Mechanisms Driving Postgraduate Health and Social Science Students' Cultural Competence: An Integrated Systematic Review

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Abstract

Purpose
The COVID-19 pandemic revealed a global urgency to address health care provision disparities, which have largely been influenced by systematic racism in federal and state policies. The World Health Organization recommends educational institutions train clinicians in cultural competence (CC); however, the mechanisms and interacting social structures that influence individuals to achieve CC have received little attention. This review investigates how postgraduate health and social science education approaches CC and how it accomplishes (or not) its goals.

Method
The authors used critical realism and Whittemore and Knafl's methods to conduct a systematic integrated review. Seven databases (MEDLINE, CINAHL, PsycINFO, Scopus, PubMed, Web of Science, and ERIC) were searched from 2000 to 2020 for original research studies. Inclusion criteria were: the use of the term "cultural competence" and/or any one of Campinha-Bacote's 5 CC factors, being about postgraduate health and/or social science students, and being about a postgraduate curriculum or a component of it. Thematic analysis was used to reveal the mechanisms and interacting social structures underlying CC.

Results
Thirty-two studies were included and 2 approaches to CC (themes) were identified. The first theme was professionalized pedagogy, which had 2 subthemes: othering and labeling. The second theme was becoming culturally competent, which had 2 subthemes: a safe CC teaching environment and social interactions that cultivate reflexivity.

Conclusions
CC conceptualizations in postgraduate health and social science education tend to view cultural differences as a problem and CC skills as a way to mitigate differences to enhance patient care. However, this generates a focus on the other, rather than a focus on the self. Future research should explore the extent to which insight, cognitive flexibility, and reflexivity, taught in safe teaching environments, are associated with increasing students' cultural safety, cultural humility, and CC.

The COVID-19 pandemic revealed a global urgency to address health care provision disparities, which have largely been influenced by systematic racism (see Supplemental Digital Appendix 1 at http://links.lww.com/ACADMED/B264)

in federal and state policies.[1] Furthermore, clinicians themselves can be indirectly responsible for these disparities as they frequently communicate health care information to groups differently—partly based on their assumptions, dispositions, and interactions with others.[2] This may lead to medical errors and misunderstandings concerning treatment plans,[2] as well as affect patients' expectations and their coping strategies.[1]

The World Health Organization recommends educational institutions train clinicians in cultural competence (CC)[3] as these skills can indirectly enhance patient satisfaction and treatment adherence and thus mitigate health care provision disparities.[4–6] Yet, there is a "systematic neglect of culture in health and healthcare," causing limited awareness of social and cultural determinants of health and decreasing opportunities to address social and health care provision disparities.[7(p1610)]

Brief review of CC

Culture is "the patterns of values, beliefs, behavior[s], and symbolic artifacts, which together characterize one group as distinctive from another and underpin the usually unspoken assumptions that guide thought and action."[8(p98)] These values, beliefs, and norms include preconceptions related to age or generation, gender, sexual orientation, language, occupation and socioeconomic status, ethnic origin, migrant experience, religious or spiritual customs, and disability status.[9(p272)]

According to Cross et al, CC refers to "a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and enable the system, agency, or those professionals to work effectively in cross-cultural situations."[10(p7)] It acknowledges cultural differences and the need to respect cultural ties, language, and the identities of communities.[11] Health and social science curricula introduced the concept of CC in the late 1980s in

recognition of structural health care inequalities.[12] Despite American and Canadian legislation to mandate CC training for health care professionals,[13] CC has not yet addressed the inherent power imbalances that generate paternalistic and discriminating health care practices.[9]

Nevertheless, health care education acknowledges discriminatory practices rooted in colonization across Australia, Canada, New Zealand, and the United States.[9] This acknowledgment recognizes that clinicians' biases hinder minorities—particularly those of African, Hispanic, Asian, and Indigenous descent and those of lower socioeconomic status—from receiving equal health care access.[9,13] Consequently, these countries introduced the notion of cultural safety into postgraduate health care education, particularly in interdisciplinary studies, nursing, medicine, dentistry, pharmacology, psychology, social work, and audiology.[9]

Cultural safety is an approach that considers the structural and interpersonal power imbalances that shape discriminatory experiences and practices, such as institutionalized racism.[14] To practice cultural safety, one needs to actively engage in a process of self-reflection and discovery to mitigate power imbalances, which can potentially undermine trust in relationships with patients and families.[15] Cultural safety also provides opportunities to challenge conventional thinking about developing cultural humility.[9] A seminal article by Tervalon and Murray-Garcia[16] described a process of cultural humility through which organizational prejudice could be resisted.

Cultural humility is not an end point but part of an ongoing process of self-reflection and self-critique, leading to an appreciation of the cultural priorities and practices of others and an awareness of the power imbalance that exists between health professionals and patients, especially those from diverse backgrounds.[15,16] To date, institutional leadership in postgraduate health care curricula seems to expect instructors to actively engage health care students in ways that consider what is needed to practice cultural humility.[16,17] Without cultural humility, it is uncertain if CC strategies will achieve their goals to

reduce and eliminate health disparities[17–19] or if CC improves patient-related outcomes.[20]

Constructs of CC

There is no standardized conceptual framework for CC in health care[21]; therefore, we draw on the definition from Cross et al[10] and the following 5 constructs in Campinha-Bacote's CC, to conceptualize constructs of CC for this study.[22] According to Campinha-Bacote's model,[22] clinicians deliver CC through:

1. Cultural awareness: Recognizing and developing the attitude that one's assumptions are different from others;

2. Cultural desire: Being motivated to learn and act on cultural awareness;

3. Cultural knowledge: Seeking and obtaining knowledge of cultural and ethnic groups;

4. Cultural skills: Processing information about a culture and adapting one's behaviors accordingly; and

5. Cultural encounters: Accessing diverse cultures.

Research gap and purpose

In postgraduate and interprofessional education, the mechanisms driving Campinha-Bacote's 5 CC constructs[22] to counteract ethnocentric health care practices[9] are not well evidenced in the literature. We define *mechanisms* as processes of interrelated dispositions and/or behaviors (parts) in one or more persons that constitute and drive interactions between people and events.[23] Examples of mechanisms are faculty's attitudes, beliefs, or values that drive the discrimination that exists in education.

A recent scoping review of best practices in health professions education to increase CC confirms a lack of trained faculty to implement curricula.[19] This review was predominantly descriptive and not interpretive, describing the educational strategies employed and highlighting the lack of best practices in the teaching of CC.[19] Furthermore, it does not attempt to address the mechanisms connected to social structures that inadvertently contribute to historic systemic inequalities toward minority groups.[19,24] We define *social structures* as

concepts or ideas made up of organized parts that give the whole entity (e.g., stereotypes, the medical model) strong emergent causal powers or tendencies to create events or experiences.[23] Without a theoretical understanding of how CC is achieved through cultural safety and how it is connected to health care professionals' cultural humility, stakeholders may view CC learning as merely anecdotal, informally taught, and based on hearsay.[9]

Given this gap, our primary research question concerns how postgraduate health and social science education approaches CC and how it accomplishes (or not) its goals. To this end, we investigate (1) how postgraduate health and social science education conceptualizes CC knowledge, (2) what mechanisms interacting with social structures facilitate the emergence of CC, and (3) what mechanisms interacting with social structures hinder the emergence of CC.

