Fukushima J. Med. Sci.,
Vol. 71, No. 2, 2025

[Original Article]

Exploring conceptions of medical unprofessionalism in Japan and the UK: a Q-methodology study

Maham Stanyon[1)], Yayoi Shikama[1], Jo Horsburgh[2,3)], Ravi Parekh[2)], Gautham Benoy[2)], Sayaka Oikawa[4)], Megumi Yasuda[1)], Zoe Moula[5)] and Koji Otani[1)]

[1)]Center for Medical Education and Career Development, Fukushima Medical University, Japan, [2)]Medical Education Innovation Research Centre, Imperial College London, UK, [3)]Centre for Higher Education Research and Scholarship, Imperial College London, UK, [4)]Department of Innovative and Digitalized Medical Education, Akita University Graduate School of Medicine, Akita, Japan, [5)]Department of Care in Long-term Conditions, Florence Nightingale Faculty of Nursing, Midwifery and Palliative Care, Kings College London, UK

(Received September 30, 2024, accepted October 30, 2024)

Abstract

Western professionalism frameworks dominate medical education yet cause translational and ethical challenges when applied across cultures. Increasing globalisation brings an impetus to examine these perspectives in non-dominating cultures, with a cultural understanding about what constitutes unprofessional behaviour urgently needed. In the absence of comparative data from dominating and non-dominating cultures, we sought to use Q-methodology to examine perceptions of unprofessional behaviour amongst stakeholders in Japan and the UK.

Statements describing 48 unprofessional behaviours were sorted according to perceived severity by 58 Japanese and UK students, clinical educators, and administrators. Factor analysis using judgemental rotation flagging factors at $p<0.05$ was performed. Follow-up questionnaire responses were coded and supported the interpretation of factors.

A four-factor solution showing four distinct constructs of unprofessional behaviour was extracted : clinical responsibility (international factor), relational responsibility (Japanese-only factor), moral responsibility (UK-dominant factor), and personal responsibility (Japanese-dominant factor). Japanese-only constructs identified behaviours disrupting personal and group relationships as more unprofessional, whereas the UK factor focused on personal motivation and ethical reasoning.

Our multi-stakeholder data provides empirical evidence into the contrasting conceptualisations of unprofessional behaviour that co-exist in practice. We identify culturally constructed perspectives unique to both contexts, which warrant recognition and integration in local teaching and national guidelines.

Key words : Professionalism, Q-methodology, factor analysis, medical education, cultural competency

Introduction

Professionalism discourses dominate health professions education (HPE) literature ; however, recognising and responding to unprofessional behaviour remains a global challenge for educators. Professionalism lapses and poor self-awareness are the most prevalent performance issues amongst medical students, and the most difficult to remediate, with repercussions for patient safety[1)]. A contributing factor to this complex problem is the lack of an agreed definition of medical professionalism[2,3)] ; as a result, unprofessionalism also remains undefined. Current professionalism

Corresponding author : Dr Maham Stanyon E-mail : mstanyon@fmu.ac.jp

frameworks are behaviour-based[4,5] , but lack the detail, context, and empirical evidence to support the consistent identification of unprofessional behaviours in practice[3,6,7]. Furthermore, formal positions on medical professionalism involve consensus statements by professional bodies[8], which risks the exclusion of multiple viewpoints within professional and lay communities and widens the gap between frameworks and their meaningful application in local teaching and subsequent medical practice.

Compounding the situation further is the Western origin of leading professionalism frameworks, such as the UK General Medical Council (GMC)'s framework '*Good Medical Practice*'[9] and '*The Physician Charter'* created by the American Board of Internal Medicine (ABIM) in collaboration with the American College of Physicians Foundation and the European Federation of Internal Medicine[10]. Although such frameworks dominate current discourses, applying such principles across cultures leads to translation and ethical challenges[11]. This recognition forms part of a broader movement of decolonisation within HPE, where HPE professionals working in non-dominating cultures are encouraged to explore key issues through their own sociocultural lenses[12]. Within Japanese medical education, Nishigori and colleagues have explored the tenets of *'The Physician Charter'* against the concepts and values of Bushido, the Japanese ancient Samurai code of conduct, finding areas of consistency alongside key areas of cultural diversity and intrinsic differences[13] ; however, to date there has not been a detailed examination of current understanding of what constitutes unprofessional behaviour in either a Japanese or a UK setting.

A key contributing factor is the subjective nature of unprofessionalism, which we feel can now be addressed using a person-centred factor analysis method called Q-methodology. Rapidly gaining in popularity within HPE, Q-methodology provides a robust way of exploring in-group and between-group variability, allowing for the identification of viewpoints missed through variable-centred approaches[14]. Q-methodology inverts traditional by-variable factor analysis by using participants themselves as the test variable and the behaviours as the population sampled, effectively transposing a correlation matrix table by factorising the rows instead of the columns[15]. The final factors extracted represent groups with shared perceptions of a given topic. Participants rank a set of heterogeneous statements onto a pyramid-shaped distribution grid, termed a Q-grid. This provides a standardised set of data that captures individual decision-making relative to each participant, enabling systematic and rigorous quantitative analysis[14,15]. The process of sorting and arranging the statements onto the Q-grid is termed 'sorting' and the completed Q-grid is referred to as a Q-sort. The interpretation of factors is then supported via qualitative data from a post-sort questionnaire. Q-methodology has previously been applied to explore diverse topics in HPE that are confounded by subjectivity, such as attitudes to teaching and learning[16], professional identity[17], and the modernisation of postgraduate training[18], but has not been used to examine attitudes towards unprofessional behaviours.

Thus, we anticipate that a Q-methodology study would provide empirical evidence to further our understanding of unprofessional behaviours through differing cultural lenses, uncover viewpoints missing from current professionalism discourses, and generate new insights to support the meaningful integration of local professional values into teaching programmes and national guidance. Our research question was therefore to examine how healthcare professionals, students, and HPE staff, in Japan and the UK, conceptualise the weighting of unprofessional behaviours, with a secondary focus on identifying cultural perspectives within those constructions.

