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Interculturality and cultural intelligence in an academic context: A report from university staff interacting with nursing students

Nematullah Shomoossi, Akbar Ahmadi Asor¹, Mohsen Kooshan², Mostafa Rad³

Abstract:

INTRODUCTION: The cultural diversity of ethnic groups in Iranian academic contexts highlights the importance of enhancing cultural awareness and minimizing cultural conflicts. Therefore, the present study aimed to investigate the intercultural intelligence of the university personnel in interacting with students.

MATERIALS AND METHODS: This cross-sectional study was a correlational research conducted on 136 employees in Sabzevar University of Medical Sciences, Iran. The participants were selected by randomized clustered sampling. The data on intercultural intelligence were collected using Earley and Ang's Questionnaire and were analyzed in SPSS using descriptive and inferential statistics.

RESULTS: Mean score of intercultural intelligence in the education-research staff, secretarial staff, and student-cultural staff was 41 ± 9 , 35.6 ± 8.3 , and 44.2 ± 7.7 , respectively. ANOVA showed a significant difference in the overall scores of intercultural intelligence across the three groups ($P = 0.001$); the scores of subsections were also statistically different, the student-cultural staff showing higher intelligence scores than the other groups. Furthermore, the overall intercultural intelligence scores varied significantly across the participants' educational levels so that the score of the staff with bachelor's degree was 37.8 ± 8.7 and those with master's degree was 45 ± 7.8 ($P = 0.01$), especially in their metacognitive and cognitive subsection scores.

CONCLUSION: The scores of intercultural intelligence were moderate to low in the staff of different working sections of the university. Moreover, the level of education shows impacts on intercultural encounters in this academic setting. The results highlight the need to develop programs in order to raise intercultural understanding in staff.

Keywords:

Cultural awareness, cultural intelligence, intercultural, university personnel

Introduction

Iran is a culturally diverse community, and the majority of the Iranian population is formed by the Persians (around 50%); the largest other ethnolinguistic groups consist of Azerbaijanis (16%–25%), Kurds (7%–10%), Lurs (7%), Mazandarani and Gilakis (7%), Arabs (2%–3%), Balochi (2%), and Turkmens (2%). However, according to

the 2011 country profile: Iran published by the Library of Congress, other minor groups accounting for about 1% of the population also inhabit this country.^[1] Many of these groups have been culturally embraced into the national culture in a way that their ethnic identity. However, variation in their cultural interaction is obvious in most formal and informal contexts including academic settings.^[2] This spreads over to their ways of living, thinking, traditions, lifestyles, and feelings and acts as well.^[3]

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Department of Medicine,
School of Medicine,
Sabzevar University
of Medical Sciences,
¹Department of
Occupational Hygiene,
School of Health,
Sabzevar University
of Medical Sciences,
²Department of Nursing,
School of Nursing and
Midwifery, Sabzevar
University of Medical
Sciences, ³Department of
Nursing, School of Nursing
and Midwifery, Iranian
Research Center on
Healthy Aging, Sabzevar
University of Medical
Sciences, Sabzevar, Iran

Address for correspondence:

Dr. Mostafa Rad,
Department of Nursing,
School of Nursing
and Midwifery, Iranian
Research Center on
Healthy Aging, Sabzevar
University of Medical
Sciences, Sabzevar, Iran.
E-mail: mostafarad633@yahoo.com

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In Iranian universities, a considerable number of international students are recruited due to high standards as well as low costs of education; accordingly, cultural understanding and intelligence may be logically expected from university employees; appropriate interaction with a culturally diverse audience can lead to higher recruitment and less attrition rates. Under the effects of globalization, interculturality is considered as a prerequisite of a healthy organization too.^[4] The cultural intelligence is basically defined as one's personal capability of acting in different cultural contexts.^[5] Such an intelligence may be considered as a new way of thought and practice, guiding managers and personnel to perform effectively in all cultural contexts. As a new dimension, cultural intelligence is also correlating with highly diversified workplaces. It allows people to recognize how others think and respond to behavioral models; consequently, intercultural barriers decline, and people gain management skills of cultural diversity.^[6] In short, it predisposes rivalry skills in the ultracomplex world of the third millennium. Therefore, people with low cultural intelligence will be unable to interact effectively with their clients from the same or different cultures.