Method

Theoretical framework

We chose critical realism as the paradigm (see Supplemental Digital Appendix 1 at http://links.lww.com/ACADMED/B264) for this review based on its fit with our research purpose. Critical realism is a branch of philosophy that is useful for exploring why some events happen for some people and not others, based on context-dependent social structures and mechanisms.[23] Within critical realism, social reality is stratified into 3 realms: empirical (what is perceived and talked about), actual (what actually—factually—happens), and real (the underlying mechanisms interacting with social structures that explore how things come to be, which are commonly taken-for-granted and unconscious).[23,25]

Procedure

We aligned the critical realist paradigm with Whittemore and Knafl's[26] methods to conduct a systematic integrated review. These methods combine experimental (quantitative) and nonexperimental (qualitative) research to provide an enhanced understanding of phenomena from various angles. Following these methods, systematic steps were used for the literature search, data evaluation, data extraction and analysis, and presentation of literature.[26]

Literature search. We consulted a librarian and searched 7 databases for eligible studies: MEDLINE, CINAHL, PsycINFO, Scopus, PubMed, Web of Science, and ERIC. As Campinha-Bacote[22] published a seminal article on CC in health care in 2002, our search included articles from January 2000 to January 2020. Additionally, 2 reviewers (C.L.K.J., D.Y.L.L.) conducted a Google Scholar search and hand-searched reference lists in key articles identified in the database searches. We combined keywords, MeSH terms, and synonyms with Boolean operators (AND/OR) for the search. Keywords were selected based on the acronym PICOS to represent the population, research interest, context, and study design in which we were interested. Search strategies combined terms for population, research interest, context, and study design and limited results to English-language and peer-reviewed articles. As an example, for Google Scholar, we combined ("cultural competence") AND ("health science" OR "social science") AND ("postgraduate" AND "education"). (See Supplemental Digital Appendix 2 at http://links.lww.com/ACADMED/B265 for a complete list of our search terms and search strategies.) We conducted our searches on June 5, 2019, and again for any additional articles on January 20, 2020.

Data evaluation. To avoid the conflation of terms, we focused on the term CC, though we did not exclude other related but distinct terms, including cultural safety, cultural sensitivity, cultural diversity, and cultural humility. Indeed, literature acknowledges the importance of these to the process of developing CC.[19] We chose original research studies that (1) contained the term "cultural competence" and/or any one of Campinha-Bacote's[22] 5 CC factors; (2) were about postgraduate health and/ or social science students, whom by default were often already health care professionals or clinicians; and (3) were about a postgraduate curriculum or a component of it. Studies that (1) were not in English; (2) were unrelated to CC; (3) did not contain the term CC or any of the 5 CC components; (4) did not include postgraduate health and/ or social science students; (5) focused solely on the psychometric evaluation of CC measurement instruments; (6) were located only in gray literature; or (7) were not accessible via the researchers' library databases were excluded.

Two researchers (C.L.K.J., D.Y.L.L.) independently screened the abstracts and full texts to minimize any reviewer selection bias.[27] A third researcher (Y.F.F.) assisted in resolving any selection discrepancies that arose. All selected abstracts that appeared eligible were then subject to full-text screening by 2 researchers (C.L.K.J., D.Y.L.L.) to confirm the article met the inclusion criteria. We used a web tool, Rayyan, for data management and organization.[28]

Once studies were confirmed for eligibility, 2 researchers (C.L.K.J., D.Y.L.L.) conducted an independent quality appraisal and screening of each study using the following study design appraisal tools: Critical Appraisal Skills Programme (for cohort and qualitative studies), Mixed Methods Appraisal Tool (for mixed methods studies), and the Critical Appraisal Tool (for cross-sectional studies). See the footnotes in Appendix 1 for information on the quality appraisal ratings. Altogether, 58 studies were excluded that did not meet the minimum quality standards. EndNote version X8.0.2 (Thomson Reuters Endnote X8, Philadelphia, Pennsylvania) was used to collect, organize, and share the data on the included studies among the full author group. The full selection process is shown in Figure 1.

Data extraction and analysis. Two researchers (C.L.K.J., D.Y.L.L.) performed the thematic analysis to conceptualize and narrate the data to reveal the mechanisms and social structures underlying CC. The initial descriptive analysis detailed the extent, nature, and distribution of the studies. For the thematic coding, we followed systematic analytical steps aligned with critical realism.[29] First, comprehension of data was examined via 2 researchers (C.L.K.J., D.Y.L.L.) who assigned chunks of text with a code (interpretive description) independently and subsequently discussed the codes to reach a consensus on their interpretations (i.e., the layer of the empirical). Second, synthesis occurred in an iterative process in conjunction with comprehension. This involved grouping similar codes together to compare and contrast patterns (i.e., the layer of the actual).

Theorizing causation included the context of interactions (i.e., the layers of the empirical, actual, and real) and involved

a process of moving through abduction, retroduction, and retrodiction to reveal mechanisms and social structures.[23] Abduction inductively inferred theoretical ideas grounded in data as the ideas arose in the analysis. Retroduction inductively gleaned theoretical patterns and deductively confirmed them through ongoing analysis.[23] Last, retrodiction deductively posited explanations informing multiple mechanisms and social structures.[23] A display matrix software (NVivo12)[30] facilitated the data organization and management. See Table 1 for a couple of examples of the analytical process.

International members of our research team (M.B., E.C., C.K., E.A.C.) supported peer debriefing to ensure plausibility of the results, prevent publication bias, and minimize confirmation bias, which enhanced the credibility, confirmability, and transferability of our results.

Presentation of literature. We depict the emergent mechanisms and social structures underlying CC found in our review in 2 models (Figures 2 and 3) and followed PRISMA reporting guidelines.[31]

Results

Study selection and characteristics

Of the 2,286 studies identified, 32 were ultimately included (Figure 1). The included studies came from 6 countries: 23 from the United States,[6,21,32–52] 1 from Canada,[53] 1 from Canada and the United States,[54] 4 from Australia,[55–58] 1 from Hong Kong and Sweden,[59] and 2 from Ireland.[60,61] Postgraduate health and/or social science students—from the medical (n = 5,427),[21,35,38,42–45,48,50–52,54,56] nursing (n = 1,518),[6,32,34,36,37,40,41,46,49,59–61] dentistry (n = 152),[53,55] speech pathology (n = 60),[57] nutrition counseling (n = 34),[39] social work (n = 15),[33] and physician assistant (n = 216)[58] disciplines—participated in the included studies. One study was composed of interprofessional participants (n = 98).[47] The study designs included cohort (n = 9), cross-sectional (n = 10), qualitative (n = 7), and mixed methods (n = 6). After quality appraisal, 13 studies were rated excellent, 10 were rated good, and 9 were rated satisfactory. See Appendix 1 for a brief description of the included studies.