Methods and Materials

Study context and ethics approval

Japanese and UK cultural contexts were selected owing to their opposing positions on Hofstede's cultural dimensions of 'power-distance', 'uncertainty avoidance', and 'individualism versus collectivism',[19] and the study builds on an existing research partnership between the institutions involved. This selection also offers the opportunity to compare ideas of unprofessionalism in a 'dominating' and a 'non-dominating' culture within HPE. Furthermore, significant differences in how hierarchy impacts interpersonal behaviours towards others between Western versus East Asian contexts have been well described[20], making both cultures ideally suited to exploring how socio-cultural norms exert environmental pressures. These pressures, in turn, influence what is considered unprofessional, mediating further actions taken on encountering such behaviours to align with socio-cultural

expectations.

The study was conducted at two large public medical schools : a central-London medical school in the UK, and the prefectural medical school in Fukushima, Japan. Ethics approval was obtained from Fukushima Medical University's General Ethics Committee (approval number 2020-009) and Imperial College London's Education Ethics Review Panel (1920-053). The research team comprised Japanese and British education specialists and clinicians, all of whom are experienced qualitative researchers in HPE and hold higher degrees in education. Awareness of researcher reflexivity was paramount, with the varied personal experiences of both cultures within the team informing our assumptions and beliefs.

Study design and setting

Our study is grounded in a social constructivist paradigm, which takes the stance that individuals operating in a defined cultural context form their understanding of unprofessional behaviours through interaction with others and subsequent reflection[21,22]. This is further supported by social construction carried out by participants in real time during the Q-method process, through sorting the statements and constructing meaning to their ranked responses.

Q-set and grid development

Literature review supported the initial generation of the statements, which were mapped against the taxonomy of unprofessional behaviours described by Mak-van der Vossen *et al*[7], and the GMC framework, *'Good Medical Practice'* (Table 1)[9]. Statements underwent a process of peer review and revision within the research team to generate a balanced and evidence-based set of statements reflective of unprofessional behaviours encountered in practice that were relevant to both cultural contexts. Statements each focused on a single behaviour carried out by a medical student, with extreme or unlawful behaviours excluded. Native Japanese speakers within the team translated the statements for the Japanese cohort, which were professionally back-translated. The statements were successfully piloted with no changes made to the statements, giving a final statement set—termed a 'Q-set'—of 48 statements (Table 1). We used a forced-choice pyramid distribution grid, scaled from −5 (least unprofessional) to +5 (most unprofessional), which ensured all statements were ranked and supported standardisation between the completed grids. This attention to standardisation is an important quality marker with a by-person approach because incomplete grids would not be suitable for factor analysis[15,23]. An overview of the Q-set development process is included in Fig. 1.

Participant sample

We used strategic sampling to recruit medical students, education faculty members, and administrators ; i.e., groups identified by the research team as key stakeholders with respect to unprofessionalism. Using Stainton Rogers as a guide[24], we aimed for between 40 and 60 participants at a 2 : 2 : 1 ratio of medical students, medical faculty and clinical educators, and administrators, respectively. The final sample consisted of 58 participants (39 Japanese and 19 from the UK), which fits within expert guidance on sample size respective to statement number for a suitably powered Q-method study[15]. All participants in the Japanese cohort identified as Japanese, whereas the UK sample included participants of East Asian background, although none were Japanese. Participation was voluntary following informed consent. No reward was offered for participation in the Q-sort or post-sort questionnaire.

Q-sort procedure

Informed consent and data collection were completed online via Q-methodology software[25] between May and November 2021. Participants accessed the Q-sort anonymously remotely via QR code and completed the Q-sort and post-sort questionnaire independently. A flow diagram of the Q-sort procedure and overall research process is outlined in Fig. 1 and an example of a completed Q-sort is shown in Fig. 2. The UK cohort undertook the study in English whilst the Japanese cohort participated in Japanese, with materials professionally back-translated for quality assurance.

Data analysis

Factors were extracted using the open-source software KenQ[26]. Primary components analysis and varimax rotation were discarded on ontological compatibility principle[27] as they result in a single 'mathematically best' solution that maximises factor separation to reveal the 'simplest structure' to the data[28,29]. Instead, we used centroid factor analysis with judgemental rotation of factors to provide an infinite number of statistically valid solutions[29], allowing the qualitative data and researcher

Table 1 The 48 statements mapped to the four domains of unprofessional behaviours as described by *Mak-van der Vossen et al 2015* and against the relevant professionalism domains according to the General Medical Council (GMC) professionalism framework '*Good Medical Practice*' (UK).

Number	Statement	Behavioural domain	GMC domain
1	Frequent late attendance to taught or clinical sessions	Failure to Engage	Domain 3: Colleagues, culture and safety
2	Does not attend taught or clinical sessions without giving prior notice		Domain 3: Colleagues, culture and safety
3	Regularly fails to compete assignments		Domain 1: Knowledge, skills and development
4	Does not take initiative compared with peers		Domain 3: Colleagues, culture and safety
5	Appears disinterested to faculty and patients		Domain 3: Colleagues, culture and safety
6	Avoids patient contact		Domain 2: Patient, partnerships and communication
7	Seeks minimally acceptable level of performance		Domain 1: Knowledge, skills and development
8	Leaves hospital during a shift without giving a reason		Domain 3: Colleagues, culture and safety
9	Does not pull their weight as part of a team		Domain 3: Colleagues, culture and safety
10	Does not give feedback to others		Domain 4: Trust and professionalism
11	Is unwilling to accept feedback about themselves		Domain 1: Knowledge, skills and development
12	Ignores emails from teaching/administrative staff		Domain 3: Colleagues, culture and safety
13	Gives patients information they are unsure is correct	Dishonest behaviour	Domain 2: Patient, partnerships and communication
14	Examining a patient with insufficient consent		Domain 2: Patient, partnerships and communication
15	Signing in for peers who are absent from sessions		Domain 4: Trust and professionalism
16	Submitting other people's or collaborative work as your own		Domain 4: Trust and professionalism
17	Presenting work including the name of someone who didn't contribute		Domain 4: Trust and professionalism
18	Sharing exam questions or tasks with peers		Domain 4: Trust and professionalism
19	Signing a document under someone else's name or stamp		Domain 4: Trust and professionalism
20	Failure to disclose if you have a serious health condition		Domain 4: Trust and professionalism Domain 3: Colleagues, culture and safety
21	Witnessing cheating and not taking appropriate action		Domain 4: Trust and professionalism
22	Fabricating parts of the patient history		Domain 4: Trust and professionalism
23	Reporting examination findings as normal when the examination has not been fully per-formed		Domain 4: Trust and professionalism
24	Citing sources that have not been read in full		Domain 4: Trust and professionalism
25	Being introduced to patients as 'doctor' and not correcting the misunderstanding		Domain 2: Patient, partnerships and communication
26	Failing to respond to administrative deadlines	Disrespectful behaviour	Domain 3: Colleagues, culture and safety
27	Laughing at a colleague because they answered incorrectly		Domain 3: Colleagues, culture and safety
28	Talking with friends during a teaching session about social events		Domain 3: Colleagues, culture and safety
29	Writing on Facebook about a patient encounter		Domain 4: Trust and professionalism
30	Disclosing clinical information to a patient's family without consent		Domain 2: Patient, partnerships and communication
31	Fails to appreciate value of clerking patients over book learning		Domain 1: Knowledge, skills and development
32	Wears casual attire or an unkempt lab coat in a clinical setting		Domain 3: Colleagues, culture and safety

