A cross-cultural study of students' approaches to professional dilemmas: sticks or ripples

Ming-Jung Ho,[1] Chi-Wei Lin,[1] Yu-Ting Chiu,[1] Lorelei Lingard[2] & Shiphra Ginsburg[3]

CONTEXT Medical educators internationally are faced with the challenge of teaching and assessing professionalism in their students. Some studies have drawn attention to contextual factors that influence students' responses to professional dilemmas. Although culture is a significant contextual factor, no research has examined student responses to professional dilemmas across different cultures.

METHODS Semi-structured interviews inquiring into reactions towards, and reasoning about, five video clips depicting students facing professional dilemmas were conducted with 24 final-year medical students in Taiwan. The interviews were transcribed and analysed according to the theoretical framework used in prior Canadian studies using the same videos and interview questions.

RESULTS The framework from previous Canadian research, including the components of principles, affect and implications, was generally applicable to the decision making of Taiwanese students, with some distinctions. Taiwanese students cited a few more avowed principles. Taiwanese students emphasised an additional unavowed principle that pertained to following the advice of more senior trainees. In addition to implications for patients, team members or themselves, Taiwanese students considered the impact of their responses on multiple relationships, including those with patients' families and alumni residents. Cultural norms were also cited by Taiwanese students.

CONCLUSIONS Medical educators must acknowledge students' reasoning in professionally challenging situations and guide students to balance considerations of principles, implications, affects and cultural norms. The prominence of Confucian relationalism in this study, exhibited by students' considerations of the rippling effects of their behaviours on all their social relationships, calls for further cross-cultural studies on medical professionalism to move the field beyond a Western individualist focus.

*Medical Education 2012: **46**: 245–256*
doi:10.1111/j.1365-2923.2011.04149.x

[1]Department of Social Medicine, National Taiwan University College of Medicine, Taipei, Taiwan
[2]Department of Medicine, Centre for Education Research & Innovation, Schulich School of Medicine & Dentistry, University of Western Ontario, London, Ontario, Canada
[3]Department of Medicine, Faculty of Medicine, and Wilson Centre for Research in Education, University of Toronto, Toronto, Ontario, Canada

Correspondence: Ming-Jung Ho, Department of Social Medicine, National Taiwan University College of Medicine, No. 1 Ren-Ai Road, Section 1, Taipei 106, Taiwan. Tel: 00 886 910 188399; Fax: 00 886 2 393 5254; E-mail: mjho@ntu.edu.tw

INTRODUCTION

Over the past two decades, considerable literature on medical professionalism has been published, including several review articles, books and chapters.[1–5] Professionalism in medicine is classically defined as the individual attributes expected of a doctor by society.[5] An important theme in the emerging literature is that professionalism can be conceptualised as a set of behaviours in context or a socially constructed way of acting or being, associated with power, rather than as a set of stable traits within a person.[6–8] This distinction is significant and has consequences for medical education practice. If professionalism were conceived of as a set of stable traits, then medical educators would be able to select students who possess these traits and assess professionalism using psychometric instruments. However, researchers have found it problematic to subdivide competence into separate, measurable, stable and generic traits.[9,10] By contrast, if professionalism were conceived of as a set of behaviours in context, medical educators could assist students to modify their behaviours and attend to the influence of context on professional behaviours.

Efforts have been made to understand the behaviours of students in context by investigating students' experiences of, and reasoning within, professional dilemmas.[11,12] Prior to the surge in studies of medical professionalism, researchers of moral development frequently used ethical dilemma scenarios to understand moral reasoning.[13] Similarly, some researchers in medical professionalism have investigated students' reasoning and justification of their choices among competing principles in the context of professional dilemmas. They have addressed issues concerning not only what the student did, but also why the student chose that action and how the student justified the action.[14] In addition to collecting individual students' descriptions of their reasoning in professional dilemmas they had encountered, a series of studies have used standardised video clips of professionally challenging situations to explore how medical students make decisions about how to react.[15–17] These studies, conducted in Canada, have found that in the face of professional dilemmas, students reasoned according to principles of professionalism, affect (or internal feelings and beliefs), and potential implications of their actions. However, it is unclear whether these considerations of principles, affect and implications are specific to the North American culture in which these studies were conducted.

Professionalism is a competency evaluated by medical education accreditation bodies at both undergraduate and postgraduate level in the USA and Canada.[18,19] Increasingly, medical educators internationally are faced with similar challenges as competency-based medical education gains popularity around the world.[20,21] Although medical educators globally are struggling with professionalism, most of the literature on the subject comes from Western countries. Some studies have drawn attention to cultural differences in the conceptualisation of medical professionalism in response to varied societal needs.[22,23] So far, no research has examined reasoning in the face of professionally challenging situations across cultures. In order to investigate whether the reasoning processes behind observable professional behaviours are universal, we compared reasoning about professionally challenging situations depicted in a set of standardised video clips in an Asian country, Taiwan, and a Western country, Canada.

