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Protocol for a realist review of the influence of cultural factors on understanding the role of feedback in developing clinical competencies of health professional students in Asia — [Source link](#)

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Published on: 25 Jan 2021 - [medRxiv](#) (Cold Spring Harbor Laboratory Press)

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1 Protocol for a realist review of the influence of cultural factors on understanding the
2 role of feedback in developing clinical competencies of health professional students
3 in Asia.

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21

22 **Word Count:** 3225

23

24 **Abstract:**

25 **Background:**

26 Clinical education has moved to a “competency-based” model with an emphasis on
27 workplace-based learning and assessment which, in turn, depends on feedback to be
28 effective. Further, the understanding of feedback has changed from information about a
29 performance directed to the learner performing the task, to a dialogue, which enables the
30 learner to act and develop.

31 In health professional education, feedback is a complex interaction between trainee,
32 supervisor and the healthcare system. Most published research on feedback in health
33 professional education originates in Europe and North America. Our interest is on the
34 impact of culture on this process, particularly in the context of Asian cultures.

35 A realist approach looks at complex interventions in social situations, and so would seem
36 appropriate lens to use to examine the influence of cultural factors on utilising feedback.

37 **Methods:**

38 An initial search has been performed to define the scope of the review question and develop
39 our candidate / “best guess” program theory. The formal electronic search was carried out
40 in February 2020 and included: CINAHL, ERIC, MEDLINE, and PsycInfo, and repeated in
41 October 2020. Retrieved articles were imported into Covidence for screening and data
42 extraction, after which components of the Context – Mechanisms – Outcomes configurations
43 will be sought to refine the initial program theory.

44 **Discussion:**

45 Feedback has been recognised as critically important in competency-based health
46 professional education, yet feedback is a complex, socially based “intervention”. Most of the
47 published literature on feedback originates from “Western” cultures. This protocol aims to

48 provide further information that may lead to improving the usefulness of feedback in the
49 South East Asian region.

50 **Systematic Review Registration:**

51 Registration was sought with PROSPERO and advice given was that this review was not
52 eligible for registration as it did not have a "direct and clinically-relevant health-related
53 outcome".

54 **Keywords:** Realist review, Realist Synthesis, Health professional students, Medical
55 students, Feedback, Asia

56

57 **ARTICLE SUMMARY:**

58 **Strengths and limitations of this study:**

- 59 • A Realist approach potentially best explains the complexities of Culture's impact on
60 feedback.
- 61 • To our knowledge, there are few studies of feedback seeking and provision to health
62 professional trainees in Asia.
- 63 • In addition to formal literature database searches, we will need to conduct citation
64 mining to locate other relevant resources.
- 65 • The typical assessment of "Risk of bias" does not apply to the Realist approach.

66

67

68 **BACKGROUND:**

69 Clinical education has moved to a "competency-based" model with an emphasis on
70 workplace-based learning and assessment which, in turn, depends on feedback to be
71 effective(1,2). Indeed Ramani *et al* (2019) (p744) describe feedback as "*a vital cog in the*

72 *wheel of competency-based medical education.*" Embarking on workplace learning will
73 require understanding of the tools used, and acceptance of the feedback process, by both
74 supervisors and trainees.

75 Complexity of Feedback:

76 Early definitions of feedback emphasised information giving to change behaviour(3–5). In a
77 widely quoted paper, Ende (1983) described feedback as *information* given to trainees
78 about a particular activity which was meant to guide performance of that or a similar activity
79 in the future. The emphasis was that feedback was something supervisors directed at
80 trainees, preferably after observation of the activity in question. University students
81 commonly complain that they do not receive enough feedback, or that it is done poorly,
82 such that academic staff are advised to "signpost" when feedback was being given(6). This
83 dissatisfaction is still experienced particularly in the lead-up to visits by course accreditation
84 bodies. Ajjawi and Regehr (2018) suggest that perhaps learners and teachers define
85 feedback quite differently(7).