The simultaneous presentation of CC with concepts of cultural sensitivity, cultural

Table 1

Select Examples of the Analytical Process Used in a 2020 Integrated Systematic Review of the Literature on Cultural Competence (CC)

Third-order themes: Conceptualization of CC	Second-order subthemes: Emergent mechanisms and social structures underlying CC (the real)	First-order coding: Patterns (the actual)	Illustrative quotes (the empirical)
Professionalized pedagogy	Othering	Reproduction of stereotypes	Daniel[33]: "It is not surprising then, that minority students are frustrated by how their group is discussed. The inability to incorporate their experiences in class discussions reproduces inequality by leaving them with the impression that their own experiences are not important and white students with a sense that their experiences are more typical." (p. 255)
	Labeling	Inadvertent biased assumptions	Sumpter and Carthon[32]: " … lots of times teachers really do stuff that isn't okay but I feel like they don't realize it. Because there will be times in class and we'll talk about a certain culture and then they'll pick on me, because of whatever culture I have. And they'll say, 'What do you think …?'" (p. 45)
			Forsyth et al[55]: "It takes an awful lot of thought from the curriculum designers and from the teachers so that it's just not tokenistic and then it's just not sort of stereotyping." (p. e40)
Becoming culturally competent	A safe CC teaching environment	Mentorship conducive to critical reasoning	Leung et al[59]: "Irrespective of whether persons with different cultural backgrounds necessarily need to be critical friends to develop cultural awareness, we suggest that conditions of mutual trust in a non-hierarchal context might set the right tone for intercultural awareness to be cultivated." (p. 526)
			Hunter and Krantz[34]: "Learners explore old and new ideas through collaborative discourse and reflection, and construct new meanings through conversations with each other and with the teacher." (p. 208)
		Discovery of common goals for group cohesion	O'Brien et al[60]: "Respect is key and we had that in our group and even if things were a little bit frustrating at times, we stayed calm and respectful." (p. 27)
			Elliott et al[61]: "The most valuable skill/lesson to translate into practice would be applying a team approach to tackling a project or addressing a problem. The experience presented an opportunity to work with different people, personalities, and skill sets to achieve a common goal and cohesion as a group." (p. 230)
	Social interactions that cultivate reflexivity	Building insight toward self and cognitive flexibility toward the other	Watt et al[56]: "It became a conflict…. Yeah, I don't stop and tell them you do what you like, this is my legal responsibility … you tend to lose ground when you do this. But I really remember those people … it's mainly because of their culture. So you try to understand their culture, try to identify and then try to change." (p. 5)
		Countervailing social structures of identity and stigma	McHenry et al[35]: "One participant states he, 'sat down with dad, tried to ask questions about his basic understanding of organs, medical problems, and therapies—basically not assuming that their illness scripts or cultural beliefs were anything like ours.'" (p. 252)
		Immersion for application of reflexivity	DeBonis[6]: "Upon completion of service-learning, my perspective had changed dramatically. I felt more confident in working with underserved or low-income population[s]…. There needs to be a large shift in our focus as providers, or those in poverty will fail to buy into what we are selling—which is health and [a] vibrant quality of life." (p. 39)

responsiveness, and cultural humility revealed the confusion surrounding CC discussions.[32] According to Sumpter and Carthon, CC discourse used "familiar buzz phrases such as 'cultural diversity,' 'cultural sensitivity,' [together with] 'cultural competence.'"[32(p47)] Consequently, CC was "plagued by a lack of consensus about its meaning, limited knowledge, [and] inadequate infusion in the curriculum."[33(p251)]

Themes

Our analysis identified 2 themes which represent the conceptualization of CC. The first theme, professionalized pedagogy (see Supplemental Digital Appendix 1 at http://links.lww.com/ACADMED/B264), includes 2 subthemes: (1) othering and (2) labeling (Figure 2). The second theme, becoming culturally competent,

consisted of 2 subthemes: (1) a safe CC teaching environment and (2) social interactions that cultivate reflexivity (see Supplemental Digital Appendix 1 at http://links.lww.com/ACADMED/B264; Figure 3). The latter theme, becoming culturally competent, appeared to relate to the cultivation of cultural safety, although the presence of a safe CC teaching environment did not necessarily lead to the achievement
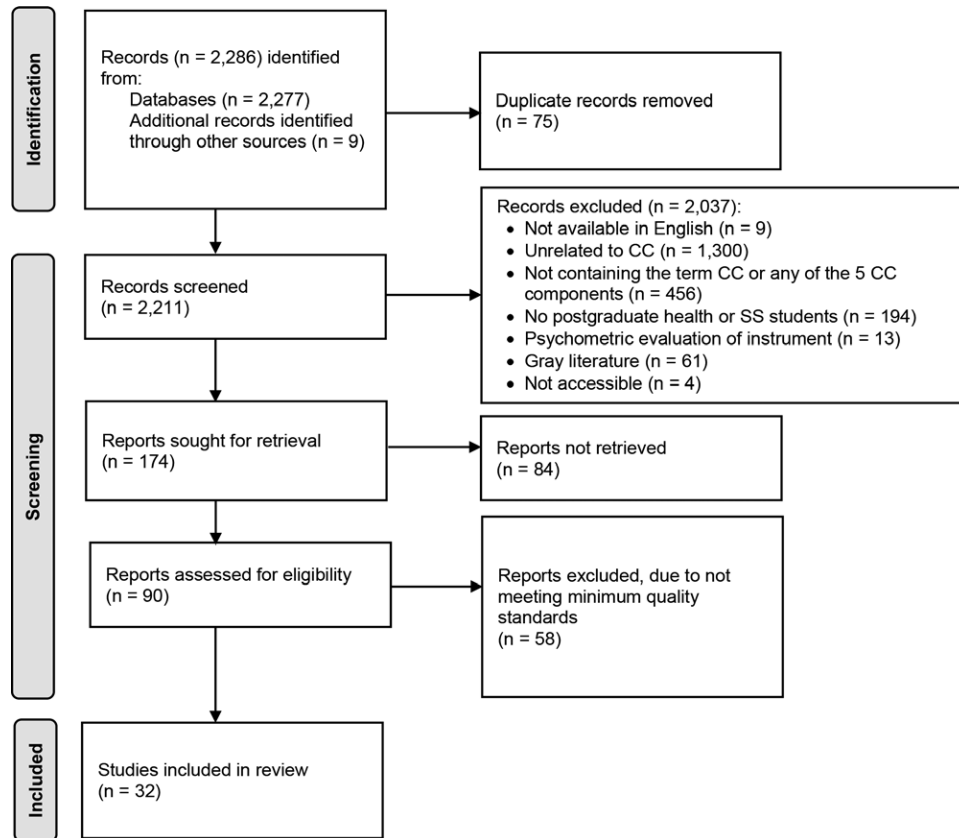
Figure 1 PRISMA flow diagram[31] showing the selection process used for a 2020 integrated systematic review of the literature on CC. Abbreviations: CC, cultural competence; SS, social science.

of cultural humility or resolve stigma (see Supplemental Digital Appendix 1 at http://links.lww.com/ACADMED/B264).

