Perceived Cultural Distance in Healthcare in Immigrant Intercultural Medical Encounters

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ABSTRACT

This article responds to the paucity of empirical research on the impact of patient-provider ethno-cultural distance and providers' cultural competence on the quality of healthcare service in migrant intercultural medical encounters in Australia. A cross-sectional study was conducted with 447 patients, consisting of 195 Caucasian and 252 non-Caucasian patients from six outpatient clinics in New South Wales, Australia. Structural equation modelling was used for data analysis. The findings demonstrated that cultural distance is an influential factor in perceived quality of outpatient care. Caucasian and non-Caucasian patients' perception of cultural distance between their physicians and themselves affected their service quality ratings of their physicians' professionalism, empathy and expertise. This is the first study on healthcare service quality in outpatient clinics in Australia for Caucasian and non-Caucasian patients. Policy implications suggest intervention strategies and the need for cultural competence education in medical and health curricula in medical schools and clinical practices.

INTRODUCTION

Disparities in health and health care among racial, ethnic, socioeconomic and geographic groups have been extensively documented in multicultural countries (Smedley et al., 2003; Orsi et al., 2010). Australia now has a population of nearly 25 million, representing 250 ethnic backgrounds and nearly 400 languages. One-quarter of this population is overseas-born and 16 per cent speak a language other than English at home. What do these new sub-populations feel about the health care they're getting? Researchers have suggested that racial discordance between patients and providers may be associated with patients' lower ratings of health care and higher levels of dissatisfaction (Street et al., 2008; Saha et al., 2011). Caregivers' cultural knowledge and behavioural skills help them to bridge the distance in medical consultations in which doctors are of a different race from their patients, to deliver culturally congruent care and achieve patient compliance (Perloff et al., 2006; Karmali et al., 2011; Lie et al., 2011). Very few empirical studies have been undertaken to evaluate whether patients associate their healthcare providers' cultural competence with the quality of their service. What research there is speaks of patients' perspective on doctors' "cultural distance" (Saha and Ogdenb, 2006; Thom and Tirado, 2006). In this study, we seek to measure perceptions of that cultural distance and the corresponding perceived quality of care. This is the first such study in Australia.

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Literature review

There is extant literature on cultural competence and cultural distance, and how patients' points of view are congruent with their providers' views, and how this perception correlates with their assessments of their health care quality.

CULTURAL DISTANCE

Culture can be defined broadly as "integrated patterns of human behaviour that include the language, thoughts, communications, actions, customs, beliefs, assumptions, values, reasoning and institutions of racial, ethnic, religious, or social groups" (Cross et al., 1989). Both defining and measuring cultural distance are challenging, due to the broad nature of this concept. Researchers have employed different methods to measure the cultural distance between service providers and customers. One of the most acknowledged approaches was proposed by Kogut and Singh (1988). They defined cultural distance as the overall discrepancy between national cultures in terms of the cultural dimensions (power distance, individualism, masculinity, and uncertainty avoidance) introduced by Hofstede (1980). Even though a wide range of studies has utilised Hofstadter's national cultural dimension scores to evaluate cultural distance, the efficiency of this approach has been called into question at the individual level. As a result, several researchers have adopted the concept of perceived cultural distance or psychic distance, in which an individual's perception of the difference between cultures, values, ethnicities or communication styles is used to measure cultural distance (Sousa and Bradley, 2006; Ng et al., 2007; Street et al., 2008). Reasoning that the cultural differences between countries are not always the same as the cultural distance between individuals from those countries (Stauss and Mang, 1999), the researchers adopted clients' perceptions to measure the cultural distance between customers and providers. In the context of health care, the role of cultural distance between patients and providers has been overlooked, and there are few empirical studies that investigate its impact on patients' experience with healthcare services (Saha et al., 2011). In one study, Street et al. (2008) introduced two concepts, namely ethnic similarity and personal similarity, to measure patient perceptions of similarity to their providers. Ethnic similarity includes items solely related to race, background and community, while personal similarity consists of cultural features such as communication style, language, reasoning and general values. They found personal similarity to be a stronger predictor of patients' rating of health care quality than ethnic similarity. In another attempt, Saha et al. (2011) measured perceived dissimilarity to providers using reverse items of personal similarity proposed by Street et al. (2008), and as this construct includes cultural elements, they named it cultural distance instead of personal distance. They argued that differences in traits such as communication style, reasoning about problems, speech/language, and general values are adequate indicators for assessing cultural distance in the context of health care. In the present study, we capture patients' perspective on both ethnic and personal dissimilarity to identify which factor has more influence on patients' perceptions of outpatient care. Similar to Saha et al. (2011), in the present article, the term cultural distance is used instead of personal distance for the factor determining patient-provider dissimilarity in communication style, language, reasoning and general values. Thus, this study examines the impacts of both ethnic and cultural distance on the quality of health care.

Cultural competence

Health care providers' cultural competence, which refers to their ability to work effectively with culturally and linguistically diverse (CALD) patients, based on cultural awareness, knowledge and skills, is acknowledged as imperative when it comes to building proper communication with these

