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E-professionalism in nursing: explaining the public perspective

Abstract

E-professionalism is a common term used to describe the behaviours of nurses and healthcare professionals in the online environment. There are a range of professional guidance documents that describe being professional online but there is little research into the perspectives of patients and the public.

This mixed-method critical realist study aimed to explain how the public make decisions about what is e-professional. It used five 'real life' vignettes for the purposes of discussion in focus groups (n=8) and a survey (n=53).

Participants felt that a nurse was entitled to a personal life, freedom of speech and promotion of causes the nurse believes to be important even if this was not aligned to their own attitudes. Profanities against anyone were unanimously rejected as acceptable.

The public make decisions based on a range of complex factors: social/individual values, attitudes and beliefs and an ethical component about the 'intent' of behaviours that influences the public perspective. An evidence-based approach to e-professionalism is discussed.

This study concludes with 'Media8', eight top tips drawn from a theoretical evidence-base for nurses and the nursing profession about how to 'be' and e-professional and manage their social media profiles.

Keywords:

E-professionalism; social media; critical realism; mixed methods; patients; public; Facebook; Twitter

Background

E-professionalism can be defined as "*the attitudes and behaviors that reflect traditional professionalism paradigms but are manifested through digital media.*" (Cain & Romanelli, 2009:1).

With a large and increasing majority of the global population having some type of online profile (Statista, 2019) e-professionalism has been an emerging topic in the international context of nursing and nurse education with a range of reports about issues with online behaviours, professional competency hearings and legal cases (Westrick, 2016; Yoder v. University of Louisville, 2012). Online Social Networks (OSN), such as Facebook, Twitter and WhatsApp messaging are one of the most common uses for the internet with increasing global use (Statista, 2019a) and are where many

issues arise with regards to e-professionalism; these include breaches of confidentiality, relationships with patients and evidence of breaching employer policy (Ryan, 2017a).

There is a range of research literature that discusses e-professionalism from the perspective of academic, student and clinical nurses (Wang *et al*, 2019; Mariono *et al*, 2018; Barnable *et al*, 2018; Koo *et al*, 2017) but little that explores what the public believe to be ‘professional and acceptable’ behaviour in the online environment. This is a significant gap in knowledge for the topic of e-professionalism. Registered nurses are required to uphold the reputation of the profession but in the absence of data explaining what the public believe to be unprofessional and damaging to the profession [rather than an individual] it is difficult to assess what and when such behaviour is damaging. This article presents a research project that uses theoretical frameworks to explain the public perspective of e-professionalism in the context of OSNs.

Literature review

E-professionalism

Research literature exploring e-professionalism in the context of healthcare and healthcare education does exist, with the majority identifying a need for more explicit guidance and education to raise awareness of the behaviours associated with e-professionalism (Mariono *et al*, 2018; Barnable *et al*, 2018; Koo *et al*, 2017; Hall *et al*, 2013; Ford, 2011). What constitutes professional behaviour is broad ranging and dependent on geographic location, profession and individual perspective (Bentoli *et al*, 2017; Mabvuure *et al*, 2014; Cain *et al*, 2009).

Research literature has described different levels and types of behaviour in the context of online social networks. Most recently, DeGagne *et al* (2019) introduces the concept of ‘cyber civility’ on Twitter feeds, suggesting that behaviour is judged by how socially ‘civil’ it is. Clyde *et al* (2014) refer to professional, healthy personal and personal with unprofessional behaviour, Ponce *et al* (2013) and subsequently, Nason *et al* (2018) took a different approach and employed a scale of behaviours 1) definite violations of professionalism (e.g. criminal activity), 2) questionable content (e.g. public intoxication) and 3) no professional issues (e.g. insensitive comments). Such scales seem to be taken from professional guidance and professional codes of conduct (Ryan, 2016). Professional and regulatory organisations publish guidance on the use of social media platforms such as Facebook that aim to raise awareness, set standards and ensure the reputation of the profession from a public perspective (NMC, 2016; Ryan, 2016; Nursing Council of New Zealand, 2013; Nursing & Midwifery Board of Ireland, 2013; American Nurses Association, 2011). However, from the focus of published research literature, it could be argued that few of these guidelines have considered what the public deem to be unprofessional behaviour and thus, what they believe to reflect poorly on the profession [rather than the individual]. Hence, most of the literature on the topic of e-professionalism deals with professional, academic and student perspectives.

The public perspective of e-professionalism

Omaggio *et al* (2018) discuss the concept of patient-targeted googling which is the process of searching for patients as a healthcare professional, usually to gain information about a patient. However, this study did not identify the patient perceptions of this. In contrast, Parmar *et al* (2018) discussed how patients of dental professionals use social media to find out more about their professional qualifications and online reviews (Healthcare professional targeted Googling, HCPTG). This study also showed that 73% of patients did not expect their dental practice to have a social media presence at all, indicating that there might not be a need for certain organisations to have a social media presence.

Maben-Feaster *et al* (2018) examined healthcare provider Twitter feeds to establish if those with professional (educational) Tweets, personal Tweets or a mix of the two were viewed as acceptable by patients. The findings of this study suggested that those with educational Tweets only were viewed as more professional than those with some personal content. This also highlighted that female profiles received higher professionalism scores than those of men. This could indicate that the public prefer professionals to have separate profiles for personal and professional use but also that social and cultural norms (i.e. gender) could influence perspective.