Professionalized pedagogy. The majority of quotes in the professionalized pedagogy theme (Figure 2) held inadvertent meanings strengthening preconceived assumptions of culture along homogeneous lines of inquiry. This generated knowledge of culture as a product and people were characterized as belonging to distinct homogeneous groups. Most often, this included groups based on sociocultural parameters, including race, ethnicity, socioeconomic status, geography, customs, knowledge, and/or lifestyle. Thus, knowledge of a person's culture could be applied to cultural disease trends[42] (see Supplemental Digital Appendix 1 at http://links.lww.com/ACADMED/B264). Furthermore, the inability to encapsulate cultural diversity was suggested to be due to the limited representation of diversity itself among health care professions.[37] As a result, health care educators tend to perpetuate knowledge of culture within

homogeneous parameters, most often racial ones.[32]

Professionalized pedagogy was institutionalized in 2 ways, that is, through internationalization and conformity to professional and legal requirements[6,36,37,39–45,48,51,53,54,58] (see outcomes in Figure 2). Internationalization is a process of integrating institutional cultural change that promotes intercultural or international cultural exchange, and in so doing, adopts global perspectives to deliver higher education.[8] Within this process, CC more often focused on specific ethnic cultures that host countries were concerned about[21] to "[improve] racial and ethnic diversity and cultural competence in the health professions workforce."[42(p1071)] Conforming to professional and legal requirements refers to adhering to disciplinary obligations to offer CC training; as a way to optimize patient care, ensuring its efficiency and effectiveness and enhancing patient outcomes.[21,36,37,39,42–45,48,51,53,54,58]

Further, as part of postgraduate students' acculturation, they were expected to conform or "to adopt the values, skills, attitudes, norms, and knowledge" required by their "society, group, or organization."[57(p260)] They demonstrated their commitment to this end by suppressing deviations from professional norms deemed as threatening.[33] In doing so, health professionals were assumed to be better able to manage patients[55,57] and CC became a "bona fide occupational qualification."[58(p2)]

Conformity to prescribed norms of CC was often a static product, involving multiple measures.[34] For example, researchers measured CC through self-reported proxy measures[58] (e.g., burnout, health beliefs, attitudes, ethnocultural empathy, personal acceptance). Alternatively, other measures included preparedness, knowledge, self-awareness, ethnic identity, comfort with CC skills, cultural immersion experiences, CC's perceived importance, and satisfaction post-CC education.[42–44,47–49,53,58] Common instruments were the Scale of Ethnocultural Empathy,[58,60] the
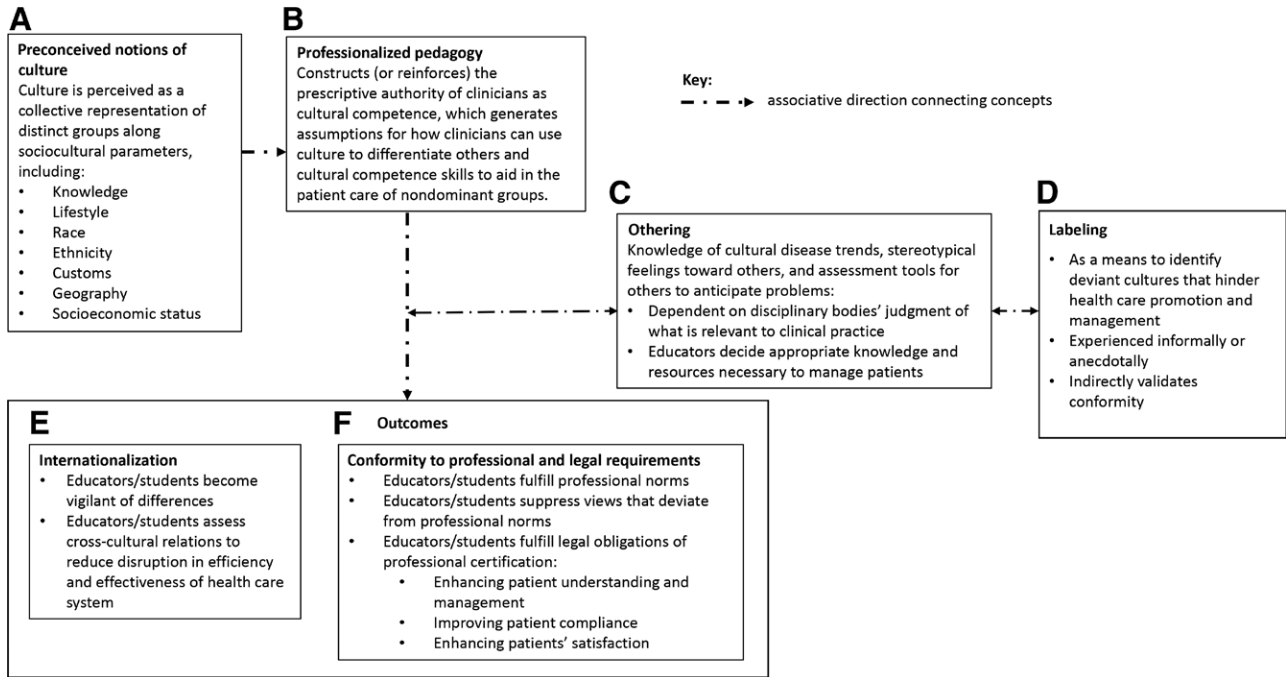
Figure 2 Model illustrating how racialized boundaries of (A) perceived notions of culture precede cultural competence. In this process, cultural competence becomes (B) professionalized pedagogy, which constructs (or reinforces) the prescriptive authority of clinicians as cultural competence. This generates pedagogical tendencies (mechanisms) to reproduce social structures of discrimination, stigma, and racism. In doing so, clinicians use culture as a management strategy to directly treat foreign patients, which prompts (C) othering and (D) labeling. Hence, outcomes of this process result in (E) internationalization and (F) conformity to professional and legal requirements. This model was developed based on the findings of a 2020 integrated systematic review of the literature on cultural competence.
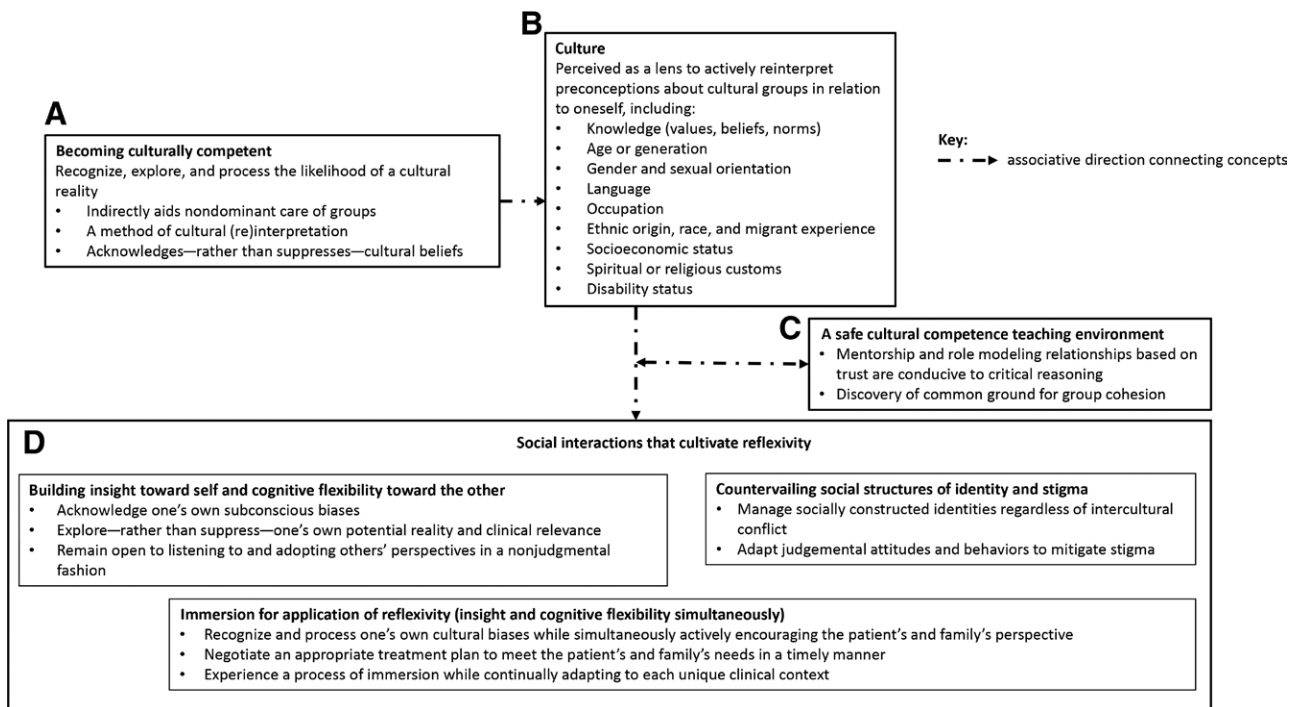
Figure 3 Model illustrating the process of (A) becoming culturally competent, which precedes conceptualizations of (B) culture. Culture then becomes a lens to actively reinterpret preconceptions about cultural groups in relation to oneself. In this process, it is necessary to create (C) a safe cultural competence teaching environment to prompt (D) social interactions that cultivate reflexivity. This process allows for the development of the mechanisms of insight and cognitive flexibility to address countervailing social structures of identity and stigma. In doing so, the application of reflexivity in clinical settings may occur. This model was developed based on the findings of a 2020 integrated systematic review of the literature on cultural competence.

