INFLUENCE OF PERSONAL CHARACTERISTICS ON CULTURAL INTELLIGENCE AMONG UNDER GRADUATE STUDENTS

1 Arun Devaraj, 2 Dr Irshad Naseer

1Assistant Director,   2 Professor & HOD

1 Presidency PreUniversity College, Mangalore, Karnataka state

Abstract:

Cultural intelligence is the ability of a person to interact effectively in multicultural situation. The role that cultural intelligence plays as an enabling factor for better cross-cultural adjustment. A significant difference was expected in the academic performance of the students between high and low level of cultural adjustment. Conducting the present study to help reduce friction among students in the institutions.

Bangalore district divided into four segments for the study. Further, two colleges from each of four segments focusing under graduation programme on random sampling basis as a representation for research study. Descriptive survey method of research used for the study. Finally, 50 each from 8 colleges accounting total sample as 400 under graduate students for the study.

Data base covering of two components a) Eight characteristics on Socio-economic status of respondents.

Cultural intelligence tool accountable with 20 statements on five point Likert scale, ranging from 1-5 scores from strongly disagree to strongly agree with four concepts, Meta Cognitive (4 statements), Cognitive (6 statements), Motivational (5 statements) and Behavioural (5 statements).

The minimum score for the cross cultural adjustment as 20 and maximum score as 100. Statistical measures used are number, percent, mean and standard deviation. Under inferential statistical test applied are Chi-square test to measure the association between selected socio economic characteristics and Cross cultural adjustment and statistical F-test for comparing means of different aspects of cultural intelligence.

Majority of the respondents (46.0 %) found as 18 years of age, boys predominant (56.0 %), belongs to 1st year PUC and language background as English (90.0%) followed by Hindi (82.0 %). Further, second ordinal position with majority (48.0 %) and number of sibling being as one (40.0 %). Academic performance found as 61-72 marks noticed with 40.0 percent and higher respondents emerging from home (56.0 %) as residence.

Regarding residential background majority (82.0 %) emerged from urban family background and religion being Hindu (58.0 %) respondents.

The result indicate that 40.0 percent of respondents possess with adequate cross cultural adjustment level as compared to remaining 60.0 percent respondents noticed with moderate cultural intelligence level.

Regarding Mata cognitive (56.0 %), cognitive aspects (16.0 %) and Motivation aspect (48.0 %) showed adequate level as compared to Behavior aspects (38.0%).

There exists significant difference between mean response on different aspects of cultural intelligence scores among respondents (F=5.47*, p<0.05).

The Association between age group ($\chi2$ = 9.28*), gender ($\chi2$ = 4.57*) and class studying ($\chi2$ = 86.17*) on cross cultural adjustment level among under graduate students found to statistically significant (p<0.05).

INTRODUCTION:

Cultural Intelligence, as redefined in recent literature, is an individual's ability to effectively understand, interpret, and respond to culturally diverse settings (Ng, Van Dyne, and Ang, 2016). Christopher Earley and Soon Ang were the first to introduce the concept of 'Cultural Intelligence'. The concept was further developed by David Livermore in the book, 'Leading with cultural Intelligence'. This concept has evolved to emphasize not only cognitive understanding but also emotional and physical adaptation to cultural differences. The concept of cultural intelligence has surfaced in scholarly literature and has garnered the interest of scholars. According to Thomas and Inkson (2004), cultural intelligence is a complex talent that includes cultural knowledge, mindfulness, and a range of behavioural abilities. Cultural intelligence is the ability of an individual to effectively adjust and adapt to different cultural environments. It involves the use of intelligent and adaptive actions that are aligned with the values and beliefs of a specific community or culture (Earley and Ang, 2003).

The relevance of Cultural Intelligence is particularly pronounced in academic settings, where undergraduate students frequently interact with peers from diverse cultural backgrounds.

Cultural intelligence is an important skill of effective leadership within the intercultural environment (Ziyatdinova, 2017). Azevedo (2018) concluded that Cultural quotient (CQ) provides many benefits to both individuals and teams in the form of psychological outcomes, behavioural outcomes and performance outcomes.