METHODS

Procedure

The video scenarios used in this study were developed by Ginsburg *et al.*[15] as part of a programme of research exploring how medical students respond to professionally challenging situations. These scenarios were based on actual events as described by medical students at two Canadian and one US university.[11] Chinese subtitles were added and were back-translated into English to ensure their accuracy for the current study. Each video was 1–2 minutes long and ended at the point at which the student depicted must say or do something in response to events.

A trained research assistant (RA) conducted confidential, semi-structured, 1-hour interviews with each participant. After each video, the participant was asked: What was the video about? If you were the student in the film, what would you do next? Why? What should the student not do? Why? Are there alternative actions? Is the scenario likely to happen in Taiwan? Clarifying questions following the answers were added when necessary. After the structured questions, participants were free to share any additional thoughts.

Participants

In order to provide a study sample comparable with that in an earlier study[15] conducted in Canada, we

recruited final-year medical students ($n = 24$) at National Taiwan University in 2009. The medical curriculum at National Taiwan University is 7 years in length (or 6 years on a special fast-track programme that has a more condensed curriculum). The pre-medical curriculum occurs in the first 2 years; the pre-clinical curriculum, which includes lectures and problem-based learning, is delivered in the next 2 years, and clinical clerkships are undertaken in the final 3 years (2 years on the fast-track programme). The last 5 (or 4) years are similar to the 4-year curriculum at the University of Toronto. In terms of the professionalism curriculum, courses based on Western principles of bioethics are integrated longitudinally. However, long before they reach medical school, Taiwanese students are taught moral education based on Confucianism throughout their childhood, both at home and in school.

Sample size was based on 'theoretical saturation'. We stopped enrolling participants when additional interviews did not reveal new themes and emergent themes were saturated. We also adopted theoretical sampling with regard to gender and the 6- or 7-year programme. The study sample included 18 male and six female students. Twenty students had undertaken the 7-year programme and four had taken the 6-year programme (this ratio is similar to that in the total year group). We recruited by posting notices on the digital bulletin board, which is the medium through which students exchange information. Participation was confidential, voluntary and remunerated. The study protocol was approved by the responsible research ethics committee in Taiwan.

Analysis

The interviews were audiotaped, transcribed and rendered anonymous for analysis by two RAs and the first author. We analysed the transcripts using grounded theory with a constructivist approach, which acknowledges researchers' prior assumptions and knowledge, including sensitising concepts from previous research and theory.[24] We began to code the transcripts according to the theoretical framework of prior Canadian studies, including coding for principles, implications and affects.[15,16] At the same time, we engaged in an open coding process to account for new themes or nuance that may not have been present in the existing framework.[25] Two RAs trained in qualitative research methods initially coded the transcripts independently. Codes were then developed iteratively by the RAs and the first author. When disagreements in coding occurred, consensus was reached by re-examining the original transcripts. The sample of 24 interviews was considered adequate for theoretical saturation because of the recurrence of both pre-existing and newly emergent themes. We used NVivo 8 software (QSR International Pty Ltd, Doncaster, Vic, Australia) to facilitate the analysis process. 'Codable units' are excerpts of transcript which express a unified idea; they vary in length from sentences to paragraphs. The counts of codable units generated by the software are included to illustrate their relative prevalence; however, these should be interpreted with caution.[26] Quotations are translated into English from Chinese and are referenced by video number and by the student's de-identified number (V#, S#).

RESULTS

The transcribed material was 465 pages long and included 269 760 Chinese characters. Overall, students found the videos engaging and were able to imagine themselves in the positions of the students portrayed in the scenarios. Most students stated that the scenarios were likely to happen in Taiwan. For instance, a student spontaneously commented at the end of the interview:

'The film clips are very authentic. I have encountered all five situations within the past half a year as a seventh-year student.' (S4)

Another student stated that he had witnessed a situation similar to that in Scenario 4, which portrays a female student, who, following the attending physician's instruction and without apparent patient permission, palpates a male patient's genitals without gloves. The Taiwanese student had seen a patient who was not prepared to undergo a rectal examination conducted by six medical students. In that instance, after the student's attending physician had performed a rectal examination himself, he had instructed the students without seeking the patient's consent to: 'Wear your gloves and examine the patient as I did.'