clients, improving the quality of care for them and reducing medication errors and health disparities (Aplin, 2007; Harris, 2010). Historically, Leininger (1978) acknowledged cultural competence in the health care context as a critical factor in addressing the cultural needs of minorities to reduce health disparities and improve health outcomes (Edwards, 2003). She stated that patients' cultural beliefs, values, and practices should be respected and appreciated through delivering culturally competent care (Leininger, 1978). Although there are many studies on cultural competence, this concept lacks a unified definition and recognized dimensions (Suarez-Balcazar et al., 2011). One of the most commonly accepted cultural competence models in the health care context was proposed by Campinha-Bacote (2002). She defined cultural competence as an "ongoing process in which the health care provider continuously strives to achieve the ability to effectively work within the cultural context of the client (individual, family, community)". Her framework entitled "The process of cultural competence in the delivery of health care services" consists of five interdependent dimensions: (a) cultural awareness, (b) cultural knowledge, (c) cultural skills, (d) cultural encounters, and (e) cultural desire (Campinha-Bacote, 2002). Cultural awareness is the process of self-examination of one's own biases towards other cultures and exploring one's racist or ethnocentric beliefs. Cultural knowledge is the process of obtaining educational insights into diverse cultural and ethnic groups; this knowledge includes information about health-related beliefs and cultural values, disease prevalence, and treatment practices. Cultural skill is the ability to collect relevant cultural data and make an accurate physical assessment of diverse patients. The cultural encounters dimension describes the process of encouraging caregivers to engage in interactions with people of different cultural backgrounds in order to modify their beliefs about them and prevent stereotyping. Cultural desire connotes the real motivation of an individual to deal with culturally diverse people and become culturally competent. Despite the numerous definitions and components of cultural competence, there is a certain degree of consensus among scholars on the three dimensions of awareness, knowledge and skills (Lucas et al., 2008). Measuring cultural competence has been dominated by the use of the self-rating method and patients' perceptions of providers' cultural competence have been drastically disregarded (Paez et al., 2009). A number of researchers believe that providers tend to overestimate their own level of cultural competence and this issue can mislead healthcare managers about the real ability of their employees to work with culturally diverse clients (Thom and Tirado, 2006). Additionally, some authors believe that patient-reported cultural competence may be more strongly associated with the outcomes of care than self-reported results (Moleiro et al., 2011). Hence, several researchers have employed patient-rating scales to measure providers' cultural competence (Lucas et al., 2008; Limberger, 2010; Michalopoulou et al., 2010), and this approach is followed in the current study.

Quality of healthcare service

Healthcare centres should regularly assess the quality of their services to identify areas for improvement. Although continuous enhancement of service quality and customer satisfaction is important for all types of service organizations, this process may be even more essential for the health care industry because of the complex nature of this service and its remarkable impact on the quality of life (Priporas et al., 2008; Gaur et al., 2011).

Various models and instruments have been developed to identify the most important dimensions of health service quality. One of the most widely recognized tools is SERVQUAL, which measures recipients' perceptions of the physical aspect of service and numerous attributes of service providers (Parasuraman et al., 1988). Although SERVQUAL is a generic assessment tool that can be used in different industries, some scholars consider that the unique aspects of health service quality are not sufficiently addressed by this instrument. They believe that the service quality measure should be tailored to the specific service setting even within the healthcare context, so further

assessment tools have been proposed to measure the quality of health services in various areas, such as inpatient care, outpatient care and emergency care (Dagger et al., 2007; Arasli et al., 2008; Qin, 2009). Patients' overall perception of a health service is influenced by their perceptions of the quality of care that they receive from health professionals, as well as the quality of operation and tangibles dimensions (Dagger et al., 2007; Ramsaran-Fowdar, 2008; Fotiadis and Vassiliadis, 2013). Attributes of caregivers, especially those of physicians, have been considered as major elements of service quality. These traits have been divided into two major groups, one that focuses on the soft side of the providers and another that targets providers' technical or professional characteristics (Lin and Guan, 2002). Patients are believed to differentiate interpersonal and emotional relationships with their providers from the professional aspect of care. The main providers are physicians in an outpatient setting, and a patient's judgment of a physician's attributes and idiosyncrasies plays a crucial role in forming his or her overall perceptions of the service provided (Rao et al., 2006; Yang-Kyun et al., 2008). In the outpatient setting, three main characteristics of physicians have been proposed as important factors that influence patients' perceptions of the health care service. One attribute refers to the soft side of the physician, which includes traits such as caring, respectful, personalised attention, and sympathetic manner. This factor has been termed as humanness, empathy or personal relationship (Lin and Guan, 2002; Margolis et al., 2003). This factor mainly refers to affection and the sympathetic emotions provided by the physician. Another factor is professionalism, which primarily refers to the way in which the physician undertakes his or her professional tasks, such as offering an interactive consultation, taking sufficient time to ask questions and engage in active listening, patient involvement and participatory decision-making with patients or their families, clear explanations of disease and treatment options that are easily understood by patients, and performing a thorough examination and physical assessment (Kersnik, 2000; Hiidenhovi et al., 2002; Lin and Guan, 2002; Ramsaran-Fowdar, 2008). Additionally, the technical accuracy of medical diagnosis or the degree of pain and physical discomfort that patients experience during examinations is embedded in the overall assessment of the quality of care (Priporas et al., 2008; Gaur et al., 2011).

Thus, doctors' medical proficiency and technical experience in making a correct diagnosis and proposing effective treatment options are crucial to what patients perceive as optimal care. Carman (2000) supported this and identified patients' assessment of the technical dimensions of care and outcome as more important than the accommodation functions of hospital care. Both dimensions were important in their study, but technical quality evaluations were actually not influenced by the perceived quality level of the affective attributes. Rundle-Thiele and Russell-Bennett (2010) later affirmed the significance of technical skills, declaring that patients can select doctors of their choice, and hence, success in practice depends not only on having good technical skills but also on satisfying customers and motivating them to return to the practice for ongoing care through "patient-centred care".

In this study, we collect patients' perspectives on outpatient care with respect to physicians' attributes, as outlined above.

THEORETICAL FRAMEWORK AND HYPOTHESES CULTURAL DISTANCE AND DOCTOR PROFESSIONALISM

Differences in cultural values and communication styles may hinder the establishment of rapport between patients and providers and may affect patients' perceptions of physicians' attributes. For instance, some ethnic patients, such as African Americans, normally show a lower tendency to ask questions than Caucasians and they abstain from making inquiries that they think the doctor may find objectionable (Michalopoulou et al., 2010). Due to a lack of knowledge about this issue,

physicians may not make sufficient effort to encourage patients to participate and reveal information, which may hinder the provision of adequate information needed by patients. Moreover, culturally different people may have different treatment preferences. Doctors need to consider these differences to reach an agreement with patients rather than ordering patients to follow instructions. Considering patients' cultural/religious beliefs, providing justifications for the prescribed medication and involving patients in decision-making on treatment strategies that are mutually acceptable to both patients and providers can prevent patients from adopting a negative perception of their doctor's professionalism. For instance, patients following Hindu beliefs may refuse to consume meat or fish products. Prescribing religious patients fish oil pills for vitamin D deficiency without asking about their concerns may lead to passive interactions during the visit and accordingly, failure to adhere to the prescribed treatment. Furthermore, cross-cultural medical visits are less likely to be participatory. Limited-English Proficient (LEP) patients or patients who do not speak English as their primary language may have difficulties explaining their symptoms in another language and may need more time. However, doctors may not take enough time to listen to them well or may keep interrupting them due to time shortages (Davidson et al., 2007; Villani and Mortensen, 2014). Likewise, during consultations with ethnic doctors who are not native English speakers, patients may not receive enough information due to the doctors' inadequate language proficiency. The linguistic barrier may also deter doctors from asking enough questions that are sufficiently clear. This leads to the following hypotheses:

