me and ultimately my student! In this case I was able to provide my student with some resources which we weren't aware of previously. She said that they were useful and has also provided the same to her friends at uni. It's also added to my student resources for next student that I have. (Participant 38)

Theme 5: learning related to career advancement

The examples presented for all previous themes demonstrate how knowledge acquired from Facebook Groups can result in tangible outcomes when applied. In addition, virtual communities on Facebook can also serve as a 'knowledge bank', where knowledge co-created through discussions is stored and can easily be revisited by members when the need arises. Similar use has also been reported in past research [4,32]. The exchange below demonstrated how Participant 1 actively built a knowledge bank in anticipation of future job interviews. It occurred when she was contacted for cross-checking purposes.

Participant 1: 'I learn about other's experiences, questions they are/might be asked, what drives them, and what roles people are interested in ... It might assist me with future interviews.'

Me: 'So by helping them, you get ideas for your own future use as well.'

Participant 1: 'Yeah pretty much. Or I can go and look to see what questions someone was asked if I have a similar interview.'

Besides interview preparation, some other reported examples under this theme include learning of job openings and other career-enhancing opportunities such as conferences, mentorship and coaching; learning how to meet professional requirements for international mobility, as well as learning how to navigate salary raises and access funding.

Theme 6: learning related to hidden curriculum

Hidden curricula consist of learning which is embedded in culture and not explicitly articulated, typically acquired through interactions and observations of others [36]. Very little is known of the

hidden curriculum specific to the occupational therapy profession, as well as the role virtual communities can play in hidden curriculum learning or how the hidden curriculum influences learning in virtual communities in general. The broader health professions education literature has suggested however, that virtual communities on social media can provide opportunities to learn the hidden curriculum in medical practice [37]. Two apparent patterns of hidden curricula have emerged from incidents under this theme:

- i. The development of digital communication competencies including digital professionalism, and
- ii. Digital interactions mirroring larger, profession-wide issues.

As overlaps between both can make distinct sub-themes impossible, a decision was made to group all of them under one common theme. The incident below where a participant critiques 'lack of evidence' in social media post content provides an example of how complex this theme can be, raising more questions than it answers.

'I see this level of conversations all the time on social media. It is a problem in the sense that it can normalise certain ways of thinking. It's typical in the sense that it happens regularly and without much moderation because of an unwritten "respect" for people's opinions when in fact we need to be challenging them. But is social media the place to do it?' (Participant 36)

At least 10 incidents raised issues of digital professionalism specific to incivility, identified through terms such as 'heated/charged discussion', 'rude', 'insulted', 'upset', 'saddened', and 'offended'. Of these, three independently discussed contentious interactions they had witnessed on a Facebook post by a colleague from the Global North resulting in the forced deletion of the Twitter account of a colleague in the Global South (Participants 12, 33, 39). As the significance of an incident to the aim of the study increases with the number of independent participants who report it [22], this was particularly noteworthy. While digital communication competencies - including that of digital professionalism - are increasingly incorporated into wider health care professions education curricula due to obligations towards patient safety and the 'social contract' between health care professions and society [36,38]; the emergence of this theme also raises questions around wider professional power dynamics: Who determines what standards of professionalism are, especially as the profession becomes increasingly diverse and international?

Discussion

The results of this study provide insight to the of the various ways occupational therapy practitioners are already using Facebook Groups for professional learning. The findings can be useful for occupational therapy practitioners new to using Facebook for professional learning, as well as for seasoned users – both to better evaluate activity choices on Facebook Groups, or to inspire new ways of mediating learning. They can be incorporated into induction tools and other learning materials by professional organisations, as well as utilised by administrators and moderators of professional communities on Facebook to enhance members’ learning experiences. Besides the learning activities reported as themes, methods which practitioners can incorporate into their social media learning include lurking, knowledge work, as well as the development of knowledge banks.

Past research suggests that occupational therapy practitioners face challenges recording their social media learning for audit purposes [1]. Nonetheless, the chosen examples provided in Themes 1–4 may be of interest to practitioners registered under the HCPC as they are compatible with the regulatory body’s CPD standards that require impact on service delivery and practice, and/or benefit to service users [39] (Table 2). These examples demonstrate how the CIT can be useful for CPD documentation of learning experiences through social media platforms. Practitioners using this approach are also encouraged not to exclude seemingly mundane and routine encounters as they can potentially produce cumulative outcomes that benefit service users or contribute towards the quality of service delivery and practice as described in Theme 2.