A few students stated that some scenarios are seen less frequently in Taiwan because their relationships with residents, attending physicians and patients' families differ from those of Canadian students. For example, in discussing Scenario 1, which depicts a student whose patient asks about her test results, which the student has been asked not to reveal by the attending

physician, one student felt this was unlikely to happen in Taiwan, as:

'…we are more likely to discuss with residents than directly with attending physicians.' (V1, S3)

Another student commented:

'We usually give bad news when patients' family members are around, instead of telling the patient alone.' (V1, S1)

Taiwanese students' responses reflected the finding that they, like their Canadian counterparts,[15] found the scenarios depicted in the videos challenging. There was no clear 'best answer' as to how the students in the videos should behave. Like the Canadian students,[15] Taiwanese students offered a variety of alternatives for action for each scenario. For example, in response to Scenario 1, students provided many options in addition to the alternatives of 'Tell the patient' and 'Don't tell the patient'. They suggested a variety of answers including: discuss with the attending physician further; discuss with resident doctors first; ask the attending physician to inform the patient; obey the attending physician's order not to inform; and discuss with the patient's family how to inform, etc. The fact that no single option was identified as optimal by all participants suggests that the scenarios were sufficiently challenging. In addition, Taiwanese clerks' responses contained an average of 15.5 codable units per scenario. This indicated that Taiwanese students engaged in expansive deliberation around each case, offering many suggestions for action and many rationales behind them.

The theoretical framework used in the previous Canadian studies[15–17] was generally applicable to the decision making of Taiwanese students. We adopted the latest framework and modified it where necessary, as indicated below. It should be noted that the original framework evolved with input from subsequent studies; it was based initially on clerkship students' responses,[15] but then incorporated those of faculty staff[16] and pre-clerkship students.[17] Table 1 summarises the themes and includes illustrative quotations. Where the framework was modified or expanded, we have elaborated on this in the text and marked the table with an asterisk. Similarly to students who participated in the Canadian study,[15] students' rationales for action fell within three main themes: reference to principles; reference to implications, and reference to affect. Unique to the current study was a fourth theme: students' reference to culture.

Reference to principles

A codable unit was categorised as a reference to principle if the student rationalised his or her suggested action in terms of an abstract concept or principle. These abstract concepts could be further divided into avowed principles and unavowed principles. Avowed principles are consistent with the principles of professionalism defined by professional bodies, such as to behave honestly, to take care of the patient, and to disclose the truth. Compared with the respondents in the Canadian study,[15] Taiwanese students articulated a few more principles, including those pertaining to accountability, altruism, ethics and excellence. Students frequently referred to principles as the reason for action in Scenarios 1, 2 and 5.

In addition to these avowed principles, a number of 'unavowed' principles were recognised by students[15] (and faculty members[16]) as important to survival and success, but these have not been enshrined by the profession in formal documents about professionalism or in explicit education agendas. All of the unavowed principles identified in the Canadian study[15] emerged in the discussions with Taiwanese students. Examples include: 'get a good education'; 'know your place'; 'do what you are told'; 'know your limitations', and 'step up to the plate'. It is worth noting that all Taiwanese participants made reference to the principle of 'know your limitations' at least once, and almost all (22 of 24) rationalised their recommended action using the unavowed principle of 'do what you are told'.

Furthermore, Taiwanese students emphasised that they should follow the advice and learn from the experience of senior classmates who had become residents. This is more nuanced than simply obeying or deferring to supervisors, as previously reported.[15] Taiwanese students genuinely trust and follow the advice of their alumni residents. The respect given to the experience of more senior trainees can be considered to represent an unavowed principle that is highly valued by Taiwanese students. Many students quoted their senior trainees' advice during the interviews. One student rationalised his response to Scenario 5, which shows a student who is performing her first thoracentesis under resident supervision being asked by a nurse whether she has performed the procedure before, as:

'A senior upperclassman told me the following: ''Little brother… you might not know how to perform the procedure, but I am telling you, when

Table 1 Example quotations to illustrate the major themes of 'avowed principles', 'unavowed principles' and 'implications'

Themes	Sub-themes	Examples from interviews
Avowed principles		
Take care of patients	Provide appropriate clinical care	'When patients come to the hospital, they have objectives… We now advocate a patient-centred approach to provide holistic care' (V3, S19)
	Provide comfort and relieve patient anxiety	'Sometimes when doctors see patients, they talk with patients. Even if there is no major point in the talk, casual conversation with a few words of condolence could relieve patients' anxiety' (V2, S5)
Behave honestly	Disclose the truth	'If there is a finding like this, I would definitely tell the patient on that day without delay' (V1, S6)
	Behave with integrity	'I am not likely to tell a lie successfully. Even if I want to tell a lie, I would not succeed… I don't want to tell a lie… That is too much against my principles' (V5, S12)
	Know when to fudge the truth	'I would simply say that I am good with confidence… I do not lie to achieve my aim [to practice the procedure] but wish to make the treatment proceed smoothly' (V5, S5)
Report inappropriate behaviour/self-regulation		'If I could not reach agreement with the surgeon who does not wish me to disclose, I could take a step up the hierarchy to report to the chairperson' (V1, S7)
Be efficient with resources	Work efficiently	'Doctors must consider time and efficacy. If doubling the effort results in half the effect, we should consider seeking assistance from other team members' (V3, S22)
	Call for help	'I think we could ask for opinions from other doctors with more expertise' (V1, S8)
Accountability*		'As the doctor, you have to be accountable to the patient' (V2, S21)
Altruism*		'I think that in medicine, the priority is the welfare of the patient' (V5, S8)
Ethics*		'If you judge only according to the principles of medical ethics, you are obliged to inform… Society expects doctors to follow this ethical principle' (V1, S12)
Excellence*		'As medical students, we should seek every opportunity to excel' (V3, S5)
Unavowed principles		
Get an education		'If this is a very special skill… if you do not learn this way, how could you pass on the skill to the next generation?' (V4, S18)
Know your place	Do what you're told: Obey	'If the attending [physician] thinks that you should not disclose, you should not disclose' (V1, S7)
	Defer	'Teachers have their habitual ways of doing things… They choose the best approach based on their experience… You just observe the teachers' habits and defer to them' (V1, S23)
	Know your limitations	'If a senior doctor asks me to do something I consider dangerous… I would tell the doctor that I am too inexperienced to do what he requested' (V5, S12)
	Step up to the plate	'If the senior resident does not want to get involved, I … will look up the books. If reading is too slow, I could search online for the dosage. Well, it is faster to ask other senior residents' (V2, S2)
Know the system		'In the hospital system… those higher in the hierarchy are more responsible for dealing with life-and-death issues' (V3, S11)

