

# Chapter 1

## Culture and Learning



**Nur Afrainin Syah, Mora Claramita, Astrid Pratidina Susilo,  
and Francois Cilliers**

**Abstract** Student-centered learning (SCL) has been a well-known principle of educating future health professionals globally. SCL was based on the ‘constructivism’ and ‘socio-theory of learning’ in which active participation and two-way dialogue of students and teachers are the keys for self-directed learning. In this chapter lays the conceptual foundations for using Hofstede’s dimensions of culture model in exploration in the rest of the edited volume of the interplay between culture and health professions education. This first and overall chapters are focusing on work from Eastern settings with hierarchical and collectivistic cultures. The model and its derivation are explained and critiqued. Given the contextual focus of the book, the power distance and the individualism–collectivism dimensions of the model are unpacked in some detail and illuminated using examples from health professions education. Honoring calls for more evidence-based practice in health professions education and the contextual knowledge of local researchers and practitioners, widely adopted approaches like problem-based learning, models of communication skills,

---

N. A. Syah (✉)

Faculty of Medicine, Department of Medical Education, Universitas Andalas, Padang, Indonesia  
e-mail: [nur@med.unand.ac.id](mailto:nur@med.unand.ac.id)

M. Claramita

Faculty of Medicine, Public Health, and Nursing, Department of Medical and Health Professions Education and Bioethics, Indonesian College of Health Professions Education (IAM-HPE), Universitas Gadjah Mada, Yogyakarta, Indonesia

e-mail: [mora.claramita@ugm.ac.id](mailto:mora.claramita@ugm.ac.id)

URL: <https://iamhpe.org/>

A. P. Susilo

Faculty of Medicine, Department of Medical Education and Bioethics, Universitas Surabaya, Surabaya, Indonesia

e-mail: [astrid.pratidina@gmail.com](mailto:astrid.pratidina@gmail.com)

F. Cilliers

Academic Development Program, Centre for Higher Education Development, Southern African Association of Health Professions Educationists (SAAHE), University of Cape Town, Cape Town, South Africa

e-mail: [francois.cilliers@uct.ac.za](mailto:francois.cilliers@uct.ac.za)

URL: <http://saahpe.org.za/>

and feedback are critiqued using the model on the one hand and contextually relevant literature on the other.

## 1.1 Introduction

### 1.1.1 *Definition of Culture: Culture as Mental Programming, Could Culture Change?*

The word “culture” derives from a French term, which is originally from the Latin “*colere*”, which means to tend to the earth and grow, or cultivation and nurture. Conceptions of culture have diverged over time such that there is no unitary definition that currently enjoys widespread support (Archer 2005; Borgatta 2001; Peterson 1990). Commonly invoked components of definitions derive from different research traditions. Anthropological perspectives see culture as “codes of conduct embedded in or constitutive of social life” (Peterson 1990, p. 498). Examples of this might include how beliefs, values, norms and social practices characterize the culture of a nation, an organization or an academic program. Sociology of knowledge perspectives see culture “in the symbolic products of group activity” (Peterson 1990, p. 498). Examples of this might include how cultural objects or events that are the products of a group like artists or curriculum designers encode and convey worth, authority, power. Hofstede et al. (2010) maintain that the manifestations of culture can be categorized as symbols, heroes, rituals, and values. Culture can be seen to operate at different levels including national and organizational (Hofstede et al. 2010; House et al. 2002; Johnson 2000), departmental (Knight and Trowler 2000) and in educational contexts, even program (Bing-You et al. 2019). While Archer (2005) critiques assumptions of coherent integration of ideas and that culture is common to all members of a group, a pragmatic approach is needed to navigate the meaning and manifestations of national culture in health professions education. To that end, in this book, we mainly apply Hofstede’s cultural dimension theory as a theoretical lens. This theory has been widely applied in explaining cultural phenomena underlying dilemmas in health professions education (Hofstede et al. 2010; Frambach et al. 2012; Claramita and Susilo 2014; Suhoyo et al. 2018).

Hofstede’s dimensions are often used in social research because of their simplicity in understanding and measuring culture (Kirkman et al. 2006; Fang 2012). The work of Hofstede is very highly cited in the field of social science (Cardon 2008). However, Hofstede’s ideas have also been critiqued. Challenges include (1) the reduction of culture into four or five dimensions (Kirkman et al. 2006; Jones 2007; Soares et al. 2007; Fang 2012), (2) the temporal origins of the data—research was conducted in 1967–1973 and the profiles for each country may be outdated (Steenkamp et al. 1999; Jones 2007; Tsoukatos and Rand 2007; Fang 2012), (3) the measurement of culture using only work-related values (Steenkamp et al. 1999), and (4) the origin of respondents from only one company (i.e., IBM) (Jones 2007; Tsoukatos and Rand 2007).

Despite criticism of cultural dimension theory, the identification of measurable dimensions makes describing and comparing cultures easier. Hofstede et al. (2010) believe that understanding the culture will facilitate business and relationships across countries. We believe there are grounds for and value in extrapolating those understandings to education and, specifically, health professions education (HPE) where we interact intensively with patients of diverse cultural origins. Culture has a significant influence on the teaching and learning process at schools, including (1) teacher–student–parents interaction, (2) division of power and responsibility between the parties, (2) budget allocation, (3) educational policy and system, (3) gender influence, (4) the purpose of education, (5) defining learning achievement, (6) learning resources, (7) learning environment, and (8) evaluation program. Understanding dimensional differences between cultures is essential in developing curriculum and learning processes that are appropriate to the culture of students in the interests of effective learning.