33	Consistently fails to complete required preparation work for teaching sessions		Domain 1: Knowledge, skills and development
34	Illegible writing		Domain 3: Colleagues, culture and safety
35	Uses phone in front of patients (for any purpose) whilst observing a consultation		Domain 4: Trust and professionalism
36	Treats patients as symptoms or diagnoses rather than as people with feelings and concerns		Domain 2: Patient, partnerships and communication
37	Makes derogatory comments about a patient		Domain 2: Patient, partnerships and communication
38	Not making appropriate changes following constructive feedback	Poor self-awareness	Domain 1: Knowledge, skills and development
39	Arguing with a tutor about the relevance of the teaching session to their learning		Domain 3: Colleagues, culture and safety
40	Communicating with a tutor in the middle of the night to ask non-urgent questions		Domain 3: Colleagues, culture and safety
41	Smelling of alcohol and visibly hung over in a clinical placement		Domain 3: Colleagues, culture and safety
42	Failing to seek help for a personal health condition affecting learning despite being advised to		Domain 3: Colleagues, culture and safety
43	Offering clinical advice to patients without the appropriate knowledge or supervision		Domain 2: Patient, partnerships and communication
44	Unwilling to perform a clinical task despite having had appropriate teaching		Domain 1: Knowledge, skills and development
45	Blames the patient rather than accept own history taking deficiencies		Domain 2: Patient, partnerships and communication
46	Challenges tutor when denied entry to a teaching session they arrived late to		Domain 3: Colleagues, culture and safety
47	Accepts gifts from patients without considering possible motives		Domain 4: Trust and professionalism
48	Fails to show empathy toward patients		Domain 2: Patient, partnerships and communication

interpretation to derive a solution best representative of reality. This approach, advocated by Q-methodology experts, ensured that decisions were based on theoretical grounds[29].

As per Q-method convention, we sought solutions for up to seven factors, choosing the final number of factors guided by our pilot data and the validated statistical acceptance criteria (Table 2)[15]. The threshold for significance of factor loadings at $p<0.05$ for each Q-sort was calculated as 2.58 ($1/\sqrt{no\ of\ statements}$), with factors rejected if they had fewer than two significantly loading Q-sorts or fewer than two Q-sorts with loadings greater than the standard error, calculated as $1/\sqrt{no\ of\ statements}$ [15]. We applied the Kaiser–Guttman criterion, retaining factors with eigenvalues greater than 1[27], and Humphrey's rule, which supports the retention of factors where the product of the two highest factor loadings is greater than twice the standard error[15,27]. Factor arrays were created from the arising factor estimates excluding confounded Q-sorts (i.e., Q-sorts that significantly loaded onto more than one factor)[15]. Resulting factors were iteratively interpreted alongside the post-sort questionnaire. The questionnaire data were semantically and then latently coded, with themes reflexively interpreted with member checking. Awareness of researcher perspectives in the interpretation of results was maintained throughout, with meaning negotiated between team members at regular meetings, supported by memo-taking to ensure rigour in the qualitative arm of the study[30].

Results

Solutions up to seven factors were calculated and a four-factor solution explaining 53% of the variance accepted. Table 2 shows how the statistical acceptance criteria were applied, with the four-factor solution emerging as the optimum balance between total variation explained and factor retention. Confounding sorts (i.e., sorts which did not distinguish between two factors) were excluded, leaving 30 Q-sorts that contributed to the factor arrays (20 from Japan and 10 from the UK). Table 3 describes the participant demographics contributing to each factor. The four factors arising were interpreted as lenses through which participants conceptualised unprofessional behaviours and labelled according to arising themes as agreed by all research team members : clinical responsibility, personal responsibility, moral responsibility, and group responsibility. This solution produced a