Table 1 (Continued)

Themes	Sub-themes	Examples from interviews
Follow senior trainees' advice*		'Senior trainees tell us not to be led by patients' (V3, S4)
Implications for:		
Patient	Patient	'If the patient had plans, he might not be able to carry them out if he were not informed. His life quality and time with family members might be affected. I feel that the patient has the right to know' (V1, S17)
	Patient's family*	'In Taiwan, patients are usually not the most important person. Their family members are the key people… We have to be conscientious when handling the relationship with a patient's family members' (V1, S24)
Other	Peer	'I don't know why he did not complete his tasks before signing off. The unfinished task would become a burden to the next shift. My classmates and I all try to complete our tasks by ourselves and not to affect others' (V2, S5)
	Upperclassman resident*	'The residents do not gain anything by caring for us and teaching us… they have to risk resolving any bad outcomes we cause. So I am very grateful to the residents for being willing to take care of us' (V5, S22)
	Attending physician/teacher	'If you want to voice concerns… it is better when the patient is absent… The patient might not consider it an issue. The attending [physician] might not know or care about this issue. Otherwise, the patient would not trust the attending physician. The patient–doctor relationship would deteriorate' (V4, S15)
	Team	'If I inform him, it would have great impact on the whole team. Although we should consider the best interests of the patient… we should communicate with the team leader' (V1, S15)
Self	External	'Ideally, I should finish the task earlier and would not leave a bad impression' (V2, S22)
	Internal	'It depends on your workload. But we don't want to become workaholics. Sometimes, doctors do not take care of their physical bodies. This is not good for patients. Some doctors have broken relationships with [their] families or have no friends. That is bad' (V2, S12)
Relationship*		'The resident is right… You have to judge the impact on your relationship with the patient… You also have to consider the impact on your attending physician's perception of you' (V3, S7)

* Items in the framework of the Canadian studies[15–17] that were modified or expanded in the present study

any upperclassman asks you if you have done the procedure, you have to say yes. Then you will have the chance to learn.'' This may not be in accordance with ethical principles, but this is how things are done in practice.' (V5, S5)

Reference to implications

A codable unit was categorised as a reference to implications if the student rationalised his or her suggested action in terms of the consequences of the

action or the impact of the action on others. Similarly to the Canadian students,[15] the Taiwanese students articulated implications for three groups of individuals: patients; others (team members), and self (the student).

Whereas implications for self were the most frequently articulated implications among Canadian students,[15] implications for patients were most frequently cited by Taiwanese students. In addition to the concern about patient health outcomes as a result of student involvement expressed by both groups of students, Taiwanese students' discussion about implications for patients focused on patients' families, although families were not depicted in the scenarios. For example, in Scenario 1, many students replied that they would consult the patient's family before informing the patient:

'If I have to inform the patient, perhaps it is better to inform [her] through the family. In the context of Taiwan, family members are more likely to be able to work with patients and to provide psychological support than medical providers.' (V1, S5)

As this example illustrates, the notion of the patient in Taiwan is enlarged to include the patient's family. The patient is not considered as separate from or independent of the family. Some students further contended that the concept of 'patient autonomy', as it is referred to in Western bioethics, should be honoured. As one student put it:

'We should not lie to the patients. Ideally, we should not hide the information. The patients have the right to know about the condition of their bodies and the test results. However, we are just finding the most appropriate person to inform the patient.' (V1, S9)

In terms of implications for other health care professionals, Taiwanese students were similar to Canadian students[15] in considering the consequences of their actions on peers, residents and attending physicians. In addition, we found a new theme: Taiwanese students paid special attention to implications for residents, who were often their seniors. In relation to Scenario 5, a student explained:

'Although the resident let the clerk practise [the procedure], the responsibility still lies on the resident who has to cover what happens when the clerk performs the procedure. I feel that the residents do not gain anything by caring for us and teaching us. We might share their workload after we have learned what they teach us, but they have to risk [the need to] take care of [any] bad outcomes we cause. So I am very grateful to the residents for being willing to take care of us.' (V5, S22)

Although implications for self (i.e. the student) were not as frequent as in the Canadian data,[15] Taiwanese students did consider implications for their external evaluations and for their internal status, both emotionally and physically. Similarly, reference to affect was found in the Taiwanese data, but not as frequently as in the Canadian data.[15] Table 1 gives illustrative quotations of such references and Table 2 shows the proportions at which each theme emerged.