1 Ethnic distance is negatively related to doctor professionalism.

2 Cultural distance is negatively related to doctor professionalism.

Cultural Distance and Doctor Empathy

The building of effective interpersonal and close relationships between patients and physicians may be hindered due to cultural hurdles. For instance, patients may become offended by or uncomfortable with the way doctors address them, their body language such as tone of voice and direct eye contact, or even the way they undertake physical examinations (Carroll et al., 2000; Chenowethm et al., 2006; Teal and Street, 2009). Similarly, expectations of interactions may not match in terms of values, needs, and preferences. For example, different patients may have different preferences for formality during the visit; people from high-context cultures prefer more formal interpersonal relations while in the low-context culture informal relations are preferable (Leong and Lee, 2006). Therefore, some patients may feel disrespected by doctors' informal manner, while other patients may not receive enough emotional support or the friendliness they expect because the doctors are too formal and exhibit emotionally restrained behaviour that does not meet the patients' standards. Likewise, the delivery of bad news may not be carried out in a manner preferred by patients. In Western countries, it is normal to break bad news to patients directly and Caucasian patients usually expect to be informed about their condition; such behaviour is not acceptable in non-Caucasian communities, such as Asian and Middle Eastern communities and may be perceived as inhumane (Torres and Rao, 2007; Xu, 2010). Moreover, differences between patients and doctors in showing emotions may result in discontent among patients, especially when the doctor belongs to a neutral culture and the patient belongs to an emotional/affective culture (Trompenaars and Hampden-Turner, 1997). Members of Asian cultures, for example, which are affectively neutral, do not openly express their feelings. In these cultures, touching or excessive body language are discouraged. On the other hand, people of affective cultures, such as Middle Eastern and Latin cultures, show emotions more openly and passionately (Trompenaars and Hampden-Turner, 1997). Likewise, the ways that patients respond to pain are influenced by cultural factors. Stoic patients such as Asians are less expressive about their pain while emotive patients such as Hispanics and Middle

Easterners tend to show their suffering with verbal complaints, moaning or crying and seek attention and prompt reliefs (Clark et al., 2010). When doctors do not express the emotions expected by the patients, they may be viewed as cold or too task-oriented and thus unable to understand the patients' worries. This issue can negatively affect patients' perceptions of doctors' empathy. Thus, the following hypotheses can be formulated:

3 Ethnic distance is negatively related to doctor empathy.

4 Cultural distance is negatively related to doctor empathy.

Cultural distance and doctor expertise

Cultural norms and lifestyle shape patients' perceptions of illness and health and the treatment preferences and cultural differences may affect the degree to which patients trust physicians' knowledge about treatment options. For instance, the Chinese may prefer to follow both pharmaceutical and supplementary treatments, or they may believe in the harmony of energies and the balance of hot and cold in the body. If a doctor prescribes them a therapy that includes the consumption of cold drinks or exposure to a cooler environment to reduce fever, they may consider this advice harmful and interpret it as a violation of the body's natural harmony (Chen, 2008). Moreover, in cross-cultural encounters, assessing patients' conditions, giving diagnoses and deciding on suitable medication types and doses might be challenging due to differences in physical characteristics, expressions of pain and symptoms and even reactions to medications among different ethnicities (Burroughs et al., 2002; Campinha-Bacote, 2002). These issues may increase the likelihood of misdiagnosis and medication errors and accordingly may affect clients' ratings of doctors' technical expertise. For example, some physicians may not be aware that Asians and Native Alaskans may need lower doses of anxiolytic agents than Caucasian patients, or that Asians, Indians and Pakistanis require lower doses of lithium and antipsychotic drugs (Burroughs et al., 2002; Ajdukovic et al., 2007). Likewise, children from diverse populations can demonstrate different symptoms from Caucasians, which can result in misdiagnosis. It has been reported that somatisation is more frequently associated with anxiety and depression in minority youths. African American and Hispanic children may show anger or disruptive behaviour while experiencing internalising disorders, and psychosis is often over diagnosed in these populations. Emotional reactivity during episodes of illness can also vary across ethnic groups. For example, depressed individuals of Asian origin show heightened reactivity compared with Caucasians, and this may hamper the evaluation of the severity of their mood disturbance (Pumariega et al., 2009).

A physician's limited knowledge about culturally bound illnesses and patients' past and present life circumstances may delay the discovery of the problem or even lead to misdiagnosis and mistreatment. For instance, Caucasian doctors may not be very well informed about fasting during pregnancy or fasting with diabetes, which are common among patients of the Muslim faith. This prevents them from analysing the physical impacts of fasting or delivering special instructions to minimise negative consequences in cases in which patients refuse to stop fasting (Ambanpola et al., 2005; Clark et al., 2010). Likewise, some western physicians may not have sufficient knowledge about the complications resulting from female circumcision and the proper methods to handle patients with this condition during medical procedures (Wikberg and Bondas, 2010; Vissandjee et al., 2014). This issue may cause mistrust with regard to doctors' knowledge and the efficacy of the prescribed instructions and healing strategies. A lack of familiarity with different people's physical characteristics or reactions to medications, together with miscommunication and misunderstanding caused by linguistic and communication barriers, can lead to serious cases of misdiagnosis and errors in prescription dosage, which can diminish patients' ratings of physicians' medical competence. Thus, it is proposed that:

