

ORIGINAL RESEARCH

Achieving shared values: A mixed methods study and multi-method model of how to effectively educate nurses about e-professionalism

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ABSTRACT

Background and objective: Professional socialisation is the method by which nurses become ‘professionals’, demonstrating the values and behaviours accepted by the profession in both the online (e-professionalism) and offline environment. Understanding the concept of e-professionalism and the values associated with online behaviours is an important component of professional practice. This mixed methods project explored nurse’s perspectives about what is acceptable to do on social media and used an evidence-based decision-making tool (A2A) to assess perspectives about whether behaviours in social media are professional or unprofessional is reliable and valid for use in nurse education.

Methods: Quantitative data was gathered for a series of five vignettes nurses were required to use the A2A tool to score each on the basis of professionalism. To assess the reliability and validity of the tool, participants were asked to complete this task on two occasions $n = 122$ nurses completed the initial survey and $n = 48$ repeated the survey. Following this, qualitative data were gathered via focus groups to explore the reasons why consensus could not be achieved.

Results: Findings show that, even with a structured tool there are still variations in what is and is not deemed to be professional behaviour. There was limited reliability and validity for individual use of the tool, but clinical staff found it useful and relevant to practice. Focus groups (three, $n = 8$) then explored the concept of e-professionalism further to establish the reasons why consensus is not achieved despite the presence of a structured tool. Two main themes were found 1) the role of values in achieving consensus and 2) the role of tools in achieving consensus and in nurse education. The complex interdependence of personal-social-professional values (competing or complementary) were found to be a significant reason why consensus about acceptable online behaviours was not achieved by using the structured tool.

Conclusions: A multi-method model to approach nurse education is proposed. It uses a combination of tools and approaches to explore the personal-social-professional domains, navigate competing values and teach practical skills for effective use of social media platforms.

Key Words: E-professionalism, Decision-making tool, Accountability, Social media, Online social networks

1. BACKGROUND

The concept of e-professionalism can be defined as, ‘the attitudes and behaviours reflecting traditional professional

paradigms that are manifested through digital media’.^[1] For several years, a wide range of international research continues to emphasise the need for models and tools that ef-

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fectively educate pre and post registration nurses about e-professionalism in the context of professional accountability.^[2-7] Available tools include those reported in which validate a scale for measuring individual (rather than broader professional) attitudes towards e-professionalism.^[8] Mosalenejad & Abdollahifad^[9] conducted research into a questionnaire for e-professionalism for medical scientists, but this was a small-scale validation based in Iran and is more about assessing an individual's e-professionalism.

Henning et al.^[6] and Zalpuri et al.^[10] describe the potential benefit in using vignettes and a series of prompts to educate medical trainees on the topic of e-professionalism which is also the approach taken in the tool used in this study.

1.1 Introduction

[Individual] socialisation is 'the process by which the objective world of reality is internalised and becomes subjectively meaningful';^[11] individuals learn, interact, develop and adapt to accepted social norms and values. Professional socialisation (a form of secondary socialisation) is the process by which individuals acquire knowledge, skills and values relating to their profession.^[12] Nurses identify as a professional and in the United Kingdom, are professionally accountable to the Nursing and Midwifery Council (NMC) code of practice^[13] which outlines the behaviours expected of registrants. This code underpins the values of the profession but there are also personal and social factors that influence the journey by which nurses socialise into their profession. NMC^[14] emphasises that nurses must demonstrate the values and behaviours of The Code in the 'offline' and 'online' domain, protect the public and uphold the reputation of the profession.

1.1.1 e-professionalism and the role of socialisation

Social media, such as Facebook has increasingly become a large part of daily life (83% of the UK population, Statista,^[15] and as such, Ryan^[16, 17] proposes the concept of 'online socialisation' in addition to [individual] socialisation and professional socialisation, arguing that the process of these is interdependent. As with professional practice, for nurses to be professional in the online environment there should be a consensus of shared values and behaviours about what is acceptable and unacceptable for a nurse to do.

1.1.2 Values and consensus

Evidence suggests that the nursing profession has not reached explicit consensus about what constitutes 'unprofessional/unacceptable' behaviour in the online environment.^[4, 18, 19] And, despite the presence of organisational policies and professional guidelines^[13] research literature identifies a need for more effective education on the topic of e-professionalism for nurses.^[4, 20, 21] It is proposed that the

complex relationship between individual-professional-online socialisation plays a significant role in how nurses perceive their own and others online behaviours. There is also a social aspect to these relationships i.e., how members of the public or people outside of the profession perceive online behaviours of nurses.^[22] Recent research in medical education also reinforces the need for consensus and a 'social contract' and 'shared value' for e-professionalism and found that there were six concepts under two domains associated with online-socialisation, implied domains: personal and professional character; explicit domains: environment, behaviour, competence, virtues, identity and mission^[23] all of which influence the processes of socialisation. However, while this research outlined these values it did not propose any methods by which to educate professionals about them, rather, it outlined what currently exists in medicine. Wissinger & Steigler^[24] discuss the 'extended parallel process model' for framing e-professionalism which includes concepts that reflect those part of socialisation processes such as individual values, perspectives and motivations.