Hofstede uses the term collective mental programming or software of the mind to refer to the different patterns among cultures. Mental programs, the collective pattern of thoughts, feelings and actions, of a group are formed by their social environment (such as countries, regions, workplaces, schools, family, and neighborhood), and the events experienced in the lives of the group members (Hofstede et al. 2010). The majority of people’s mental programs are developed during childhood, akin to the deeply seated meaning perspectives Mezirow (1991) describes. To learn something different from the mental program that has been developed requires discarding or adapting what has been learned and assimilated, before being able to construct a new mental program. To unlearn a mental program is more challenging than learning it for the first time. Thus, it is difficult to totally change someone’s culture.

However, humans have agency and the ability to escape from the programming process and take unexpected action. Thus, people’s personality and behavior is not fully determined by their social group’s mental programs. A person’s personality, is her or his uniqueness (Hofstede et al. 2010). The personal mental program does not need to be shared among members of a social group. Different from shared culture, the personal mental program underlying an individual’s behavior is based on traits which are partly inherited and partly learned as modification from their culture and personal experience. Consequently, someone’s reaction to something can at best be estimated by knowing their culture and past experiences. However, in everyday living in a social environment, individual behavior is constrained or enabled by the collective pattern of values, norms, and rules shared within the social group (Hofstede et al. 2010).

Values and norms are often used interchangeably; however, values are more general and abstract, whereas norms are more specific. ‘It is important to be honest’ is a value. ‘Not cheating and obeying the examination rules’ are norms. Drawing on Hofstede’s dimensions briefly to illustrate how this might play out in an educational setting, in a hierarchical and collectivistic culture, maintaining social harmony (by remaining silent in the face of confusion, to avoid conflict in class and keep social harmony) is more important than being honest but potentially inviting confrontation (by questioning the teacher). Given, then, that it is difficult for individuals with a variety of personalities to ‘escape’ from their cultures in every facet of their lives,

including in educational processes, it becomes apparent why considering culture in educational settings is so important.

### ***1.1.2 Culture, Learning, and Students***

To understand the existence of cultural differences that can influence the success of any learning strategy, a discussion of how culture is relevant in helping students to optimize their learning process is in order. Current students in this century are mostly labeled as “generation Z” (born between 1997 and 2010) and the “Alpha generation” (born 2011 and upwards). They are digital natives who have grown up alongside massive advances in digital technology (pewresearch.org; businessinsider.com). They are used to using mobile learning in accessing the abundant information available on the web and are considered to be more independent than the previous generation. They do not wait for parents to teach them or tell them how to make decisions. They are considered tolerant of cultural differences and very concerned about the environment. The Z and Alpha generations are claimed to be more culturally tolerant than preceding generations, including in the learning process (forbes.com). However, this claim may not be entirely correct.

As discussed above, culture is difficult to change. Individuals are nurtured into a culture from birth by parents according to the parents’ own mental programming and that of their collective social group. Attending university is often the first time that an individual is confronted with the cultures of others and the culture of the institution, of the field or discipline they seek to become part of. Interacting with these cultures ideally results in positive growth experiences and in student engagement and retention (Zepke 2013) but can result in alienation (Barnhardt and Ginns 2014; Wimpenny and Savin-Baden 2013) which when extreme, can engender explosive student activism as happened recently in South Africa (Nyamnjoh 2017). As noted, transformative engagement with a new culture is no simple matter.

It could be argued that communication and information technology will effect significant cultural change, including in education. Hofstede and his colleagues (2010) dispute this contention. This technology supposedly makes cultural differences disappear, as interconnectedness rises and the world becomes a global village. Hofstede and his colleagues argue (2010, p. 391) that “the software of the machines may be globalized, but the software of the minds that use them is not.” The software of the mind determines the information that individuals look for and accept, as well as whether and how they interpret and apply that information according to their own values. Values lie at the core of Hofstede’s onion representation of culture. Symbols are on the skin of the onion, while heroes and rituals are in between. Symbols, heroes, and rituals are classified as practice of culture. They are more volatile and dynamic. Communication and information technology may change the practice of a culture in terms of symbols, heroes, and rituals. However, the technology cannot change values of a culture. Values are more permanent and durable, represented by choices between opposing conditions, such as evil versus good, dirty versus clean, dangerous versus

safe, forbidden versus permitted, decent versus indecent, moral versus immoral, ugly versus beautiful, unnatural versus natural, abnormal versus normal, paradoxical versus logical, irrational versus rational, etc. Moreover, Hofstede et al. (2010) argue that the communication and information technology, in contrast, could increase the awareness of the world community that they are different from each other because the information allows them to compare and contrast themselves with others.

## 1.2 Dimensions of Culture

### 1.2.1 High ‘Power Distance’ and Collectivistic Culture

It is quite difficult to examine the influence of culture in education as so many indicators or components could be named under a definition of culture. The work of Hofstede and his colleagues (2010) posits a more systematic approach to engaging with culture. The dimensions of culture model has six dimensions of ‘power distance’, ‘individualism/collectivism’, ‘masculinity/femininity’, ‘uncertainty avoidance’, ‘short/long term orientation’, and ‘indulgence/restraint’.