In an academic context, the authorities' awareness of the cultural requirements gains importance in the admission and treatment of course applicants and prospective candidates, especially in an institution where applicants come from a culturally diverse context.^[4] Cultural awareness originates in an inner sense of the equality of cultures, an increased understanding of your own and other people's cultures, and a positive interest in how cultures both connect and differ.^[5] Cultural awareness encompasses the following three qualities: (1) awareness of one's own culturally induced behavior, (2) awareness of the culturally induced behavior of others, and (3) ability to explain one's own cultural standpoint.^[6] By acquiring intercultural awareness, more tolerant and less ethnocentric points of view would emerge, and a new identity more capable and more tolerant of cultural differences may start to develop.^[7]

Cultural intelligence has recently been raised in various managerial studies; the knowledge of cultural intelligence is defined as one's capability of accommodating diverse values, traditions and customs, and working in such contexts, which may be predictive of cultural adjustment, successful decision-making, and performance.^[8,9] The effect of cultural intelligence on management issues consists of far-fetched aspects, which are not yet completely known to researchers.^[10]

Studies show that cultural quotient is a consistent predictor of performance in multicultural settings.^[11] Therefore, interculturality as the interaction of people

from different cultures causes the understanding of another culture and a common understanding of one another's intentions and behaviors; this may appear difficult and sometimes problematic for senders and receivers of a message. Accordingly, cultural conflicts may occur as a result of misinterpretation, ethnocentrism, stereotyping, and prejudice.^[12] Preventing these conflicts, in a university setting, is possible if the awareness of one's own attitudes as well as sensitivity to intercultural differences is enhanced. Accordingly, developing cultural sensitivity does not mean that we need to lose or alter our own cultural identities; rather, we are expected to recognize cultural influences in interpreting behaviors and intentions. In this regard, the role of interculturality may highlight casting aside the host culture, adopting a rational acceptance of the cultural differences from the guest culture, although different cultures do share some universals.^[13]

Managers normally deal with a diversified set of tasks and require higher cultural intelligence in cases where such a diversity applies to employees from diverse backgrounds. However, the research in this regard has focused on its financial gains rather than its sociocultural outcomes. In the Iranian context of cultural management, novel and modern ways originating in research findings can contribute to its consistency and strength. Appropriate orientation and systematic mediation will interactively contribute to the strengthening of cultural understanding. One such contribution may come from a study on the university employees who interact with students from diverse cultural backgrounds. Therefore, the present study aimed to investigate the cultural intelligence of the university staff in interacting with students from various cultural backgrounds in 2017, in a major medical university in Iran.

Materials and Methods

The present study was a descriptive correlational study, intending to investigate the cultural intelligence of the university staff in three major sections (secretarial sections, education-research section, and student-cultural section), in Sabzevar University of Medical Sciences, Iran. Furthermore, the relationship between the four subsections of cultural intelligence and the working sections of the staff was investigated. The statistical population included all university staff from whom 136 participants were selected by randomized clustered sampling. The sample size was calculated using G*Power software, and according to studies with 95% confidence level, 80% test power, and effect size 0.15, 136 people were calculated. The inclusion criteria included, at least, having a 1-year experience and inclination to join the study. The data collection instruments included demographic information and Earley and Ang's Cultural

Intelligence Questionnaire. The demographic section contained information on participants' age, gender, experience, and education.

The Cultural Intelligence Questionnaire included 20 statements in four subsections: metacognitive (5 statements), cognitive (5 statements), motivational (5 statements), and behavioral (5 statements). Each statement varied from very little (1) to very high (5) in Likert scale. The intercultural intelligence scores ranged from 20 to 100.^[14] In the present study, the reliability of the questionnaire was calculated to be $\alpha = 0.85$ by Cronbach's alpha; for the content validity, 10 lecturers and professors in Sabzevar University of Medical Sciences, Iran, were asked to review the questionnaire; the content validity index was estimated to be around 0.83.