2. THE STUDY

2.1 Aim

This project aimed to use the Awareness to Action (A2A) 3Cs (Clarity, Context & Confirmability) decision-making tool to assess whether there is consensus about what is deemed to be professional and unprofessional in the online environment and evaluate whether an evidence-based, structured tool is, valid, reliable, useful and effective for establishing consensus and for use in nurse education.

2.2 Research questions

- I. Is there consensus about what is or is not professional on social media platforms and if not, what are the reasons why?
- II. Is the A2A 3Cs decision making tool reliable, valid, useful and relevant for use in nursing practice and education?

2.3 Design

This mixed methods project employed survey design to gather quantitative data and focus groups to gather qualitative data.

2.4 Sample, sampling frame and recruitment

Participants were recruited through three routes, a community healthcare NHS trust, Twitter and Facebook posts using the chief investigators professional profile and through a higher education institution (HEI) in the United Kingdom. Participants were geographically dispersed and from a range of roles; managerial, academic and clinical.

Participants were provided with a link to the participant information sheet outlining the study, either face to face in the

NHS trust or online and if they wished to proceed, they were screened through survey questions on the platform ‘Bristol Online Survey’. Eligibility for inclusion included the need to be a registered professional with Nursing and Midwifery Council and over the age of 18 years.

2.5 Intervention

The A2A 3Cs decision-making tool was developed as part of a 42-month ethnographic study that conducted semi-structured interviews, focus groups with nurses and nurs-

ing students and online observations of publicly accessible professional groups. This tool was designed with prompt questions covering the four pillars of accountability under each of the three Cs. It begins with clarity, if there is no breach in one or more of the pillars of accountability (ethical, legal, employer, professional) under the clarity heading then the flowchart would result in an outcome of A (see Table 1). If there is a possible breach, then the flowchart continues onto ‘context’ with a series of prompts under the four pillars and so on.

Table 1. The 3Cs within the tool and associated outcomes

Outcome	Description
A Clarity	No evidence that the behaviour breaches any policy/guidelines in professional, legal, employment or ethical pillars of accountability. No intervention or referral is needed but reflection on use of privacy policy may be useful. There is no need to proceed to the next stage ‘context’.
B Context	There is evidence that the behaviour may breach policy/guidelines as described above but there is not sufficient detail to confirm the context (i.e. when and where it occurred). No intervention or referral is needed but reflection on use of privacy policy may be useful.
C Confirmability	This needs further investigation and should be reported (if not already). This might include referral to a professional body/formal investigation/performance management.
D Confirmability	Can you be sure that it was the professional in question who acted/behaved in this way and while they were in a professional capacity? If there is no evidence then it would be appropriate to use methods to raise awareness of e-professionalism, change privacy settings and perhaps monitor their actions.
E	Don’t know/unsure/could not decide

Participants were presented with a series of 5 vignettes (see Table 2) and asked to score each using the A2A 3Cs flowchart. For the purposes of statistical analysis (as described later), three ‘raters’ (a clinical-academic, nurse academic and nurse-lawyer) determined the preferred outcomes for the A2A 3Cs assessment on the vignettes.

Usability and usefulness of the tool were evaluated with three Likert scored questions (on a 1-5 scale); participants could opt to participate in this component only. Any that chose to complete the pre and post-test using the vignettes were provide with a £10 e-voucher for their time and effort.

Table 2. Description of each vignette

Vignette	Description of vignette	Raters’ Score
1	Sharing a name badge, workplace name and identified as a nurse. With a comment identifying a breach of information governance policy of the employer.	C
2	Sharing a non-identifiable patient’s leg ulcer. The patient had provided consent for this to be shared to consult with the wider nursing community on a professionally linked closed Facebook group.	A
3	Drinking alcohol outside of work. Shared with a select group of ‘friends’ on the social media profile.	B
4	Same as vignette 3 but shared via a public profile.	D
5	Profane language against a workplace and patients. Identified by name and as a nurse on a public profile. Breach of professional code, employer policy and ethical accountability.	C

2.6 Data collection and analysis

Data was collected during the years 2018-2022. Participants were asked to complete a pre-test (evaluation component only, 15-30 minutes to complete) and were invited to repeat the survey 4-5 weeks after initial completion to identify if

the same patterns in responses were observed over time and so that reliability of the tool could be assessed. The post-test component was an ‘opt in’ at the end of the survey for the pre-test.