5 Ethnic distance is negatively related to doctor expertise.

6 Cultural distance is negatively related to doctor expertise.

For instance, they may routinely ask patients in private about the nature and extent of the family's involvement and request patients to sign waiver forms if they wish to fully disclose their medical information to family members (Clark and Vercler, 2007). During cross-cultural medical visits, it is important to decide on the proper type of information and the level of detail that should be shared in each case. Understanding this, physicians can adjust their behaviour to accommodate. For example, patients from an Asian background may prefer to indicate what should be done if a specific side effect occurs rather than providing a long list of possible side-effects. Similarly, non-verbal communication is important in conveying respect. In high-context cultures, such as Asian, Middle Eastern, Hispanic and Native American cultures, communication depends heavily on the context of what is being communicated rather than on the specific words (Galanti, 1991). Conversely, those of low-context cultures, such Caucasian Swiss, German, Scandinavian and Australian, rely much more heavily on precise, direct, and logical spoken communication and less on an assumed understanding. High-context cultures sometimes have belief systems that relate illness to the weather, social environment, or eating habits. These patients may therefore spend a large amount of time describing the circumstances surrounding their illness rather than focusing on the illness itself (van Servellen, 1997). In the practice of Western medical care, such discourses are discouraged and seen as distracting, whereas for some non-Caucasian patients, providing such seemingly anecdotal information is preferred and seems more professional (van Servellen, 1997). By having cultural knowledge, understanding, and respect for culturally different individuals, adaption is more likely to take place to address particular needs of patients. Culturally sensitive doctors are more considerate in choosing terms and the speed of transmitting medical information when interacting with patients who have poor English skills. This phenomenon also applies to situations in which doctors are not native English speakers and have strong foreign accents.

Possessing knowledge about the importance of folk remedies to some ethnic groups may help doctors to discuss supplementary medicines and reach an agreement with patients on the best treatment options (Collins & Fund, 2002). Hence, the following hypothesis is established:

7 Cultural competence is positively related to doctor professionalism.

Cultural competence and doctor professionalism

While cultural differences can create distance and negatively affect patients' perceptions of providers' attributes, increasing the knowledge of different ethnic beliefs across diverse patient populations and improving cultural skills can help physicians to provide a professional service for patients. Culturally competent physicians attempt to understand patients' support networks and the role of the family in the health care process.

Cultural competence and doctor empathy

Physicians with a high level of cultural competence are more likely to develop close interpersonal relations and express human emotions and behaviour that are acceptable in different cultures (Bhui et al., 2007). Likewise, to establish trusting therapeutic relationships with ethno-culturally different patients, they allow patients to express their beliefs and concerns. By acknowledging differences and understanding patients' particular needs, they are capable of offering respectful care rather than being condemning (Betancourt, 2006; Lie et al., 2011). Furthermore, their knowledge about

different cultural traits, such as whether a culture is emotional or neutral, assists them in providing the emotional support demanded by patients. These physicians may be better able to show patients that they are genuinely interested in their concerns. Minority patients with poor English speaking and listening comprehension can create a situation in which it seems practically impossible to develop a friendly relationship. When possible, knowing a few phrases in the corresponding language of that ethnicity as well as being able to comprehend their accent could potentially help prevent alienation and put a patient at ease (Gibson and Zhong, 2005). Thus, the following hypothesis is established:

8 Cultural competence is positively related to doctor empathy.

Cultural competence and doctor expertise

Communication styles, demonstrations of emotion (including pain or sorrow), prioritisation, the prevalence rate of particular diseases, and responses to certain medication vary among different ethnic populations (Galanti, 1991, 2015; Fortin, 2002). For instance, some dermatologic conditions may be rare in Caucasian skin but are much more common in ethnic patients and vice versa (Cole et al., 2009; Crane, 2013). Thalassaemia is also more prevalent in certain races, with the type and prevalence varying between places of origin. Dark-skinned people who regularly cover up may lack vitamin D in temperate climates, and rickets have been reported, especially with a high consumption of chapattis that are high in phosphate. The patient's race may be a consideration in determining the best treatment for hypertension (Rull, 2011). Culturally competent providers are aware that there are cultural and communication barriers to accurate diagnosis and may be better able to assess both medical and socio-cultural aspects of the patient's situation to avoid potential misdiagnosis, unnecessary suffering, and harmful complications (Thom and Tirado, 2006; Teal and Street, 2009). Thus, the following hypothesis is established:

9 Cultural competence is positively related to doctor expertise.

Moreover, as discussed earlier, doctor attributes are positively associated with overall health care quality. Therefore, it can be proposed that:

10 Doctor professionalism is positively related to the overall health care quality.

11 Doctor empathy is positively related to the overall health care quality.

12 Doctor expertise is positively related to the overall health care quality.

The conceptual model is presented in Figure 1. The relationships among the constructs depicted in the model were empirically tested based on the total sample and the split dataset of Caucasian and non-Caucasian patients.

Methodology

Structural equation modelling was used in this research study as it is a multivariate statistical analysis technique that is used to analyse structural relationships. This technique is the combination of factor analysis and multiple regression analysis, and it is used to analyse the structural relationship between measured variables and latent constructs. This method is preferred by the researcher because it estimates the multiple and interrelated dependence in a single analysis.

Social science research aims to explain and predict the behaviour of individuals, groups or organizations. By exploring the factors in the environment where the target respondents exist, the

FIGURE 1
RESEARCH CONCEPTUAL MODEL.
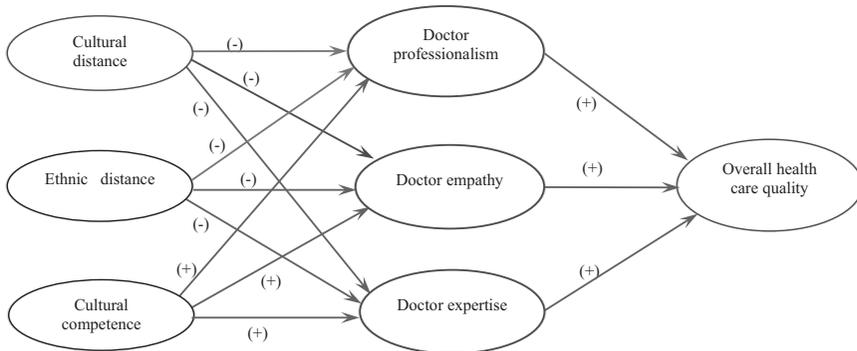
researchers can identify particular trends and details about them. Researchers, by recognizing a number of conditions in which the individual, society or organization exists, can, within certain limits, identify particular development trends and describe the details concerning their life spaces, thereby discovering significant factors and relationships in a particular society. But this is not adequate, as the goal in research on social sciences is not only to conduct a basic statistical analysis and to recognize individual factors and behaviours but also to determine the cause-effect linkage among variables of interest. Because of the latent characteristics of several social phenomena, more complicated techniques are needed which can conduct causal analyses and include many variables based on Structural equation modelling-SEM (Tarka, 2018).