86 Over time, feedback has been understood as more than simply providing information –
87 information is only feedback when it is *used* to improve work or learning and is part of a
88 sociocultural interaction. Furthermore, feedback value is influenced by the credibility of the
89 feedback source(8–10). As it is essential to close the feedback loop, we can think of
90 feedback as sense-making in the context of information provided from many sources to
91 improve work and learning(11). The importance of relationships and trust between the
92 supervisor and trainee, especially when the feedback relates to assessment has been
93 emphasised (12). Many factors are recognised to impact the effect of feedback including
94 context (e.g. the workplace – hospital or ambulatory settings, teaching a skill, formative
95 assessment, summative assessment) (13,14) regulatory focus(15), self-efficacy(16,17); the
96 person's "theory of intelligence" (their understanding of whether intelligence is "fixed" or

97 “improvable”), and therefore whether effort is worthwhile(18,19). If a person’s belief is that
98 intelligence is fixed, effort may not seem to be worthwhile, whereas if they feel there is
99 opportunity for improvement, effort becomes worthwhile.

100 This raises the question of whether cultural factors influence acceptance and engagement
101 with “dialogic feedback” in a non-Western or Asian context, and how does it compare with
102 the “Western” situation? An initial literature review of feedback within health professional
103 education suggests that the literature is heavy with a North American and European focus,
104 but is limited from South East Asia or Asia-Pacific perspective, except notably in
105 Indonesia(20,21). As such, a number of questions remain unanswered. For example, which
106 cultural background of students / trainees and their teachers / supervisors influences their
107 engagement with feedback, and how does it do so? Is it the “ethnic culture” (e.g. Confucian
108 heritage, Malay / Muslim, or Indian cultures, in the Malaysian context), the national culture
109 (e.g. Malaysia, Singapore, Indonesia) (22), or the education system culture (e.g. school
110 education, university, or even discipline cultures) that have the predominant effect – or is
111 there no dominant effect? We will return to this later.

112 Feedback within the clinical learning environment is particularly complex and influenced by
113 such things as the workload of providing patient care, hierarchies, time constraints and
114 limited opportunities to observe a student’s performance, the supervisor’s experience of
115 feedback during their training and therefore understanding of feedback, as well as the
116 student’s expectations and engagement with feedback provided. These complexities will be
117 recognised by clinical teachers in Western environments but are potentially magnified within
118 the Asian setting.

119 Complexity of Culture:

120 When we consider culture in the context of health professional education there are three
121 predominant and interdependent cultures – the “big-Culture”, the Workplace culture and the
122 Education culture.

123 A useful description of **Culture** comes from Edward Hall, an early cultural anthropologist, in a
124 book first published in 1959:

125 *"Culture is a mould in which we are all cast, and it controls our daily lives in many*
126 *unsuspected ways. It is part of a person's behaviour in which he takes for granted -*
127 *the part he doesn't think about, since he assumes it as universal or regards it as*
128 *idiosyncratic.... Culture hides much more than it reveals and strangely enough, what*
129 *it hides it hides most effectively from its own participants."* (23) (p. 29)

130 **Culture** (sometimes referred to as "big-Culture") in this context is defined by Hofstede as

131 *"The collective programming of the mind that distinguishes one group or category of*
132 *people from another ... culture is (a) a collective, not individual, attribute; (b) not*
133 *directly visible but manifested in behaviours; and (c) common to some but not all*
134 *people."* (24) (p58).

135 While there are several classifications of characteristics of Culture, Hofstede's typology is
136 widely used and can help in our understanding of the issues. Initially there were four
137 dimensions described(25):

- 138 1. Individualism – Collectivism
- 139 2. Power Distance
- 140 3. Uncertainty Avoidance
- 141 4. Masculinity – Femininity.

142 Subsequently, two further dimensions were added(26):

- 143 5. Long versus Short-term Orientation
- 144 6. Indulgence versus Restraint

145 Of these dimensions, Individualism-Collectivism and Power Distance appear to be the most
146 significant big-Culture influences in the clinical learning environment in South-East Asia(21)

147 In focussing on the Asian region, we can recognise several *broad* cultural groups – the
148 “Confucian Heritage Culture”, Indonesian-Malay / Muslim cultures, the Indian subcontinent
149 cultures, then overlaid by the cultural impacts of colonialism.