Three focus groups (n = 8) explored the concept of 'acceptable' and 'unacceptable' in the context of e-professionalism to consider why there is so little consensus despite the presence of an evidence-based tool. Focus group transcripts were analysed in the qualitative analysis software NVivo (2020 edition) using the process described in Stringer.^[25] The focus groups first explored participant understanding of e-professionalism and went on to discuss what activities would be deemed as acceptable and unacceptable and their rationale for these decisions.

2.7 Ethics

This study was approved by an Institutional Review Board (HREC-2018-2796), the survey component was also approved by the Health Research Authority (HREC 18/HRA/1961) for recruitment of professionals in a health-care trust. Valid informed consent was taken from each participant through the Bristol Online Survey tool. For survey participants, this was at the beginning of the survey and for focus group participants this was taken prior to the focus group and re-confirmed at the start of the focus group. Focus groups were conducted via Microsoft Teams, they contained a confidentiality statement and were recorded, anonymised and digitally transcribed.

2.8 Validity and reliability/rigour

To minimise the likelihood of missing data and for the purposes of rigour the survey was piloted with a small group of nurse academics.

The statistical software programme SPSS v27.0 was used for analysis; the confidence level for statistical tests was set at 95%. Normality was assessed using Shapiro-Wilk. Content validity of the A2A 3Cs tool was considered during the original ethnographic study, whereby the tool was peer reviewed, piloted and confirmed with a range of participants.^[26] Level of agreement with the 'raters' was assessed using Wilcoxon signed rank tests. Kruskal-Wallis tests identified if there were any differences in responses based on demographic factors such as age and job role (construct validity). To assess agreement between participants (inter-rater reliability) a Kappa test was applied using Randolph.^[27,28] Pre-test, post-test reliability was assessed using Cronbach's Alpha.

The target recruitment for professional staff completing the evaluation of usability and usefulness on one occasion was n = 100, based on the population of nurses in the United Kingdom (UK), CI 0.1 and 95% confidence level. To assess for reliability and internal validity, based on a relative error of 20% and chance agreement probability of 0.5 – 0.9, 31-100 subjects were required.^[26,29]

For qualitative data, open ended survey responses, focus group transcripts and themes within current literature were triangulated as part of the analysis process. Focus groups were conducted by the co-investigator and used to contribute to survey respondent validation.^[30]

3. RESULTS

3.1 Participant characteristics

For the initial evaluation survey n = 122 and those who wanted to repeat the exercise 4-5 weeks later, n=48. Shapiro-Wilk of participant scores and 'length of time registered' (LOTR) indicated that data were not normally distributed ($p > .05$ for all components).

Table 3 outlines participant characteristics n=122 and n=48 (post-test). For length of time registered pre-test n = 122, mean 7.55, s.d. 5.942 and post-test mean 6.77, s.d. 5.762.

3.2 Statistical tests

3.2.1 Agreement with 'rater' scores

Wilcoxon Signed Rank tests were used to assess whether participants agreed with the original 'rater' scores agreed by the research team. On first attempt, participants scored the same as the 'raters' on vignettes 1 ($p = .338$) and 3 ($p = .729$) but not for 2, 4 and 5 although the most common response for vignette 5 was the same as the raters (n = 77; 63.1%) and less variation in responses to that of 2 and 4. For vignette 2 participants viewed this more harshly than the raters and for 4 more leniently than the raters.

On the second attempt at using the tool participants agreed with raters on vignette 5 ($p = .428$). For vignette 1 and 3 the median response was the same but other responses showed more variation, they responded with a more severe outcome for vignettes 2 and 4.

3.2.2 Inter-rater reliability

Randolph Kappa showed overall agreement as poor 32.33%, 0.15 [0.08, 0.23]. For post-test, Randolph Kappa showed overall agreement as poor 50.12%, 0.38 [0.14, 0.61]. Levels of variance in responses were most notable for vignette 1 and 3 (1.018, 1.189 respectively). These results indicate that, even with a structured tool personal perspectives may still be factor when making judgements about online behaviours.

3.2.3 Pre-test, post-test reliability

Cronbach's alpha for vignettes 1-5 was 0.218, 0.429, 0.280, 0.374 and 0.128 respectively, indicating that participants either changed their perspectives or applied the tool differently on their second attempt.

Table 3. Initial evaluation participant characteristics

		Pre-test		Post test	
		n	%	n	%
Age (years)	16-24	5	4.1	2	4.2
	25-34	80	65.6	34	75
	35-44	33	27.1	11	22.9
	45-54	2	1.6	-	-
	55+	2	1.6	1	2.1
	TOTAL	122	100	48	100
Gender	Male	11	9.0	10	20.8
	Female	106	86.9%	36	75
	Other	5	4.1	2	4.2
	TOTAL	122	100	48	100
Role	Clinical	88	72.1	42	87.5
	Managerial	29	23.8	5	10.4
	Academic	5	4.1	1	2.1
	TOTAL	122	100	48	100
Region	Northern Ireland	6	4.9		
	Scotland	30	24.6		
	Wales	21	17.2		
	England	65	53.3		
	TOTAL	122	100		

Table 4 provides a summary of focus group participants.