Staying in a foreign country has several beneficial effects on individuals, as it improves their understanding of different cultures and their self-awareness (Newsome & Cooper, 2016). Researchers have emphasized the significance of overseas students cultivating cultural intelligence in a multicultural society like India.

Metacognitive cultural intelligence refers to an individual's ability to effectively utilize their cultural knowledge in various cultural contexts (Ott and Michailova, 2016). There is a clear and beneficial correlation between behavioural cultural intelligence and psychological adaptation. These findings unequivocally emphasize the significance of behavioural cultural intelligence in a foreign setting, as it facilitates the successful psychological adjustment of international students (Rana *et al.,* 2020).

It is essential to understand the motivational, cognitive, metacognitive, and contextual elements of learning in order to enhance and cultivate students' learning techniques within a particular educational setting and subject areaIn response to the current trend of students and teachers frequently relocating to different countries and worldwide institutions for educational and personal growth, it is imperative to thoroughly examine the various learning methods employed by undergraduate students in different fields and settings. The present study was conducted on Cultural Intelligence among under graduate students in Bangalore.

METHODOLOGY:

Study area consists of Bangalore district situated in Karnataka state. The location is geographically divided into four sectors, Bangalore north, Bangalore south, Bangalore East and Anekal.

Totally eight colleges from the above region selected for research study.

Sample size comprising of 50 students from each of the college with 400 students studying in under graduation.

Based on the thorough review of literature structured, questionnaire prepared covering

    i)   Socio-economic status of students and

    ii)   Standard tool to measure Cultural Intelligence. Survey method of descriptive research used for the current study.

       Social Economic Status comprising of variables age, gender, class, language known, ordinal position, siblings, academic performance, place of residence, residence background and religion.

       Cultural Intelligence (CI) is the ability to interact effectively in multicultural situation has been labelled as Cultural Intelligence measured with 20 statements. It has four concepts Meta Cognitive (4 statements), Cognitive (6 statements), Motivational (5 statements) and Behavioural (5 statements).

       Each statement rated on a 5-point Likert scale, ranging from 1-5 scores i.e., strongly disagree (score-1), disagree (score-2), undecided (score-3), agree (score-4) and strongly agree (score-5). The minimum score for the cultural intelligence as 20 and maximum score as 100.

Statistical Tools and techniques used are

    a)   Descriptive statistics: Number, Percentage, Mean and Standard deviation worked out for the background information

    b)   Inferential statistics: Chi-square test to measure the association between selected personal characteristics and Cultural intelligence level. F-test for comparing means of different aspects on Cultural intelligence.

RESULTS:

Section-1: Personal characteristics

TABLE – 1

Classification of Respondents by Age group and Gender

N=400

Characteristics	Category	Respondents	
		Number	Percent
Age group	18 years	184	46.0
	19 years	136	34.0
	20 years	80	20.0
Gender	Boys	224	56.0
	Girls	176	44.0
Total		**400**	**100.0**

      Table-1 and Figure -1 depicts the classification of respondents by age group and Gender. The result indicates that higher respondents (46.0 %) found in the age group of 18 years followed by 19 years (34.0 %) and 20 years of age group (20.0 %).