Transcultural Self-Efficacy Tool,[42,52] and the Cultural Assessment Survey.[40,47,52] Unfortunately, assessors rarely acknowledged the dynamic and temporal process of CC, as was reflected by their propensity to frequently only measure CC once, even though CC can be developed in different ways in different clinical contexts.[41]

Conformity was achieved through 2 mechanisms: othering and labeling.

Othering. Othering refers to the knowledge of an "awareness of assessment tools for others, specific diseases among others, others' barriers to health care, and stereotypical feelings toward others."[34(p211)] It is a top-down approach, representing a one-way transfer of predetermined cultural information that directs attention to specific cultural disease trends. For example, one faculty momentarily highlighted an aspect of a foreign patient, when it was problematic: "I may teach something to residents, but it is likely a brief, passing moment. For example, a stoic Japanese patient."[21(p370)] Further, the teaching of CC was often dependent on disciplinary bodies' judgments of how a sensitivity to a patient's age, gender, and disability status matters for clinical practice.[21,43,44] For example, family medicine trainees were more likely than internal medicine trainees "to rate sociocultural factors as relevant to clinical practice and perceive themselves as more competent in managing sociocultural issues."[43(p1108)] Hence, the family medicine residents' training appeared to have influenced their "perceptions of preparedness to deliver cross-cultural care."[43(p1107)] Similarly, in a mixed methods study of speech-language pathology students, their measure of cultural awareness was interpreted to enable them "to anticipate [patient] experiences" before encountering them.[57(p267)]

Labeling. Labeling refers to the informal practice of stereotyping "deviant" cultures that hinder health care promotion and management.[32] The "image of minority people reinforces the notion that they are a problem for the rest of society because of their inability to conform to white middle-class models of life."[33(p257)] Consequently, health care professionals are inclined to perceive associated cultural differences as risk factors for a higher disease prevalence and problems to be managed.[46,47,54,56]

Analogous to how labeling directly stigmatizes those who do not comply with medical treatment, it indirectly validates those who conform to it. For example, a student noted, "… they did this whole cultural section and they made me so mad because it was multiple-choice. Depending on what the culture was, I had to say they would do this."[32(p45)]

Becoming culturally competent. The second theme reflects efforts at becoming culturally competent (Figure 3). Unlike in the first theme, this theme did not conceptualize culture as a problem; instead, it conceptualized CC as a process of cultivating individual (or personal) agency (see Supplemental Digital Appendix 1 at http://links.lww.com/ACADMED/B264) for reflexivity with others. This theme focused on "a process of becoming competent, rather than achieving competence,"[41(p25)] which happens over time.[40,56,59,60] Specifically, effort is required to see culture not as a tool, but as a lens through which one can reinterpret an individual's preconceived "knowledge, understanding, [and] response to the environment, both social and otherwise."[21(p370)]

Howells et al[57] supported this approach referring to Well's Cultural Development Model, which suggests that CC occurs in phases from cultural incompetence to proficiency. Additionally, Marzilli[46] asserted culture was an integration of the social aspects of the person, family, community, and global society and cited the Purnell Model for Cultural Competence. According to Marzilli,[46] this approach asserts that culture originates not only from the social aspects of individuals but also from insight of individuals' circumstances (e.g., family roles, health care practices).

Only 2 studies[33,55] adopted a critical framework and acknowledged postcolonial ideas of power imbalances in health care relationships. One of the studies argued that health care services and educational institutions often adopt Anglo-Saxon norms, which supported colonial ways and marginalized Indigenous (i.e., naturally occurring or native) ways of knowing, being, and doing.[55(pe38)] The other argued that to become conscious of one's implicit personal biases, individuals must be exposed to individuals from diverse ethnic and cultural backgrounds.[33]

Uncovering one's biases required that educators create a safe CC teaching environment. In doing so, educators could generate social interactions that cultivate reflexivity, which one could use to address countervailing social structures of identity and stigma.

A safe CC teaching environment. Educators used multiple modalities to expose students to diverse groups and teach CC (including problem-based learning[57]; presentations[35,39,44,47,54]; seminars, workshops, or clinical scenarios/cases[21,36,48,52,55]; and simulated learning[36,39]). Instructors that invested time and effort into coaxing students to feel safe engaging in CC conversations apparently had the most success.[60,61] O'Brien et al stated, "exploring attitudes, practices, and behaviors in a safe, non-judgmental environment where both students and facilitators are not afraid of feeling uncomfortable, can create a greater awareness of the value of intercultural learning."[60(p29)]

Mentorship and role model relationships that were based on trust enabled a critical nonjudgmental stance, which was conducive to exploring assumptions,[21,34,39,41,52,54,60] instead of a self-critical evaluative lens.[43] Moreover, guidance was essential for cultivating openness and cognitive flexibility (see Supplemental Digital Appendix 1 at http://links.lww.com/ACADMED/B264), while showing empathy and patience and clarifying mutual concerns[34(p208)] were required to discover common ground.[33,41,42] Students could defend their views as "critical friends" (a peer learning model) "irrespective of … cultural backgrounds … critical friends may develop cultural awareness … [through] mutual trust in a non-hierarchal context."[59(p526)] Furthermore, incentivizing working with others (including through graded group work and educational credits) could promote cross-cultural interactions and shared decision making among students.[59,60]

Social interactions that cultivate reflexivity. This subtheme was made up of 3 parts: (1) building insight toward self and cognitive flexibility toward the other, (2) countervailing social structures of identity and stigma, and (3) immersion for application of reflexivity.