The ‘power-distance’ dimension leads to the acceptance of inequalities within community, leading to questions about how power will be divided and distributed. The ‘individualism-collectivism’ dimension is how members of a community relate to each other within their community; questions will be on how much “I” or “We” influence decisions. ‘Masculinity/femininity’ lies in appreciation for work performance and assertiveness. Work performance and achievements are very important for individuals coming from masculine cultures because achievement and competitiveness are indicators of success in this culture. On the other hand, feminine culture values quality of life and caring for others. Being the top is not important in this culture. ‘Avoidance of uncertainty’ means how people within community deal with uncertainty in a matter. The characteristic of communities with high uncertainty avoidance will be greater anxiety and stress compared to community with low uncertainty avoidance. ‘Long or short’-term orientation has to do with how communities will think–react over change that happens within their community. Communities with a long term orientation will have many truths, and be more open and accepting of change, expending more effort to achieve certainty. Communities also could be with ‘indulgence and restraint’. Indulgent communities will accept free gratification of basic and natural human drives, for example, allowing a member of the community to accept a gift for the things that they have done.

In this book, the discussion on the influence of culture on health professions education focuses on the first two dimensions of the dimensions of culture model, ‘power distance’ and ‘collectivism/individualism’. We have selected these two dimensions as the basis of our discussions because this edited volume aims at exploring health professional education practice in a group of countries on the upper right axis of Hofstede’s figure (Hofstede et al. 2010) (Fig. 1.1). These countries are similar in

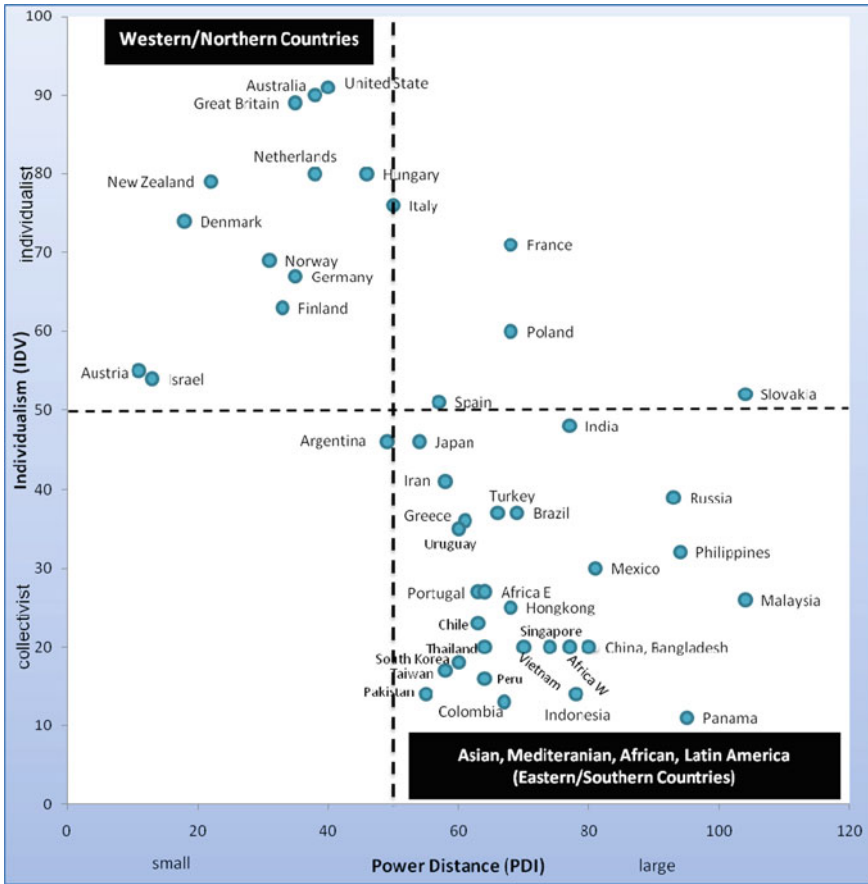


Fig. 1.1 The grouped countries re-illustrated based on Hofstede (2010) of the cultural dimensions

the two dimensions as having a high power distance index (hierarchical) and being collectivist (communal). They are mostly located in the southern hemisphere, and are commonly referred to as part of the ‘global south’, ‘eastern countries’, or ‘developing countries’. Many of the world’s most populated areas such as China, India, Africa, Arabian, and Indonesia are in this group. We use the terms of ‘eastern’, ‘southern’, interchangeably in this book. These countries can be compared with countries on the lower left axis of Hofstede’s figure, which hold more egalitarian or partnership culture and are individualistic in decision-making. These countries are commonly referred to as being part of the ‘global north’, ‘northern countries’, ‘developed countries’. These terms are also used interchangeably in this book.