Learning experiences can be impacted by the influence of social media platform design on interactions. Thus, guidance from professional bodies on social media learning can incorporate details unique to specific social media platforms to better enable informed choices among practitioners. As Facebook Groups have clear boundaries which enable separation of personal and professional social media presence, learners can keep personal profiles private while interacting with others professionally *via* groups. This poses an

advantage over platforms like Twitter where posts by private profiles are restricted only to followers, curbing interactivity. Furthermore, Facebook allows its users to message one another even when not directly connected. Users who engage in conducive dialogue through this feature can potentially reduce aggression in their public interactions in comparison to platforms which only allow private messages between connected accounts such as Twitter as described by Participant 48:

On Facebook things tend to be a lot more gentle, so when I’m challenging people I might message people rather than put in the comments of the actual discussion. Whereas on Twitter you can be absolutely flayed alive, you’ll get 50 people saying ‘that’s appalling that you think like that, you should be sacked’. It’s a different way of interacting with people.

The high character allowance for Facebook posts and comments can prevent miscommunication from forced brevity, a challenge reported by Twitter users [1].

Facebook’s structure is friendly for new users, eliminating many obstacles to learning and engagement typical to Twitter [1]. Facebook group interactions tend to be more asynchronous compared to real-time Twitter learning activities such as ‘tweetchats’ or conference-tweeting which are highly demanding in terms of time and attention [1]. Thus, learners can engage at a more controlled pace while still enjoying interactivity, an important element of social media learning [1].

The curation of learning opportunities also differs between social media platforms. Curation methods used by participants in this study include joining groups and developing knowledge banks within groups for later reference. These are facilitated by the clear boundaries of Facebook Groups as well as the ‘search’ function which allows users to retrieve old posts and comments from within the group itself. In contrast, curation on platforms like Twitter can be more complex, involving skills such as choosing the right accounts to ‘follow’ as part of one’s learning network, as well as the strategic use of hashtags [1]. Some occupational therapy groups on Facebook, particularly those belonging to the ‘4OT’ suite,

Table 2. Relationship between examples and HCPC CPD Standards [39].

Example in theme	Standard 3: Type of practice / service delivery influenced	Standard 4: Service users which have received benefit
1	Mental health	Community mental health workers and peer support workers
2	Mental health	Other health professionals at workplace / mental health conference.
3	Generic occupational therapy practice fundamentals	Clients on placement and all future clients
4	Practice education	Student

prominently feature directories of other related groups in pinned posts. This can also facilitate content curation for learning.

Methodological considerations/limitations

The designated boundaries of the study are likely to have resulted in bias in findings, thus generalisation of its findings to other social media platforms or even occupational therapy practitioners of a different profile on the same platform should be done with caution. English is the dominant language of communication in most international virtual communities; while this study only includes participants who would have met certain English language competency standards in order to be eligible for registration and who are able to report experiences of learning through Facebook groups. Thus, the findings and discussion show a significant bias in favour of this social media platform as a professional learning environment. Further research is needed to identify weaknesses, which may be possible through cross-platform comparisons or through examination of occupational therapy practitioners' experiences from other demographics.

Besides, a possible methodological limitation of this study pertains to gender imbalance in sampling. Burns and colleagues [40] suggested that gender-balanced sampling can have an influence on the quality of data collected in CIT studies. A disproportionately high number of participants who identify as men is discouraged, on the basis that their disclosures would be less detailed and thus affect the quality of their narratives. This study has a disproportionately higher number of women participants than men, mirroring the demographics of the profession in the UK [41]. While these demographics are unlikely to have affected quality of disclosure, they may have impacted participant response rates. This study generated a moderate questionnaire response rate of ~49%. While higher than that of the mean response rate of published studies which is ~34% [42], it is still lower than that recommended by Fincham [43] which suggests that a response rate of ~60% should be the goal to address concerns of non-response bias. As this was conducted during the summer break and school holidays in the United Kingdom, it is likely that the caregiving responsibilities of women participants with children would have influenced response rates.

Conclusion

This article provides evidence for the utility of Facebook Groups as a professional learning environment. It showcases the varied ways professional learning occurs through Facebook Groups through concrete examples from occupational therapy practitioners' experiences. The findings can be helpful to various parties such as individual practitioners, administrators/moderators of virtual professional communities, as well as professional organisations in terms of enhancing the quality of learning experiences within the profession. This study adds to the evidence base for professional learning through social media, particularly that of the virtual communities known as 'groups' on the Facebook platform.