It was crucial that social interactions take place within a safe CC teaching

environment. Campinha-Bacote[22] emphasized that clinicians' beliefs could unduly influence patient decisions; however, clinicians could modify their practice through inward reflection on their actions. Howells et al summed it up by stating, "It can be argued that the ability to transition between culturally and linguistically diverse contexts requires constant reflective practice."[57(p268)]

Building insight toward self and cognitive flexibility toward the other. For postgraduate students, reflexivity, which incorporated insight and cognitive flexibility, was the most pronounced mechanism that enabled cultural reinterpretations of power imbalances in health care relationships. For instance, an American medical resident stated, "[submerging ourselves] into their situation … that was pretty [much] like an eye-opener […] for me."[52(p50)] Thus, cognitive flexibility, or acknowledging one's cultural beliefs and their effect on one's behaviors, is necessary to adapt to others' situated context.[33,60] This mechanism appeared to nurture cultural humility. Moreover, an emphasis on immersion that incorporated service learning—a form of cultural immersion—achieved short-term outcomes related to advocacy and culturally responsive care.[33,39,40,47,48,51,52]

Countervailing social structures of identity and stigma. Managing one's own socially constructed identities and the hidden stigmas associated with those identities was critical. For instance, the aim of having intercultural debates counteracted achieving CC in many cases due to unacknowledged threats of identity and stigma: "Clustering in monocultural groupings was not intentional but was often the result of students feeling pressured to achieve academic objectives."[60(p28)] Moreover, students were concerned that recounting experiences of marginalization may offend others or be unwanted.[32,33] Daniel stated, "Minority students quickly get the message that speaking up in class about oppression and racial issues is risky and undesirable."[33(p256)] Students tried to manage their identity, concealing their cultural heritage: "I think sometimes they're [Aboriginal students] kind of reluctant to come forward and talk about their heritage and be proud of it because they are people that have the stigma associated with it."[55(pe39–e40)] Particularly,

when students lacked opportunities to explore differing opinions, some perceived their knowledge, expertise, and levels of competence as superior to those of international students[57] and consequently, "ethnocentric attitudes were not always effectively explored and in some cases were reinforced."[60(p28)]

Immersion for application of reflexivity. Without training to cultivate insight and cognitive flexibility, age, gender, years of clinical experience, ethnicity, and nationality did not significantly influence CC.[41,54] In other words, clinicians who reported having more cultural knowledge did not necessarily report feeling more comfortable practicing CC with patients.[37] Essential to developing CC was insight—critically reflecting on one's values and beliefs about intersections of race, class, and gender.[33,52] Insight prompted one to question their own identity in relation to others: "I was surprised how much I gained from hearing [from] others, which helped me think more about myself and my beliefs."[60(p27)] In contrast, a social work student expressed disbelief about how they were portrayed in the classroom: "I was in class one time, … it got so bad I wanted to say, … wait a minute that's me you are describing in those terms. … Before I got here, I did not know that being black was bad. It makes me wonder if you are not black what you think being black is."[33(p257)]

Flexibility was particularly essential when teachers' awareness of their own ethnic and subcultural background or standards were seen to ethically conflict with students' norms and values.[62] Indeed, if teachers could demonstrate cognitive flexibility, they could better meet expectations to "include all students regardless of their ethnic, cultural or social background, in their teaching."[62(p72)]

Discussion

Our findings suggest that CC conceptualizations in postgraduate health and social science education tend to follow professionalized assumptions of ethnic, racial, or national parameters on cultural disease trends. This informs health professionals' attitudes and behaviors.[45,46] As such, CC is often framed to use prescriptive cultural information that prompts othering and results in labeling to fulfill mandatory professional and legal requirements and

internationalization. This leads to the reinforcement of cultural differences, culture being seen as a problem, and to the marginalization and systematic oppression of others due to race, ethnicity, or cultural background.

In terms of CC training, our findings confirm those of previous studies, which described educational approaches as sometimes "over-generalizing, simplistic and impractical" and "[failing] to realize meaningful outcomes in health care settings."[63(p1)] Thus, CC education may present CC as a product embedded with ethnocentric ideas that interfere with educational quality, thereby inadvertently perpetuating cultural racism against outgroup members.[64] As Viruell-Fuentes et al argued, "othering processes produce and reproduce marginalization, disempowerment and social exclusion."[65(p2101)]

Our review also revealed another approach whereby CC may precede preconceptions of culture and culture is not defined as a problem. This reflects a culturally interpretative view that is found in international business literature, which facilitates innovative work behavior.[66] Indeed, cultural intelligence is proposed as having a mediating role to CC as it is seen as "a capacity to adapt by shifting across interpretive lenses, in response to important culturally based cues."[66(p14)] Korzilius et al[66] found that the absence of CC predictors (e.g., aptitude) and cultural knowledge of environments were associated with business failures. Similarly, Hordijk et al suggest "reflexivity cannot be achieved without awareness of the context in which students' norms and values exist, as well as awareness of a teacher's own ethnic and (sub)cultural background/standards."[62(p72)] Indeed, constructs of labeling and othering reflect the colonial racialization of institutions,[67] whereas reflexivity potentially reveals a way to circumvent these biases and promote health professionals' CC.

Unlike most literature reviews, our review extends the understanding of CC beyond conceptualizations of knowledge and awareness, to how insight, cognitive flexibility, and reflexivity contribute to cultural humility and CC. Further, our review highlights how insight, cognitive flexibility, and applications of reflexivity have the potential to help address countervailing social structures

of identity and stigma.[68] Markova and Berrios[69] distinguish a definition of "awareness" as narrow (quantitative) knowledge of a deficit, loss, or impairment—essentially a problem—from "insight" as a wider (qualitative) construct of how phenomena (and their underlying mechanisms) occur. Indeed, in contrast to this definition of awareness, the "boundaries [of insight] are not well demarcated and constituents depend not only on experiential changes but on outside factors including social, cultural, educational, etc. [factors]."[69(p431)]

Henderson et al's[70] study of the CC concept in community health care contexts revealed that insight is a key antecedent of CC. They proposed that insight encompasses empathy, openness, curiosity, flexibility, and a willingness to reflect and is required for the development of a "capacity for a higher level of moral reasoning."[70(p590)] Comparatively, an understanding of one's ethnoculture, beliefs, and behavior is necessary to analyze and evaluate them against "normative" ways of being.[70] Without insight, one may not "recognise discrimination, stereotypes, [or] prejudice, and [may not] understand Western medicine as a constraint" to other cultures.[70(p601)] In other words, contextual (i.e., cultural and structural) conditioning can potentially motivate or impinge on one's developing CC, dependent on the individual's insight, cognitive flexibility, and reflexivity, all of which are interdependent.[71]

Nilson[72] found that reflexivity was integral to both her self-identity and gaining insight and acceptance of her biases and assumptions about Indigenous women in Southwestern Australia. For Nilson, reflexivity is "a tool to examine and contextualize judgements, presumptions, and preconceptions, which positions oneself to be open to differing viewpoints and actively explore alternative perspectives."[72(p119)] We suggest that reflexivity is required to normalize negative emotions in a nonjudgmental way; nurture mutual aid; and establish solidarity, collective responsibility, and reciprocity to build a collective identity with others. Indeed, the discovery of common goals created ground for individuals to overcome their resistance to CC and experience group cohesion.[73]