There are of course some variations in terms of the degree of power distance and individualism between countries in the global south and the global north. Japan, for example, which is included as a developed country, is grouped into the right upper axis but hold less ‘power distance’, less collectivism in decision-making,

but a sharply distinguished masculine–feminine culture, and uncertainty avoidance. However, personally, we believe that the Japanese, in reality, perhaps have a wide ‘power-distance’ culture based on the ethical attitude of ‘bowing’, and following instructions, to show respect to elders, including teachers. There are also countries in the right upper axis that feature a bit lower on ‘paternalism’ but higher on ‘collectivism’ or the other way round. Hence, Hofstede et al. (2010) pointed out that the power distance index (the PDI) tends to be negatively correlated with the individualism index (the IDV). Countries that hold wide ‘power distance’ tend to correlate with ‘collectivism’. In this book, we are going to discuss the influence of these two cultural dimensions on health professions education. Throughout this book, we invite you, the reader, to thoughtfully interpret the message based on the individual variation of the cultural dimensions in your context. More information about comparing countries based on their cultural dimensions can be found in this website: <https://www.hofstede-insights.com/product/compare-countries/>

### **1.3 Hierarchical and Communal Culture: How They Affect Teaching and Learning?**

#### ***1.3.1 Power Distance***

‘Power distance’ is a characteristic of a culture that describes the degree to which community members who are less powerful stakeholders estimate and accept that power is distributed unevenly. The basic challenge here is how people deal with inequality between them. Hofstede et al. worked on measuring the power distance dimension of cultures across the globe using the Power Distance Index (PDI) that they developed. The PDI is measured based on the IBM Company’s employees answers to three types of questions: (1) the worry and fear of the employees have in expressing disagreement with their managers, (2) employees’ perception on their work environment related to autocratic and paternalistic style of their managers in decision-making, and (3) the employees’ preferences on the style of their managers. The PDI has a value between 0 and 102, 0 is the lowest and 102 is the highest. Of the ‘eastern countries’, Malaysia was the highest (102) and Japan was the lowest (54).

Hofstede et al. (2010) argued that power distance occurs in a company or institution between superiors and subordinates. Consciously or not, power distance is more often felt by subordinates than superiors, because superiors have power that subordinates do not have. Consequently, power distance can be defined as the distance of power between superiors and subordinates. In high power distance contexts, superiors or managers expect the obedience of their subordinates or team members. If subordinates want to refuse, they will not state this openly. The subordinates or employees expect to be told what to do and when. Control is expected and managers are respected for their position. As a result, in cultures with high power distance, subordinates or employees are more likely motivated to work by looking at more

examples and emulating leadership behavior, and the paternalistic nature of leadership that pays attention to employees, whereas in low power distance environments, employees are more motivated to work independently and do not depend on the leadership behavior of their superiors.

Hofstede et al. (2010) argued that the power distance not only affects employees and managers' interaction at work, it also affects peoples' interactions at home, in schools, the healthcare system and the country in general. Hofstede et al. (2010) maintain that people living in a country with high power distance accept a hierarchical order where everyone has a place without needing further justification. On the other hand, people living in a society with a low power distance try to achieve an equal distribution of power and recognition of power inequalities. High power distance cultures have the assumption that certain groups of people are considered superior to others. This is based on social status, financial ability, gender, race, age, education, birth, achievement, background, and so on. People who have more power usually dominate people who have less. In countries with a high power distance dimension, it is common practice that young people must respect those who are older, acting more politely and in a different way from their socializing with their peers.

Parents and teachers are expected and accepted as having more power and being superior to their children and students. Children–parents interaction at home is similar to students–teachers relationship at school. Parents and teachers are the sources of wisdom, values, norms, knowledge, and regulations. This hierarchical position is a ground rule not needing further justification. In contrast, in low power distance cultures, unequal roles are established for convenience. Bandura and Ramachaudran (1994) argues that students as learners are inseparable from the influence of their social environment (culture). Thus, teacher-centred learning (TCL) strategy seems more acceptable and comfortable in high power distance cultures.

In TCL, the teacher is the main source of learning because he or she is believed to have extensive knowledge. The teacher will be perceived by students as someone who is always right in her or his opinion. Students tend to listen, pay attention, and have their learning dictated by the teacher's way of learning. Teachers in the class are very active because in this learning system the teachers give more lectures and provide learning material. The learning process is conceptualized as a transfer of knowledge and skills from the teachers to students, one extreme of conceptions of learning and teaching (Otting et al. 2010; Trigwell et al. 1999). Teachers are expected to tell students what to do. Students are accustomed to acquiescence so are more passive in the learning process. They will not ask questions or speak up if they are not asked by their teachers in order to show respect. Table 1.1 compares teacher–student interaction in low and high power distance culture (Hofstede 1986, 1998, 2010).



**Table 1.1** The power distance dimension in teacher/student and student/student interaction (adapted from Hofstede 1986, 1998, 2010; Frambach et al. 2012; Claramita et al. 2013)

Small power distance societies	Large power distance societies
“Truth” is impersonal and can obtained from any competent people	Teacher “wisdom” is important in teacher/student relationship
The independence of students is respected	Teachers have to be respected by their students
Student-centered learning is promoted	Teacher-centered learning is more acceptable
Students are expected to initiate communication	Teachers are expected to initiate communication
Students are expected to find their own way	Teacher are expected to show paths for students to follow
It is acceptable for students to speak up spontaneously in class	Students cannot speak up without teachers’ invitation
It is acceptable if students have different opinion with and criticize their teachers	It is not acceptable if students openly express different opinions to and criticize their teachers
Two-way communication in class is important for effective learning	The capability of teacher is important for effective learning
Teachers and students are equal outside the class	Students have to respect teachers inside and outside the class
Parents side with students in teacher/student conflict	Parents side with teachers in teacher/student conflict
Students prefer younger teachers	Students respect older teachers more