150

151 Workplace culture can be viewed as another cultural layer that interacts with the “big-
152 Culture”, particularly in clinical teaching and hospital environments. Medicine around the
153 world tends to be hierarchical and paternalistic. However, within the Asian region teaching
154 by humiliation is common, and in Malaysia the term “scolding” is commonly used to describe
155 teaching in the clinical environment. Another term frequently heard is *kiasu* – particularly
156 applied to students of Chinese ethnicity. According to the Oxford Dictionary(27), *kiasu*
157 refers to a person who is “*governed by self-interest, typically manifesting as a selfish,*
158 *grasping attitude arising from a fear of missing out on something.*”. *Kiasu* is a Hokkien word
159 meaning “fear of loss”. There are two aspects to *kiasu*, the negative side of being selfish
160 and grasping, as seen in the Oxford dictionary definition, and a positive aspect of being
161 successful through hard work – not evident in that dictionary definition(28). (*Kiasu* is
162 related to the concept of “face”, which western stereotypes frequently regard as a
163 characteristic of Asian Culture).

164 The education system clearly has an overarching culture which influenced the students’
165 experiences of school. Over the past decade, Singapore has been modifying the approach
166 to assessment in pre-school and early primary school. Even at that early age high-stakes
167 examinations have been a feature and there has been significant push-back against
168 reducing that emphasis. The following quotes from teachers in an article reviewing the
169 reception of the changes to early primary school education are informative(22):

170 *“Doing away with SA1/2 is not a good idea. We still need to maintain the competitive*
171 *edge and to instil that habit of doing so in our society. Our young are already too*

172 *pampered, and I do not agree to taking away the SAs to reduce stress. I'll agree to*
173 *more pathways to success but not taking away tests. Life is a test in itself."*

174 And ...

175 *"parents do not read the comments or look at the stars given. Instead, they flip the*
176 *pages in the paper and start to calculate how many marks their child had scored.*
177 *Imagine the amount of time and effort the teachers have to go through writing*
178 *feedback, which is hardly read. This is especially so because their parents were*
179 *educated and brought up to look for a mark to their examination paper. They get*
180 *better feedback through these marks they see on their children's script."*

181

182 There has been much written about the influence of the "Confucian Heritage Culture" of
183 learning (CHC) on students from South East Asia as well as from China, Japan and Korea.
184 In his writings Confucius saw learning as a means of social change and to overcome social
185 differences, but also placed much emphasis on personal effort(29). Wang (2006) sees
186 parallels in Confucius' writings about education with Plato's "philosopher king". The Chinese
187 philosophy of education also highlighted a mutually respectful relationship between teacher
188 and learner, with the teacher guiding the learner, rather than pulling the learner along (30).
189 This parallels the role of *guru* seen in the Indian culture of education – with the *guru*
190 (teacher) nurturing the learner(31,32).

191

192 Malaysia is a predominantly Islamic country, and a former British colony. Clearly both these
193 aspects of its history have shaped the education system of the country and are as important
194 factors as the Confucian heritage. In an editorial for a special edition of Comparative
195 Education Review in 2006, Kadi highlights the great diversity in Islamic education and gives
196 a perspective to the colonial experiences(33). The school culture clearly responds to the

197 education system's overarching culture but adds its own layer. An examination-oriented
198 curriculum was seen as a legacy of the colonial era.