Jain *et al* (2014) explored the perspectives of medical students, faculty staff and the public by using simulated examples of behaviour on public social media profiles. This showed significant differences in public, faculty and student perspectives about what types of behaviours are unprofessional based on 'comfort' rating. This study also suggested that social and cultural norms might influence these perspectives but did not go as far as to provide any theoretical explanation as to why and how this might be the case and in what circumstance.

Clyde *et al* (2014) used a questionnaire with students studying education (as the public) and identified that individual posts from medical doctors did not reflect poorly on the profession, rather, they reflected poorly on the individual.

More recently, Weijs *et al* (2019) explored the effects of workday comments on public perceptions of professional credibility. This study found that professionals who expressed frustration with their work were viewed as 'less credible' than those which were more general and ambiguous comments about work or the workplace. It also concluded that there is a limited evidence base for e-professionalism from the public perspective and recommended further investigation into this aspect of the topic.

Aim & objectives

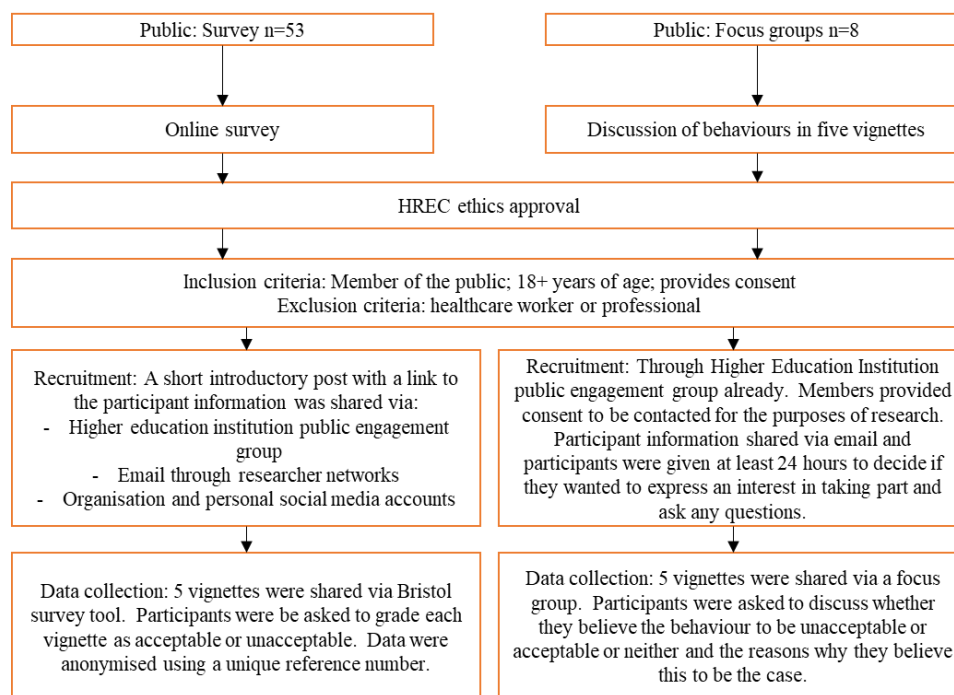
- Employ realist mixed methodology (Bhaskar, 1989) with intensive study design (Danermark *et al*, 1997; Reed, 2009) to explain what, how and why the public come to decisions about online behaviours of nurses and e-professionalism.
- Use an evidence-based, theoretical approach to make recommendations for nurses when managing their OSN profiles

Methods

Sample, sampling frame, recruitment & data collection

This study was carried out during 2018-2019. Figure.1 outlines the sample, sampling frame and recruitment process. As this study recruited from members of the public, the survey sample size is based on the number of residents in the United Kingdom (Office of National Statistics, 2018), with a confidence level, 95% and confidence interval, 15%.

Figure 1 - Sample and recruitment



Intervention

Five vignettes were presented to both the focus group and survey participants. These were taken from real life examples with some slight amendments made to the context of one (Table 1 case 3). Each vignette was assessed, and 'graded', considering legal, ethical, employer and public routes of accountability (Caulfield, 2005) by an academic lawyer who previously worked as a registered nurse and two nurse academics who also work clinically as nurses. The Awareness to Action (A2A) Clarity, Context, Confirmability (3Cs) tool, a validated tool for assessing online behaviours, as

described in Ryan & Cornock (2018) and Ryan & Cornock (in press) was used to guide this; table 1 provides and description of each vignette. The vignettes have not been published here due to research ethics approvals but are available as a supplementary file from the researcher. The survey is also available as a supplementary file.

Data triangulation & analysis

A six-stage, realist informed analysis process was employed adapted from Ryan (2017; 2017d) (table 2). Research publications, open survey responses and focus group transcripts were entered into NVivo 10.0 (qualitative analysis software). The statistical software SPSS v24.0 was used to analyse data from the survey. Chi-square tests were applied to assess difference in response based on each vignette, age and gender.