### 1.3.2 Individualism–Collectivism

According to Hofstede (2010), individualism and collectivism are opposite values. This means that the higher the level of individualism of a culture, the lower the level of its collectivism. The dimension of individualism/collectivism shows to what degree an individual is integrated into their social groups. In collectivist cultures, people are interdependent and an integrated part of their social group. This emphasizes the obligations of an individual toward society or group rather than her or his personal rights. The individual is expected to sacrifice her or his personal interests and goals for the group’s goals, such that obedience is at a premium and individuals adjust to the group or organization in order to maintain harmony. On the other hand, in individualist cultures, an individual is separate to and independent of other individuals. A society with a culture of individualism encourages its members to be independent, autonomous. This culture emphasizes personal responsibility and rights. Individual needs, desires, interests, and goals take precedence over group goals.

Hofstede (2010) developed the individualism index (IDV) based on the employees’ perception of how important a list of work goals was for them regardless of their current working condition, i.e., personal time (for personal or family life), freedom, challenge, training, physical (working condition), use of skills, earnings, recognition, (career) advancement, (living in a) desirable area, cooperation (with

colleagues), (fringe) benefits, (job) security, and (relationship with) manager. Data analysis showed that the first six objectives related to the dimensions of individualism and collectivism, while the next eight objectives reflected the masculinity and femininity dimensions. Important work goals for the individualist pole were personal time (having sufficient time for personal or family life), freedom in choosing an own approach to the job, and challenge (getting personal sense of accomplishment due to a challenging work). People at the collectivist pole perceived that training opportunities for improving or learning new skills, having good working space, and being skillful and competent on the job, were important for them.

The choice of work targets for each cultural group both individualism and collectivism illustrates the relationship between the individual and their group. The importance of work goals in the form of personal time, freedom, and challenges (personal) in the side of individualism shows the importance of the independence of employees within an organization in this cultural group. On the other hand, collectivist groups emphasize the importance of support provided by the organization for employees, which shows employees' dependence on the organization. Furthermore, Hofstede and his colleagues indicated that individualist groups tended to come from high-income countries and vice versa—collectivist groups tended to come from lower and middle-income countries. In high-income countries, training, physical condition, and use of skills are absolute requirements for work, so they are not the target of their work. Conversely, in lower and middle-income countries, these three things determine a person's position in the work field.

The IDV has a value between 0 and 100, 0 is the lowest (collectivist pole) and 100 is the highest (individualist pole). Most of Eastern countries have the IDV below 50. India is the highest (48), Japan is in the second place (46), and Indonesia is the lowest (14), positioning India as the most individualist country in Asia, and Indonesia as the most collectivist. It is interesting that IDV and PDI tends to be negatively correlated. Many countries with high power distance index (PDI) such as Malaysia, Bangladesh, China, and Indonesia have low IDV, indicating they are more collectivist. Japan, on the other hand, has low PDI and high IDV. Meanwhile, India is the most individualist country in Asia but with significantly high power distance.

Similar to the dimension of power distance, cultural characteristics of individualism also affect the learning process. Students from collectivist cultures tend to maintain harmony of the group and avoid conflict. As a result, they will not speak up in a large class discussion because of the large variety of the group members. Nevertheless, they are more willing to speak up in a smaller group discussion because they know the discussion members better than in the large group. Thus, small group discussion seems more appropriate learning strategy for the collectivist culture. However, teachers are expected to be aware that, if the collectivist background students are allowed to form the group discussion by themselves, ethnicity and other background will be the basic consideration of forming the small group. Nepotism is common in the collectivist culture. In individualist culture, conflict and confrontation are not avoided as long as they can maintain respect for one another. In contrast to individualist culture, in which students are encouraged to be more independent, students in collectivist society are more likely to be dependent on their teacher; as discussed

**Table 1.2** The individualism and collectivism dimension in teacher/student and student/student interaction (adapted from Hofstede 1986, 1998, 2010 and Claramita et al. 2013)

Collectivist societies	Individualist societies
Interaction is regulated by the traditional roots	Can accept something new easily
Learning is for young people	Learning is for all—both young and old
Learning how to do is expected from students	Learning how to learn is expected from students
Students speak up in class when they are invited personally by teachers	Students speak up in class in response to a general invitation by teachers
Individuals prefer to speak up in a small group	Individuals speak up in any size of group
Particular criteria (e.g., ethnic affiliation) are used as a basis for group formation	Universal is criteria (task type) are used as a basis for group formation
Classes strive to maintain formal harmony at all times	Conflict and confrontation is acceptable
Losing face should be avoided both for teacher and student	Face-consciousness is not significant
Education is for gaining prestige and status	Education for increasing ability and competencies
University certificates are important and published	University certificates are symbolic
Teachers are expected to consider the students’ background (affiliation with influential persons or status) in dealing with them	Impartiality is strict in teacher/student and student/student interaction

before it is important for them to get support from others. The degree of student dependence on teachers in Eastern countries is not only caused by the cultural dimension of collectivism but is also reinforced by the high social distance culture. Teachers are the main source of knowledge in high power distance societies. They are expected to transfer knowledge and skills to their students. Therefore, it is necessary to understand that the lack of student independence is predicted to be a problem of active learning in most of Eastern countries. The Table 1.2 compares teacher–student interaction in individualist and collectivist culture (Hofstede 1986).