As for the ethical considerations, this article is the result of a research at Sabzevar University of Medical Sciences with the ethics committee code IR.MEDSAB.REC.1394.46. The researcher was then introduced to the Educational Deputy of Sabzevar University of Medical Sciences and relevant working sections; the participants were informed about the purposes of the research and they filled out the questionnaires. Full respect for the principles of ethics and trust in the use of all resources and accurate publication of results research are observed.

The obtained data were analyzed in SPSS version 21 (Developed by IBM cooperation, Armonk, NY, United States of America). Descriptive statistics including mean and standard deviation were used for investigating differences of demographic characteristics such as age and experiences. Furthermore, one-way ANOVA was used for investigating the relationship between the main variables, with the confidence interval 95%.

Results

A total of 136 employees participated in the study in which 54 were secretarial staff (39.7%), 40 education-research staff (29.4%), and 42 employees from the student-cultural section (30.9%). Forty-two participants were male (30.9%) and the rest were female (69.1%). Their working experiences ranged from 1 to 26 years in their respective sections, with an average of 9.22 years; also, their age ranged from 22 to 55 years, with a mean of 32.8 years. As for their education, 40 participants held master's degrees (29.4%), 92 held bachelor's degrees (67.66%), and 4 held associate degrees (2.94%).

Groups of participants and intercultural intelligence scores

Based on one-way ANOVA, a significant difference was observed in the overall intercultural intelligence scores

across the three groups of participants ($P = 0.001$). The scores of intercultural subsections were also statistically different across the groups; one-way ANOVA showed a significant difference in the mean scores of subsections across the three groups: metacognitive ($P = 0.002$), cognitive ($P = 0.001$), motivational ($P = 0.032$), and behavioral (0.004) [Table 1].

Furthermore, paired comparisons using Tukey's HSD (honestly significant difference) test indicated that the employees in the education-research section differed significantly (mean difference: 5.67 ± 1.73) from the secretarial employees as regards their overall intercultural intelligence scores ($P = 0.004$). The intercultural intelligence scores of the employees in the student-cultural section were also significantly different (mean difference: -8.6 ± 1.7) from those in the secretarial section ($P = 0.000$).

Focusing on the metacognitive subsection, HSD Tukey test revealed a significant difference (mean difference: 1.58 ± 0.56) across the three groups ($P = 0.015$); in paired comparisons, however, there was no significant difference between the education-research group and the student-cultural group ($P > 0.05$). For the same subsection, the other two groups (secretarial and student-cultural) showed a significant difference (1.77 ± 0.55) ($P = 0.005$).

In regard with the cognitive subsection, HSD Tukey test showed a significant difference (mean difference: 2.76 ± 1) between the participants from education-research and secretarial sections ($P = 0.018$). Similarly, a significant difference (mean difference: -3.43 ± 0.99) was observed between the student-cultural and secretarial working sections ($P = 0.002$) [Table 1].

As for the motivational subsection, HSD Tukey test showed a significant difference (mean difference: -1.33 ± 0.51) between the participants from student-cultural and secretarial sections ($P = 0.27$). A similarly significant difference in the behavioral dimension (mean difference: 2.05 ± 0.6) was observed between the student-cultural and secretarial sections ($P = 0.003$).

Educational levels and scores of the intercultural intelligence

One-way ANOVA indicated that the overall intercultural intelligence scores varied significantly across the participants' educational levels, i.e., those with associate, bachelor's, and master's degrees of education ($P = 0.001$). As for the subsections of intercultural intelligence, participants' metacognitive scores ($P = 0.001$) and cognitive scores ($P = 0.001$) varied significantly with their levels of education. However, differences of the two groups' motivational ($P = 0.137$)

Table 1: Overall and subsection scores of intercultural intelligence across the groups