Table 1 Description of the five vignettes

Vignette/Case	Description	Grading/comments
1	A 'selfie' picture on Twitter of a healthcare professional showing their NHS identification to the camera and stating 'I'm in work Jeremy' in response to a political statement from the Department of Health minister in the UK. He claimed that the NHS needed to be a 24/7 service and the result was collective action from healthcare professionals demonstrating that this was already the case.	Acceptable but the individual should not be sharing their identification badge for the organisation in which they work as it breaches employer policy.
2	A picture of a patient's leg with a chronic leg ulcer that is not healing despite use of available treatments. This has been shared by a nurse on a closed professional nursing Facebook group, appealing for help and advice about potential approaches to treatment. The patient is not identifiable, the nurse also states that the patient has consented to her photographing and sharing the photo through the forum.	Acceptable.
3	A picture of a nurse on a night out with friends, drinking a glass of wine. Their name is visible (pseudonym was used for the purposes of this research) as is their workplace, relationship status and personal details. This is shared with a ' custom ' group of 10 friends on their Facebook profile.	Acceptable.
4	As in vignette 3, a picture of a nurse on a night out with friends, drinking a glass of wine. Their name is visible (pseudonym was used for the purposes of this research) as is their workplace, relationship status and personal details. This is shared publicly on their Facebook profile.	Acceptable. Although, there perhaps needs to be some awareness of what is shared in the public domain.
5	This was a case on a public community (Twitter) where some adolescents had stolen from people's homes. A man who identified as a registered nurse expresses his disgust with profane language and other statements such as " <i>bash them within an inch of their useless worthless lives</i> "	Unacceptable.

Table 2 Six-stage analysis process

Stage of analysis	Description
Stage 1: [Re]description Review literature and describe the current situation along with researcher assumptions	Description is the process of reviewing the current evidence surrounding a phenomenon and understanding any analytical or theoretical frameworks associated with it. In this case, it entailed several scoping activities. Re-description involves revisiting this evidence after data collection to enable the confirmation of the phenomena in the context of the current study. Description and re-description in this study involved: A literature review to determine current evidence and theory on the topic of e-professionalism and public perspectives at stage 1 and then during stage 5.
Stage 2: Data coding – Identify components <ul style="list-style-type: none"> - Entities: people, places and organisations involved - Actions: things that entities might do, behaviours on social media - Outcomes: what impact the ‘events’ on social media might have - Events: things that happen - Tendencies: perspectives, opinion, characteristics of entities - Structures (morphogenic/morphostatic): structures that either change or sustain behaviours/actions/tendencies (e.g. time, negative experience) - Mechanisms (potential): theory that might explain how the above interact to create the world as we/the entities see it 	The coding framework of the ‘holy grail’ of critical realist ‘components’ of reality taken from Elder-Vass (2010) and Rees & Gatenby (2014) were applied to the data sources.
Stage 3: Identify relationships	This stage of analysis examines case examples and scenarios in the data and how these relate to the research question. In this case it examined the different perspectives and most importantly, the reasons for holding these perspectives along with ‘when’ these might change or stay the same.
Stage 4: Visual mapping of models	Retrodution requires exploration of how components in the data actually interact to ‘create’ the outcomes observed. During the process of analysis stages 1-3 Thinking about ‘what has to happen for X to occur?’ ‘What conditions need to exist in order for X event to happen?’ The previous stages informed the decisions made during this stage of analysis.
Stage 5: Hypothesise, compare, test and confirm the theories that explain the models.	This stage consisted of proposals for suggested theories, causal mechanisms and possible explanatory frameworks that respond to the research question/aim. This will be guided by the mechanisms and theories that emerged during stage 4 but may also revisit the literature to identify other potential theory. The visual ‘concept’ maps modelled in stage 4 were used to ‘test’ the pattern of proposed theories and causal mechanisms against that which has been observed. These theories formed the basis the explanatory frameworks which may be applied to practice.
Stage 6: Theoretical and explanatory frameworks.	Take the underpinning theory and use it to develop practically applicable frameworks in response to the research aim. This stage consolidated stages 1-5 and produces frameworks that might have utility in practice (e.g. questionnaires, assessment tools, algorithms). When reporting the study, these were applied to case scenarios in order to evidence their relevance to the likely ‘real’ world.

Ethics and rigour

Ethical approval, including consent and confidentiality procedures was successfully obtained from the researchers' institutional Human Research Ethics Committee (HREC-2796) with reciprocal ethical approval from the partner higher education institution. Rigour was applied in line with the transparency, accuracy, propriety, utility, purposivity, accuracy, specificity and modified objectivity framework (TAPUPASM) as described in Ryan & Ruddy (2019).

Results

Participant characteristics

The survey recruited n=53 and two focus groups recruited n=8 in total. Table 3 provides a summary of the survey participants and table 4 provides a summary of the focus group participants.