We assert that creating opportunities for real-world learning can advance health professionals' reflexivity, if cultural safety is present in the learning environment. Curtis et al[14] argue that cultural safety should be the preferred goal, not CC. Students need cultural safety to search for "truth" and embrace credible knowledge of differences and diversity in their thinking, before adopting mainstream cultural norms.[14] Students also require cultural safety "to critique the 'taken for granted' power structures and be prepared to challenge their own culture, biases, privilege and power rather than attempt to become 'competent' in the culture of the other."[14(p14)] This is consistent with our findings, and we call for safe learning environments to cultivate insight and cognitive flexibility, as well as to rebuild one's identity in relation to others' identities, which are distinct and equally compelling to one's own. Without this critical consciousness, postgraduate students tend to implicitly reconstitute, rather than resist, the oppressive powers that enact social injustices.[14,64]

Implications

Academic leadership may need to reconsider their approach to CC in postgraduate health and social science curricula, so as to stop "a system of racism [… flourishing and … undergirding] both institutional- and individual-level discrimination."[74(p110)] Thus, CC learning outcomes need to be made explicit to address the structural and relational problems causing health inequities. This may include practicing cultural immersion (in simulated or real settings) to address real-world power struggles in the clinical context.

Future research should explore: (1) the extent to which insight, cognitive flexibility, and reflexivity, taught in safe teaching environments, are associated with increasing students' cultural safety, cultural humility, and CC; (2) the processes (including how, why, for whom, and when) during which insight, cognitive flexibility, and reflexivity occur to mitigate power imbalances between clinicians and their patients and families[19]; and (3) the processes that develop reflexivity toward CC—as part of "transformational unlearning"—that allow one to be receptive to, recognize, and grieve that one has deeply held

assumptions of oneself and the colonized world.[75] Only when postgraduate students have insight into the process of transformational unlearning, can they start to challenge the deeply ingrained social structures that stigmatize (their own and others') identity and hinder their clinical effectiveness.

Limitations

The findings of this review are specific to postgraduate health and, to a lesser extent, social science students in developed countries and, thus, may not be transferable to other contexts. Further, the inclusion of only English articles may contribute to an Anglo-centric interpretation of CC that is potentially not applicable to contexts that do not share similar cultural norms. Moreover, we did not focus on specific interventions associated with teaching CC (including cultural immersion).

Conclusions

Our review suggests that CC conceptualizations in postgraduate health and social science education tend to view cultural differences as a problem and CC skills as a way to mitigate differences to enhance patient care. However, this generates a focus on the other, rather than a focus on the self. Insight and cognitive flexibility are 2 processes that, when taught in culturally safe teaching environments, encourage cultural humility and reflexivity. Using reflexivity, one can develop their critical consciousness, which informs their moral reasoning and actions in a way that may demonstrate expressions of CC with others. As Camphina-Bacote[22] stated, CC is a process of striving to become CC, rather than being CC; thus, we assert that reflexivity skills must be dynamic, as CC is a lifelong learning journey.

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Appendix 1
Brief Description of the Included Studies in a 2020 Integrated Systematic Review of the Literature on CC

Author(s), year[ref]	Country	Sample	Design	CC definition	Educational approach	Conceptual or theoretical framework for/of CC	Quality appraisal rating[a]
Aleksejuniene et al, 2014[53]	Canada	106 predoctoral and 33 recent dental graduates	Cross-sectional survey	Not stated but implied: "Dental graduates must be competent at managing a diverse patient population and have the interpersonal and communications skills to function successfully in a multicultural work environment" (p. 390)	Not stated	Designed by authors composed of 5 domains	Satisfactory
Alpern et al, 2016[38]	US	199 residents in internal medicine and pediatrics	Cross-sectional survey	Not stated but implied: "Ability to provide care to immigrant and refugee populations by including PTSD, migration, torture, travel, and refugee camp experiences and learning to communicate effectively in evaluation of preparedness" (p. 1)	Not stated	3 factors: attitudes toward immigrants/refugees, personal experience when caring for immigrants/ refugees, and medical education (preparedness)	Good
Bauer and Bai, 2018[39]	US	34 graduate nutrition counseling students	Pre- and post-test based on a CC inventory (cohort)	"The Office of Minority Health defined cultural and linguistic competence as 'a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations' … " (p. 2) The Campinha-Bacote Model states "cultural competence is 'a process of becoming culturally competent, not being culturally competent.'" (p. 2)	Classroom interventions	Campinha-Bacote Model	Good
Carpenter and Garcia, 2012[40]	US	29 undergraduate nursing students and 6 MSc and PhD students	Mixed methods, with pre-, during, and post-intervention test	"as having four components: cultural awareness (affective dimension), cultural sensitivity (attitudinal dimension), cultural knowledge (cognitive dimension), and cultural skills (behavioral dimension)" (p. 85)	International experiences abroad	Campinha-Bacote model	Excellent
Chun et al, 2009[21]	US	4 surgical residents and 18 faculty members	Qualitative	"Have respect for patients' health beliefs, understand the biopsychosocial context in which patients experience illness, and develop a mutually agreeable treatment plan" (p. 368)	Not stated	Not stated	Good
Creech et al, 2017[36]	US	22 faculty members teaching 34 courses	Pre- and postcurricular intervention survey (cohort)	Not stated but implied: "prepares the graduate to … synthesize concepts, including psychosocial dimensions and cultural diversity…in developing, implementing, and evaluating interventions" (p. 333)	Addition of at least one CC objective and associated content in all courses; educational approach was not stated but assistance from experts with graduate education in transcultural nursing and extensive teaching experience was available	"Cultural competence content is recurring or spiraled in the curriculum to allow knowledge levels to increase over time." (p. 334) This framework was originally developed by Jerome Brunner.[76]	Good
Daniel, 2011[33]	US	15 social work master's students	Grounded theory method using semistructured interviews	Not stated	Instruction on multiculturalism	Not stated	Good

(Appendix continues)

Appendix 1
(Continued)

Author(s), year[ref]	Country	Sample	Design	CC definition	Educational approach	Conceptual or theoretical framework for/of CC	Quality appraisal rating[a]
DeBonis, 2016[6]	US	152 graduate students in nurse practitioner and nursing education tracts	Surveys pre- and postservice learning (cohort)	"Process of continually increasing understanding of different groups, along with factors that influence attitudes and behaviours" (p. 36)	Service learning	Not stated	Excellent
Diaz et al, 2015[41]	US	26 master's students, 35 college students, 24 university faculty, and 17 clinical educators in nursing	Mixed methods (self-report survey and qualitative data)	"The capacity to identify, understand and respect the values and beliefs of others" (p. 23)	Not stated	Purnell Model for Cultural Competence and Campinha-Bacote model	Satisfactory
Domenech Rodriguez et al, 2019[58]	Australia	216 physician assistant students	Cross-sectional survey	"the ability of healthcare professionals to communicate with and effectively provide high-quality care to patients from diverse sociocultural backgrounds" (p. 2)	Exercises to address CC training and burnout prevention	Betancourt model	Satisfactory
Elliott et al, 2016[61]	Ireland	7 DNP students	Mixed methods (survey given 2 weeks after intervention and qualitative questionnaire for in-depth reflections)	"Concept of cultural awareness, knowledge, skills and attitudes" (p. 226)	Team debate	Not stated	Excellent
Forsyth et al, 2019[55]	Australia	13 dentistry academics	Qualitative (semistructured interviews)	Not stated	Education provided about Indigenous CC	Social determinants of health, social justice, and human rights frameworks; higher education principles; and decolonizing methodologies	Good
Green et al, 2008[42]	US	1,467 medical residents in 3 primary care specialists	Cross-sectional survey	"The ability to provide high-quality, effective health care to patients from diverse sociocultural backgrounds" (p. 1071)	Not stated	Not stated	Excellent
Greer et al, 2007[43]	US	1,150 primary care residents	Cross-sectional survey	"The skill for providing quality care to diverse populations, such as assessing patients' understanding of illness, identifying and addressing mistrust and caring for patients with limited English proficiency" (p. 1107)	Not stated	Not stated	Excellent
Howells et al, 2016[57]	Australia	60 master's of speech-language pathology students	Cross-sectional survey	"Cultural competency in SLP [speech-language-pathology] requires clinicians to understand and appropriately respond to any number of cultural variables that a client may present with, including age, beliefs, ethnicity, linguistic background, national origin, race and religion" (p. 260)	Not stated	Campinha-Bacote model	Good