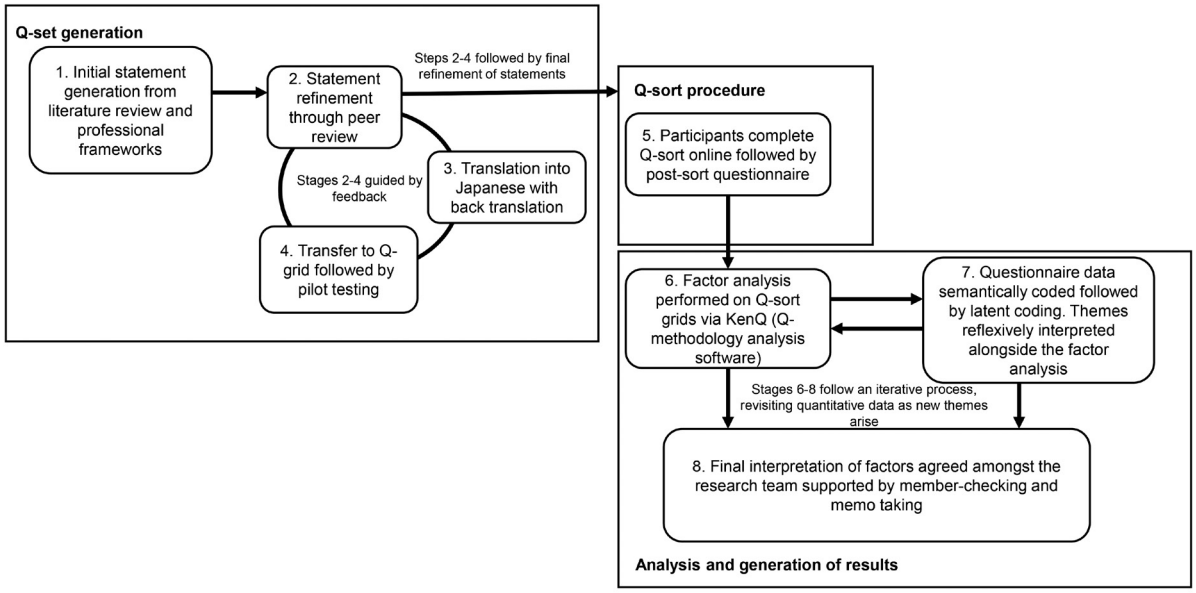

Fig. 1. A flow diagram of the research process including the development of the Q-set, the Q-sort procedure and the analysis.

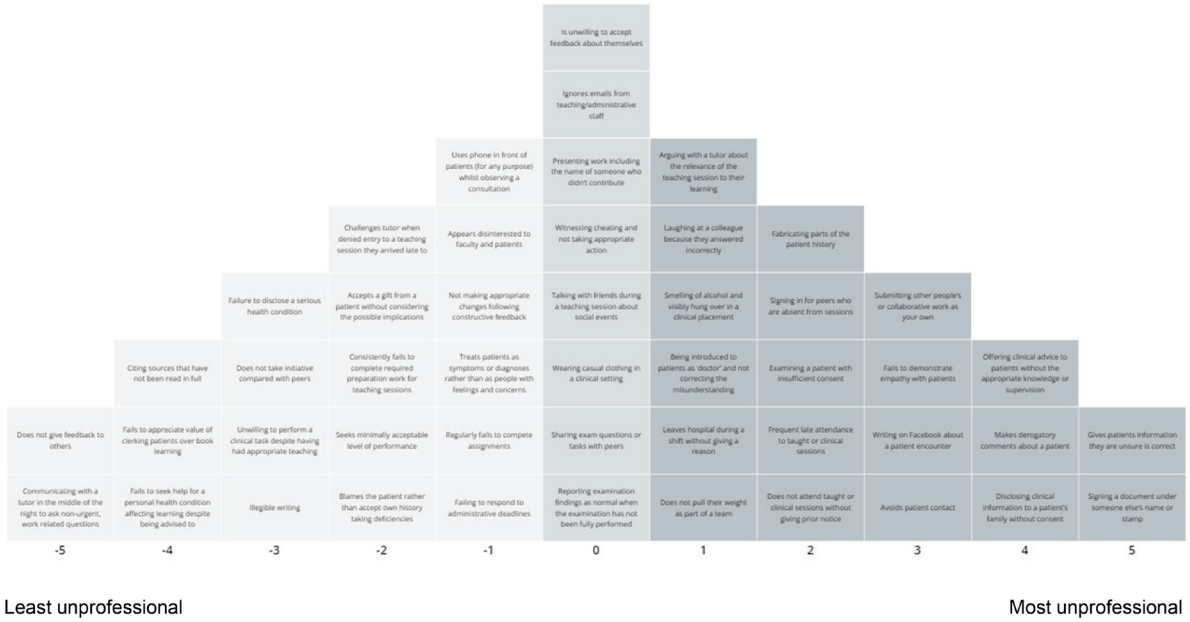

Fig. 2. An example of a completed Q-sort, where all 48 statements of unprofessional behaviours have been ranked on the Q-grid according to perceived severity from −5 (least unprofessional) to +5 (most unprofessional).

single consensus statement—'ignores emails from teaching/administrative staff'—that was ranked similarly across all factors. All remaining statements distinguished between at least two pairs of factors at $p<0.05$ or $p<0.01$, meaning that they were ranked in a significantly different position in one factor relative to another. Table 4 shows the ranking of statements within each factor.

Factor 1 : Clinical responsibility

Clinical responsibility was the largest and sole international factor extracted, accounting for 18% of the variance with nine contributors (five from Japan—one administrator, three clinical educators and one medical student—and four from the UK—three clinical educators and one medical student) (Table 3). Participants conceptualising unprofessional behaviours under this factor used a clinical lens to

Table 2. Factor solutions generated and acceptance criteria.

Number of factors retained	Number of factors extracted				
	3	4	5	6	7
Excluding factors with less than 2 contributing sorts	3	4	4	5	6
Kaiser–Guttman criteria*	3	4	4	5	5
Humphrey's rule**	3	4	4	4	4
Excluding factors with less than 2 loadings greater than the standard error***	3	4	4	4	4
Common variance explained (%)	50	53	53	53	53

The Kaiser–Guttman criterion is the retention of factors where the eigenvalue >1.
**Humphrey's rule is the retention of factors where the product of the two highest factor loadings is greater than twice the standard error (with standard error calculated as 1/√number of statements).
***Factor loadings calculated as 2.58 (1/√number of statements).

Table 3. Factor breakdown by participant contribution.

Factor (total number of contributors)	Country and position (total number of contributors)	Years in education (median)	Year of medical school (median)	Number of participants with international experience
Factor 1: Clinical responsibility (9)	Japan–Administrator (1) Japan–Clinical Educator (3) Japan–Medical Student (1) UK–Clinical Educator (3) UK–Medical Student (1)	16–20	6	2
Factor 2: Relational responsibility (7)	Japan–Administrator (1) Japan–Clinical Educator (1) Japan–Medical Student (5)	0–5	6	1
Factor 3: Moral responsibility (6)	Japan–Administrator (1) UK– Administrator (1) UK–Clinical Educator (2) UK–Medical Student (2)	6–10	5.5	0
Factor 4: Personal responsibility (8)	Japan–Clinical Educator (3) Japan–Medical Student (4) UK–Medical Student (1)	16–20	6	3

sort the statements, ranking behaviours perceived as most harmful to patients as the most unprofessional. Patient safety was the priority amongst this group in distinguishing between behaviours, regardless of whether the participant had a clinical background.