> Thus structural equation is suitable to examine constructs such as: intelligence, alienation, and discrimination, and socialization, motives of human behaviour, personal fulfilment, aggression, frustrations, conservatism, anomie, satisfaction, or attitudes. In the economic sense, these can also be: prosperity of a geographic region, social-economic status, satisfaction from purchased products, approval of products, and improvement of economic conditions. All in all, the measurement of such latent constructs is conducted indirectly, mostly with the use of a set of observable variables and via observation of the causal effects in SEM between respective latent variables. (Tarka, 2018)

In this study based on the qualitative findings, a service quality model was developed for the outpatient setting, after which several of the relationships in the model were tested using structural equation modelling (SEM).

STUDY SAMPLE

The health sector should endeavour to obtain opinions on health services from all groups of patients to supply optimal and equal care. Unfortunately, factors such as language barriers, a low level of literacy, and a lack of trust and budget issues have resulted in low participation of ethnic communities in clinical research (NHMRC, 2005). Consequently, there is inadequate knowledge about these clients' perceptions of the health service. To address this issue, the data used in this study were drawn from representatives of both the ethnic majority and ethnic minorities, whom we refer to as Caucasian and non-Caucasian patients. This research focused on patients' experience of care during medical visits to outpatient clinics. We collected the quantitative data from the patients

of six outpatient medical centres in the state of New South Wales, Australia, located in different suburbs inhabited mostly by specific groups of ethnic people (generally Middle Eastern, Indian and Asian: mostly Vietnamese and Chinese) and Caucasians. The sample was restricted to adults between 18 and 80 years of age who visited a doctor in an outpatient clinic in Australia during the two months prior to their participation in the survey. We did not elicit information about the current visit and patients were asked to recall their last visit with a doctor and answer the questions based on that visit. It was believed that seeking information after the visit may influence the doctors to modify their normal behaviour and routine. Posters inviting the patients to participate in the study were attached to the reception counters. Patients were requested to return the completed questionnaires to the receptionists and receive a $15 gift card in return. A total of 470 questionnaires were placed on the reception counters.

Since we planned to run a multi-group analysis between Caucasian and non-Caucasian patients using structural equation modelling (SEM), we needed a sample size of approximately 200 participants for each group (Hoelter, 1983). Therefore, certain numbers of questionnaires were placed in clinics in different stages to ensure that we received the desirable number of responses from each of these groups. To ensure validity, the conventional translation and back-translation process was followed (van de Vijver and Leung, 1997). Accordingly, all posters, information sheet and questionnaires were translated into Chinese (Mandarin), Vietnamese, Arabic and Persian and translated back into English. All questionnaires were returned but 23 questionnaires were excluded because they had more than 5% missing values. For the analysis, 447 questionnaires were usable, of which 252 respondents were non-Caucasian and 195 respondents were Caucasian and these sample sizes were sufficient for adopting SEM. The data collection process lasted for about 3 months, from February to April 2013.

MEASURES

Demographic questions

Participants completed questionnaires on their demographic information, along with some of the doctors' characteristics, such as race/ethnicity, gender, ability to speak the patient's first language, and the number of visits to the doctor. Patients self-identified as Caucasian or non-Caucasian.

Sample characteristics

The patients' demographic characteristics are summarised in Table 1. Compared to Caucasians, fewer non-Caucasians over 56 took part in the study. Compared to the Caucasian group, more non-Caucasian respondents did not finish high school, and more non-Caucasian respondents had higher education (Master/PhD). Non-Caucasian respondents reported higher racial/ethnic discordant visits. Apart from these difference and cultural/language differences, there is no other major difference between these two groups. Caucasian and non-Caucasian patients were found to be very different in terms of cultural background and language.

CULTURAL DISTANCE

It is very difficult to measure "Culture" as it is a multidimensional, vibrant, and intangible concept (Street et al., 2008), making it intrinsically tricky to measure.

TABLE 1

DEMOGRAPHIC CHARACTERISTICS

Characteristics	Total Sample (%)	Caucasian (%)	Non-Caucasian (%)
Age			
18–25	12	9	15
26–35	32	22	40
36–45	29	30	28
46–55	15	17	13
56–65	9	15	4
≥66	4	7	1
Gender			
Male	38	35	40
Female	62	65	60
Employment Status			
Full-time	48	53	43
Part-time	20	21	19
Unemployed	32	26	37
Annual Household Income			
≤$20,000	10	9	10
$20,001–$40,000	23	19	27
$40,001–$60,000	24	24	25
$60,001–$80,000	24	27	22
$80,001–$100,000	14	15	13
≥$100,001	4	6	4
Education			
Some Primary School	1.1	0.0	2.0
Completed Primary School	1.8	0.0	3.2
Some High School	6.0	8.7	4.0
Completed High School	24.8	30.3	20.6
Tafe or Trade Certificate or Diploma	19.5	21.0	18.3
Bachelor's Degree	33.1	32.3	33.7
Postgraduate (Master's/PhD)	13.6	7.7	18.3
Race			
African/Black	0.4	0	0.8
Aboriginal/Torres	0	0	0
Asian (Far East Asia)	23	0	40.9
White/Caucasian	43	100	0
Indian/Sri Lankan/Bangladesh	6.9	0	12.3
Middle Eastern/North African	26	0	46
Religion			
Protestant	17.2	36.9	2
Catholic	18.8	31.3	9.1
Other Christianity (Orthodox, Coptic, etc.)	2	0.5	3.2
Native Australian	0	0	0
Buddhism	4.9	0.5	8.3
Islam	24.6	0.5	43.3
Hinduism	4.5	0	7.9
Judaism	0.4	1	0
No religion	23.7	23.1	24.2
Other	3.8	6.2	2
English as 1st Language			
Yes	49.2	100	10.3
No	50.8	0	89.7
Employment Proficiency			
Very well	57.5	100	24.6
Well	26.8	0	47.6