Table 3 - Survey participant age, gender and region of the UK

<i>How old are you?</i>	<i>Frequency</i>	<i>Percent %</i>	<i>Mode</i>
<i>18-24 years</i>	4	7.5	
<i>25-34 years</i>	16	30.2	
<i>35-44 years</i>	28	52.8	35-44 years
<i>45-54 years</i>	4	7.5	
<i>55+ years</i>	1	1.9	
Total	53	100	
<i>What gender are you?</i>	<i>Frequency</i>	<i>Percent %</i>	<i>Mode</i>
<i>Male</i>	10	18.9	
<i>Female</i>	43	81.1	Female
Total	53	100	
<i>Where do you live?</i>	<i>Frequency</i>	<i>Percent %</i>	<i>Mode</i>
<i>England</i>	45	84.9	England
<i>Northern Ireland</i>	1	1.9	
<i>Wales</i>	2	3.8	
<i>Scotland</i>	5	9.4	
Total	53	100	

Table 4 – Focus group participant age and gender (N.B. all focus group participants were from the Midlands of the UK)

<i>Participant number</i>	<i>Focus group</i>	<i>Age (years)</i>	<i>Gender</i>
1	1	35-44	Female
2	1	35-44	Female
3	1	25-34	Male
4	1	55+	Male
5	2	25-34	Female

6	2	16-24	Female
7	2	45-54	Female
8	2	35-44	Female

Survey and focus group findings

For each of the vignettes one sample binomial or chi square tests were used to assess whether survey participants (SP) were most likely to view the behaviours to be acceptable or unacceptable. The significance level was set at 0.05. These findings were then discussed in the context of the qualitative feedback from survey participants and focus groups (FG).

Vignette 1

This vignette showed a 50% split between whether the behaviour was unacceptable or acceptable and therefore, one-sample binomial testing showed that responses occurred with equal chance. Pearson chi-square showed no significant difference in responses across age [2.333 p=0.675 df 4] or gender [0.000 p=1.00 df 1].

Conflicting opinion on this vignette seemed to be as a result of three factors. Firstly, participants felt that nurses were entitled to freedom of speech, especially when defending or participating a collective cause of benefit to their profession or healthcare system,

“I don’t find it offensive...it’s just a young woman making a statement” (FG1 lines 78-79)

“They are using social media as a means for standing up for their profession” (SP 25)

Conversely, they argued that employer names or identification badges should not be shared in the public domain via a personal profile as this could raise concerns with e-safety, breach policy or unintentionally reflect poorly on the employer,

“It is not advisable to have your ID on show in social media pictures as it can make you a target for people who are angry with your service. The police advise during e-safety training that it is not best practice to have your employee ID on show. It is also against some company policies.” (SP 41)

“It’s not very professional and gives a bad impression that could be detrimental to her workplace” (SP 53)

There were also concerns about unintended consequences of content and the lack of control over responses from other people when something is in the public domain,

“Even though it’s a personal account it’s a statement that is likely to set off a spiral of comments about that issue...but then who’s going to comment on that?” (FG2 lines 75-77)

“What she posted is in her control, but everything else’s now is completely out of her control, if she’s passing a personal opinion or collective do you think that would make a difference to the people behind what she is saying?” (FG2 lines 82-84)

In contrast, participants then went on to say that such images tended to reflect more on the nurse as an individual rather than the profession as a whole,

“she’s being sarcastic and it’s quite humorous as well and it reflects her personality...there’s an element of personality that comes through and it allows for the freedom of expression” (FG1 lines 77-78)

Thus, members of the public viewed the image as unacceptable primarily for concern over risk to safety, not necessarily to the profession.

Vignette 2

Most survey participants (56.6% n=30) rated vignette two as acceptable and this was significant based on a one-sample chi square test $p=0.000$. There was no significant difference in response based on a chi-square test against age [1.994 $p=0.981$ df 8] or gender [0.491 $p=0.782$ df 2].

The interaction between online versus offline was debated, some participants felt that this was no different to asking for advice from the clinical team in the clinical environment, only that, by its very nature online media could reach a broader range of expertise, more quickly and therefore be of benefit to the patient,

“you are just getting out to a wider range of people that we do need to embrace things like social media within work and its’ just a new way of talking to peers and colleagues” (FG1 lines 235-236)

Those who felt that this was acceptable suggested that this was only acceptable under several circumstances 1) as part of the nurses duty of care, 2) acting in the best interests of the patient, 3) if all other avenues had been explored 4) if the patient was anonymous 5) there was documented consent and 6) if this was a closed, professional group or forum,

“Assuming the patient remained anonymous, the nurse is acting in a professional capacity and seeking advice from other professionals. I would imagine this is normal practice, the fact it is over social media is not relevant” (SP 34)

“No identifiable information was given; the patient gave consent (ideally needs to be documented) but the nurse has reached out to other nurses for support and advice after exhausting all other routes.” (SP 35)

As with vignette 1, there were some concerns relating to the unintended consequences of sharing pictures online (e.g. pictures being copied, edited and shared in a different format) as opposed to

seeking face to face advice from more senior members of a clinical team, along with other concerns associated with the lack of confirmability of the people and information provided in the online environment,

“There’s a danger cos you don’t know who they are, you don’t know how qualified they are...could be in the wrong context” (FG1 lines252-253)

Vignettes 3 & 4

Almost all the survey participants rated vignette 3 as acceptable (96.2% n=50) and a one sample binomial test showed this was significant $p=0.000$. Pearson chi-square testing showed a significant difference in perspective across age groups with those aged 35-44 years (n=20) and 25-34 (n=11) years most likely to deem this to be acceptable [31.720 $p=0.000$ df 4]. There was no significant difference based on gender [0.495 $p=0.482$ df 1]. There was no significant difference between the acceptability of vignette 3 and 4 [1.487 $p=0.233$] although focus group participants discussed this in more depth.

A one sample binomial test for vignette 4 showed that most participants (80.4% n=37 with 7 missing responses) were likely to score this as acceptable $p=0.000$. There was no significant difference in response found for age or gender.