199 *"A great deal of teaching preparation at this time involved equipping students for the*
200 *examination. An exam-oriented curriculum had been in place in the Malaysian*
201 *education system since it was introduced during the colonial era by the British.*
202 *Although the curriculum had been revised many times over a period of more than*
203 *five decades, assessment had been an integral part not only in schools but also at*
204 *tertiary level. Teachers realised that they needed to gear their students towards the*
205 *exam as pressure from every corner awaits them; the Ministry of Education demands*
206 *schools produce good, intelligent students; the local education department*
207 *pressurises heads of schools to produce excellent results, who then order teachers to*
208 *do their best to at least beat the results of neighbouring schools, not to mention*
209 *being under pressure to meet the expectations of parents who want their children to*
210 *do well under the guidance of the teachers."*(34)(p59)

211

212 Tertiary education culture varies enormously across the region, from hierarchical approaches
213 to being more collegial (especially in the later stages of the degrees). The high school
214 experiences clearly impact students transitioning to university, coming with an expectation
215 that university would simply be an extension of school – first year medical students in
216 Malaysia clearly started university with the idea that knowledge was fixed and largely
217 unchanging, and that their teachers or lecturers functioned as sources of knowledge who
218 were not to be questioned. Knowledge was facts, and facts were immutable(35). As school
219 had emphasised rote learning of fixed knowledge, and an important part of those students'
220 adaptation to university was coming to terms with thinking for themselves. As they move
221 into workplace-based learning, the culture of the medical workplace is likely to have an
222 impact.

223 **Realist Synthesis methodology:**

224 The (scientific) Realist approach is a methodology that is useful for researching complex
225 interventions in the social environment, such as healthcare and education, and asks: "*What*
226 *is it about this intervention that works, for whom, in what circumstances, in what respects*
227 *and how?*" (36,37). It seeks to find "mechanisms (M)" that fire in particular "contexts (C)"
228 to produce "Outcomes (O)" in question – so called CMO Configurations. Realist synthesis or
229 realist review (the terms are used interchangeably) is a theory driven, iterative and
230 explanation-building approach, that usually starts with a "best guess" or candidate program
231 theory and uses findings from primary sources to understand how and why the outcomes
232 have occurred, and therefore refine the initial program theory(38). Interpretation involves
233 looking for both confirming and negating data and explanations.

234

235 The specific research questions for this synthesis are as follows:

236

237 In the Asian or non-Western health professional education environment:

- 238 1. How, why and in what circumstances do **health professional trainees** (e.g.
239 students and junior doctors) seek, respond to, and use feedback given in the
240 clinical environment?
- 241 2. **Supervisors** (e.g. consultants, clinical tutors, preceptors): What do supervisors
242 feel about providing feedback? How do they provide feedback, in what
243 circumstances? Do they see their feedback being used?
- 244 3. **Both trainees and supervisors:** How do they perceive feedback?

245

246 The review is following the five steps of a realist review as enunciated by Pawson and
247 colleagues(36), namely

- 248 1. Clarify the scope and purpose of the review question
- 249 2. Search for evidence – commencing with an exploratory search, with subsequent
250 focussing and purposive and “snowball” sampling
- 251 3. Appraise primary studies and extract data
- 252 4. Synthesise the evidence to obtain conclusions, and ...
- 253 5. Disseminate.

254 In appraising studies, **Relevance** is assessed by whether it can contribute to theory
255 building or testing, while **Rigor** assessment is based on whether the methods which
256 generated a *particular piece of data* is trustworthy(39). Pawson argues that the
257 methodological quality of a study is not appropriate grounds for excluding a study in realist
258 reviews – “*There are often nuggets of wisdom in methodologically weak studies*”(40).

259

260 **METHODS AND ANALYSIS:**

261 The protocol for this review was judged to be ineligible for registration with the International
262 Prospective Register for Systematic Reviews (PROSPERO), as it did not “*have a direct and*
263 *clinically-relevant health-related outcome*”.

264 A PRISMA-P checklist has been completed and available as an additional file(41).

265

266 **Search Strategy:**

267 An initial search has been performed to define the scope of the review question and develop
268 our candidate / “best guess” program theory. This initial search utilised MEDLINE and
269 PsycInfo, searching “Trainee” (and variations), Feedback (and debrief) and Culture
270 (including cross-cultural, ethnic differences, anthropology).