Table 4. Focus group participants

Characteristic		N	%
Gender	Male	1	12.5
	Female	7	87.5
Stage of career	Pre-registration	5	62.5
	Post-registration	3	37.5
Age (years)	25-34	2	25
	25-44	1	12.5
	45-54	3	37.5
	55+	2	25
Location	England	5	62.5
	Northern Ireland	2	25
	Wales	1	12.5

3.2.4 Construct validity

1) Role will affect response to each vignette

Role significantly affected perspective on vignettes 2 ($p < .001$), 3 ($p < .001$) and 4 ($p < .05$). For vignettes 3 and 5 managers seemed to be less favourable and more favourable on vignette 2. Only clinical staff chose to repeat the exercise for a second time and their response to usability and relevance to practice was significantly different to that of other roles.

2) Age will affect response to each vignette

Age significantly affected perspective on vignettes 2 ($p = .019$) and 3 ($p = .001$) where those in the 35-44 year and 25-34 year age groups respectively were more favourable

than other age groups.

3) LOTR will affect response to each vignette

There were significant differences in responses for vignettes 2 ($p < .001$, 5.495), 3 ($p < .001$, 9.603) and 5 ($p < .005$, 3.226). For vignettes 2 and 5 those who had been qualified for less time were less favourable, for vignette 3 they were more favourable.

4) Region will affect response to each vignette

There were some significant differences between all regions for vignettes 2 ($p = .02$), 3 ($p < .001$), 4 ($p = .008$) and 5 ($p = .026$). For all vignettes participants in England were significantly more likely to score differently to participants from Scotland.

3.3 Focus groups

3.3.1 The role of values in achieving consensus

Personal values clearly form a large part of what people deem to be acceptable and unacceptable on social media,

'If I think I can maybe signpost someone, I've seen a large rise and, again, it's obviously to do with mental health, but I've seen a large rise in people maybe sharing that they are feeling suicidal or they're feeling down and they don't know what to do and they can't access services and I will maybe send a message and say, look, here's a service that might be of use to you.' (FG1R3)

‘I feel personally I don’t like to be showing off, because I feel Facebook allows people to put the fake side of their lives and if it’s, what do you call it, an avenue for people to show off then you present something else, because when somebody meets you after viewing your Facebook profile they might think, oh, you’re completely different to how you feel or show the people, and I feel that’s not right, you should just express yourself for who you really are.’ (FG3R3)

Participants tended to compare their own ‘acceptable’ behaviour to that of other behaviour they had witnessed in the online environment (‘what I do is right, what some others do is not’),

‘there are so many people having heated discussions, giving their opinions and it’s surprising really when some people are getting involved and, you know, how much they’re saying, and because of COVID, the fact that nurses are up there so much or healthcare professionals, it makes it all the more important just to be really aware of what you’re saying.’ (FG1R3)

However, there appeared to be some topics that were agreed upon,

‘Like obviously you wouldn’t talk about work, with the NMC, the code, like talk about patients, things like that, anything that identifies where you work and I don’t even put on my Facebook where I work at all, I haven’t put what Trust I work for or anything like that.’ (FG3R1)

Along with competing personal-professional-social values where an action is personally and socially acceptable but not professionally,

‘So, what would you think is inappropriate behaviour? Being drunk and raucous! I don’t know, there’s quite a fine line I think, having fun with friends and then misbehaving, I guess. It is a fine line, isn’t it, because people might argue, what’s wrong with just going out and dancing and having a drink, I don’t know, what do you think?’ (FG3R1) ‘We do have the right to speak up for ourselves, but we have to be mindful of how we do it. I’ve been a smoker in the NHS, but I am very careful, I don’t want my patients to ever know that I smoke. I don’t

smoke at work for a start, I don’t want to smell of cigarettes, I would never tell, because it is promoting bad health, isn’t it? That’s an image that you don’t want to portray, I guess, even though it’s not illegal and you have a right to smoke, I wouldn’t want to probably let my patients know that.’ (FG3R2)

Emotive and/or politically charged topics were seen to be a trigger for unacceptable behaviour but with participants acknowledging their ‘right’ to an opinion and individuality, thus creating conflict,

‘but I think it should be maybe strongly advised against putting things on or even sharing things that you’re not 100% and political beliefs, and especially just now, as it’s been said earlier on, with the whole COVID, a lot of people have got very strong opinions on it and it’s very, very easy to get sucked into a full-blown argument on your beliefs and opinions and I think it should be maybe readdressed with staff to stay away from it and just distance yourself as much as possible.’ (FG1R2)