(*Appendix continues*)

Appendix 1
(Continued)

Author(s), year[ref]	Country	Sample	Design	CC definition	Educational approach	Conceptual or theoretical framework for/of CC	Quality appraisal rating[a]
Hunter and Krantz, 2010[34]	US	76 master's nurse students, educators, and administrators	Pre- and postsurvey (cohort)	No definition stated but reports CC is based on the Campinha-Bacote model	Constructive learning theory from field of education	Campinha-Bacote model	Satisfactory
Jacobs et al, 2019[52]	US	47 family medicine residents	Pre- and postsurvey (cohort)	"a knowledge-based approach to diverse cultural beliefs, values, and behaviors" (p. 48)	Seminars only or seminars and workshops	Not stated	Excellent
Krajewski et al, 2008[44]	US	35 medical residents	Pre- and postintervention test (cohort)	Not stated	2-part lecture to introduce CC skills and examples	Betancourt model	Good
Leung et al, 2017[59]	Sweden and HK	8 doctoral nursing students	Qualitative	"learning to work with people from diverse cultural backgrounds, using interpersonal communication, relationship skills, and behavioral flexibility" (p. 526)	5 live webinars	Social constructionism	Excellent
Lopez et al, 2008[45]	US	2,047 resident physicians from 7 specialties	Cross-sectional survey	"Ability to bridge the 'cultural distance' that exists between physicians and patients" (p. 1953)	Not stated	Betancourt model	Excellent
Mareno and Hart, 2014[37]	US	150 undergraduate and 215 postgraduate nurses	Prospective cross-sectional survey	No definition stated but reports the Campinha-Bacote model was used to explore "the differences in cultural desire, awareness, knowledge, skills, and encounters" (p. 84)	Not stated	Campinha-Bacote model	Excellent
Marzilli, 2016[46]	US	89 faculty from a Texas nursing school	Concurrent mixed methods (descriptive statistics survey and telephone interviews analyzed using grounded theory)	"Acting in a manner that acknowledges the cultural background of another individual and tailoring the attitudes and behaviors of the individual providing care" (p. 225)	Not stated	Purnell Model for Cultural Competence	Satisfactory
McElfish et al, 2018[47]	US	98 students from medicine, nursing, and pharmacy	Mixed methods (pre- and post-test and focus groups)	Not stated	Two 60-minute presentations and/or educational seminars, clinical experiential learning in a student-led clinic, and community-based service learning over 6 months	Not stated	Good
McHenry et al, 2016[35]	US	44 pediatric and family medicine residents	Mixed methods (pre- and postintervention survey and open-ended questions to describe experiences)	Not stated	30-minute module as a live or online presentation providing information about Burmese refugees	Not stated	Satisfactory

(Appendix continues)

Appendix 1
(Continued)

Author(s), year[ref]	Country	Sample	Design	CC definition	Conceptual or theoretical framework for/of CC	Educational approach	Quality appraisal rating[a]
Mechanic et al, 2017[48]	US	73 ER residents and faculty	Cross-sectional survey	"System that acknowledges and incorporates the importance of culture, assessment of cross-cultural relations, vigilance toward the dynamics that result from cultural differences, expansion of cultural knowledge, and adaptation of services to meet culturally unique needs" (p.392)	Not stated	Web-based modules and lectures or didactics, journal club, simulations, and community immersion	Good
Mills et al, 2016[54]	US and Canada	74 general psychiatry residents	Pre- and post-questionnaire to measure CC (cohort)	Not stated	Not stated	1-hour session including a didactic lesson with PowerPoint slides adapted from Lim et al[77]	Excellent
Ndiwane et al, 2014[49]	US	29 first-year graduate nursing students in an accelerated master's-degree program	Pretest, post-test, and final evaluation (cohort)	Not stated	Not stated	Pretest, didactic introduction to culturally sensitive issues, and video-recorded OSCE with 2 ethnically diverse standardized patients	Satisfactory
O'Brien et al, 2019[60]	Ireland	14 postgraduate nursing students	Qualitative (semistructured interviews)	Not stated	Not stated	Modules coscheduled with international students	Excellent
Rosendale and Josephson, 2017[50]	US	47 neurology residency program directors	Cross-sectional survey	Not stated	Not stated	Not stated	Satisfactory
Sumpter and Carthon, 2011[32]	US	507 undergraduate nursing students, 56 doctoral nursing students, and 56 faculty	Qualitative (focus groups)	Not stated	Not stated	Blueprint for Integration of Cultural Competence in the Curriculum Questionnaire teaching guide and measurement tool	Excellent
Watt et al, 2015[56]	Australia	14 GP supervisors	Qualitative (interviews)	"a set of consistent behaviours, attitudes and policies that enable a system, agency or individual to work within a cross-cultural context or situation effectively" (p. 1)	Not stated	Opportunistic training at workplace supervised by GP	Excellent
Yao et al, 2016[51]	US	208 plastic and reconstructive surgeons	Pretest and postintervention survey (cohort)	Not stated	Not stated	2-week experience that included a surgical mission, with a follow-up debriefing meeting	Satisfactory

Abbreviations: CC, cultural competence; US, the United States; PTSD, posttraumatic stress disorder; HK, Hong Kong; ER, emergency room; OSCE, objective structured clinical examination; GP, general practice.

[a]Quality appraisals were conducted by 2 researchers (C.L.K.J., D.Y.L.L.) using the following study design tools: Critical Appraisal Skills Programme (for cohort and qualitative studies), Mixed Methods Appraisal Tool (for mixed methods studies), and the Critical Appraisal Tool (for cross-sectional studies). There were 10 questions in each tool. A judgment of "yes" equated to a score of 1, a judgment of "not apparent" equated to a score of 0, and a judgment of "no" equated to a score of −1. Thus, scores could range from 10 to −10. Studies were excluded if they did not meet a minimum score of 1 or if they received a judgment of no to any question about the clarity of the research question(s) and/or about the use of an appropriate research methodology to address the research question(s). A total of 58 studies were excluded for not meeting the minimum standard of quality. For the ratings, scores of 0 or below were deemed unsatisfactory, scores of 1–4 were deemed satisfactory, scores of 5–8 were deemed good, and scores > 8 were deemed excellent.