The nurse’s ‘entitlement’ to be a person when outside of work was a notable reason for both vignettes being deemed as acceptable,

“The nurse is off duty and enjoying time with friends. Yes, she is drinking alcohol and some may see this as a bad role model but this is in her personal time and even medical professionals deserve a glass of wine or two! I am more offended by nurses who stand just outside the hospital in uniform smoking” (SP7)

This also illustrated the interaction and difference in attitudes between the offline and online environment; the importance of ‘context’.

However, where participants did not view these vignettes as acceptable this was related to the ‘context’ or strong personal views about drinking alcohol, being intoxicated or the types of clothing the nurse was wearing, suggesting an element of ‘social and cultural norms’,

“People do silly positions however it appears to show cleavage which is common” (SP 20)

Interestingly, there was little difference between the percentage response to whether custom friends sharing versus public sharing was acceptable but comments about unacceptability, as with vignette 1, seemed to refer to the ‘risk’ of sharing too much in the public domain and the need to raise awareness of the importance and use of privacy settings for people who use social media, not necessarily because the person was a nurse,

“I think that she’s a bit foolish, from a professional she’s the foolish one making it public”
(FG2 317-318)

“It potentially makes them vulnerable, but a person’s job is not the most concerning part – it’s the lack of awareness about the risks of this information being available” (SP 25)

Vignette 5

Frequency of responses showed that all participants were unanimous that this case was unacceptable. As such, all participants in both the survey and focus group felt that such profanities against individuals or groups, regardless of whether someone is a professional are unacceptable in any circumstance.

“Abhorrent behaviour from anyone let alone from someone in a care giving profession” (SP 36)

Furthermore, participants felt that, as the individual in this post were identifiable as a nurse, they would be led to question their competency, personal and professional values in such a role,

“I wouldn’t want to hear that person was on the ward where you son was, that would really upset me” (FG1 lines 437-438)

Notably, as with the other vignettes, these posts were deemed to predominantly reflect on the individual and not the nursing profession. However, some participants believed it to be ‘typical yet unacceptable’ many stated that they would want the employer to act and investigate this behaviour, this was not the case with the other vignettes,

“Unfortunately, this appears to be very typical of a post that you see on many groups and local papers, which is why I don’t follow them. I am mostly disappointed in humanity when I see this. I would hope that he was subject to a disciplinary.” (SP 41).

Limitations

As per the intensive research design frequently employed in realist research (Danermark *et al*, 1997) the focus groups were limited to eight members of the public from the East Midlands of the UK. While the survey was open to an international audience all participants were from the nations in the UK and thus, the findings here might not reflect social norms elsewhere in the world. However, as the explanatory framework is underpinned by well-established theoretical concepts that is not to say it cannot be readily amended or adapted to reflect legal, ethical and professional frameworks in other areas of the world.

Discussion

How do the public decide what is and is not acceptable, when and why?

There were three underpinning theories that supported an explanation about what public participants believed to be acceptable, in what circumstances and how nurses can manage their behaviour in the context of e-professionalism: Socialisation (Weidman *et al*, 2001; Ryan, 2017a, b), Ajzen's (2005) Theory of Reasoned Action and Olliere-Malaterre *et al* (2013) boundary management framework.