### 1.4 Common Design for Teaching and Learning in a Diverse World: Evidence for Challenges and Opportunities

Currently, due to the potential benefits of student centered learning (SCL) for the effective development of students’ hard and soft skills, SCL which originated from individualist Western cultures with low power distance, have been widely implemented in collectivist Eastern countries with high power distance cultures. One

thesis, using systematic review methods, articulated the benefits of one SCL-oriented strategy, problem-based learning (PBL), that in many studies from Western and Eastern contexts, has been shown to increase student self-directed learning (Silawani 2019). However, we frequently hear complaints from teachers in Eastern countries that their students are passive and do not want to voice their opinions in group discussions; and that students are happy if they are given learning material in lectures in front of the class. On the other hand, teachers also express their distrust of students' ability to learn independently and are not happy on their students' acquisition of knowledge through the SCL process. These phenomena are also validated by the particular thesis which underlined that the students from hierarchical and collectivist cultures tend to respect their teachers more, in terms of ethical attitudes of politeness, and have greater dependency on teachers' direction than their peers from more egalitarian and individual cultures (Silawani 2019). In short, students from the 'global south' have greater challenges being independent learners than their peers from the 'global north'.

Since its development at McMaster University in 1960, PBL has been widely adopted by medical education institutions around the world. However, five decades of globalization of PBL has yielded inconsistent results (Hartling et al. 2010). Claims and evidence that PBL can increase knowledge acquisition, group interaction, problem-solving skills, and increased learning motivation compared to traditional learning methods are not unchallenged (Azer and Azer 2015; Hartling et al. 2010; Koh et al. 2008; Colliver 2000; Berkson 1993). It has been argued that the inconsistent results of PBL implementation in facilitating student learning is influenced by the cultural background of the parties involved (Frambach et al. 2012; Jippes and Majoor 2011; Gwee 2008). The cultural dimension is, then, an important catalyst in knowledge formation (Alavi and Leidner 2001) and has to be taken into consideration if institutions want the benefit of PBL (Al-Shobaili et al. 2010).

Around two decades ago, van der Vleuten et al. (2000) wrote a plea to invite teachers of health professionals to use evidence-based practice in education. They observed that although many clinicians were keen to use evidence-based medicine in their clinical practice, they did not recognize that the education domain should also be informed by evidence-based practice. We are strong believers that "there is nothing so practical as a good theory" (Lewin 1952, p. 169). With ongoing reforms in health professions education, the use of theory is becoming more extensive. Theory should feed on evidence and evidence should drive theory (Cilliers et al. 2012). As most research in HPE emanates from the global North—in a study of which countries produce most HPE literature, only one of 15, Brazil, was from the global South (Doja et al. 2014)—there is a great need for more contextually valid local evidence.

We close this chapter with some brief examples of the material that will be covered in the book. In the field of communication skills training, experts in the United Kingdom developed consensus on communication skills content for undergraduate medical curricula. This was an extensive model resulting from rigorous studies conducted mostly in Western settings (Von Fragstein et al. 2008). While the model has face validity, we advocate the importance of strengthening local evidence in communication skills from hierarchical and communal cultures (Claramita et al.

2013). We have used Hofstede's work extensively as the theoretical basis of our work. In the last 5 years, we have conducted several studies related to this topic to accumulate evidence on communication skills training from the Southeast Asian context that was summarized in Claramita and Susilo (2014). Parallel to this, we have noted an increasing number of publications focusing on the influence of culture in health profession education (Frambach et al. 2012; Jippes 2013). A Master's thesis from Indonesia systematically reviewed the challenges and opportunities faced by students in paternalism–collectivism and egalitarianism–individualism culture in PBL tutorials as described above (Silawani 2019). Other publications on clinical education also emphasize the different perception of feedback in this cultural context. Feedback tends to be perceived as 'instructions' rather than a stimulus for learning (Suhoyo 2018). Teacher–student relationships have also been found to be far from the idealized partnership dialogue (Nugraheny et al. 2016). While extensive community-based education studies have been undertaken in the southern hemisphere context, there are still many educational areas to be improved, from objectives, feedback in community settings, experiential-based curriculum, and formative assessment (Talaat and Ladhani 2014; Kristina et al. 2006; Widyandana et al. 2011; Dhital et al. 2015; Claramita et al. 2019).

Nevertheless, for some topics, the relevant evidence from this cultural context is scarce. For example, we experienced challenges supporting the chapter on Continuing Professional Development with sufficient evidence. Some studies from these parts of the world have focused on needs assessment of different professionals' views (Micallef and Kayyali 2019; Mizuno-Lewis et al. 2014; Younes et al. 2019). A scoping review about interventions on mentorship for health workers only found four studies, which were from Rwanda, Afghanistan, Jordan, and Botswana (Schwerdtle et al. 2017). A review about CPD in pharmacists included 19 studies, in which only four studies came from countries with hierarchical and or collectivistic culture (Micallef and Kayyali 2019).

## 1.5 Summary

We dedicate this chapter to the promotion of combining theory in education with local evidence from educational practice. We advocate the use of evidence-based practice throughout this edited volume and have sourced local evidence from various sources of publication. We encourage the use of existing evidence from different cultures to tailor educational interventions to local needs. We honor the contextual knowledge of local researchers and practitioners and seek to enrich the global discourse on health professions education with this view from the global South.