A new theme, 'relationships', emerged as a unique subset of implications. We noted that in addition to contemplating consequences on patients and their families, other team members or themselves, Taiwanese students thought about the impact of their behaviours on their relationships, rather than just on individual persons. This theme highlights bi-directional interactions among stakeholders, rather than the uni-directional impact of a student's behaviour on another person. We found evidence suggesting that students tried to understand and to behave according to their position or role within the relationship. The following student's statement is illustrative:

'Within the same system, if you are in different positions, you think differently. This seems strange, but this is the reality. If you are not in the position to assume responsibility, but you do lots of things, then this is not good for the person in charge.' (S15, V1)

This student was expressing concern not simply for another person, but in relation to the expected roles of persons in these relationships.

In the following statement about Scenario 3, which depicts a student telling a resident that she wants to observe a bone marrow biopsy but has promised a patient with dementia she will see him right away, the interviewee considered the resident portrayed in the film, the patient, who did not appear physically but was mentioned in the film, and the attending physician, who was not mentioned at all:

'The resident is right in saying, ''Do what you need to do.'' You have to judge the impact on your relationship with the patient if you see the patient after the round as promised or after you watch the bone marrow [biopsy]. You also have to consider the impact on your attending physician's perception of you.' (V3, S7)

Table 2 Relative frequencies of references to particular categories of theme made by Taiwanese students, Canadian students[15] and Canadian faculty staff[16]

	References across all scenarios		
Thematic category	**Students in Taiwan (*n* = 24)**	**Students in Canada (*n* = 18)**	**Faculty in Canada (*n* = 30)**
Principles	776 (24)		558 (30)
'Avowed'	618 (24)	126	
Take care of patients	228 (24)		137 (29)
Provide appropriate clinical care	136 (21)	43	65 (28)
Provide comfort and relieve patient anxiety	102 (24)	33	90 (24)
Behave honestly	158 (24)		148 (28)
Disclose the truth	40 (18)	17	77 (26)
Behave with integrity	49 (16)	19	48 (20)
Know when to fudge the truth	79 (24)		30 (16)
Report inappropriate behaviour/self-regulation	12 (7)	9	28 (15)
Be efficient with resources	183 (24)	5	25 (17)
Work efficiently	51 (23)		
Call for help	137 (24)		
Accountability	108 (24)		
Ethics	64 (20)		
Altruism	23 (12)		
Excellence	20 (10)		
'Unavowed'	358 (24)	84	
Get an education	53 (15)	27	56 (21)
Know your place	190 (24)		178 (30)
Do what you're told	46 (22)		68 (25)
Obey	44 (22)	13	46 (25)
Defer	2 (2)	29	22 (12)
Know your limitations	101 (24)		56 (23)
Step up to the plate	45 (22)		64 (28)
Allegiance	25 (11)	15	
Know the system	188 (23)		62 (23)
Learn from upperclassmen	23 (13)		
Affect	117 (21)	49	134 (30)
Implications	974 (24)	234	263 (30)
For patients	549 (24)	40	96 (29)
For others	252 (24)	28	63 (26)
For self	267 (24)	77	151 (29)
External	196 (24)	60	
Internal	80 (24)	29	
For relationships	501 (24)		
Culture	271 (24)		

As the above quotation illustrates, the consideration of the self within multiple relationships was a prominent theme in our results.

We noticed that Taiwanese students talked a lot about their consideration of all related stakeholders in the scenarios. Students used several Chinese phrases, such as 'face' and '*renqing*', which refers to attention to 'favour' in relationships, to explain their decisions. For instance, in response to Scenario 2, which features a student who wishes to review a patient's insulin order while the resident tries to get the team to go out for a drink when the shift ends on the last day of a rotation, a student commented:

'If you stay, you feel embarrassed [for not giving face to the resident who invited you for a drink]. If you leave, you are embarrassed in terms of *renqing*. You owe a favour to the next person on call.' (V2, S4)

In sum, consideration of interpersonal relationships was pervasive in the data. As Table 2 indicates, all students made references to relationships.

Reference to culture

An interesting finding in the current study is that students not only reasoned according to principles, implications and affects, but also according to cultural norms. Taiwanese students voluntarily articulated the cultural norms of Taiwan when they answered the question about their choices and reasons for action after the video stopped at the critical moment.