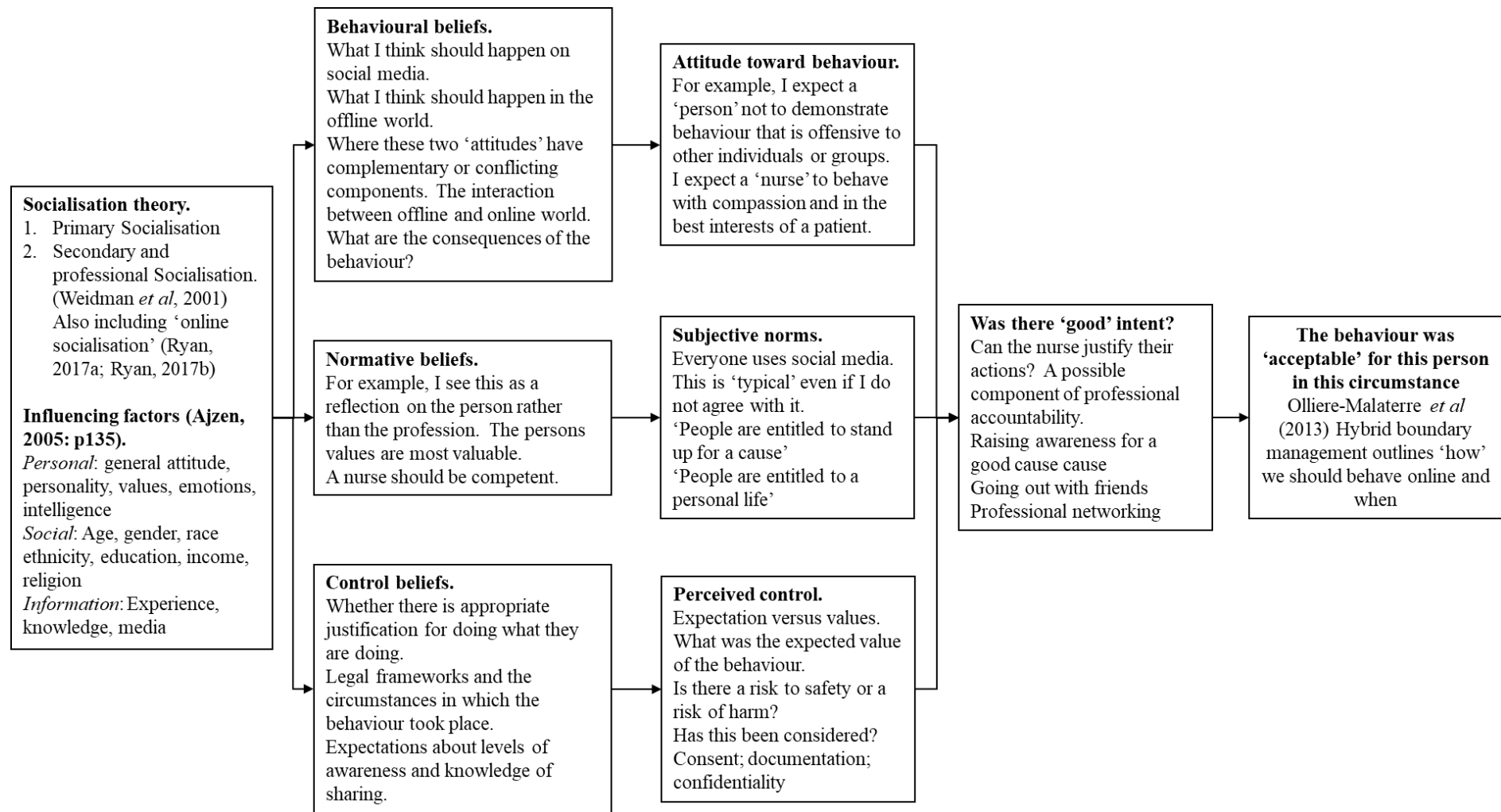
The findings in this study indicate that there are a range of factors that influence the public perceptions of nurse's behaviours in OSNs in a range of different circumstances and thus, e-professionalism. Figure 2 explains this with the use of socialisation theory and outlines the factors that influenced the general attitude of a member of the public; some of this may be cultural and social values, for example, believing it to be socially acceptable to drink alcohol in public or wear provocative clothing. As such, the use of this theory to underpin the findings of this study explains why public perception is likely to be different in different parts of the country, and globally.

Building on these theories (figure 2), decisions about nurses behaviour in the case scenarios in this study were based on an individual's beliefs (that is behavioural, normative and control), personal, social and cultural values (that is attitudes, subjective norms and perceived control) coupled with ethical considerations about whether the 'intent' was to cause harm or malice and whether harm was actually evident.

Socialisation, social norms, beliefs and attitudes

While Ajzen's (2005) theory of reasoned action is most frequently applied to the decision to 'behave' or 'act' in a certain way, when the principles were applied to the data in this study (during analysis stages 5 & 6) it explained how participants came to decisions about what is acceptable behaviour and in what circumstances (figure 2). As described in Ajzen (2005), Weidman *et al* (2001), Ryan (2017a, b) (figure 2) there are a range of factors that influence an individual's behaviour, beliefs and attitudes. As with the data in this study, Manthiou *et al* (2014) and Vallerand *et al* (1992) found that attitudes played a more important part in determining 'acceptability' than normative beliefs and subjective norms; what people think they should and should not do and the social pressure associated with this. For example, the attitude that nurses should act in the best interest of a patient was more important than a person's normative beliefs and subjective norms relating to drinking alcohol or wearing 'low cut' clothing. It emerged that that 'good intent' and positive consequences were also associated with 'acceptability'. For example, if the nurse was acting in the best interests of a patient (vignette 2) or the concept of standing up for a worthy cause, such as the healthcare system. Consequently, it was possible to make recommendations for nurses about what behaviours are acceptable and in what circumstances.

Figure 2 Application of socialisation theory and the theory of reasoned action (Ajzen, 2005) to the public decisions about 'acceptability' of behaviour



What does this mean for nurses? What and how to share information?

Having explained 'how' the public make decisions about e-professionalism it is possible to make recommendations about how nurses can manage their online profiles to promote a 'professional image'. The findings of this study indicate that members of the public do not see socially acceptable behaviours to be unprofessional, even if they do not necessarily agree with their acceptability. This also reflects some of the findings in DeGagne *et al* (2019) where the concept of 'cyber civility' is presented. Conversely, they expressed concern about 'safety and privacy' of those who were sharing photos and personal details publicly and suggested the need for 'increased self-awareness' online.

Olliere-Malaterre *et al* (2013) describes four approaches to boundary management in the online environment,

- I. **Open:** public profiles and full disclosure of a range of information.
- II. **Audience:** private profile; ignore or deny certain connections; different sites to segment different audiences (e.g. LinkedIn for professional, Facebook for personal)
- III. **Content:** sharing positive and flattering information; non-controversial posts; control 'tagging' and sharing; monitor comments from others or prevent certain individuals from making comments
- IV. **Hybrid:** A combination of the above depending on the purpose; create and maintain lists of contacts and manage content based on this (e.g. a custom friend list to share on Facebook with only close friends and family); visit profile and monitor privacy settings frequently, when new updates to platforms have occurred or when you change workplace or career; educate connections about what is appropriate to comment.