### Key Learning Points

- Culture has a significant influence on the deployment of educational innovations in settings contextually different from where those innovations originate.
- While there is no consensus definition of culture, Hofstede's dimensions of culture model offers a practical tool to explore the interplay between culture and health professions education.
- The research base for educational innovation in the global South can be meaningfully expanded using theoretical models that allow local advances to be related conceptually to approach the student-centered learning.

### References

- Archer MS (2005) Structure, culture and agency. In: Jacobs MD, Hanrahan NW (eds) *The Blackwell companion to the sociology of culture*. Blackwell Publishing Ltd., Malden, MA, pp 17–34
- Alavi M, Leidner DE (2001) Knowledge management and knowledge management systems: conceptual foundations and research issues. *MIS Q* 25(1):107–136
- Alshahrani A (2017) Power distance and individualism-collectivism in EFL learning environment. *Arab World English J* 8(2)
- Al-Shobaili HA, Al-Robaee AA, Al-Zolibani AA et al (2010) Utilization of self directed learning allocated times by medical students. *Saudi Med J* 31(3):333–335
- Azer SA, Azer D (2015) Group interaction in problem-based learning tutorials: a systematic review. *Eur J Dent Educ* 19(4):194–208
- Bandura A, Ramachaudran VS (1994) *Encyclopedia of human behavior*, vol 4. Academic Press, New York, pp 71–81
- Barnhardt B, Ginns P (2014) An alienation-based framework for student experience in higher education: new interpretations of past observations in student learning theory. *High Educ* 68(6):789–805
- Berkson L (1993) Problem-based learning: Have the expectations been met? *Acad Med* 68(10):79–88
- Bing-You R, Ramani S, Ramesh S, Hayes V, Varaklis K, Ward D, Blanco M (2019) The interplay between residency program culture and feedback culture: a cross-sectional study exploring perceptions of residents at three institutions. *Med Educ Online* 24(1):1611296
- Borgatta EF (2001) Culture. In Borgatta EF (ed) *Encyclopedia of sociology*, 2nd ed, vol 1. Macmillan Reference, New York
- Cardon PW (2008) A critique of Hall's contexting model: a meta-analysis of literature on intercultural business and technical communication. *J Bus Tech Commun* 22(4):399–428
- Cilliers FJ, Schuwirth LWT, van der Vleuten CPM (2012) Modelling the pre-assessment learning effects of assessment: evidence in the validity chain. *Med Educ* 46(11):1087–1098
- Doja A, Horsley T, Sampson M (2014) Productivity in medical education research: an examination of countries of origin. *BMC Med Educ* 14(1):243
- Claramita M, Nugraheni MD, van Dalen J et al (2013) Doctor–patient communication in Southeast Asia: a different culture? *Adv Health Sci Educ* 18(1):15–31

- Claramita M, Susilo AP (2014) Improving communication skills in the Southeast Asian health care context. *Perspect Med Educ* 3(6):474–479
- Claramita M, Setiawati EP, Kristina TN et al (2019) Community-based educational design for undergraduate medical education: a grounded theory study. *BMC Med Educ* 19(1):1–10
- Colliver JA (2000) Effectiveness of problem-based learning curricula: research and theory. *Acad Med* 75(3):259–266
- Dhital R, Subedi M, Prasai N et al (2015) Learning from primary health care centers in nepal: reflective writings on experiential learning of third year Nepalese medical students. *BMC Res Notes* 8(1):1–9
- Fang T (2012) Yin yang: a new perspective on culture. *Manag Organ Rev* 8(1):25–50
- Frambach JM, Driessen EW, Chan LC et al (2012) Rethinking the globalisation of problem-based learning: How culture challenges self-directed learning. *Med Educ* 46(8):738–747
- Gwee MC (2008) Globalization of problem-based learning (PBL): cross cultural implications. *Kaosiung J Med Sci* 14-S22
- Hartling L, Spooner C, Tjosvold L et al (2010) Problem-based learning in pre-clinical medical education: 22 years of outcome research. *Med Teach* 32(1):28–35
- Hofstede G (1986) Cultural differences in teaching and learning. *Int J Intercult Relat* 10(3):301–320
- Hofstede G, Hofstede GH, Hofstede GH et al (1998) Masculinity and femininity: the taboo dimension of national cultures, vol 3. Sage, New York
- Hofstede G, Hofstede GJ, Minkov M (2010) Culture and organizations: software of the mind, intercultural cooperation and its importance for survival, vol 3. McGraw-Hill, New York, pp 79–107
- House R, Javidan M, Hanges P, Dorfman P (2002) Understanding cultures and implicit leadership theories across the globe: an introduction to project GLOBE. *J World Bus* 37(1):3–10
- Jippes M, Majoer GD (2011) Influence of national culture on the adoption of integrated medical curricula. *Adv Health Sci Educ* 16(1):5–16
- Jippes M (2013) Culture matters in medical schools: how values shape a successful curriculum change. Thesis Maastricht University
- Johnson G (2000) Strategy through a cultural lens: learning from managers' experience. *Manag Learn* 31(4):403–426
- Jones M (2007) Hofstede–culturally questionable? Paper presented to the Oxford Business & Economics Conference, United Kingdom
- Kirkman BL, Lowe KB, Gibson CB (2006) A quarter century of culture's consequences: a review of empirical research incorporating Hofstede's cultural values framework. *J Int Bus Stud* 37(3):285–320
- Knight PT, Trowler PR (2000) Department-level cultures and the improvement of learning and teaching. *Stud High Educ* 25(1):69–83
- Koh GCH, Khoo HE, Wong ML et al (2008) The effects of problem-based learning during medical school on physician competency: a systematic review. *CMAJ* 178(1):34–41
- Kristina TN, Majoer GD, Van der Vleuten CPM (2006) A survey validation of generic objectives for community-based education in undergraduate medical training. *Educ Health Change Learn Practice* 19(2)
- Lynch EA, Mudge A, Knowles S et al (2018) “There is nothing so practical as a good theory”: a pragmatic guide for selecting theoretical approaches for implementation projects. *BMC Health Serv Res* 18(1):1–11
- Lewin K (1952) Problems of research in social psychology. In: Cartwright D (ed) *Field theory in social science: selected theoretical papers by Kurt Lewin*. Tavistock Publications Limited, London, p 346
- Mezirow J (1991) *Transformative dimensions of adult learning*. Jossey-Bass, San Francisco, CA
- Micallef R, Kayyali R (2019) A systematic review of models used and preferences for continuing education and continuing professional development of pharmacists. *Pharmacy* 7(4):154