271 The formal electronic search was carried out in February 2020 and included: CINAHL, ERIC,
 272 MEDLINE, and PsycInfo. Search terms were developed in discussion with a librarian and the
 273 research team, with the same broad categories as before, although only articles available in
 274 English were retained. An example of the search strategy is given in *Table 1*. Both MeSH
 275 (medical subject headings) and free text were employed to ensure sufficiently wide article
 276 coverage. This search was repeated in October 2020, for articles published since the
 277 February search. A hand search will also be made of the following journals: Academic
 278 Medicine, Medical Education, Medical Teacher, BMC Medical Education, Education for Health,
 279 Teaching and Learning in Medicine, Perspectives on Medical Education, Medical Journal of
 280 Malaysia, Annals of the Academy of Medicine Singapore, and Singapore Medical Journal.
 281 Citation mining (Snowball or Pearl growing) searches of the reference list in included articles
 282 and searching for articles that cite these articles will occur. Although dissertations were
 283 initially excluded, relevant published articles arising from the excluded dissertations will be
 284 sought by hand-searching.

285

Concept: Learner	Concept: Feedback	Concept: Culture
Subject Headings e.g. MeSH	Subject Headings e.g. MeSH	Subject Headings e.g. MeSH
<ul style="list-style-type: none"> • Students, Health Occupations • Clinical clerkship • Education, medical/ or education, nursing/ or education, pharmacy/ or education, public health professional/ • Clinical competence • Faculty • Faculty, dental/ or faculty, medical/ or faculty, nursing 	<ul style="list-style-type: none"> • FORMATIVE FEEDBACK • Debrief 	<ul style="list-style-type: none"> • CULTURE • Cross-Cultural Comparison • Cultural diversity • Cultural difference
Keywords and phrases	Keywords and phrases	Keywords and phrases

Trainee	Feedback	Culture
Student	Feeding back	Cultural difference
Learner	Feed-back	Cultural diversity
Graduate	Feedforward	Cultural understanding
Intern	Feed forward	Cross cultural
Supervisor	Feeding forward	Ethnic
Teacher	Fed back	
Lecturer	Debrief	
Instructor		
Professor		
Tutor		

286

287 **Table 1:** Example of Search strategy used in Ovid MEDLINE

288

289 **Selection criteria:**

290 Following the searches as outlined, the citations were imported into Covidence(42) for “Title
 291 and Abstract Screening”. Duplicates were removed before title and abstract screening
 292 began with two team members reviewing a sample of the articles retrieved to ensure that
 293 criteria are agreed upon. The rest of this phase was carried out by any one of the team
 294 members but with the intention to err on retaining studies for closer evaluation at the full
 295 text screening stage.

296 Core inclusion criteria sought studies relating to

- 297 • Workplace-based learning and assessment,
- 298 • Feedback giving, seeking and acceptance,
- 299 • Culture (Ethnic and institutional),
- 300 • Post-secondary and vocational education involving health professional training.

301

302 Exclusion criteria centre around:

- 303 • Biological cultures – microbiologic, tissue culture
- 304 • Workplace safety / Organisational culture / Organisational development

- 305 • Feedback in physiology or therapeutic situations - e.g. Psychiatry
- 306 • Describing and/or feedback on new teaching methods, including technology
- 307 • Teaching cultural competency
- 308 • Reviews: Literature reviews, Book reviews
- 309 • Primary and secondary school, learners with a disability, Community health education
- 310 • Clinical trials
- 311 • Patient satisfaction

312

313 Following title and abstract screening, the full texts of the retained articles were imported
314 into Covidence for further screening. From here, all full text articles in the process of being
315 screened by two members of the team, and any discrepancies will be discussed to resolve
316 the disagreements. Notes will be made to justify inclusion or exclusion and will assist with
317 both resolving discrepancies and providing transparency. Selecting papers for the review
318 will be guided by the research study questions – Does the study involve students in health
319 professional courses (especially in their clinical training) or their supervisors? Does the
320 study pertain to students in Asian countries (noting the possible need to expand to include
321 non-Western countries if insufficient studies pertain to Asian countries)? Therefore,
322 exclusion criteria at this stage will be expanded to exclude studies not related to health
323 professional education, and “Western studies”.