       Further, regarding gender it is evident that boys found on majority (56.0%) as compared to representation of girls (44.0%).
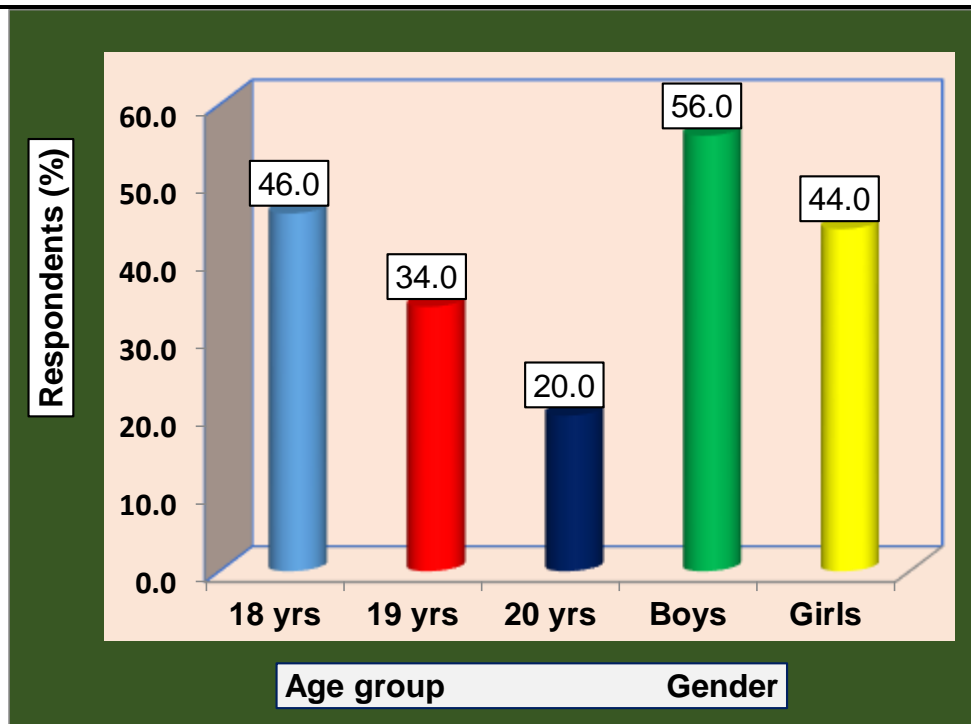
Figure . 1 : Respondents by Age group and Gender

TABLE – 2

Classification of Respondents by Class studying and Language known

N=400

Characteristics	Category	Respondents	
		Number	Percent
Class studying (PUC)	1st year	222	55.5
	2nd year	178	44.5
Language known @	Kannada	100	25.0
	English	360	90.0
	Hindi	328	82.0
	Others	144	36.0

@ Multiple Response

Classification of respondents by class studying and language known indicated in Table-2. It is seen that majority of respondents noticed (55.5%) studying in 1st year PUC as against remaining 44.5 percent studying in 2nd year PUC (Figure-2).

Regarding languages known it is seen from the results that majority (90.0%) with English followed by Hindi (82.0%), followed by other (36.0%) and Kannada language (25.0%).
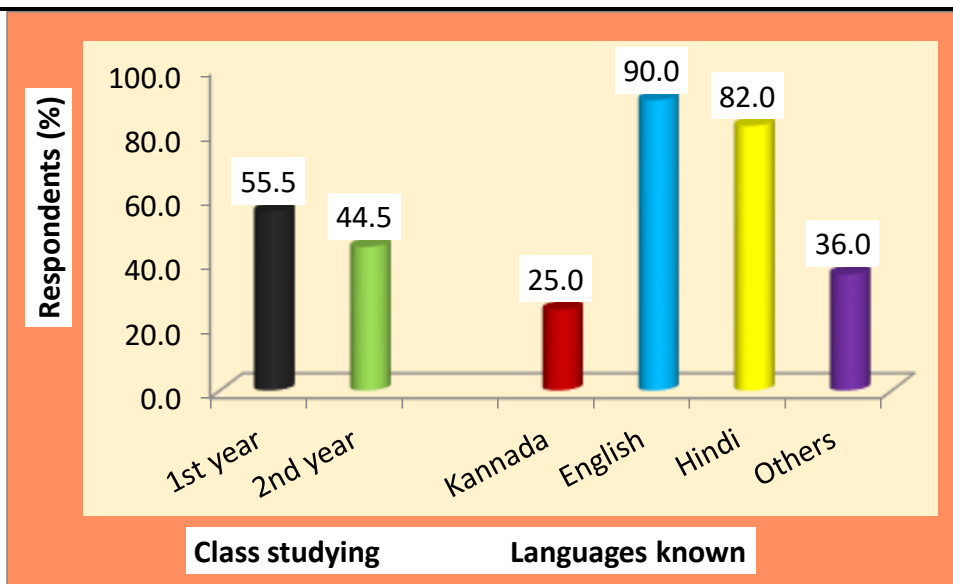
Figure . 2 : Respondents by Class studying and Language known