For instance, in response to Scenario 1, a student remarked:

'I think there is a difference in terms of cultural norms. In the West, patients have the right to know all the details and results of tests. But in Eastern Taiwanese society, in order to protect the patient and to prevent him from the shock of the bad news… I agree with what the attending physicians in the clinics and the wards do – to discuss with the family members of the patient how to inform and to manage. Family members here always participate in decisions about management.' (V1, S5)

In such reflections, students were considering both Western-style medical education and local cultural norms. They recognised, particularly in Scenario 2, that there might be differences between Western and Taiwanese conceptualisations of personal versus professional life. Furthermore, in addition to considering the cultural norms of Taiwanese society, students also took into account the norms of practice in the particular hospital setting of their clerkships. They often stated that they would consider how similar incidents are dealt with in that hospital and act according to those norms.

DISCUSSION

This study takes a step towards answering the call for cross-cultural studies on medical professionalism.[10] We adopted video clips of professional dilemmas based on the experiences of North American students[11] and tried to address the following research questions: Could this method work with Taiwanese medical students? Can it capture their reasoning in the face of professionally challenging situations? Is a North American-derived theoretical framework applicable in our setting? Are there cultural differences?

To our knowledge, this is the first study to compare responses to the same professionally challenging video scenarios between clinical students in the West and East. Rees and Monrouxe[27] compared discourses and dilemmas of professionalism between Australian and UK students, but both groups were of Anglo-Saxon origin. Our results indicated that the method of showing professional dilemma videos worked well beyond the Anglo-Saxon context. The current study confirms the findings of previous studies[15–17] that the video clips were able to elicit diverse answers rather than a narrow range of socially desirable responses, and expands the application to non-Western regions.

For the most part, the theoretical framework of the previous Canadian research[15–17] was applicable to the current study. References to principles, implications and affect were articulated by the Taiwanese students. This may reflect the possibility that some principles of professionalism are universal[8] or may suggest that Western-framed professionalism has been taken up globally. There were some discrepancies, however, which deserve attention. Firstly, Taiwanese students cited a few more avowed principles than Canadian students did, such as those of accountability, altruism, excellence and ethics. Themes of avowed principles are related not only to the formal curriculum, but also correspond to items in another study prioritised by Taiwanese stakeholders as competences of medical professionals.[23] In other words, students articulated what was expected of them.

Secondly, as in previous studies,[15] our study found significant references to unavowed principles. All 24 transcripts of the student interviews contained codable units which referred to unavowed principles. It is worth noting that, in addition to the unavowed principles listed in the previous study in Canada,[15] Taiwanese students emphasised another unavowed principle: that of following the advice of more senior trainees. This differs subtly but importantly from the pre-existing principles of obeying or deferring to supervisors that emerged in the Canadian data. Taiwanese students have special relationships with more senior residents and respect the advice of these 'school elder brothers and sisters' – characters used literally in the Chinese phrase for senior trainees. Unpublished studies of intern diaries and a survey on the hidden curriculum in Taiwan have also found school alumni to have a powerful influence (M. Ho, unpublished data, 2010). In our study, students recognised some inconsistency between the content of informal teaching by more senior trainees and that delivered by their teachers in formal ethics classes. When students noticed the discrepancy between formal and informal teaching, they often trusted and adopted survival tips given to them by their 'school elder brothers and sisters'.

Thirdly, although students were conscious of both avowed and unavowed principles, they referred to implications more often than to principles. One striking finding in the references to implications is the emphasis on social relationships, which resulted in a new item in the category of implications. The work of indigenous psychologists on Confucian relationalism provides a useful framework to explain our findings. Indigenous psychology is based on social anthropological work, which characterises the social order of Chinese societies as: '…ripples caused by throwing a stone into a pond. Each person is situated at the centre of a set of concentric rings of water, which extend to the edges of that person's social influence.'[28] By contrast: '…individuals in a Western society of individualism are akin to wooden sticks, which may be bound together by their social organisation in a bundle.'[28]

Indigenous psychologists highlight the influence of Confucian culture and propose to understand the individual in Confucian societies not in isolation but in terms of social relationships.[29–31] In Confucian social relationships, it is important to maintain harmony by respecting the seniors in one's immediate family, and this is extended to the country and the world. From this perspective, it is not surprising that our data showed that Taiwanese students rationalised less frequently about implications for 'self', but extensively considered the rippling effects of their behaviours on their relationships with 'school elder brothers and sisters', all possible team members, and patients and their families.

However, student strivings for harmonious social relationships sometimes involved the difficult reconciliation of Western and Eastern principles. In addition to the recurrent need to choose between respecting a patient's family and honouring the patient's autonomy as an individual, there were other examples of the conflict between Eastern and Western practices in all scenarios. In Scenario 1, the Western principle emphasises the need to tell patients the truth, whereas Confucian relationalism stresses the need to respect seniors. In Scenarios 2 and 3, Western principles require that the patient is prioritised, whereas Confucian relationalism emphasises the need to respect the advice of seniors. Similar tensions were present in Scenarios 4 and 5.