"Offering clinical advice or information they are unsure is correct [is most unprofessional] because it directly harms the patient." Educator (Japan)

"Faking signs or faking the history [is most unprofessional because it] can lead to terrible consequences for the patient." Medical student (UK)

"Of all the statements, in terms of medical safety, [falsifying test results] is the behaviour that should most be avoided." Administrator (Japan)

Statements affecting patient interactions and care delivery—notably 'reports examination as normal when the test has not been done' and 'offering clinical advice without appropriate knowledge or supervision'—were ranked as more unprofessional in this factor compared with the others and were considered foundational tenets in medical practice in both cultures. UK participants additionally mentioned regulatory organisations and professional consequences in justifying their statement ranking, citing fear of investigation by a professional body as an influence on their choice of most unprofessional behaviour.

"Fabricating the patient's history [undermines] the foundations of the relationship with the patient." Medical Student (Japan)

"Examining a patient with insufficient consent could lead to a malpractice investigation." Administrator (UK)

Table 4. Factor arrays showing the ranking of statements within the factors.

Number	Statement	Statement position			
		Factor 1: Clinical responsibility	Factor 2: Relational responsibility	Factor 3: Moral responsibility	Factor 4: Personal responsibility
1	Frequent late attendance to taught or clinical sessions	-1	3 D*	0	-4 D*
2	Does not attend taught or clinical sessions without giving prior notice	1	3 D*	1	4 D*
3	Regularly fails to complete assignments	-1	0	2	-4 D*
4	Does not take initiative compared with peers	-2	-4	-4	-5
5	Appears disinterested to faculty and patients	-1	0	-4	-2
6	Avoids patient contact	0	0	-1	-3 D*
7	Seeks minimally acceptable level of performance	-3	-1	-4	-5 D
8	Leaves hospital during a shift without giving a reason	1	2	3 D	-3 D*
9	Does not pull their weight as part of a team	0	-1	-1	-3 D
10	Does not give feedback to others	-2	-4	-5	-1
11	Is unwilling to accept feedback about themselves	0	-3 D	-2	-2
12	Ignores emails from teaching/administrative staff	0	1 C	0	-1 C
13	Gives patients information they are unsure is correct	2	1	3 D*	-1 D*
14	Examining a patient with insufficient consent	4	1	5	-1 D*
15	Signing in for peers who are absent from sessions	-2	-5 D	1 D*	3
16	Submitting other people's or collaborative work as your own	2	-2	2	-1
17	Presenting work including the name of someone who didn't contribute	1 D*	-3	-2	-2
18	Sharing exam questions or tasks with peers	2	0	-2	-1
19	Signing a document under someone else's name or stamp	3	0	4	0
20	Failure to disclose if you have a serious health condition	1 D	-2	-1	-2
21	Witnessing cheating and not taking appropriate action	0	-4 D	0	-2
22	Fabricating parts of the patient history	4	5	4	1
23	Reporting examination findings as normal when the examination has not been fully per-formed	4	4	2	1
24	Citing sources that have not been read in full	-3	-5 D*	-1	0
25	Being introduced to patients as 'doctor' and not correcting the misunderstanding	1	-1	-5 D*	0
26	Failing to respond to administrative deadlines	-1	2	0	0
27	Laughing at a colleague because they answered incorrectly	0	-3 D*	-1	2
28	Talking with friends during a teaching session about social events	-4	-2	-2	0
29	Writing on Facebook about a patient encounter	5	4	1	5
30	Disclosing clinical information to a patient's family without consent	3	2	5	2
31	Fails to appreciate value of clerking patients over book learning	-1	2 D	-3 D*	0
32	Wears casual attire or an unkempt lab coat in a clinical setting	-1	-2	3 D	0 D*
33	Consistently fails to complete required preparation work for teaching sessions	-3	0	-2	0

34	Illegible writing	-4	-1	-3	0
35	Uses phone in front of patients (for any purpose) whilst observing a consultation	0	3 D	0	2
36	Treats patients as symptoms or diagnoses rather than as people with feelings and concerns	2	1	-1 D*	1
37	Makes derogatory comments about a patient	5	4	2	4
38	Not making appropriate changes following constructive feedback	-2	-1	1	1
39	Arguing with a tutor about the relevance of the teaching session to their learning	-5	-3	0	1 D
40	Communicating with a tutor in the middle of the night to ask non-urgent questions	-5 D*	0	3	3
41	Smelling of alcohol and visibly hung over in a clinical placement	2	5 D*	2	3
42	Failing to seek help for a personal health condition affecting learning despite being advised to	-2 D*	0	1	2 D*
43	Offering clinical advice to patients without the appropriate knowledge or supervision	3	2	4	4
44	Unwilling to perform a clinical task despite having had appropriate teaching	0	-1	-3 D*	3 D*
45	Blames the patient rather than accept own history taking deficiencies	3	3	1	5
46	Challenges tutor when denied entry to a teaching session they arrived late to	-4 D	1	0	2 D
47	Accepts gifts from patients without considering possible motives	-3	-2	3	3
48	Fails to show empathy toward patients	1	1	0	4 D*

Asterisk (*) indicates significance at $p<0.01$; otherwise $p<0.05$.
D denotes a distinguishing statement, where the statement in that position has been ranked in a significantly different position compared with its position in other factors. C indicates a consensus statement, where the statement has been ranked similarly across all factors.

Statements describing unprofessional behaviours involving authority figures in an education context were ranked as least unprofessional, such as 'arguing with a tutor about the relevance of the teaching session' and 'communicating with a tutor in the middle of the night to ask non-urgent questions'. Participants from both cultural contexts felt that behaviours challenging power structures could be viewed positively in a professional setting.