Working sections	Education-research section		Secretarial section		Student-cultural section		ANOVA		
	Mean±SD	n	Mean±SD	n	Mean±SD	n	df	F	P
Overall score and subsection scores									
Metacognitive dimension	10.95±2.34	40	9.37±3.1	54	11.1±2.8	42	2	6.4	0.002
Cognitive dimension	12.8±4.9	40	10±5	54	13.5±4.3	42	2	7	0.001
Motivational dimension	6.1±2.4	40	5.3±2.6	54	6.3±2.4	42	2	3.5	0.032
Behavioral dimension	11.4±2.5	40	10.8±3.1	54	10.8±3.1	42	2	5.86	0.004
Overall intercultural intelligence	41±9	40	35.6±8.3	54	44.2±7.7	42	2	13.5	0.001

SD=Standard deviation

Table 2: Scores of intercultural intelligence across educational levels

Levels of education	Associate degree		Bachelor's degree		Master's degree		Total		ANOVA		
	Mean±SD	n	Mean±SD	n	Mean±SD	n	Mean±SD	n	df	F	P
Overall score and subsection scores											
Metacognitive dimension	12±0.75	4	9.80±2.8	92	11.7±2.4	40	-1.9±0.5	136	2	-3.7	0.001
Cognitive dimension	15.5±1.2	4	10.9±4.8	92	14.2±4.7	40	-3.3±0.9	136	2	-3.66	0.001
Motivational dimension	6.6±0.37	4	5.7±2.5	92	6.6±2.5	40	-0.94±0.47	136	2	-2	0.137
Behavioral dimension	12.45±0.85	4	11.3±3	92	12.4±4	40	-1.1±0.57	136	2	-1.99	0.098
Overall intercultural intelligence	45.05±3.17	4	37.8±8.7	92	45±7.8	40	-7.2±1.6	136	2	-4.5	0.001

SD=Standard deviation

and behavioral scores ($P = 0.098$) were not significant [Table 2].

Paired comparisons using HSD Tukey test showed a significant difference (mean difference: -7.2 ± 1.6) between the overall scores of intercultural intelligence across the participants' levels of education ($P = 0.001$). Furthermore, their metacognitive ($P = 0.001$) and cognitive ($P = 0.001$) scores differed significantly (mean differences: -1.97 ± 0.5 and -3.5 ± 0.9 , respectively).

As for other relationships, however, the Student's *t*-test showed no significant differences across the participants' gender and mean scores of intercultural subsections (i.e., metacognitive, cognitive, motivational, and behavioral subsections) ($P > 0.05$). Furthermore, using Pearson correlation coefficient, no significant relationship was observed between the participants' intercultural intelligence scores, its subsection scores, and their age ($P > 0.05$). To determine the relationship between intercultural intelligence scores and the participants' age, their age range was divided into different age groups; however, ANOVA showed no significant relationship between age groups and mean scores of the subsections ($P > 0.05$). Furthermore, Pearson correlation coefficient showed no significant correlation between years of working experience and mean scores of subsections (i.e., metacognitive, cognitive, motivational, and behavioral sections) ($P > 0.05$).

Discussion

The present study was conducted in a major medical university in Sabzevar, Iran, aiming to investigate the intercultural intelligence of three groups of

university staff (i.e., working in the secretarial section, education-research section, and student-cultural section) interacting with students from various cultural backgrounds in 2017. The results showed that the participants' gender, age, and years of working experience had no significant correlation with the overall scores of intercultural intelligence. However, significant differences were observed in two major subsections which will be discussed below:

First, the intercultural intelligence score was observed to be moderate to low in different working sections of the university. The results are not consistent with Tamannaefar and Hesampour in which they indicated that intercultural intelligence in Iran is moderate to high. Perhaps, the reason is the difference between the research environments (Kashan University of Medical Sciences).^[15] Due to the fact that a significant part of the skills and capabilities of cultural intelligence is acquired by education, organizations should have had special emphasis on training in staff cultural intelligence development.^[16] The overall scores of intercultural intelligence were also different across the three groups; the scores of subsections were also statistically different, the student-cultural staff showing higher intelligence scores than the other two groups. Employees in the student-cultural section were mainly engaged in noninstructional needs of the students, for example, extracurricular activities, sports, loans, counseling, dining, housing, etc., Therefore, the frequency of exposure to cultural encounters urges the staff to an understanding of different cultural intentions and behaviors in the long run. Personnel in the other two sections have minimal encounters and may require promotional training in intercultural intelligence as recommended

by Al-Agha.^[17] Strategies for promoting intercultural awareness in educational settings are also suggested by Rahimi *et al.*^[18] Furthermore, Zhu recommends empathy as a short-term promotional strategy; he further contends that intercultural understanding can fail due to stereotypes, prejudice, and lack of cultural sensitivity.^[19]