TABLE – 3

Classification of Respondents by Ordinal position and Number of Siblings

N=400

Characteristics	Category	Respondents	
		Number	Percent
Ordinal position	First	160	40.0
	Second	192	48.0
	Third	48	12.0
Number of Siblings	No	88	22.0
	One	160	40.0
	Two	104	26.0
	Three	48	12.0
Total		**400**	**100.0**

Table-3 and Figure-3 depicts the classification of respondents by ordinal position and number of siblings. It is seen from the data that higher respondent noticed as second ordinal position (48.0%) followed by first ordinal position (40.0%) and third (12.0%).

Result on number of siblings shows that higher response (40.0%) showed with one siblings followed by two siblings (26.0%) and no siblings (22.0%).
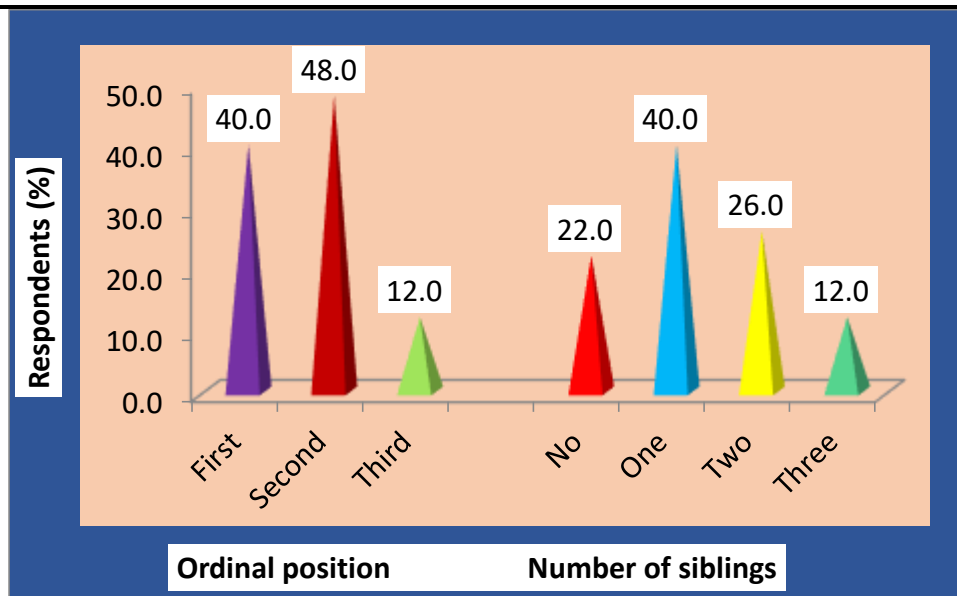
Figure . 3 : Respondents by Ordinal position and Number of Siblings

TABLE – 4

Academic performance, Place of residence and Mode of Transport

N=400

Characteristics	Category	Respondents	
		Number	Percent
Previous academic performance (%)	61-72	160	40.0
	73-80	152	38.0
	81+	88	22.0
Place of residence	Home	224	56.0
	Hostel	176	44.0
Total		**400**	**100.0**

Classification of respondents by academic performance, place of residence and mode of transport indicated in Table-4. The respondents with academic performance noticed with 61-72 % found with 40.0 respondents followed by 38.0 percent with 73-80 percent and 81+ (22.0%). Regarding place of residence majority of respondents (56.0%) residing in home compared to hostel (44.0%).

Rajesh and Sudeshna (2021) studied on Cultural intelligence as a correlated of Academic performance among the students of masters in library and information science with three universities.

TABLE – 5

Classification of Respondents by Residential background and Religion

N=400

Characteristics	Category	Respondents	
		Number	Percent
Residential background	Rural	40	10.0
	Urban	328	82.0
	Semi urban	32	8.0
Religion	Hindu	232	58.0
	Muslim	136	34.0
	Christian	32	8.0
Total		**400**	**100.0**

Classification of respondents by residential background and religion snow in Table-5. It is seen from the data that majority (82.0%) found with residential background with urban as compared to rural (10.0%) and semi urban area (8.0%). With respect to religion higher respondents (58.0%) noticed with Hindu followed by Muslim (34.0%) and meager response being Christian (8.0%).