TABLE 1

(CONTINUED)

Characteristics	Total Sample (%)	Caucasian (%)	Non-Caucasian (%)
Not well	13.9	0	24.6
Not at all	1.8	0	3.2
Years Living in Australia			
≤1 year	1.6	0	2
1–4 years	17	3.1	28.6
5–8 years	17.7	1	30.6
9–12 years	9.4	2.1	15.1
≥12 years	54.4	93.8	23.8
Number of Visits with this Doctor			
1	24.2	24.1	24.2
2	32.2	28.7	34.9
3	19.5	20	19
More than 3 times	24.2	27.2	21.8
Racial/ethnic Concordant Visit	45	51	40
Racial/ethnic Discordant Visit	55	49	60

While it may be intricate to find a particular patient on the multidimensional landscape of culture, it is theoretically more practical to assess, typically, the cultural distance that patients from different groups perceive between themselves and their health care providers.

To measure patients' perceptions of ethnic distance from their doctors, we used a three-item scale based on the instrument developed by Street et al. (2008). These items measure patients' perceptions of distance in terms of ethnic and cultural background and skin colour. Additionally, a four-item scale based on the instrument developed by Saha et al. (2011) and Street et al. (2008) was used to measure cultural distance.

To measure patients' perceptions of cultural distance from their providers, we administered the 4-item scale developed by Street et al. (2008) as an instrument to capture dimensions of patient–provider cultural concordance vs. discordance because the scale contains items evaluating patients' perceived likeness to their provider in terms of speech and language, reasoning, communication style, and values. These questions contain a seven-point Likert scale from 1 (least distant) to 7 (most distant) to assess the perceived ethnic and cultural distance.

While these items identify only a few dimensions of culture, they are dimensions that are particularly relevant to the way in which cultural differences might affect patient–provider interactions (Schouten and Meeuwesen, 2006).

We used this scale because it has been validated as a predictor of patient satisfaction, trust, and intent to adhere to treatment recommendations (Street et al., 2008).

CULTURAL COMPETENCE

To measure providers' cultural competence, we adopted a patient-reporting tool which was designed by Lucas et al. (2008). This instrument was developed based on the Sue and Torino (2005) conceptual model, in which cultural awareness, cultural knowledge and cultural skills are the main elements of cultural competence. As explained earlier, these three elements of cultural competence have been replicated in many conceptual frameworks and measuring instruments.

Quality of health care

We developed a scale to measure patients' perceptions of overall health care quality and the attributes of doctors. The scale comprises of three items to measure the overall health care quality as follows: "The quality of care I received from the clinic was very good", "The quality of service I received from the clinic was of a high standard in every way" and "Overall, the quality of the service provided by the clinic was excellent".

In addition, six items were used to measure patient perceptions of doctors as follows: "the doctor listened to them well", "gave adequate information", "explained things in a way that they could understand", "undertook a thorough examination", "involved patients (or families) in making decisions", and "asked enough questions". Four items were used to measure perceived empathy, including whether the doctor was "nice and caring", "courteous and respectful", "cared about the patient's concerns", and "tried to put the patient at ease (e.g., by making friendly conversation rather than talking only about the illness)". Three items were used to measure doctors' expertise, asking patients whether "the doctor was well trained and knowledgeable", "was highly experienced", and "made a correct diagnosis".

Reliability

Cronbach's coefficient alpha was used to test the internal consistency (reliability) of the constructs. The results are as follows:

(a) overall health service quality = 0.93,
(b) doctor professionalism = 0.94,
(c) doctor empathy = 0.92,
(d) doctor expertise = 0.93,
(e) ethnic distance = 0.94,
(f) cultural distance = 0.88,
(g) cultural awareness = 0.90, and
(h) cultural knowledge = 0.91, and
(i) cultural skills = 0.93.

A Cronbach's alpha value of 0.70 or above is considered acceptable (Hair et al., 2006). The summated scale as the mean value of symmetrical items appertaining to each factor is used. The technique reduces measurement error and boosts the representativeness of construct concepts into a singular-dimension (Hair et al., 2006). The interconstruct correlations shown in Table 1 are all below the suggested value of 0.85 (Tabachnick and Fidell, 2007), pointing to the absence of multicollinearity and presence of the discriminant validity of the constructs.

Validity

The interconstruct correlations shown in Table 2 are all below the suggested value of 0.85 (Tabachnick and Fidell, 2007), pointing to the absence of multicollinearity and presence of the discriminant validity of the constructs.

Model fit and hypothesis verification

The hypothesised model was examined using maximum likelihood path analysis, applying AMOS 21. First, the model fit statistics were used to examine the fit between the data and the model

TABLE 2

CORRELATION MATRIX

	Mean (SD)	Overall Health Care Quality	Doctor Professionalism	Doctor Empathy	Doctor Expertise	Cultural Competence	Cultural Distance	Ethnic Distance
Overall Health care Quality	5.38 (0.99)	1						
Doctor Profes-sionalism	5.55 (0.87)	0.828***	1					
Doctor Empathy	5.56 (0.86)	0.805***	0.820***	1				
Doctor Expertise	5.59 (0.99)	0.834***	0.797***	0.770***	1			
Cultural Compe-tence	4.98 (1.15)	0.546***	0.516***	0.535***	−0.474***	1		
Cultural Distance	2.95 (1.22)	−0.483***	−0.427***	−0.446***	−0.397***	−0.504***	1	
Ethnic Distance	3.98 (1.97)	−0.172***	−0.203***	−0.215***	−0.110**	−0.464***	0.298***	1

*$p < 0.05$;
**$p < 0.01$;
***$p < 0.001$.