"Arguing with a tutor [is less unprofessional] because asserting your own opinion is an important skill." Educator (Japan)

Factor 2 : Relational responsibility

Relational responsibility was the next largest, and a Japanese-only factor, accounting for 13% of the variance and derived from the views of seven contributors consisting of one administrator, one clinical educator and five medical students (Table 3). Group characteristics for this factor were noted to differ from the other factors as the viewpoints came from medical students and two early career professionals (i.e. within the first 5 years of work). Relational in this context represents a wide range of social bonds, from transient connections where social spaces intersect to deeper transactional relationships as part of a group. Participants applying this lens were more aware of the impact of their actions on a wider group, choosing behaviours with the potential to affect image or cause disruption to social cohesion as most unprofessional (e.g., 'smelling of alcohol on a clinical placement' and 'fabricating part of the patient history'). Statements describing other behaviours perceived to negatively impact group dynamics were also ranked as more unprofessional in this factor compared with others ; this included 'frequent late attendance', 'does not attend without notice', 'uses phone in front of patients', and 'fails to appreciate the value of clerking patients over book learning'.

"Unauthorised absence and frequent late attendance are basic rules for living in our society and cause a great deal of inconvenience to those around you [if broken]." Medical student (Japan)

Behaviours that maintained harmonious social relationships through avoiding disruption to others or preventing others from getting into trouble were felt to be least unprofessional.

"Although it's not an entirely good thing to do, there is little trouble caused directly to others." Educator (Japan)

Behaviours felt to be less unprofessional in this factor also followed this pattern, including 'presenting work including the name of someone who did not contribute' and 'witnessing cheating and not taking appropriate action'. Through this lens, behaviours felt to be unavoidable or due to personality were considered as less unprofessional.

"I felt that the least unprofessional behaviours might be down to the personality of that individual." Educator (Japan)

Factor 3 : Moral responsibility

Moral responsibility accounted for 12% of the variance and was a predominantly UK-based factor, comprising six viewpoints made up from one Japanese administrator, one UK administrator, two UK clinical educators and two UK medical students (Table 3). Using this construction to understand unprofessional behaviour, participants ranked statements describing breaches in trust between doctors and patients as the most unprofessional ; for example, 'examining a patient with insufficient consent' and 'disclosing clinical information to family without consent'.

"Offering clinical advice without appropriate supervision and [falsely] reporting findings as normal go directly against the principles and foundations of medicine. It seems that a person who would undertake such behaviours would need to consider their core motivation for medicine." Educator (UK)

Participants also clearly demarcated dishonest and colluding behaviours as more unprofessional—including 'signing a document under someone else's name', 'accepts gifts from patients without considering possible motives' and 'signing in for absent peers'—ranking these statements in higher positions relative to their position in other factors.

"Signing off with someone else's signature is not only unethical but also worthy of [having your] medical licence suspended." Medical Student (UK)

Behaviours such as 'appearing disinterested', 'not giving feedback to others', and 'wearing casual attire in a clinical setting' were amongst the least unprofessional. This view of dressing casually contrasts strongly with opinions from Japan, where participants felt that personal presentation was a more important aspect to professionalism.

"People involved in medical care cannot [wear casual attire or an unkept lab coat] as this could be seen as unclean or lacking in hygiene." Administrator (Japan)

A distinguishing feature from Factor 1 (clinical responsibility), where the clinical lens weighted behaviours affecting interactions with patients as more unprofessional, is that behaviours influencing patient interactions—namely 'fails to show empathy', 'treats patients as symptoms or diagnoses', and 'fails to appreciate the value of clerking patients over book learning'—were felt to be less unprofessional under a lens of moral responsibility and thus ranked lower in this factor.

Factor 4 : Personal responsibility

Personal responsibility was a predominantly Japanese factor, constructed from eight viewpoints generated from three Japanese clinical educators, four Japanese medical students and one UK medical student (Table 3). Through this lens, participants ranked statements that disrupted personal relationships as most unprofessional, such as 'blaming the patient for own history taking deficiencies' and 'writing on Facebook about a patient encounter'. This differs from Factor 2 (relational responsibility), where the focus was on maintaining group cohesion, as the behaviours isolated in this factor focused on one-to-one relationships. Statements ranked as more unprofessional in this factor relative to others included 'laughing at a colleague' and 'arguing with a tutor' ; least unprofessional were behaviours that only affected the individual, such as 'does not take initiative' and 'seeks minimally acceptable level of performance'.

"Because humanity is important in medical care. Even beyond illnesses there are many things that can be treated by words alone." Educator (Japan)

"I felt that [these behaviours were less unprofessional] because they cause little disadvantage to others". Medical Student (Japan)

In this lens, participants spoke of a concern for how actions are perceived by others.

"I thought that the clearest examples [of unprofessional behaviour] were those that [would be] recognised as unprofessional behaviours, even if judged by non-healthcare professionals." Educator *(Japan)*

Discussion

In this paper, we examine cultural differences between Japanese and UK stakeholders in the perception of medical unprofessional behaviours via the innovative approach offered by Q-methodology. Our findings reveal an internationally shared understanding of unprofessional behaviour through the lens of patient safety, which operates alongside culturally constructed unique viewpoints related to relational, personal, and moral responsibilities. Crucially, these are viewpoints currently lacking or missing from leading professionalism frameworks.

Our findings align with our pilot data, which demonstrated an equivalent four-factor solution, and the lenses identified overlap with the professionalism domains of 'respect for patients', 'responsibility for actions', 'ethical practice', and 'social responsibility' described by Hilton and Slotnick[31]. Additionally, our results further the literature in providing empirical evidence for the ideas of Martimianakis *et al*[32], supporting a socio-cultural understanding of [un]professional behaviours. Such a model contrasts with a purely educational view on unprofessional behaviours as a remedial problem, with the cultural viewpoints identified making clear the extent of the translation gap between professionalism frameworks and current practice in both contexts.