Acknowledgements

The author was supported by a Chevening scholarship from the Foreign and Commonwealth Office (United Kingdom) throughout the research duration. She would like to thank Ms Helen Pugsley (Cardiff University) for her support throughout the research duration; Mr Ter Fu, Teoh (Changi General Hospital) for contributing towards independent coding; colleagues and anonymised examiners from the Cardiff University MSc Medical Education Class of 2018 for reviewing and validating tentative themes and categories arising from data analysis; administrators of various professional Facebook groups for graciously supporting participant recruitment efforts; all research participants for their generous contribution of time and experiences; as well as Dr Carolyn Dunford (Brunel University London) and Ms An Nee, Lim for proofreading.

Disclosure statement

The author reports no conflict of interest.

ORCID

J. Y. Teoh  <http://orcid.org/0000-0003-2424-2816>

Data availability statement

The data that support the findings of this study are available from the corresponding author, JYT, upon reasonable request.

References

- [1] Hughes K. The use of Twitter for continuing professional development within occupational therapy. *J Furth High Educ.* 2020;44(1):113–125.
- [2] Bodell S, Hook A. Using Facebook for professional networking: a modern-day essential. *Br J Occup Ther.* 2011;74(12):588–590.

- [3] Dieleman C, Duncan E. Investigating the purpose of an online discussion group for health professionals: a case example from forensic occupational therapy. *BMC Health Serv Res.* 2013;13(1):253.
- [4] Rolls K, Hansen M, Jackson D, et al. How health care professionals use social media to create virtual communities: an integrative review. *J Med Internet Res.* 2016;18(6):e166.
- [5] World Federation of Occupational Therapists. Position statement: use of social media. 2016. Available from: <https://wfot.org/resources/use-of-social-media>.
- [6] Hamilton A, Burwash S, Penman M, et al. Making connections and promoting the profession: social media use by World Federation of Occupational Therapists member organisations. *Digit Health.* 2016;2:2055207616653844.
- [7] Larney E. Social media for occupational therapists: balancing the risks and benefits. Paper presented at: Canadian Association of Occupational Therapists Conference; 2013 May 29–Jun 1; Victoria, British Columbia. Available from: https://www.acotro-acore.org/sites/default/files/uploads/acotro_-_social_media_presentation_-_caot_2013_reduced_file_size.pdf.
- [8] Royal College of Occupational Therapists. Introduction to social media. 2019. Available from: <https://www.rcot.co.uk/promoting-occupational-therapy/using-social-media>.
- [9] Hook A, Bodell S, Hamilton A, et al. Online technology for occupational therapy: blazing a new highway for the way we are ALL going to travel in the next era. *World Fed Occup Ther Bull.* 2014;69(1):24–26.
- [10] BJOT, #OTalk. Social media: creating communities of research and practice. *Br J Occup Ther.* 2016;79(4):195–196.
- [11] Whiting C, Crow C. Social media provides a unique platform for clinical information exchange: exploring a 24000+ member pediatric occupational therapists Facebook group. Poster session presented at: American Occupational Therapy Association Annual Conference & Centennial Celebration; 2017 Mar 30–Apr 2, Philadelphia, PA.
- [12] Wiid C, McCormack C, Warren A, et al. Public and private blogging during placements: perspectives of occupational therapy students. *Int J Ther Rehabil.* 2013;20(2):79–87.
- [13] Bodell S, Hook A. Developing online professional networks for undergraduate occupational therapy students: an evaluation of an extracurricular facilitated blended learning package. *Br J Occup Ther.* 2014;77(6):320–323.
- [14] Naidoo D, Govender P, Stead M, et al. Occupational therapy students' use of social media for professional practice. *AJHPE.* 2018;10(2):101.
- [15] Murray K, Ward K. Attitudes to social media use as a platform for Continuing Professional Development (CPD) within occupational therapy. *J Furth High Educ.* 2019;43(4):545–559.
- [16] Hearle D, Lawson S, Morris R. A strategic guide to continuing professional development for health and care professionals. Keswick: M & K Update Ltd; 2016.
- [17] Lave J, Wenger E. *Situated learning: legitimate peripheral participation.* Cambridge: Cambridge University Press; 1991.
- [18] Pritchard A, Woollard J. *Psychology for the classroom: constructivism and social learning.* Oxon: Routledge; 2010.
- [19] Saunders M, Lewis P, Thornhill A. *Research methods for business students.* 8th ed. Harlow: Pearson; 2019.
- [20] Levers M. *Philosophical paradigms, grounded theory, and perspectives on emergence.* SAGE Open. 2013;3(4):215824401351724.
- [21] Driscoll M. *Psychology of learning for instruction.* 3rd ed. Boston (MA): Pearson; 2005.
- [22] Flanagan J. The critical incident technique. *Psychol Bull.* 1954;51(4):327–358.
- [23] Serrat O. *Knowledge solutions: tools, methods, and approaches to drive organizational performance.* Singapore: Springer; 2017.
- [24] Tripp D. *Critical incidents in teaching: developing professional judgement.* New York (NY): Routledge; 2011.
- [25] Paas F, Sweller J. Implications for cognitive load theory for multimedia learning. In: Mayer R, editor. *The Cambridge handbook of multimedia learning.* Cambridge: Cambridge University Press; 2014.
- [26] Mayer R. Cognitive theory of multimedia learning. In: Mayer R, editor. *The Cambridge handbook of multimedia learning.* Cambridge: Cambridge University Press; 2014.
- [27] Hewson C. Qualitative approaches in internet-mediated research: opportunities, issues, possibilities. In: Leavy P, editor. *The Oxford handbook of qualitative research.* Oxford: Oxford University Press; 2014.
- [28] Ryan G, Bernard H. Techniques to identify themes. *Field Methods.* 2003;15(1):85–109.
- [29] Butterfield L, Borgen W, Amundson N, et al. Fifty years of the critical incident technique: 1954–2004 and beyond. *Qual Res.* 2005;5(4):475–497.
- [30] Butterfield L. Using the enhanced critical incident technique in counselling. *Can J Couns.* 2009;43(4):265–282.
- [31] Macià M, García I. Informal online communities and networks as a source of teacher professional development: a review. *Teach Teach Educ.* 2016;55:291–307.
- [32] Barry M, Kuijjer-Siebelink W, Nieuwenhuis L, et al. Communities of practice: a means to support occupational therapists' continuing professional development. A literature review. *Aust Occup Ther J.* 2017;64(2):185–193.
- [33] Lantz-Andersson A, Lundin M, Selwyn N. Twenty years of online teacher communities: a systematic review of formally-organized and informally-developed professional learning groups. *Teach Teach Educ.* 2018;75:302–315.
- [34] McLoughlin C, Patel KD, O'Callaghan T, et al. The use of virtual communities of practice to improve interprofessional collaboration and education: findings from an integrated review. *J Interprof Care.* 2018;32(2):136–142.