- Mizuno-Lewis S, Kono K, Lewis DR et al (2014) Barriers to continuing education and continuing professional development among occupational health nurses in Japan. *Workplace Health Saf* 62(5):198–205
- Nugraheny E, Claramita M, Rahayu GR et al (2016) Feedback in the nonshifting context of the midwifery clinical education in Indonesia: a mixed methods study. *Iran J Nurs Midwifery Res* 21(6):628
- Nyamnjoh A (2017) The phenomenology of Rhodes Must Fall: student activism and the experience of alienation at the University of Cape Town. *Strat Rev South Afr* 39(1)
- Oda Y, Koizumi S (2008) Status of medical education reform at Saga Medical School 5 years after introducing PBL. *Kaohsiung J Med Sci* 24(3):S46–S53
- Otting H, Zwaal W, Tempelaar D, Gijsselaers W (2010) The structural relationship between students' epistemological beliefs and conceptions of teaching and learning. *Stud High Educ* 35(7):741–760
- Peterson RA (1990) Symbols and social life: the growth of cultural studies. *Contemp Sociol* 19(4):498–500
- Schwerdtle P, Morphet J, Hall H (2017) A scoping review of mentorship of health personnel to improve the quality of health care in low and middle-income countries. *Glob Health* 13(1):1–8
- Silawani S (2019) Problems in the implementation of problem-based learning in different culture of paternalism-collectivistic and egalitarian-individualistic: a systematic review. Thesis, Universitas Gadjah Mada. [http://lib.ugm.ac.id/ind/?page\\_id=248](http://lib.ugm.ac.id/ind/?page_id=248)
- Soares AM, Farhangmehr M, Shoham A (2007) Hofstede's dimensions of culture in international marketing studies. *J Bus Res* 60(3):277–284
- Steenkamp JBE, Ter Hofstede F, Wedel M (1999) A cross-national investigation into the individual and national cultural antecedents of consumer innovativeness. *J Mark* 63(2):55–69
- Suhoyo Y, Schönrock-Adema J, Emilia O et al (2018) Clinical workplace learning: perceived learning value of individual and group feedback in a collectivistic culture. *BMC Med Educ* 18(1):1–6
- Talaat W, Ladhani Z (2014) Community based education in health professions: global perspectives. WHO, Geneva
- Trigwell K, Prosser M, Waterhouse F (1999) Relations between teachers' approaches to teaching and students' approaches to learning. *High Educ* 37(1):57–70. <https://doi.org/10.1023/A:1003548313194>
- Tsoukatos E, Rand GK (2007) Cultural influences on service quality and customer satisfaction: evidence from Greek insurance. *Manag Serv Qual Int J* 17(4):467–485
- Wimpenny K, Savin-Baden M (2013) Alienation, agency and authenticity: a synthesis of the literature on student engagement. *Teach High Educ* 18(3):311–326
- Widyandana D, Majoor GD, Scherpbier AJJA (2011) Effects of partial substitution of pre-clinical skills training by attachments to primary health care centers: an experimental study. *Med Teach* 33(6):e313–e317
- Van Der Vleuten CPM, Dolmans DHJM, Scherpbier AJJA (2000) The need for evidence in education. *Med Teach* 22(3):246–250
- Van Merriënboer JJ, Clark RE, De Croock MB (2002) Blueprints for complex learning: the 4C/ID-model. *Educ Tech Res Dev* 50(2):39–61
- Von Fragstein M, Silverman J, Cushing A et al (2008) UK consensus statement on the content of communication curricula in undergraduate medical education. *Med Educ* 42(11):1100–1107
- Younes NA, AbuAIRub R, Alshraideh H et al (2019) Engagement of Jordanian physicians in continuous professional development: current practices, motivation, and barriers. *Int J Gener Med* 12:475–483
- Zepke N (2013) Student engagement: a complex business supporting the first year experience in tertiary education. *Int J First Year High Educ* 4(2)