Significant in our findings are the Japanese viewpoints of relational and personal responsibility in distinguishing unprofessional behaviours, which are likely to be drawn from Japanese interdependence in identity formation relative to independence (a Western characteristic found in the UK context), leaving the Japanese sense of self incomplete without others[33]. Such a difference brings stronger ties to a collective, an increased focus on the maintenance of harmonious relationships, anticipation of the behaviour of others, and moderation of personal behaviours to prioritise in-group relationships[34]. Understanding these social norms leads to an appreciation of how behaviours that deviate from relationship preservation, cause perceived inconvenience to others, or can be anticipated to appear a certain way hold deep-seated cultural connotations of unprofessionalism that extend to medical practice. It is significant to note the younger demographic that contributed to the factor of relational responsibility, including the persistence into early career professionals in both clinical and non-clinical settings. This highlights earlier influences from education in the Japanese school system which may represent a more readily accessible construct of unprofessional behaviours for medical students to drawn on at this career stage. Persistence of the viewpoint into early career indicates its importance as a foundation for professional development in the Japanese context, raising the possibility that this represents a stage of pre-professional development similar to a Western concept of 'proto-professionalism' proposed by Hilton and Slotnick[31].

Within the UK cohort the factors arising were narrower by comparison, reflecting guidance from professional regulatory bodies such as the GMC's *Good Medical Practice*, which has been enshrined in national training and professional consciousness since 1995[9]. However, the lens of moral responsibility was statistically distinct, highlighting a viewpoint considering personal motivation and ethical reasoning in conceptualising unprofessionalism, rather than using a purely clinical lens. This difference may represent the shift towards professional values that encompass physician wellness and intrinsic motivation, which has been recently described in HPE literature[12].

Our research has several key strengths. In using Q-methodology, we have a robust and validated method to extract and examine unprofessionalism constructs across contrasting cultural contexts, strengthened by judgemental rotation, standardisation of Q-sorts, and qualitative data to support factor interpretation. The extracted factors are unconscious to participants and cannot be predicted by researchers[15,18], reducing the potential for response and expectation bias. Our Q-sort was suitably powered[15], and the extracted factors conceptually well supported. However, Q-methodology is not generalisable outside of our cohort[15], and although a process was implemented for rigour in statement generation, all unprofessional behaviours may not have been represented in the study. This opens the possibility that other lenses conceptualising unprofessionalism may co-exist. In addition, our study recruited from a range of HPE stakeholders but excluded patients. Furthermore, differences in education and healthcare systems influence the sociocultural environment and are therefore likely to contribute to how unprofessional

behaviours are distinguished and considered in practice ; however, such evaluation was beyond the scope of this project. Therefore, further studies are needed to validate and elaborate on our identified lenses and search for additional perspectives not captured from our cohorts, including those of patients and relatives.

Given the shared problem of medical unprofessionalism in healthcare contexts globally, sociocultural examination of the translation gap between professionalism frameworks and perceptions of unprofessional behaviour offers valuable insights and unique cultural perspectives, worthy of integration into teaching and national frameworks for local cultural relevance and reflective of professional practice. This may help to appropriately set professionalism guidelines relative and responsive to the needs of our students and patients locally, and importantly, guide educators in assessing professionalism concerns arising within these populations.

Acknowledgements

We express our deepest thanks to Mr Oliver Stanyon for conducting the Japanese-English translation and back-translation for this study, and for language-editing the manuscript.

This study was funded by a Japan Society for the Promotion of Science Kakenhi category C grant, number 21K10377 and the NIHR Applied Research Collaboration Northwest London. The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.

Conflict of Interest Disclosure

The authors have no conflicts of interest to declare.

References :

1. Brennan N, Price T, Archer J, Brett J. Remediating professionalism lapses in medical students and doctors : A systematic review. Med Educ, **54** : 196-204, 2020. doi:10.1111/medu.14016. Epub 2019 Dec 23. PMID : 31872509.
2. Van De Camp K, Vernooij-Dassen MJ, Grol RP, Bottema BJ. How to conceptualize professionalism : a qualitative study. Med Teach, **26** : 696-702, 2004. doi:10.1080/01421590400019518. PMID : 15763872.
3. Birden H, Glass N, Wilson I, Harrison M, Usherwood T, Nass D. Defining professionalism in medical education : a systematic review. Med Teach, **36** : 47-61, 2014. doi:10.3109/0142159X.2014.850154. Epub 2013 Nov 19. PMID : 24252073.
4. Lesser CS, Lucey CR, Egener B, Braddock CH 3rd, Linas SL, Levinson W. A behavioral and systems view of professionalism. JAMA, **304** : 2732-2737, 2010. doi:10.1001/jama.2010.1864. PMID : 21177508.
5. Irby DM, Hamstra SJ. Parting the Clouds : Three Professionalism Frameworks in Medical Education. Acad Med, **91** : 1606-1611, 2016. doi:10.1097/ACM.0000000000001190. PMID : 27119331.
6. Walsh C, Abelson HT. Medical professionalism : crossing a generational divide. Perspect Biol Med, **51** : 554-564, 2008. doi:10.1353/pbm.0.0042. PMID : 18997358.
7. Mak-van der Vossen M, van Mook W, van der Burgt S, Kors J, Ket JCF, Croiset G, Kusurkar R. Descriptors for unprofessional behaviours of medical students : a systematic review and categorisation. BMC Med Educ, **17** : 164, 2017. doi:10.1186/s12909-017-0997-x.
8. Kinghorn WA, McEvoy MD, Michel A, Balboni M. 2007. Viewpoint : Professionalism in modern medicine : Does the emperor have any clothes? Acad Med **82** : 40-45.
9. General Medical Council UK. *Good Medical Practice*. Available from : https://www.gmc-uk.org/professional-standards/professional-standards-for-doctors/good-medical-practice [Last accessed 30.9.2024].
10. ABIM. The Physician Charter. Available from : https://abimfoundation.org/what-we-do/physician-charter [Last accessed 30.9.2024].
11. Stanyon M, Shikama Y, Otani K. When I say … cultural competence. *Med Educ*, **55** : 556-557, 2021. doi:10.1111/medu.14439
12. Nishigori H, Shimazono Y, Busari J, Dornan T. Exploring yarigai : The meaning of working as a physician in teaching medical professionalism. *Med Teach*. Published online February 20, 2024. doi :10.1080/0142159X.2024.2316227
13. Nishigori H, Harrison R, Busari J, Dornan T. Bushido and medical professionalism in Japan. *Acad Med*, **89** : 560-563, 2014. doi:10.1097/ACM.0000000000000176
14. Kusurkar RA, Mak-van der Vossen M, Kors J, Grijpma JW, van der Burgt SME, Koster AS, de la Croix A. 'One size does not fit all' : The value of person-centred analysis in health professions education research. Perspect Med Educ, **10** : 245-251, 2021. doi:10.1007/s40037-020-00633-w. Epub