- [35] Brooks F, Scott P. Exploring knowledge work and leadership in online midwifery communication. *J Adv Nurs*. 2006;55(4):510–520.
- [36] Mostaghimi A, Olszewski A, Bell S, et al. Erosion of digital professionalism during medical students' core clinical clerkships. *JMIR Med Educ*. 2017;3(1):e9.
- [37] Zhang R, Yin K, Xiang Y, et al. A student-run mobile social platform enhanced the hidden-curriculum teaching. *Med Teach*. 2017;39(10):1100–1100.
- [38] Ellaway R, Coral J, Topps D, et al. Exploring digital professionalism. *Med Teach*. 2015;37(9):844–849.
- [39] Health and Care Professions Council. Continuing Professional Development and your Registration [Internet]. London: Health and Care Professions Council; 2017. [cited 2020 Feb 16]. p. 7–9. Available from: <https://www.hcpc-uk.org/globalassets/resources/guidance/continuing-professional-development-and-your-registration.pdf>
- [40] Burns A, Williams L, Maxham J. Narrative text biases attending the critical incidents technique. *Qualitative Mrkt Res An Int J*. 2000;3(4):178–186.
- [41] World Federation of Occupational Therapists, Stoner C, Curchod L, et al. World Federation of Occupational Therapists human resources project 2012 and 2014: demographic profile of WFOT member organisations. *WFOT Bull*. 2017;73(1):24–26.
- [42] Fulton B. Organizations and survey research: implementing response enhancing strategies and conducting nonresponse analyses. *Sociol Methods Res*. 2018; 47(2):240–276.
- [43] Fincham J. Response rates and responsiveness for surveys, standards, and the journal. *Am J Pharm Educ*. 2008;72(2):43.