Second, the overall intercultural intelligence scores varied significantly across the participants' educational levels, i.e., those holding bachelor's and master's degrees, especially in their metacognitive and cognitive scores. Apparently, higher levels of education provide opportunities to reflect upon intercultural development through exposure to a culturally different professional setting; development through exposure to a culturally different professional setting. Therefore, understanding the cultural complexity may be achieved in higher education^[17] as well as in preservice and in-service training.^[20]

As Narayanasamy *et al.* (2005) contended, much practice-based nursing research is conceived to be in need of transcultural trainings.^[21] Advisably, cultural instruction is among the basic needs for university staff since they are interacting with a diverse community of students from various ethnolinguistic backgrounds. Most scholars believe that stereotypical viewpoints prove destructive in understanding different ways of living and thinking. Specifically, an academic setting is conceived to help participants enhance their awareness of such differences and to produce open-minded graduates who are aware of cultural similarities and differences of various ethnic or language backgrounds in cross-cultural training programs; the need for addressing clients' second language deficits is also highlighted.^[22] Avoiding unidirectional dominance can contribute to fostering communications within diversity. Indirect ways such as studying foreign languages, world literature, or history of other ethnicities may be recommended too. These may be instructed within academic environments to raise mutual understanding and to develop sensitivity to students' cultures.

This, the first study, is reported of its own kind on assessment of the intercultural intelligence of the university personnel in interacting with students in the Iranian medical university. Identifying intercultural intelligence and its influential factors among different parts of the university staff will enable managers to set programs to promote interactions with students from different ethnic and international backgrounds.

One of the limitations of this study was study on a university staff in eastern Iran, which according to the common culture in this region, the results of the study can be generalized to the same area.

The present study raised a sensitivity to the human relationships in cultural encounters in the culturally diverse context of Iranian universities, and the authors hope that this can initiate further programs for faculty and staff empowerment in the future. The study was designed to reflect a picture of what goes on in the minds of university staff in dealing with students from various cultural backgrounds. However, the study was limited to the questionnaire responses, without in-depth interviews which may be attended in future research and studies. Strategies for promoting the cultural and intercultural awareness in academic contexts are suggested for both short-term and long-term plans. Finally, we recommend similar studies to be conducted on the intercultural interactions of faculty members with students, enriched with qualitative in-depth interviews, or video-recorded observations.

Conclusion

To sum up, the effects of the working section and the level of education in academic settings were the significant points for effective intercultural encounters. Intercultural intelligence was moderate to low in different working sections of the university. The results stressed the role of educational level and the demands of the working sections in understanding different cultural backgrounds; they also highlight the need for developing interculturality in university staff.

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Conflicts of interest

There are no conflicts of interest.

References

1. Library of Congress. Country Profile: Iran (PDF). Federal Research Division; 2011. Available from: <https://www.loc.gov/rr/frd/cs/profiles/Iran.pdf>. [Last accessed on 2019 Feb 09].
2. Bückler JJ, Furrer O, Poutsma E, Buyens D. The impact of cultural intelligence on communication effectiveness, job satisfaction and anxiety for Chinese host country managers working for foreign multinationals. *Int J Hum Resour Manage* 2014;25:2068-87.
3. Chao MM, Takeuchi R, Farh JL. Enhancing cultural intelligence: The roles of implicit culture beliefs and adjustment. *J Pers Psychol* 2017;70:257-92.
4. Eskandari F, Samadi A. Investigating the effect of cultural intelligence on organizational health: Case study of managers in Malayer, Iran. *J Manage Cult* 2016;14:809-28.