324

325 Studies remaining after the full text screen will be assessed for Quality and Rigour using the
326 Critical Appraisal Skills Programme (CASP-Qualitative) checklist(43) and the Medical
327 Education Research Study Quality Instrument (MERSQI) (44). Each study will be appraised
328 by at least two team members, and any discrepancies will be resolved by the full team.

329

330 **Extracting Data:**

331 Data extraction will follow, with data entered into a table within Covidence 2.0. Data
332 extracted will include citation details, country or region where study was performed,
333 population studied, methodology used, and an empirical judgement of Realist Relevance will
334 also be made at this stage. Comments of potential context, mechanism and outcome will be
335 recorded. Data extracted in Covidence will be exported as a .csv file into Excel, to be used
336 in the synthesis phase. Finally, included articles will be entered into NVivo software(45) for
337 further data extraction, coding and identification of CMO configurations.

338

339 **Synthesise findings to draw conclusions:**

340 NVivo software in conjunction with the Excel spreadsheet exported from Covidence will be
341 used to synthesise findings and modify our original “best guess” program theory. Discussion
342 among the team members with the use of realist logic will aim to identify Contexts (C),
343 Mechanisms (M) and Outcomes (O) and infer CMO configurations. The process will look for
344 confirming and contradictory findings and will be iterative.

345 **Ethics and Dissemination:**

346 As this study is a literature review, ethics approval is not required.

347 The findings will be documented in line with the RAMESES publications standards for Realist
348 syntheses(39), and we plan to disseminate the findings by means of a peer-reviewed journal
349 article and conference presentation(s).

350

351 **DISCUSSION:**

352 Feedback has been recognised as critically important in competency-based health
353 professional education, yet feedback is a complex, socially based “intervention”. Most of the
354 published literature on feedback originates from “Western” cultures. There is reason to

355 expect that components of Culture – “big-Culture”, workplace culture and education system
356 cultures will impact the provision, acceptability and use of feedback. **Again**, complex
357 interactions come into play. The realist approach is a relevant way to examine these
358 processes. This protocol aims to provide further information that may lead to improving the
359 usefulness of feedback in the South East Asian region.

360

361 **Systematic Review Registration:**

362 Registration was sought with PROSPERO and advice given was that this review was not
363 eligible for registration as it did not have a “direct and clinically-relevant health-related
364 outcome”.

365

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377

378 **Author Contributions:**

379 PF developed the original idea for this review protocol in collaboration with MS, WMcK and
380 SH. PF wrote the original draft of the protocol, which was subsequently refined by MS,
381 WMcK, SH, and PF. All authors agree to be accountable for all aspects of this protocol. PF
382 is guarantor of the review.

383

384 **Competing interests:**

385 All authors declare that they have no competing interests.

386 **Funding:**

387 This research received no specific grant from any funding agency in the public, commercial
388 or not-for-profit sectors.

389 **Ethics:**

390 Not applicable.

391 **Patient and Public Involvement:**

392 None – Literature review.

393

394 **References:**

- 395 1. Norcini J. The power of feedback. *Med Educ.* 2010 Jan;44(1):16–7.
- 396 2. Ramani S, Könings KD, Ginsburg S, van der Vleuten CPM. Feedback Redefined:
397 Principles and Practice. *J Gen Intern Med.* 2019 May 19;34(5):744–9.
- 398 3. Ende J. Feedback in Clinical Medical Education. *JAMA J Am Med Assoc.* 1983 Aug
399 12;250(6):777.