Section – 2 : Overall and Aspect wise Cultural Intelligence Level among students

TABLE – 6

Response on Overall Cultural Intelligence Level among Undergraduate students

Cultural Intelligence Level	Category	Respondents	
		Number	Percent
Inadequate	≤ 50 % Score	0	0.0
Moderate	51-75 % Score	240	60.0
Adequate	> 75 % Score	160	40.0
Total		**400**	**100.0**

Response on overall cultural intelligence level among under graduate students indicated in Table-9 and Figure-9. The result indicates that 60.0 percent of respondents possess with moderate Cultural Intelligence Level as compared to remaining 40.0 percent respondents noticed with adequate cultural intelligence level. It is interesting to note that none of the respondents noticed with inadequate level of cultural intelligence level.

Lada and James (2016) researched on developing students on cultural intelligence, the activity led to a perceived increase in cultural knowledge, motivation, and confidence in the students' ability to communicate with people from other cultures.

TABLE – 7

Aspect wise Respondent on Cultural Intelligence level among Undergraduate students

No.	Cultural Intelligence Aspects	Category	Respondents		χ^2 Test
			Number	Percent	
I	Mata cognitive Level	Moderate	176	44.0	
		Adequate	224	56.0	150.48**
II	Cognitive level	Moderate	336	84.0	
		Adequate	64	16.0	
III	Motivation level	Moderate	208	52.0	
		Adequate	192	48.0	
IV	Behavior level	Moderate	248	62.0	
		Adequate	152	38.0	
Aspect wise Total			**400**	**100.0**	

** Significant at 1% level, χ^2 (0.05, 3df) = 7.815

Table-7 indicates aspect wise respondent on cultural intelligence level among under graduate students. The findings show that 56.0 percent of respondents showed adequate Metacognitive level as compared to remaining 44.0 percent specify moderate level. Regarding cognitive aspect.

Majority (84.0 %) of the respondents noticed with moderate level followed by 16.0 percent respectively showed inadequate and adequate cognitive level of respondents. With respect to motivation aspect higher respondents (52.0 %) showed moderate level as compared to 48.0 percent indicates adequate motivational level. On the behavior aspect majority (62.0%) specify moderate level as against remaining 38.0 percent mention adequate behavior level of respondents. The difference in respondents measured levels of four different aspects of cultural intelligence found to be statistically significant ($\chi^2 = 150.48**$, $p<0.01$).Evan and Wooda (2015) in their study, tours have been seen to positively improve metacognitive, cognitive and motivational cultural quotient among students.

TABLE -8

Response on Aspect wise Mean Cultural Intelligence scores among Undergraduate students

N=400

No.	Cultural Intelligence Aspects	State ments	Max. Score	Scores			
				Mean	SD	Mean (%)	SD (%)
I	Mata cognitive	4	20	15.30	2.70	76.5	13.5
II	Cognitive	6	30	19.26	4.09	64.2	13.6
III	Motivation	5	25	19.56	2.95	78.2	11.8
IV	Behavior	5	25	18.68	2.47	74.7	9.9
	Combined	**20**	**100**	**72.80**	**7.83**	**75.8**	**7.8**
	F-Test			**5.47***			

* Significant at 5% level,

Response on aspect wise mean cultural intelligence scores among under graduate students are established in Table-8 and Figure-4. Mean response of 76.5 percent observed on meta cognitive aspect as compared to 64.2 percent response on cognitive aspect, motivation aspect specifies mean response of 78.2 percent. Further, behavior aspect demonstrates as 74.7 percent. However, the over mean cultural intelligence scores found to be 75.8 percent.