Conversely, the broader nature of social media and how it has evolved over time influences opinions about acceptability,

‘for my 19 year old, she has everything, she has Instagram, she has Facebook and it’s just such a minefield, because that’s their norm, that’s how they grow up, that’s how they live their lives now, so it’s a scary territory for anybody now that they’re living with it constantly, so they need to be aware of it.’ (FG1R2)

Participants expressed that they would prefer to have more explicit guidelines about what they ‘can’ or ‘cannot’ do, referring to policy and guidelines that they do not believe are sufficiently explicit, therefore creating confusion,

‘I don’t like it so this is my rules, and it would be individual values that they are imposing as a Trust value, but we should be able to know exactly what is expected of us as healthcare professionals and not necessarily what somebody thinks is right.’ (FG3R3)

my Director of Nursing and a lot of the Senior Management Team share information on Twitter and on LinkedIn and they share it very professionally, there’s no, you know, and it’s very useful. So, I guess, yes, there is one, but I think

it's probably something that needs to be updated regularly.' (FG1R2)

This also indicates the important role of organisational values and policy on leading by example,

'basically you know how many times through Snapchat and that, people taking, as you said, photographs of people in their uniforms and sharing it left, right and centre. This was a way to be able to – there is ways to do it and this way the Trust do it. They'll suggest a topic to take a picture of, send it to them and then the Trust's sharing it, not the individual members.' (FG1R3)

'Good intentions' that may be misunderstood or actions that could create unintended consequences were seen to be a challenge when determining the level of 'acceptability',

'like the COVID vaccines and you are an anti-vaxxer, you have your own, it's coming from you as an individual, that's fine, but if it's coming out as a person in a nursing profession people might take your advice as authoritative and not have the vaccine, so yeah, that's why you don't need to put where you're working because it will be seen like you are coming from an authoritative sphere where people follow your advice and that's why you need not to be seen smoking and doing all sorts of things, because these are the things we are trying to promote and healthy and active lifestyles for people.' (FG1R3)

Participants all felt that online profiles should be used for either personal or professional reasons rather than mixing to two but also note the challenges with boundaries between life domains in social media,

'I think social norms have lapsed somewhat, so there's perhaps not that rigid distinction between a professional and personal life now, there's greater overlap and, for me, that's where the boundaries blur, because I'm very old school, trained a long time ago and so, for me, I'm always a nurse, I'm always a nurse and so I represent nursing and what it is and so in many ways that comes first really.' (FG2R1)

'I've tried to distance myself from that. So, I've got my own private one, I've got a small business that I run as well, so I've got that as separate

and I make sure that that's completely separate from things now and I try and close off my personal one completely, but, I think it was R1 that said it as well, you can go back on the pictures and I didn't realise that.' (FG1R2)

And the interaction between online and offline behaviours,

'it's a really fine line and that's the keeping the things private. Yeah, you should be able to share the things you want with your friends openly and that's why you need, I think, to keep a social media page private. Yeah, you can read all the things and that and either be annoyed by them or agree with them and I would find, especially with conversations that have been going on online recently, what I would tend to do and something that really annoys me and that I would feel strongly on I would actually tend to discuss it with my family, OK, oh, I've seen that, so at least you're still able to deal with something that you've seen, but just don't get involved in the conversation online.' (FG1R2)

There were also a range of actions they saw as acceptable in protecting privacy,

'I've got different letters in front of my name as well so that patients can't, or hopefully it limits the amount of patients that can find me on social media.'

'I've taken a few photos and put them on Facebook, but it's just for my own, since about three years ago I put them in an area where only I can see them, not everyone else, so I've screened which photos are available for the public and which are for my friends and stuff like that.' (FG3R3)

'It's like my profile picture isn't me at the moment, it's something random, so it confuses people.' (FG3R2)

3.3.2 *The role of tools in achieving consensus in nurse education*

Interestingly, despite vignette 2 being more acceptable to the older age groups, focus group participants felt that this was not acceptable due to the 'unknown' nature of social media, citing other offline resources as more appropriate to use,

'There's enough sources and places in a safe environment to do it, rather than online.'

Because there’s always someone somewhere, isn’t there, that maybe knows, oh well, that actually sounds like someone I know’s story, or, before you know it, everything’s just blown out of proportion and you’ve lost your ticket because you’ve asked the question on social media. And the other thing online, it may be a closed group, but you can’t see who’s at the other end of that closed group.’ (FG1R2)

Ease of use received mixed responses, with n = 61 (50%) of participants rating the tool as ‘easy to use’. Feedback suggests that this was due to it being presented as a flowchart diagram and that if it was digitalised as a tool, it would be far easier to follow and since the project completed this has been done.