2020 Dec 7. PMID : 33284407 ; PMCID : PMC8368141
15. Watts S, Stenner, P. Doing Q Methodological Research : Theory, Method and Interpretation. London : SAGE Publications Ltd ; 2012. https://doi.org/10.4135/9781446251911.
16. Fokkema JP, Scheele F, Westerman M, *et al.* Perceived effects of innovations in postgraduate medical education : a Q study focusing on workplace-based assessment. AcadMed, **89** : 1259-1266, 2014.
17. Chang, Y.C., Xiao, X., Nkambule, N. *et al.* (2020) Exploring emergency physicians' professional identities : a Q-method study. Adv in Health Sci Educ **26**, 117–138. Available from : https://doi.org/10.1007/s10459-020-09973-y
18. Wallenburg, I., van Exel, J., Stolk, E., *et al.* (2010) Between trust and accountability : different perspectives on the modernization of postgraduate medical training in the Netherlands. *Acad Med*. 85(6), 1082-1090. Available from : doi:10.1097/ACM.0b013e3181dc1f0f. PMID : 20505413
19. Hofstede G. Dimensionalizing Cultures : The Hofstede Model in Context. Online Readings in Psychology and Culture, **2** : 2011. https://doi.org/10.9707/2307-0919.1014
20. Gobel MS, Miyamoto Y. Self- and Other-Orientation in High Rank : A Cultural Psychological Approach to Social Hierarchy. Personality and Social Psychology Review, **28** : 54-80, 2024. https://doi.org/10.1177/10888683231172252
21. Vygotsky LS. Thought and Language. The MIT Press ; 1934.
22. Kozulin A, Gindis B, Ageyev VS, Miller SM. Vygotsky's Educational Theory in Cultural Context, Cambridge : Cambridge University Press ; 2003.
23. Brown, SR. "The Forced-Free Distinction in Q Technique." Journal of Educational Measurement, **8** : 283-287, 1971. http://www.jstor.org/stable/1433748.
24. Stainton Rogers R. Q methodology. In Smith, J.A., Harre, R. and Van Langenhove, L., editors, Rethinking methods in psychology. London : Sage ; 1995.
25. Lutfallah S, Buchanan L. Quantifying subjective data using online Q-methodology software. The Mental Lexicon, **14** : 415-423, 2019. doi: https://doi.org/10.1075/ml.20002.lut
26. Banasick S. Ken-Q Analysis (Version 1.0.6) ; 2019 [Software]. Available from : https://shawnbanasick.github.io/ken-q-analysis/
27. Banasick S. A Comparison of Centroid Factor Extraction Methods for Q Methodology. Kobe College Studies, **67** : 1-17, 2020.
28. Ho R. Handbook of univariate and multivariate data analysis and interpretation with SPSS. Boca Raton, FL : Chapman & Hall/CRC ; 2006.
29. Ramlo S. Centroid and Theoretical Rotation : Justification for Their Use in Q Methodology Research. Mid-Western Educational Researcher, **28** : 73-92, 2016
30. Morse JM, Barrett M, Mayan M, Olson K and Spiers J. Verification Strategies for Establishing Reliability and Validity in Qualitative Research. International Journal of Qualitative Methods, **1** : 13-22, 2002. https://doi.org/10.1177/160940690200100202
31. Hilton SR, Slotnick HB. Proto-professionalism : how professionalisation occurs across the continuum of medical education. Med Educ, **39** : 58-65, 2005.
32. Martimianakis MA, Maniate JM, Hodges BD. Sociological interpretations of professionalism. Med Educ, **43** : 829-837, 2009. doi:10.1111/j.1365-2923.2009.03408.x. Epub 2009 Aug 6. PMID : 19674298.
33. Markus HR, Kitayama S. Culture and the self : Implications for cognition, emotion, and motivation. Psychological Review, **98** : 224-253, 1991. https://doi.org/10.1037/0033-295X.98.2.224.
34. Yamagishi T. Micro-macro dynamics of the cultural construction of reality : A niche construction approach to culture. In : Gelfand MJ, Chiu CY and Hong YY (eds.) Advances in culture and psychology, Oxford : Oxford University Press, 251-308, 2011.

Appendix 1 : Post Q-sort questionnaire

1. Please indicate which country you are based in
   - ○ UK
   - ○ Japan
2. Please indicate your occupation
   - ○ Medical Student
   - ○ Clinician Educator
   - ○ Non-Clinician Educator
   - ○ Administrator
3. If you are a medical student, please indicate your year of study
   - ○ 1
   - ○ 2
   - ○ 3
   - ○ 4
   - ○ 5
   - ○ 6
   - ○ N/A
4. If you are an educator or an administrator, please indicate how many years you have worked in education
   - ○ 0-5 years
   - ○ 5-10 years

- ○ 10–15 years
- ○ 15–20 years
- ○ >20 years
- ○ N/A

5. Do you have any international experience (for example living or working in another culture)? If so, please give brief details below. This may include a description of your role, duration of the experience, the countries/cultures involved, etc.
6. Which 2 statements did you feel are MOST unprofessional? Please explain WHY you felt these were the most unprofessional of the behaviours listed. You can view your Qsort by clicking the yellow "view Qsort" button at the bottom of the screen.
7. Which 2 statements did you feel are LEAST unprofessional? Please explain WHY you felt these were the least unprofessional of the behaviours listed. You can view your Qsort by clicking the yellow "view Qsort" button at the bottom of the screen.