(Byrne, 2010). To assess the model fit we considered the following goodness-of-fit indices, and their cut-off values were applied based on the suggestions of Hu and Bentler (1999): 1) normed Chi-square: (X^2/df), in which, a value of less than 3, preferably lower than 2, indicates a good fit; 2) Goodness-of-Fit Index (GFI); 3) the Adjusted Goodness-of-Fit Index (AGFI), which is desired to be higher than 0.9; and 4) Root Mean Square Error of Approximation (RMSEA), which should be a value less than 0.08 with PCLOSE greater than 0.05 indicating acceptable fit. The majority of indices satisfy the criteria, thus assuring a satisfactory level (X^2 = 13.67, df = 6, X^2/df = 2.27, RMSEA = 0.05, GFI = 0.95, AGFI = 0.83). Therefore, the paths were estimated to test the hypotheses. First a path analysis was performed on the model with the entire sample and then a multi-group path analysis was carried out in which the model was tested for two separate groups of non-Caucasian and Caucasian patients. The results, as illustrated in Table 3, show that the hypotheses on the associations between ethnic distance, doctor professionalism and doctor empathy were not verified in the total sample, while the link between ethnic distance and doctor expertise was statistically significant. Likewise, in the Caucasian group, ethnic distance had no significant association with doctor professionalism and doctor empathy but had a meaningful impact on doctor expertise. None of these links, however, were substantiated in the non-Caucasian group.

This indicates that the difference in ethnicity per se does not impact non-Caucasian patients' perceptions of doctor professionalism, empathy and expertise, while it may impact Caucasian patients' perceptions of doctor expertise. The hypotheses on the association among cultural distance, doctor professionalism, doctor empathy and doctor expertise were verified for the total sample as well as the non-Caucasian and Caucasian groups. Similarly, the relationships between cultural competence, doctor professionalism, doctor empathy, and doctor expertise were substantiated in the total sample along with both groups. The links between doctor professionalism, doctor empathy, doctor expertise and overall healthcare quality were verified in both cohorts.

The results are summarised in Table 3. Since this study is based on a self-administered survey, common method bias in the form of single rater bias was very likely to happen. To identify the magnitude of this bias Harman single factor analysis was performed (Podsakoff et al., 2003). Results indicate that a single factor carrying 32.7 per cent of variance emerged. Because this is not greater than 50 per cent, we can argue that the effect of method variance is negligible.

FINDINGS AND DISCUSSION

To rectify health care inequalities and improve the well-being of the population, researchers have requested an improvement of cultural competence among medical providers and integration of cultural competence into clinical practices in the multicultural context (Campinha-Bacote, 2002; Betancourt et al., 2003; Brunett and Shingles, 2018).

As the number of non-English speaking patients and the number of overseas-born/trained health workers are both on the rise in Australia, the likelihood of misunderstandings, medical errors and frustrating encounters between culturally different patients and providers will increase. The number of overseas-born doctors in Australia has increased in recent years (Parliament of the Commonwealth of Australia, 2012). The multicultural population of Australia and the increasing number of overseas-born and trained doctors necessitate investigating the role of culture in provision of health care for patients. In this study, we aimed to explore whether cultural differences are associated with lower ratings of outpatient care as well as to identify whether any practical evidence exists to support the efficacy of cultural competence.

We obtained the opinions of both mainstream and minority populations in this study. The findings illustrate that physicians who come from a different culture from their patient in terms of language, communication styles, reasoning and general values, are perceived to be offering a lower-quality service. Our results are consistent with those of Street et al. (2008), who found that the

TABLE 3

PATH ANALYSIS

Structural Model Estimates	Total Sample		Caucasian		Non-Caucasian	
	β	t	β	t	β	t
Cultural Distance → Doctor Professionalism	−0.230	−5.02***	−0.268	−3.90***	−0.190	−3.15**
Cultural Distance → Doctor Empathy	−0.241	−5.35***	−0.322	−4.92***	−0.165	−2.74**
Cultural Distance → Doctor Expertise	−0.226	−4.83***	−0.297	−4.52***	−0.150	−2.36*
Ethnic Distance → Doctor Professionalism	−0.066	−1.47	−0.081	−1.27	−0.015	−0.25
Ethnic Distance → Doctor Empathy	−0.062	−1.42	−0.053	−0.87	−0.026	−0.42
Ethnic Distance → Doctor expertise	−0.159	−3.47***	−0.175	−2.87**	−0.070	−1.08
Cultural Competence → Doctor professionalism	0.430	8.71***	0.392	5.46***	0.467	7.07***
Cultural Competence → Doctor empathy	0.442	9.11***	0.401	5.87***	0.493	7.48***
Cultural Competence → Doctor expertise	0.433	8.59***	0.442	6.45***	0.451	6.48***
Doctor Professionalism → Overall health care quality	0.370	14.23***	0.362	9.75***	0.379	10.42***
Doctor Empathy → Overall Health Care Quality	0.32	12.41***	0.335	8.93***	0.308	8.46***
Doctor Expertise → Overall Health Care Quality	0.480	18.61***	0.473	12.61***	0.465	12.96***

Model fit: $X^2 = 13.67$, df = 6, $X^2/df = 2.27$, RMSEA = 0.05, GFI = 0.95, AGFI = 0.83
p-values of t-statistics: any value greater than 1.96 is significant at $p < 0.05$, so denote significance by *$p < 0.05$, **$p < 0.01$ and ***$p < 0.001$.

perception of similarity to one's physician is a multidimensional construct and ethnic similarity is a less influential factor on the patients' perceptions of the outcomes than cultural similarity. Specifically, patients who felt that they had more in common with their doctors in regard to beliefs, values and manner of communication reported receiving more professional care and emotional support from their doctors as well as more accurate diagnoses and a higher level of knowledge about their condition. These results are consistent among both Caucasian and non-Caucasian patients.