When participants were asked if they would recommend the A2A 3Cs tool to a colleague, age, role and length of time qualified, all showed significant differences within groups. Chi-square testing showed that those aged 16-34 years were significantly more likely to say that they would recommend the tool to a colleague $p < .001$ and participants in the 25-34 year category found the tool easier to use $p < .001$. Those in clinical roles were significantly more likely to recommend to a colleague $p < .001$, saw it as more relevant to their practice $p < .05$ and found it easier to use $p < .01$. Participants who had been qualified for longer lengths of time were significantly less likely to recommend the tool $p = .002$.

4. DISCUSSION

There were two core themes identified in the findings of this study 1) the role of values in achieving consensus and 2) the role of ‘tools’ in achieving consensus and in education.

4.1 The role of values in achieving consensus

How a person socialises into a domain (personal, professional, social, online) is a process by which they obtain values and behaviours commonly accepted in that domain. The limited pre-test, post-test reliability and the variance between factors such as age, role and length of time registered suggest that there was little consensus about the vignettes and perspectives about online behaviours are subjective. From the focus groups, it seems that perspectives are influenced by a range of different factors, are individual and may evolve over time and this was reflected in research findings from Wissinger & Steigler^[24] and Ryan.^[16,17] How someone is socialised into particular domains depends on internal factors such as personal reasons and motivations for use, personal values and experiences from a person’s past and external factors such as professional codes of practice, workplace values and expectations or socially accepted ‘norms’. Inevitably, personal-social-professional values can overlap and influence each other, these may be competing or complementary values but there seems to be more risk of overlap in the online environment where boundaries and therefore behaviours are not defined by physical space (see Figure 1).

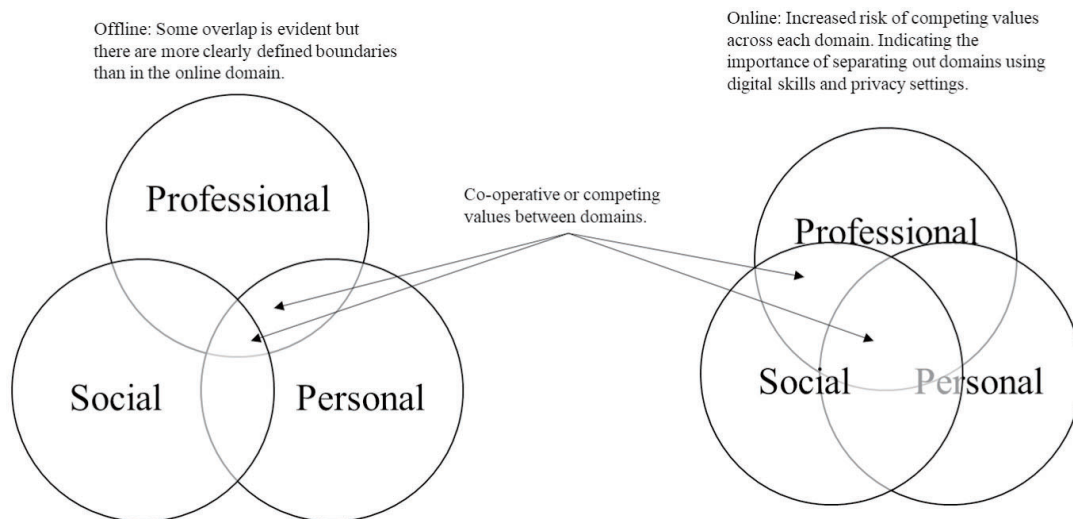


Figure 1. Online and offline values

Social values play a role in determining what people may view as acceptable or unacceptable of a nurse. Ryan et al.^[22] explored public perceptions of the same five vignettes used here. Ryan et al.^[22] study found that members of the public

are influenced by their own beliefs, attitudes and behaviours (factors affecting socialisation) but they believed nurses were entitled to a personal life, freedom of speech and the right to promote their own causes even if they were not aligned

with their own. Vignettes 1-4 were generally accepted by participants of the public focus groups although, the publicly accessible photo of a nurse being drunk was seen to be a 'risk to themselves', their own privacy and context, clarity and confirmability should be considered when judging the vignettes. For example, being drunk is socially acceptable but being drunk just before going into work is not. There was some alignment about what was explicitly unacceptable, such as posting profanities against anyone (i.e. vignette 5) or illegal activity.^[31] Considering this and the focus group data reported here, it could be suggested that through dialogue and discussion there could be improved consensus between social, personal and professional values.