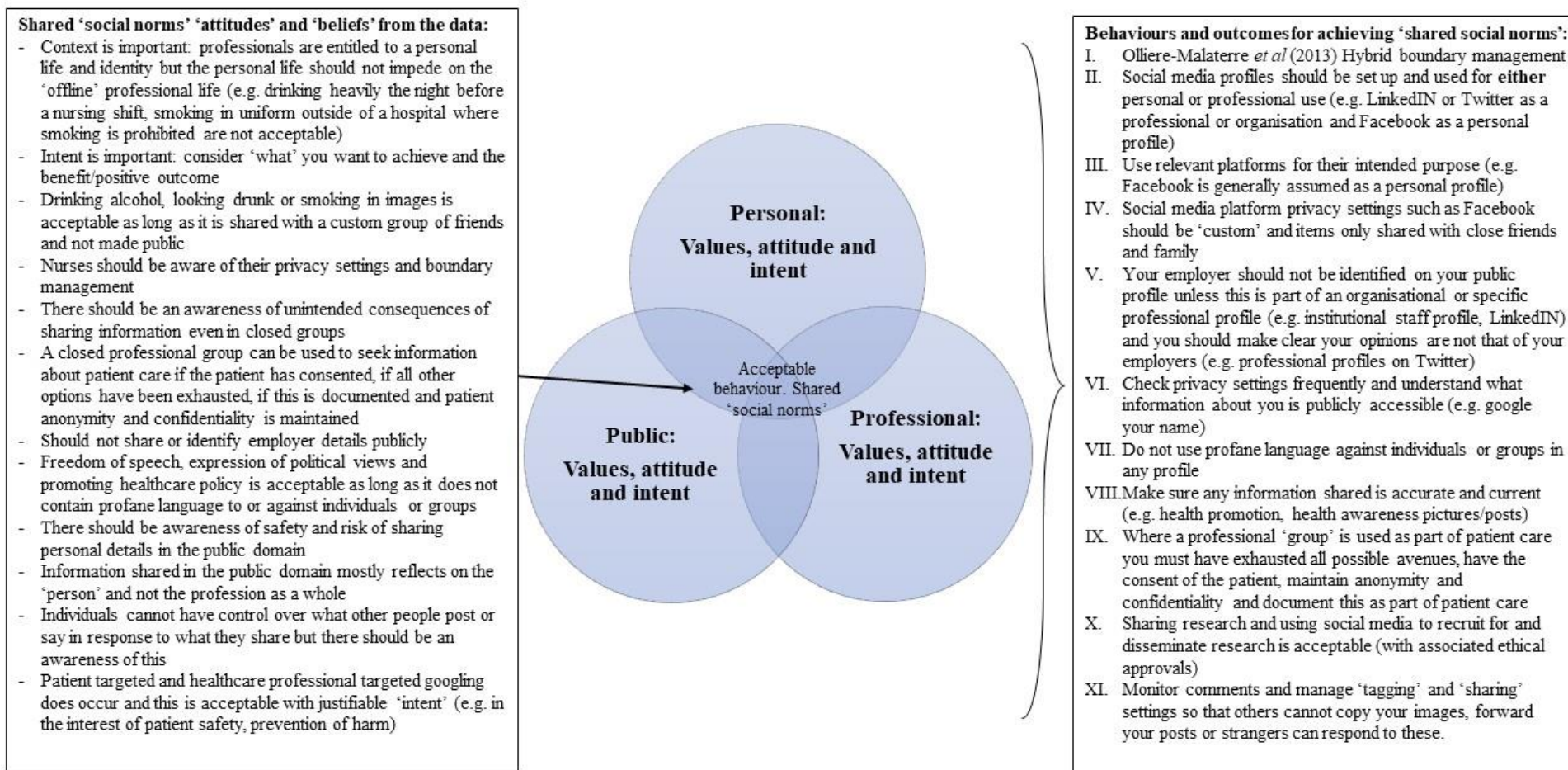
Hybrid boundary management requires the individual to 'custom' and 'manage' who they share what types of information with (Olliere-Malaterre *et al*, 2013). Although there was no significant difference in survey respondent's acceptability of vignette 3 and 4, focus group participants confirmed that vignette 3 was more acceptable as see it was only shared with close friends and family. The majority of participants did not view vignette 4 as unacceptable but there were concerns about safety and public image of the individual, and there were some participants whose background (and thus, their perspective on social norms) led them to question whether drinking alcohol, being intoxicated and wearing a 'low cut' dress should be in the public domain in the online environment. Interestingly, these participants expressed the same opinion of individuals in the 'offline' world (i.e. they felt that people should not necessarily demonstrate this behaviour at all, not just online).

While many participants felt that sharing information publicly was not acceptable, discussions in focus groups regarding HCPTG was deemed to be acceptable. HCPTG is where a patient or member of the public uses an internet search to find information about a healthcare professional. Participants

in this study and in research literature (Maben-Feaster *et al*, 2018; Parmar *et al*, 2018) indicated that professional and organisational profiles that accurately show the persons credentials can be viewed positively by the public.