The mean response scores of four aspects of cultural intelligence subjected for statistical test. The result indicates that there exists statistical significant difference between mean response on different aspects of cultural intelligence scores (F=5.47*, $p<0.05$).
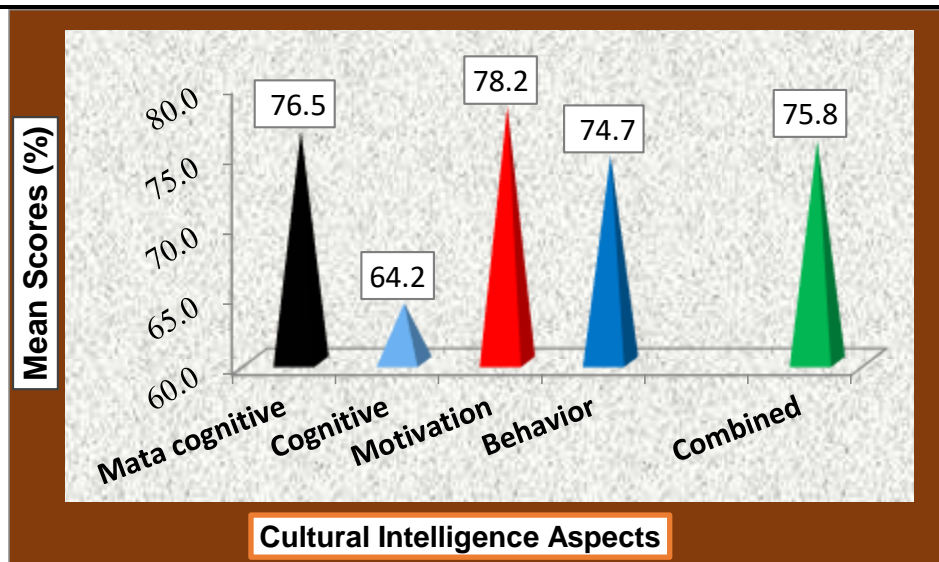
Figure . 4 : Response on Aspect wise Mean Cultural Intelligence scores among Under graduate students

Presbitero (2016) stated that students' cultural intelligence can reduce, lessen, or minimize cultural shock. Peterson (2017) mentioned the importance of intercultural understanding and education, i.e. the concept of Cultural Intelligence. It states how cultural intelligence affects the working environment in multinational corporations

Section – 3 : Association between Personal characteristics and Cultural Intelligence Level among students

TABLE – 9

Association between Age, Gender and Class studying on Cultural Intelligence Level among Undergraduate students

N=400

Demographic Variables	Category	Sample	Cultural Intelligence Level				χ^2 Value	P Value
			Moderate		Adequate			
			N	%	N	%		
Age group	18 years	184	96	52.2	88	47.8	9.28*	P<0.05 (5.991)
	19 years	136	88	64.7	48	35.3		
	20 years	80	56	70.0	24	30.0		
Gender	Boys	224	124	55.4	110	44.6	4.57*	P<0.05 (3.841)
	Girls	176	116	65.9	60	34.1		
Class studying	1st year	222	88	39.6	134	60.4	86.17 *	P<0.05 (3.841)
	2nd year	178	152	85.4	26	14.6		
Combined		**400**	**240**	**60.0**	**160**	**40.0**		

* Significant at 5% Level,   Note : Figures in the parenthesis indicate Table value

The association between age, gender and class studying on cultural intelligence level among under graduate students depicted in Table-9.

It is evident from the research result that 47.8 percent of respondents with 18 years possess with adequate cultural intelligence level as compared to 19 years (35.3 %) and 20 years (30.0 %).

Regarding gender 44.6 percent of boys found with adequate cultural intelligence level as compared to girls (34.1 %). Ngonyama (2020) cross-cultural adjustment experiences of academic expatriates in some South African universities: Academic expatriates experience general and interaction adjustment

challenges associated with the use of local languages and understanding of local culture, nevertheless female expatriates were found to be better adjusted in interaction and general adjustment as compared to the male counterparts.

With respect to class studying, students of 60.4 percent with 1st year noticed with higher adequate cultural intelligence level as compared to students of studying in 2nd year under graduate (34.1 %).