Conversely, from focus group discussions and taking into account the public focus group comments about risk, there does seem to be some consensus that personal and professional social media profiles should be kept separate (i.e. personal or professional) and the use of privacy settings should be used more effectively (e.g. sharing with only a custom list of close family and friends) although participants did not always feel they had the skills to do this. The need for education about online skills and the use of privacy settings is also reported in research literature.^[6,32]

Personal-social values and characteristics also played a role in how behaviours were perceived. In the focus groups participants frequently referred to differences in behaviours between 'neomillennials' (those who have never been without social media) and those who were introduced to social media in later life. For example, there were differences in responses from those from the 25-34 year age group who were more favourable about photos of being under the influence of alcohol online (public and private) and this may be because this is seen more as the 'norm' for an age group who grew up well socialised into social media and who are the largest group of users in the UK.^[33] It is unsurprising that the 25-34 year age group found the tool easier to use, more likely to recommend it and saw more relevance to practice than other age groups, given that they are more socialised with digital technologies and more likely to engage with social media.^[15,33]

Professional values seemed to play less of a role, not least because the policy and guidance available was viewed to be 'woolly' and unclear about what is or is not acceptable for nurses.^[34] Social and personal values seemed to contribute most to perspectives about acceptability. Socialisation of an individual is a unique experience and therefore, could explain why there were such different expectations about acceptability of behaviours but also why members of the public in Ryan et al.^[22] generally agreed [or were more lenient] on the nurses' perspectives of the vignettes.

This finding also indicates that nurses should be socialised into the online environment as part of the professional socialisation process so that personal-professional-social values are acknowledged and understood in a more balanced way. Currently, it appears that there is a need for more consensus from a professional values perspective using education, policy and guidance. This is also reflected in Guraya et al.^[23] who used Delphi technique to attempt to embed shared values into a framework for e-professionalism in medicine but the methods by which to achieve awareness and acceptance of these shared values also need to be established and communicated via fit for purpose policy, guidance and educational methods which directly inform professional values and thus, how nurses are socialised into the profession.

4.2 The role of tools in achieving consensus & in education

Consensus between focus group participants and survey respondents was not always achieved, for example, the case from vignette 2 which was generally accepted by those using the tool but not by focus group participants. The reliability and validity of this tool for individual use are limited which is a similar finding to Li et al.^[35] who conducted a systematic review of instruments relating to professionalism (rather than e-professionalism) in medicine and nursing. The review recommended only 3 of 74 instruments based on reliability and validity indicates structured tools to assess highly subjective topics are generally inconsistent. However, that is not to say that they cannot play a role in education, alongside other approaches such as reflective activities and raising awareness of how to manage privacy settings for example.^[6]

A range of literature identifies a need for more tools that can be used with groups for the purposes of education and training^[2,3] and that education on the competent use of social media needs to improve,^[36] the lack of consensus shown in the findings of this A2A study would support this. However, the A2A 3Cs tool may well have the potential to be used to guide group based structured critical and evidence-based discussion and reflection to agree shared values.

Wissinger & Steigler^[24] argue that people need to acknowledge that there is a risk in using social media before they can learn to accept and effectively manage this risk. This suggests that there need to be tools and approaches in education that cover the internal and external factors across personal-social-professional domains including e.g. 'my own attitudes', others 'attitudes' and behaviours, professional values and behaviours and also the skills to use online platforms effectively (see Figure 2). This multi-method model as a 'programme of education' would be an effective way to achieve this.