Our findings of the students' struggle to reconcile the conflicting demands of the principles of Western professionalism and Confucian relationalism resonate with the findings of previous studies which highlighted the tension between the formal and hidden curricula.[15,32] This study adds a cross-cultural perspective to this tension and urges us to consider dimensions of the hidden curriculum that have not been well explored in the existing literature.[33] We found the most influential role models to be alumni residents, rather than attending physician, as reported elsewhere.[34] In addition to role models, our study suggests that other domains of the hidden curriculum, such as 'cultural norms', deserve attention as these norms may not be in harmony with the principles articulated in globalised formal curricula. In future attempts to reflectively adopt Western curricula, we should consider local cultural norms and help students to reconcile potential conflicts between these and Western principles of practice.

Our results seem to suggest that Confucian relationalism has greater explanatory power than the principles of dominant Western professionalism in analyses of Taiwanese students' processes of rationalisation. What is the implication of the prominence of Confucian relationalism in our results? Is it a phenomenon to which we should pay special attention when we encounter doctors and trainees with cultural roots in Confucius-influenced societies, such as those of China, Korea, Japan, Hong Kong, Taiwan and Singapore? Although

relationalism is more pronounced in Confucian societies, attention to relationships is not absent in societies in which individualism is more evident. A previous Canadian study also found that the consideration of some students of their positions in relationships resulted in the acknowledgement of unavowed principles of obedience and allegiance.[14] Perhaps, for medical trainees all over the world, medical educators should move beyond the current emphasis on principles that apply at the individual level and explicitly help students to balance relationships in clinical settings.

The limitations of this study include its setting within a single institute in a single Eastern country. Any interpretation of the study should consider the Taiwanese context in terms of the influence of both traditional Confucian values and Western-style medical education, including the explicit teaching of the principles of bioethics. Given the importance of interpersonal relationships, our Taiwanese participants may have provided the researchers with answers they believed to be socially desirable, although we had informed them that the data would be processed anonymously. Further studies in other cultural settings are needed in order to establish how the implications of this study might be generalised. Secondly, this study compared the responses of Taiwanese and Canadian students to standardised professional dilemmas. We do not know how students actually reason or act in practice. It is worth exploring alternative methods such as the use of incognito patients to shed more light on what students actually do, rather than what they think. Further, we are not sure of the degree to which the Taiwanese students' responses may have been shaped by the Western videotapes. Do Western, English-language films prompt Taiwanese students to echo Western values or to reflect more about cultural differences and locally unique values? The resolution of these questions awaits future research.

In conclusion, this study attempts to advance research on medical professionalism from a cross-cultural perspective. The study shows that using standardised video clips of professional dilemmas is a feasible method of conducting cross-cultural comparative studies. In analysing reasoning about professional dilemmas, the existing theoretical framework of principles, affect and implications was applied cross-culturally, with a few important refinements. The new issue of relationalism in regard to implications points to the importance of social relationships beyond the patient–doctor relationship in this context. The additional references to culture prompt us to re-examine the globalisation of medical education with a Western individualist outlook. Building on the findings of this study, researchers could further investigate the possibilities and implications of reframing medical professionalism in alternative cultural perspectives such as that of Confucian relationalism.

Contributors: M-JH designed the study, analysed the data, and drafted and revised the paper. C-WL and Y-TC conducted the interviews, analysed the data and drafted parts of the paper. LL and SG designed the study, interpreted the data, and critically revised the drafts. All authors approved the final manuscript.
Acknowledgements: the authors would like to thank all the interview participants.
Funding: National Science Council, Taiwan.
Conflicts of interest: none.
Ethical approval: this study was approved by the National Taiwan University Hospital Research Ethics Committee.

REFERENCES

1 Veloski JJ, Fields SK, Boex JR, Blank LL. Measuring professionalism: a review of studies with instruments reported in the literature between 1982 and 2002. *Acad Med* 2005;**80** (4):366–70.
2 Jha V, Bekker HL, Duffy SRG, Roberts TE. A systematic review of studies assessing and facilitating attitudes towards professionalism in medicine. *Med Educ* 2007;**41** (8):822–9.
3 Arnold L. Assessing professional behaviour: yesterday, today, and tomorrow. *Acad Med* 2002;**77** (6):502–15.
4 Stern DT. *Measuring Medical Professionalism.* New York, NY: Oxford University Press 2006.
5 Cruess RL, Cruess SR, Steinert Y. *Teaching Medical Professionalism.* New York, NY: Cambridge University Press 2009.
6 Lesser CS, Lucey CR, Egener B, Braddock CH III, Linas SL, Levinson W. A behavioural and systems view of professionalism. *JAMA* 2010;**304** (24):2732–7.
7 Ginsburg S, Regehr G, Hatala R, McNaughton N, Frohna A, Hodges B, Lingard L, Stern D. Context, conflict, and resolution: a new conceptual framework for evaluating professionalism. *Acad Med* 2000;**75** (10 Suppl):6–11.
8 Hodges BD, Ginsburg S, Cruess R *et al.* Assessment of professionalism: recommendations from the Ottawa 2010 Conference. *Med Teach* 2011;**33**:354–63.
9 Schuwirth LWT, van der Vleuten CPM. A plea for new psychometric models in educational assessment. *Med Educ* 2006;**40** (4):296–300.
10 Kuper A, Reeves S, Albert M, Hodges BD. Assessment: do we need to broaden our methodological horizons? *Med Educ* 2007;**41** (12):1121–3.