Further, the association between age group ($\chi2 = 9.28*$), gender ($\chi2 = 4.57*$) and class studying ($\chi2 = 81.17*$) on cultural intelligence level among under graduate students found to statistically significant ($p<0.05$).

Atoum (2016) in the study at Jordan, showed that there were no statistical differences in the cultural intelligence scores of all subjects based on residence.

Irma *et al.,* (2021) studied and come out with conclusion that the student's cultural intelligence had a positive relationship with the low culture shock.

Conclusion:

The present study findings emphasize and revealed that the well-coordinated and appropriately planned effort on the part of the concerned authorities for enhancing the cultural intelligence of the students admitted in their institutions in order to ensure better academic achievement and adjustment to the cross cultural situations.

References:

1. Atoum, A. (2016). Cultural Intelligence among Jordanian University Students. *International Journal of Education and Training*, *2*(1), 1–9.

2. Azevedo, A. (2018). Cultural intelligence: Key benefits to individuals, teams, and organizations. *Ameri- can Journal of Economics and Business Administration*, *10*(1), 52-56. https://doi.org/10.3844/ajebasp.2018.52.56

3. Earley, P. C., & Ang, S. (2003). Cultural intelligence: Individual interactions across cultures. Palo Alto, CA: Stanford University Press

4. Evan, D., and Wooda, H. Y. (2015). Short-term cross-cultural study tours: impact on cultural intelligence. *The International Journal of Human Resource Management*, 558-570.

5. Irman, Elfiondri and Oslan Amril (2021). Students Culture shock and Cultural intelligence: The case of International Internship students on Japan. *International Journal of Research and Innovation in Social Science,* 5(7), 166-170.

6. Lada Helen Kurpis and James Hunter (2017). Developing student's cultural intelligence through an experiential learning activity: A Cross-Cultural consumer Behavior interview. *Journal of Marketing Education*, 39(1), 30-46.

7. Newsome, L. K., & Cooper, P. (2016). International students' cultural and social experiences in a British university: 'Such a hard life (it) is here'. *Journal of International Students*, *6*(1), 195–215.

8. Ngonyama. T. Ndou (2020). A Cross-cultural adjustment experiences of Academic expatriates in some South African universities: the case of kwazulu-natal, *South African Journal of Higher Education,* 34, 251-268.

9. Ng, K. Y., Van Dyne, L., and Ang, S. (2016). Cultural Intelligence: A Review, Reflections,and Recommendations for Future Research. Journal of International Business Studies,47(4), 221-258.

10. Ott, D. L., & Michailova, S. (2016). Cultural intelligence: A review and new research avenues. *International Journal of Management Reviews*, 1–21.

11. Peterson (2017) *The Elusive Cultural Chameleon: Cultural Intelligence as a New Approach to Intercultural Training for the Global Manager*. Retrieved from journals.aom.org: https://doi.org/10.5465/amle.2004.12436826

12. Presbitero, A. (2016). It's not all about language ability: motivational cultural intelligence matters in call center performance. *International Journal of Human Resource Management*, 1-16.

13. Rajesh Chutia and Sudeshna Nath (2021). Cultural Intelligence as a Correlate of Academic Performance among the students of Masters in Library and Information science. *Library Philosophy and Practice*, 5381.

14. Rana, M., Bhasin, J. and Mushtaq, S., 2020. Measurement of cultural intelligence and its impact on psychological adaptation of international students in India. *Vision*, *24*(4), pp.452-459.

15. Thomas, D.C. & Inkson, K., (2004). Cultural intelligence; People skills for Global Business. San Francisco, Berret-Koehler

16. Thomson, G., Rosenthal, D., & Russell, J. (2006). Cultural stress among international students at an Australian university. In *Australian International Education Conference*, 10,1–8.

17. Ziyatdinova, E. (2017). The role of cultural intelligence from the perspective of leader. A*RCADA green Thesis*, 1-58. Retrieved from https://www.theseus.fi/bitstream/handle/10024/130322/Elvira Ziyatdinova thesis MAY, 2017 Arcada.pdf?sequence=1