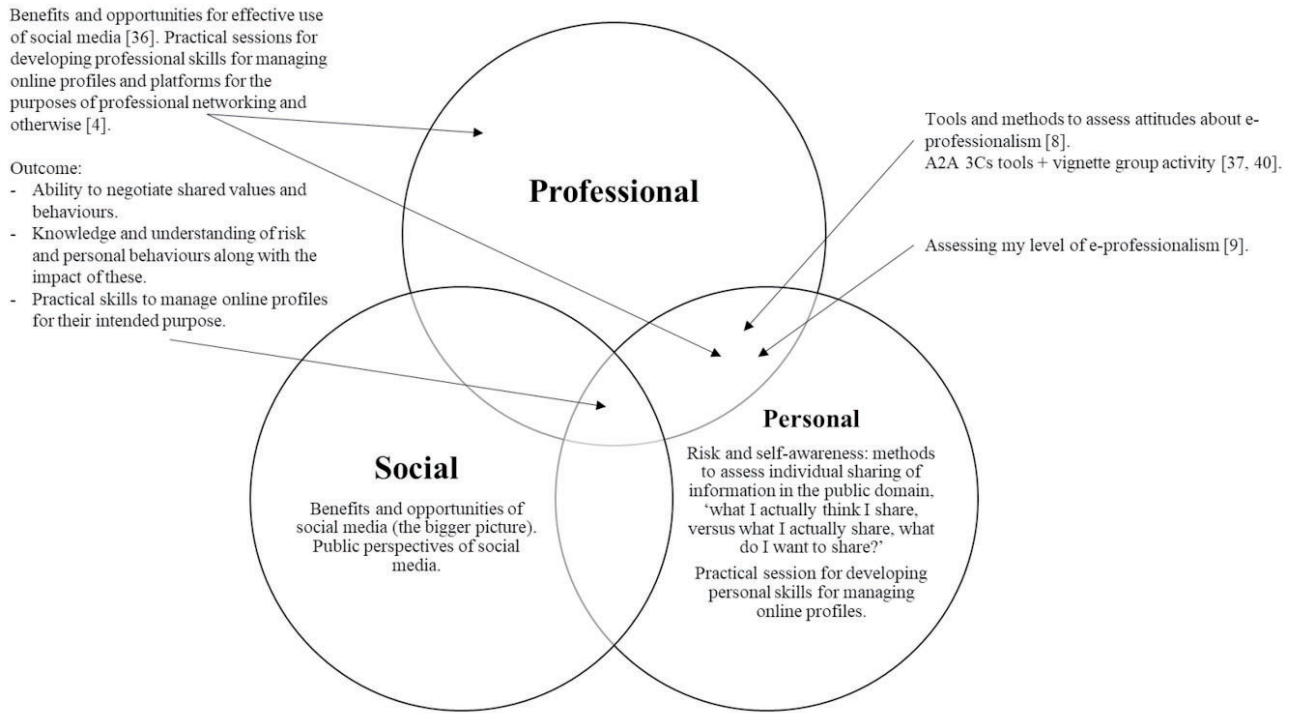


Figure 2. A multi-method model for education on e-professionalism

Research literature and findings from this study indicate that vignettes are viewed as an effective way of educating about e-professionalism as part of reflection, dialogue and discussion.^[10] However, a multi-method approach using and attitudes-based tool to begin, such as that reported in Marelic et al.,^[8] then the A2A tool and vignette activity from this study used as prompt may be more effective in gaining consensus and ‘agreeing shared values’, allowing for ‘sense checking’ against each stage of the tool. This could be followed with tools such as that proposed by Mosalanejad & Abdollahifard^[9] which goes on to assess levels e-professionalism and education about how to assess individual social media profiles and raise awareness of personal sharing online^[37] and finally, teach the skills to manage these e.g. privacy settings.

4.3 Limitations, representativeness and generalisability

From a representativeness and generalisability perspective, this small-scale study involved nurses based in the United Kingdom and did recruit from three nations in the UK. However, the concept of e-professionalism is applicable to a range of professions and the findings and model of education proposed here could be applied to the education of a range of healthcare professions fields such as medicine, pharmacy and dentistry. In fact, focus group participants suggested that this type of education is relevant to all public facing healthcare workers.

Representativeness could be considered a limitation as most participants were female, with the majority aged 24-44 years of age. However, based on the data in NMC^[38] this is an accurate representation of the nursing and care workforce both in the UK and globally.^[39]

The findings relating to low levels of reliability and validity indicate that A2A tool is not necessarily appropriate for individuals alone to use for making consistent decisions. However, the model of education in which the A2A tool is included, requires further larger scale development and evaluation.

5. CONCLUSION & RECOMMENDATIONS

Despite being given a structured tool to follow to make evidence-based decisions about online behaviours consensus about acceptable behaviours could not be confirmed by use of the A2A 3Cs tool alone. This, along with other research literature suggests that structured tools on their own are not viewed to be reliable or valid for consistent assessment of subjective topics such as online behaviours and people’s perspectives of these.

As per socialisation theory this study confirms that there are many intrinsic (personal experience, age, values and culture) and extrinsic factors that influence decisions and perspectives about what is and is not professional online, this indicates that decisions need further discussion rather than be made

on an individual level. It appears that nursing is still being 'socialised' into the online world, suggesting the need to embed shared values about online activity through education, policy and guidance.

As with existing published research, recommendations from this report further confirms the need for effective approaches for education on e-professionalism and proposes an educational model which includes the A2A 3Cs tool employed in this research and which should be used as part of the education for nurses and indeed, other healthcare professionals. It recommends the use of a range of tools as part of the framework to promote awareness in personal, social and professional domains. It considers and seeks to address the complex factors that influence socialisation-professional socialisation and online socialisation, in the attempt to navigate the competing and complementary values between different life domains (individual-social-professional), promote discussion and dialogue and facilitate some consensus about acceptable behaviours online in the context of e-professionalism.

Effective education on the topic of e-professionalism requires further research but this study confirms the need for multi-methods approaches that combine qualitative and quantitative tools that reflect the complex nature of the personal-social-professional domains and the interdependency of values within these. Future, larger scale research should further develop and evaluate a multi-methods model to educate nurses about e-professionalism.

Policy and guidance documents require further work to be effective in generating consensus among healthcare professionals, including nurses. The nature of the online environment means that boundaries between life domains are less defined, and nurses express a need for more clarity within policy and guidance documents to enable them to navigate the complexities of the online environment.

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