11 Ginsburg S, Regehr G, Stern D, Lingard L. The anatomy of the professional lapse: bridging the gap between traditional frameworks and students' perceptions. *Acad Med* 2002;**77** (6):516–22.
12 Ginsburg S, Regehr G, Lingard L. To be and not to be: the paradox of the emerging professional stance. *Med Educ* 2003;**37** (4):350–7.
13 Baldwin DC Jr, Self DJ. The assessment of moral reasoning and professionalism in medical education and practice. In: Stern DT, ed. *Measuring Medical Professionalism*. New York, NY: Oxford University Press 2006;75–93.
14 Lingard L, Garwood K, Szauter K, Stern D. The rhetoric of rationalisation: how students grapple with professional dilemmas. *Acad Med* 2001;**76** (10 Suppl):45–7.
15 Ginsburg S, Regehr G, Lingard L. The disavowed curriculum: understanding students' reasoning in professionally challenging situations. *J Gen Intern Med* 2003;**18** (12):1015–22.
16 Ginsburg S, Lingard L, Regehr G, Underwood K. Know when to rock the boat: how faculty rationalise students' behaviours. *J Gen Intern Med* 2007;**23** (7):942–7.
17 Ginsburg S, Lingard L. 'Is that normal?' Pre-clerkship students' approaches to professional dilemmas. *Med Educ* 2011;**45** (4):362–71.
18 Accreditation Council for Graduate Medical Education. Program Director Guide to the Common Program Requirements. 2009. http://www.acgme.org/acWebsite/navPages/commonpr_documents/IVA5e_EducationalProgram_ACGMECompetencies_Professionalism_Explanation.pdf. [Accessed 15 January 2012.]
19 Liaison Committee on Medical Education. Functions and structure of a medical school: standards for accreditation of medical education programmes leading to the MD degree. 2010. http://www.lcme.org/functions2010jun.pdf. [Accessed 15 January 2012.]
20 ACGME-International. Program director guide to the foundational requirements. 2011. http://www.acgme-i.org/web/about/PDGuideACGMEI.pdf. [Accessed 15 January 2012.]
21 Liaison Committee on Medical Education. LCME considers proposed changes in accreditation standards. 2006. http://www.lcme.org/hearing.htm. [Accessed 29 September 2011.]
22 Cruess SR, Cruess RL, Steinert Y. Teaching professionalism across cultural and national borders: lessons learned from an AMEE workshop. *Med Teach* 2010;**32** (5):371–4.
23 Ho M, Yu K, Hirsh D, Huang T, Yang P. Does one size fit all? Building a framework for medical professionalism. *Acad Med* 2011;**86** (11):1407–14.
24 Charmaz K. *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*. London: Sage Publications 2006;123–51.
25 Creswell JW. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. Thousand Oaks, CA: Sage Publications 1998;109–35.
26 Maxwell J. Using numbers in qualitative research. *Qual Inq* 2010;**16** (6):475–82.
27 Rees CE, Monrouxe LV. Medical students learning intimate examinations without valid consent: a multicentre study. *Med Educ* 2011;**45** (3):261–72.
28 Fei HT. *From the Soil, the Foundation of Chinese Society: A Translation of Fei Xiaotong's Xiangtu Zhongguo*. Berkeley, CA: University of California Press 1992/1948;24–7.
29 Hsu FLK. Psychosocial homeostasis and jen: conceptual tools for advancing psychological anthropology. *Am Anthropol* 1971;**73** (1):23–44.
30 Ho DYF. Interpersonal relationships and relationship dominance: an analysis based on methodological relationalism. *Asian J Soc Psychol* 1998;**1** (1):1–16.
31 Hwang KK. Chinese relationalism: theoretical construction and methodological considerations. *J Theory Soc Behav* 2000;**30** (2):155–78.
32 Hafferty FW. Beyond curriculum reform: confronting medicine's hidden curriculum. *Acad Med* 1998;**73** (4):403–7.
33 Hafferty F. The elephant in medical professionalism's kitchen. *Acad Med* 2006;**81** (10):906–14.
34 Wright SM, Kern DE, Kolodner K, Howard DM, Brancati FL. Attributes of excellent attending physician role models. *N Engl J Med* 1998;**339**:1986–93.

Received 31 May 2011; editorial comments to authors 4 August 2011; accepted for publication 19 August 2011