- 400 4. Butler DL, Winne PH. Feedback and Self-Regulated Learning: A Theoretical Synthesis.
401 Rev Educ Res. 1995 Sep 30;65(3):245–81.
- 402 5. Hattie J, Timperley H. The Power of Feedback. Rev Educ Res. 2007 Mar 16;77(1):81–
403 112.
- 404 6. Boud D, Molloy E. What is the problem with feedback? In: Feedback in Higher and
405 Professional Education. 2012. p. 1–10.
- 406 7. Ajjawi R, Regehr G. When I say ... feedback. Med Educ. 2018;3–5.
- 407 8. Watling CJ, Driessen E, Van der Vleuten CPM, Vanstone M, Lingard LA. Beyond
408 individualism: professional culture and its influence on feedback. Med Educ. 2013
409 Jun;47(6):585–94.
- 410 9. Watling CJ. Unfulfilled promise, untapped potential: Feedback at the crossroads. Med
411 Teach. 2014 Aug 5;36(8):692–7.
- 412 10. Wilbur K, BenSmail N, Ahkter S. Student feedback experiences in a cross-border
413 medical education curriculum. Int J Med Educ. 2019 May 24;10:98–105.
- 414 11. Carless D, Boud D. The development of student feedback literacy: enabling uptake of
415 feedback. Assess Eval High Educ. 2018 Nov 17;43(8):1315–25.
- 416 12. Carless D. Trust, distrust and their impact on assessment reform. Assess Eval High
417 Educ. 2009 Feb;34(1):79–89.
- 418 13. Tekian A, Watling CJ, Roberts TE, Steinert Y, Norcini J. Qualitative and quantitative
419 feedback in the context of competency-based education. Med Teach. 2017 Dec
420 2;39(12):1245–9.
- 421 14. Harrison CJ, Könings KD, Schuwirth L, Wass V, van der Vleuten C. Barriers to the
422 uptake and use of feedback in the context of summative assessment. Adv Heal Sci

- 423 Educ. 2015 Mar 7;20(1):229–45.
- 424 15. Watling CJ, Driessen EW, van der Vleuten CPM, Vanstone M, Lingard LA.
425 Understanding responses to feedback: the potential and limitations of regulatory
426 focus theory. Med Educ. 2012 Jun;46(6):593–603.
- 427 16. Ramani S, Könings KD, Mann K V., Pisarski EE, van der Vleuten CPM. About
428 Politeness, Face, and Feedback: Exploring Resident and Faculty Perceptions of How
429 Institutional Feedback Culture Influences Feedback Practices. Acad Med. 2018
430 Sep;93(9):1348–58.
- 431 17. van de Ridder JMM, Peters CMM, Stokking KM, de Ru JA, ten Cate OTJ. Framing of
432 feedback impacts student’s satisfaction, self-efficacy and performance. Adv Heal Sci
433 Educ. 2015 Aug 27;20(3):803–16.
- 434 18. Nussbaum AD, Dweck CS. Defensiveness Versus Remediation: Self-Theories and
435 Modes of Self-Esteem Maintenance. Personal Soc Psychol Bull. 2008 May
436 5;34(5):599–612.
- 437 19. Tweed RG, Lehman DR. Learning Considered within a Cultural Context: Confucian and
438 Socratic Approaches. Am Psychol. 2002;57(2):89–99.
- 439 20. Suhoyo Y, Van Hell EA, Kerdijk W, Emilia O, Schönrock-Adema J, Kuks JBM, et al.
440 Influence of feedback characteristics on perceived learning value of feedback in
441 clerkships: does culture matter? BMC Med Educ. 2017 Dec 5;17(1):69.
- 442 21. Suhoyo Y, van Hell EA, Prihatiningsih TS, Kuks JBM, Cohen-Schotanus J. Exploring
443 cultural differences in feedback processes and perceived instructiveness during
444 clerkships: Replicating a Dutch study in Indonesia. Med Teach. 2014 Mar
445 2;36(3):223–9.
- 446 22. Ratnam-Lim CTL, Tan KHK. Large-scale implementation of formative assessment