5. Rad M, Shomoossi N, Rakhshani MH, Sabzevari MT. Psychological capital and academic burnout in students of clinical majors in Iran. *Acta Fac Med Naissensis* 2017;34:311-9.
6. Groves KS, Feyerherm A, Gu M. Examining cultural intelligence and cross-cultural negotiation effectiveness. *J Manag Educ* 2015;39:209-43.
7. Bowman NA, Denson N, Park JJ. Racial/cultural awareness workshops and post-college civic engagement: A propensity score matching approach. *Am Educ Res J* 2016;53:1556-87.
8. Ott DL, Michailova S. Cultural intelligence: A review and new research avenues. *Indian J Med Res* 2018;20:99-119.
9. Alaei S, Mirmohammadi M. Investigating the role and importance of cultural intelligence in cultural management. *Cult Eng* 2013;77:169-99.
10. Alaei S, Mirmohammadi M. Investigating the role and importance of cultural intelligence in cultural management. *Cult Eng* 2013;77:169-99.
11. Baltaci A. Relations between prejudice, cultural intelligence and level of entrepreneurship: A study of school principals. *IEJEE* 2017;9:645-66. Available from: <https://www.iejee.com/index.php/IEJEE/article/view/181>. [Last accessed on 2019 Jan 28].
12. Forss SI, Willems E, Call J, van Schaik CP. Cognitive differences between orang-utan species: A test of the cultural intelligence hypothesis. *Sci Rep* 2016;6:30516.
13. Dervin F. Towards post-intercultural teacher education: Analysing 'extreme' intercultural dialogue to reconstruct interculturality. *Eur J Teach Edu* 2015;38:71-86.
14. Earley PC, Ang S. *Cultural Intelligence: Individual Interactions Across Cultures*. Stanford: Stanford University Press; 2003.
15. Tamannaefar M, Hesampour F. The relationship between cultural and emotional intelligence with students' adjustment to university. *Hum Resour Manage* 2016;3:1-3. Available from: <http://www.iaiest.com/dl/journals/6-%20IAJ%20of%20Organizational%20Behavior%20and%20Human%20Resource%20Management/v3-i9-sep2016/paper1.pdf>. [Last accessed on 2019 Jan 28].
16. Ang S, Rockstuhl T, Tan ML. Cultural intelligence and competencies. *Int Encyclopedia Soc Behav Sci* 2015;2:433-9. Available from: http://www.soonang.com/wp-content/uploads/2017/04/2015-Ang-et-al-IIEncyclopedia-of-he-Social-and-Behavioral-Sciences_CI-and-Competencies.pdf. [Last accessed on 2019 Jan 28].
17. Ghorbani M, Kouhestani HA. Study of the relationship between cultural intelligence and organizational effectiveness in Esfarrayen industrial complex of Iran. *Afr J Bus Manage* 2012;6:1491-8.
18. Rahimi M, Barkat G, Atari Y. Study of relationship between cultural intelligence and decision making styles of high school principals in Izeh County. *Int J Sci Res Publ* 2014;4:1-5. Available from: <http://www.ijsrp.org/research-paper-0614/ijsrp-p3044.pdf>. [Last accessed on 2019 Feb 09].
19. Zhu H. From Intercultural Awareness to Intercultural Empathy. *Engl Lang Teach* 2011;4:116-9. Available from: <https://files.eric.ed.gov/fulltext/EJ1080436.pdf>. [Last accessed on 2019 Feb 09].
20. Walkington J. Enhancing multicultural perspectives in the formation of preservice teachers through immersion in a culturally different context. *Multicult Educ Rev* 2015;7:140-54.
21. Narayanasamy A, White E. A review of transcultural nursing. *Nurs Educ Today* 2005;25:102-11.
22. Gasiorek J, van de Poel K. Language-specific skills in intercultural healthcare communication: Comparing perceived preparedness and skills in nurses' first and second languages. *Nurse Educ Today* 2018;61:54-9.