However, patients' perceptions of being different from their physicians in terms of race, background and community did not markedly affect their perceptions of their doctors' professionalism or empathy. The results indicate that ethnic difference may negatively affect Caucasian patients' judgment of doctors' expertise, while no significant relationship was found between ethnic distance and doctor expertise in the non-Caucasian group. One possible explanation is that Caucasian patients may have less trust in the quality of training and education systems in the developing countries where some non-Caucasian physicians obtained their degrees. As a result, Caucasian patients may assume that non-Caucasian doctors are generally less knowledgeable than Caucasian doctors. However, the findings show that cultural distance is a more influential factor on healthcare quality factors than ethnic distance. This outcome indicates that even if the patient and physician are from different ethno-cultural backgrounds, they may not feel a very big gap in terms of values, reasoning and communication style.

Moreover, both groups of patients reported higher quality care delivered by physicians who have greater cultural competence. Thus, the hypothetical efficacy of cultural competence in the outpatient setting is supported by our findings.

Limitations and future studies

The delivery of equal and effective care in multicultural health settings is a complex topic and more empirical studies are required to identify how cultural barriers affect the patient-provider relationship. To assist the infusion of cultural competence into the health sector, more empirical evidence should be found to encourage managers and policy makers to invest time and money in promoting cultural competence in the educational and medical settings.

This study is the first attempt in Australia to explore practical evidence indicating the negative effect of cultural distance as well as the positive effect of cultural competence in the delivery of outpatient care. Another limitation could be that communicating across ethnic and cultural divides can conceivably introduce variations in how questions are heard and what responses are given.

To mitigate language barriers, we translated our questionnaires into four non-English languages. One of the limitations is that in the end we did not gather responses from every ethnic group in Australia. Although the questionnaires were administered in four languages, to facilitate the participation of ethnic patients, those with poor English skills who could not speak these languages were not able to take part in this study.

The data were collected from NSW, the most multicultural state in Australia, and this can limit generalising the results to the entire country. Only patients' perceptions were acquired to test the models in this research. Future studies can compare doctors' self-reported and patient-reported cultural competence to disclose whether any deviation exists between the perceptions of patients and those of doctors regarding the physicians' cultural competence.

Moreover, future research can investigate the role of language as a separate variable in patients' perception of quality of care provided by doctors in intercultural medical encounters.

CONCLUSION

This study found new evidence in the Australian context that patient-physician cultural distance can negatively affect effectiveness of clinical encounters and result in poorer quality of service.

Both Caucasian and non-Caucasian patients perceived that the physicians' cultural competence is associated with their levels of professionalism, empathy and technical expertise. The findings highlight the significance of integrating cultural practices and concepts into health service delivery and raise providers' cultural competence to rectify health care inequities and improve health and well-being of all patients. Therefore, further attempts should be made in medical schools and health care practices to facilitate the development of cultural communication competence for physicians and other clinicians.

Policy implication

This research identifies that "Cultural Distance" is associated with lower patient ratings of health-care quality and customer satisfaction. Bridging the gap in cultural disparity can help better develop patient–provider interactions and relations.

There has been little empirical research exploring cultural distance between patients and providers and the effect of this dimension of the patient–provider relationship and on patient satisfaction and their experiences and outcomes. This will enhance quality of care as greater cultural distance was perceived by patients as associated with lower perceived quality of care and less satisfaction. Policy implications point towards more funded research on "Cultural Distance and Patient Satisfaction". For this to happen, we need to conduct more government-funded research on this topic in diverse healthcare settings and collect data and evidence. It is quite evident that the range of this sector is enormous and involves cooperation among several elements. In order to ensure quality management in hospitals, and increase customer satisfaction it is important to find the root causes of problems.

Complex issues within the health service sector arise due to the fear, pain and insecurity of patients that occur due to reported incidents. Research needs to examine preventable adverse events affecting patients in Australian hospitals, as many such errors occur due to cultural distance and cultural incompetence and also patient misunderstandings (Chavan, 2011). To understand this risk, we need to understand its associations with quality, scope, time and cost factors in healthcare projects. As the risk exposure increases, the quality of the service delivered decreases.

An important policy implication is risk assessment which is a measure of the probability of incurring this loss and the consequence of that loss. Policies should be formulated to maintain data to find everything that could go wrong in health service process.

Hospitals should be designed to provide good public service and also to satisfy individual consumer preferences. Incident reports should highlight time and place of incident, participating doctors and nurses and consequences. Only by recording the incidents and systematically documenting them will help the hospitals to identify the severity of the risk of cultural distance. The incident reports can be used to track and capture varied types of errors, identify those that happened due to lack of cultural competence, expose and punish malpractitioners, provide training in those sectors and at the same time help management to reward good workers based on their records. Within the medical profession, there are legal and cultural barriers to the disclosure of errors (Helmfeich, 2000, in Chavan, 2011).

Policy implications should point to the importance of having reliable data collection on these errors, in order to reduce the frequency and severity of adverse events. Lack of available data is a severe limitation.

Differences in cultural values and communication styles hinder the progress of a good relationship between patient and provider. Cultural differences can generate distance, and that task to bridge the distance has the potential to advance patient–provider interactions.

Policy implications suggest intervention strategies and the need for cultural competence education in medical and health curricula into medical schools and clinical practices.

Policy implication efforts need to be made to reduce the potential contribution of patient–provider relationships to disparities in healthcare delivery, through efforts of offering mandatory training and annual updating of training in diversity management, intercultural management and cultural competence to all providers and hospital staff which will address cultural and non-cultural barriers in patient–provider relationships (Saha et al., 2011).The policy implications suggest the need to understand the efficacy of cross-cultural competence and communication for both local and overseas trained doctors.

Policies should be directed at developing cultural competence through integration of cultural competence education in medical and health curricula into medical schools and clinical practices and through regularly updating cultural awareness through mandatory annual training workshops to improve their cultural knowledge and attitudes and be culturally competent practitioners. Cultural differences can create distance, and these efforts to bridge that distance have the potential to improve patient–provider interactions (Berlin and Fowkes, 1983; Saha et al., 2011).

Cultural and linguistic sensitive services and information, targeted to exact communities, are imperative in improving overall health. Policies should restructure health service and systems to facilitate culturally competent healthcare delivery and work with culturally diverse communities to culturally tailor interventions to improve the quality of care and patient satisfaction.

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