- 447 practices in an examination-oriented culture. *Assess Educ Princ Policy Pract*. 2015 Jan
448 2;22(1):61–78.
- 449 23. Hall ET. *The silent language*. New York, NY: Anchor Books, Doubleday; 1990. 1–209
450 p.
- 451 24. Hofstede G, McCrae RR. *Personality and Culture Revisited: Linking Traits and*
452 *Dimensions of Culture*. *Cross-Cultural Res*. 2004 Feb 25;38(1):52–88.
- 453 25. Hofstede G. Cultural differences in teaching and learning. *Int J Intercult Relations*.
454 1986 Jan;10(3):301–20.
- 455 26. Hofstede G, Hofstede GJ, Minkov M. Part II: Dimensions of national cultures. In:
456 *Cultures and Organizations: Software of the Mind*. Third. Mc-Graw-Hill Education;
457 2010. p. 199.
- 458 27. Oxford English Dictionary. 'culture, n.' [Internet]. OED Online. June 2014. 2014 [cited
459 2014 Aug 6]. Available from: <http://www.oed.com/view/Entry/45746?>
- 460 28. Hwang A, Ang S, Francesco AM. The silent Chinese: The influence of face and
461 kiasuism on student feedback-seeking behaviors. *J Manag Educ*. 2002 Feb;26(1):70–
462 98.
- 463 29. Wang T. *Understanding Chinese Culture and Learning*. In: Australian Association for
464 *Research in Education*. 2006. p. 1–14.
- 465 30. Jin L, Cortazzi M. Changing Practices in Chinese Cultures of Learning. *Lang Cult*
466 *Curric*. 2006;19(1):5–20.
- 467 31. Marambe KN, Vermunt JD, Boshuizen HPA. A cross-cultural comparison of student
468 learning patterns in higher education. *High Educ*. 2011 Dec 13;64(3):299–316.
- 469 32. Crozet C. The core tenets of education in ancient India, inspirations for modern times.

- 470 Int J Pedagog Learn. 2012;7(3):262–5.
- 471 33. Kadi W. Education in Islam—Myths and Truths. *Comp Educ Rev.* 2006;50(3):311–24.
- 472 34. Idrus F. Initiating Culturally Responsive Teaching for Identity Construction in the
473 Malaysian Classrooms. *English Lang Teach.* 2014 Mar 6;7(4):53–64.
- 474 35. Fullerton PD. 'That's the way we learn': Exploring influences of culture on medical
475 student learning in Malaysia and Australia (MHPE Thesis). Monash University,
476 Melbourne, Australia; 2014.
- 477 36. Pawson R, Greenhalgh T, Harvey G, Walshe K. Realist review - a new method of
478 systematic review designed for complex policy interventions. *J Health Serv Res Policy.*
479 2005 Jul 4;10(1_suppl):21–34.
- 480 37. Greenhalgh T, Wong G, Westhorp G, Pawson R. Protocol - realist and meta-narrative
481 evidence synthesis: Evolving Standards (RAMESES). *BMC Med Res Methodol.* 2011
482 Dec 16;11(1):115.
- 483 38. Wong G, Greenhalgh T, Westhorp G, Pawson R. Realist methods in medical education
484 research: what are they and what can they contribute? *Med Educ.* 2012
485 Jan;46(1):89–96.
- 486 39. Wong G, Greenhalgh T, Westhorp G, Buckingham J, Pawson R. RAMESES publication
487 standards: Realist syntheses. *J Adv Nurs.* 2013;69(5):1005–22.
- 488 40. Pawson R. Digging for nuggets: How 'bad' research can yield 'good' evidence. *Int J*
489 *Soc Res Methodol Theory Pract.* 2006 Apr;9(2):127–42.
- 490 41. Moher D, Shamseer L, Clarke M, Ghersi D, Liberati A, Petticrew M, et al. Preferred
491 reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015
492 statement. *Syst Rev.* 2015 Dec 1;4(1):1.

- 493 42. Veritas Health Innovation. Covidence systematic review software. Melbourne,
494 Australia: Veritas Health Innovation; 2020.
- 495 43. Critical Appraisal Skills Programme. CASP Qualitative Checklist [Internet]. 2018 [cited
496 2020 Nov 22]. Available from: <http://www.casp-uk.net/casp-tools-checklists>
- 497 44. Cook DA, Reed DA. Appraising the Quality of Medical Education Research Methods:
498 The Medical Education Research Study Quality Instrument and the Newcastle-Ottawa
499 Scale-Education. *Acad Med.* 2015;90(8):1067–76.
- 500 45. QSR International. NVIVO Software. Melbourne Australia: QSR International Pty Ltd,
501 Second Floor, 651 Doncaster Road, Doncaster 3108; 2020.
- 502