Considering the data from this study, theoretical evidence from figure 2, the evolving and changeable nature of the internet and social media platforms figure 3 firstly identifies the social norms and values expressed by the public participants in this study. From the findings in this study and the theory presented in figure 2, indicate that social values and norms, personal background influential factors (Olliere-Malaterre *et al*, 2013; Ryan, 2017b, c). As such, figure 3 illustrates where public, personal and professional values can be complementary or in conflict and the overarching aim for e-professionalism should be to operate within the central area of the image; where all of these are most likely to be in complement. The final part of figure 2 takes recommendations from Olliere-Malaterre *et al* (2013) and Ryan (2017b, c) theoretical frameworks about competent, hybrid boundary management to facilitate an online presence that reflects the public, professional and personal perspectives of e-professionalism.

Figure 3 – How nurses can use the findings from this study (figure 2) to manage their online behaviour to facilitate e-professionalism from the public perspective?



Conclusion

The findings of this research are original and significant in that they address a gap in knowledge about public and patient perceptions of nurse's behaviour on social media; it explains 'how' and 'why' members of the public come to decisions about what is 'professional' and 'unprofessional'.

As discussed, minimal research has considered the public perspective and where it does, the work is predominantly descriptive, not theoretically informed and does not consider theoretical concepts about why the public hold these perspectives and expectations of nurses. As previously highlighted, anecdotal and research literature presents differing views about what constitutes 'e-professionalism'. For example, whether images of drinking alcohol or being intoxicated should be tolerated. Interestingly, this study could serve as a resolution to these conflicting opinions, with public participants deeming such behaviour to be acceptable and 'typical' of social media posts, even for nurses and even when their own values might not concur. Thus, it tells us that the public accept that nurses are a 'person' and entitled to a personal life within the remit of shared social norms.

As per theory relating to socialisation, reasoning and boundary management, this study acknowledges that the development of 'social norms' is complex and evolving offering a basis for developing 'shared values and expectations' between the public, nurses and the nursing profession; about their behaviour as individuals and professionals in online social networks. In doing so, it addresses a significant gap in current research with theoretically informed findings that can be incorporated into professional guidance, organisational policy or education.

The topic of e-professionalism will continue to evolve, with other emerging topics such as PTG and HCPTG the management of OSN profiles for nurses and the nursing profession should be an ongoing consideration. Members of the public acknowledge that nurses are entitled to a personal life but have concerns about safety and security of nurses who share personal details and personal photos publicly, any profane language generally or against individuals or groups is unanimously deemed to be unprofessional. As such, nurses need to 'mediate' or 'Media8' the information they share online and how they manage boundaries between personal-professional-public information.

Recommendations

Box 1 'Media8': top tips for nurses emerging from this study

- i. Use appropriate and separate platforms for personal, education and professional purposes. For example, LinkedIn for professional profiles and Facebook for personal.
- ii. Have a 'custom list' of specific friends and family on OSNs such as Facebook so that posts have limited and focused reach
- iii. Do not have your employer and position listed publicly on personal profiles

- iv. Every 3-6 months or when privacy settings are updated, use an internet search engine or OSN functionality to view what the public can see about you online
- v. Where the function is available 'unlink' your profile from internet search engines (this function is available on sites such as Facebook)
- vi. Use functions that control who can 'tag' and share your posts and use the option to 'review' posts to your Facebook timeline to limit the impact of 'unintended consequences'
- vii. Make sure anything shared that relates to healthcare or 'practice' is current, up-to-date and evidence-based
- viii. Think carefully about profile pictures and photos that are publicly accessible. Do you want to be identifiable from these?

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Supplementary file: Example questionnaire

Screening questions

Q1 Are you over the age of 18?

Q2 Do you work for a healthcare organisation?

Q3 Are you a healthcare professional?

Q4 Thank you for agreeing to participate in this research. The information you provide during this survey will be used for research purposes. You will not be identifiable from the data collected and used for the purposes of this research. It will take 10-15 minutes to complete. By clicking 'yes' below you agree that you have read the participant information sheet dated 6 December 2018 and that the research team may use the information given for the purposes of the research.

Questionnaire

Q5 How old are you?

18-24 years

25-34 years

35-44 years

45-54 years

55+ years

Q6 What gender are you?

Male

Female

Other

Prefer not to say

Q7 What country do you live in?

England

Northern Ireland

Wales

Scotland

Other (please state):

Q8 Please enter a unique reference here. This should be made up of the first three letters of your surname and today's date. For example, John Smith, taking the survey on 6th December 2018 would

enter: SMI6/12/18 If you need to contact the research team about your responses then you will need to quote this reference number. Please make a note of it.

The following questions include some examples of healthcare professionals using social media such as Facebook. You will be asked to assess whether you feel that they are professional or unprofessional. Where possible it would be useful for you to give reasons for your choice in the comments box provided.

N.B. The vignettes have not been included here for ethical approval purposes, but each was given the following text:

Questions 9-18

The image below is of a nurse who works for a healthcare organisation. Please respond to the question with this in mind.

Vignette/case 1-5

Acceptable/professional

Unacceptable/unprofessional

What is the reason for your response (optional)?

Q19 If you would like to be entered into a draw for a £20 Amazon e-voucher please enter your email address here. Your details will only be used for this purpose and will not be passed onto any third parties.

Q20 If you would like to be kept up to date with the results of this research, please enter your email address here. Your details will only be used for this purpose and will not be passed onto any third parties.