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# **Cultural Intelligence as a Correlate of Academic Performance among the students of Masters in Library and Information Science**

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**Abstract:** A library is a perfect multi-cultural setting, where people from all ethnic backgrounds come together to access information. In this context, it becomes very vital for future library professionals to consider cultural skills as a tool kit to identify and manage varied cultural characteristics. Academic performance of Library science students might be an effective indicator of their being a potential professional in library settings in the future. So the objective of the paper was to investigate whether academic performance of library students was significantly predicted by Cultural Intelligence and certain demographic variables of students studying in the Department of Library Science and Information from the three prominent universities of Assam. For the study, all the 66 students from the three universities were selected, out of which 61 students responded to the survey. Data was collected using Cultural Quotient Scale, developed by Soon Ang and Van Dyne.

The results of regression analysis were found to be statistically significant in case of both Gauhati and Dibrugarh universities. The motivational and behavioral components of cultural intelligence, along with demographic characteristics like gender and work experience emerged as strong predictors of academic performance among the students of Gauhati University. The cognitive, metacognitive and behavioral components of cultural intelligence, along with demographic characteristics like possession of professional qualification and place of residence

were found to be strong predictors of academic performance among the students of Dibrugarh University.

**Key words:** Cultural Intelligence, Cultural Quotient, Academic Performance, Universities

## **1. Introduction**

Cultural intelligence refers to an individual's capability to function effectively in situations characterized by cultural diversity (Ang & Van Dyne, 2008). It is the ability to make effective cross-cultural adjustments and establishing balanced relationships amidst diverse ethnicity. The Cultural Quotient (CQ) score of a person reveals the social behavior of the individuals in varied cultural settings. The thrust behind the idea of cultural intelligence is that whether there are noticeable differences among individuals in presenting cultural viewpoints (Earley & Ang, 2003). Cultural Quotient is a tool in itself to equip the individual to manipulate cultural diversity for personal betterment. The scope of Cultural intelligence covers components like meta-cognition, cognition, motivation and behavioral CQ.

There are varieties of ways in which people differ from each other culturally. At the same time, our social sphere is expanding where building adjustment skills becomes apparently essential. Mono-cultural organizations were a thing of the past; today multicultural designs have dominated the work arena. It very well applies to a library setting, which undertakes a multicultural work approach. Such inclusiveness covers everything from language, cultural norms, religion, ancestry, social class, monetary aspects etc. As such it is a requirement for future library professionals to train themselves in CQ skills, which must be essentially integrated in the teaching-learning experiences given to Library Science students.

## **2. Review of literature**

MacNab, B. R. (2012) studied elements of cultural intelligence in management highlighting that the education process needs to be experiential in nature. He directed research in the lines of making management education more interactive and participative between teachers and students. In another research study, Crowne, K. A. (2013) investigated the impact of cultural exposure on both emotional intelligence and cultural intelligence in the context of critical international experience and easy travel facilities in multi-cultural organizations. It was found that CQ rather than EQ was affected by such diverse exposure internationally. While Moon, T. (2013) examined

the performance changes of multicultural teams in the context of cultural intelligence (CQ). He identified that CQ plays a moderating role between cultural diversity and team performance, thus reducing negative effects of cultural differences. In alignment with the present research study, Masrek et al. (2017) aimed at integration of CQ elements into the librarians' development programs to enhance librarian's work performance. The findings revealed that performance of the academic librarians after training was reasonably elevated. Villagran, M. (2020) moreover focused on the incorporation of cultural intelligence in special libraries, in order to influence librarian's daily practices and application to diverse interactions. Relevant suggestions were also put forward for betterment of such practices in libraries.

### **3. Objectives**

- To find out whether cultural intelligence and demographic characteristics of the library science students significantly predict their academic performance.
- To find out the different teaching methodologies adopted for instruction of library science students in the context of cultural adaptability.

### **4. Research question**

- Can cultural intelligence and certain demographic variables emerge as potential predictors of academic performance among the library science students?
- What is the different teaching learning experiences designed for futuristic prospects of developing effective library professionals?

### **5. Methodology**

#### **5.1. Research method**

Descriptive Survey method of research with a cross-sectional design has been adopted to conduct the research study.

#### **5.2. Research Population**

The research population is the total number of 66 students studying in the Library Science Departments of the three universities of Assam – Assam University, Gauhati University and Dibrugarh University.

Table 1 Population Distribution

<b>Universities</b>	<b>Population</b>
Gauhati University	28
Assam University	20
Dibrugarh University	18
<b>Total</b>	<b>66</b>

### 5.3. Sample and sampling technique

Out of 66 students, 61 students' responses were considered on the basis of Purposive Sampling Technique.

Table 2 Distribution of Respondents

<b>Universities</b>	<b>Respondents</b>
Gauhati University	24
Assam University	20
Dibrugarh University	17
<b>Total</b>	<b>61</b>

### 5.4. Research Tools

The following tools were considered for the research study:

- A socio-demographic datasheet to collect the demographic profile of the sampled students.
- Information schedule to collect information on teaching-learning experiences in the context of CQ.
- Cultural Quotient Scale (CQS) was applied to the students under study. CQS is a 20 item questionnaire covering the four factors of Cultural Intelligence i.e.; Meta-cognitive CQ, Cognitive CQ, Motivational CQ and Behavioural CQ.

## 5.5. Data Collection Procedure

After getting a prior approval from the head of the colleges, the tools were administered to the sampled undergraduate students. The responses were collected after assurance of confidentiality. On account of their responses, the necessary scoring and interpretation was done. The period of data collection is from November to December, 2020.

## 5.6. Statistical Methods adopted

The data was statistically treated by using SPSS. Simple correlation measure and regression analysis was applied to draw inferences about the population.

## 6. Conceptual Framework

A library is not a mono-cultural organization, with very high expectancy to meet cultural demands. Only those library professionals with high CQ have the ability to face culturally different situations with behaviors that are universal, culturally as well as idiosyncratically. Efficient relationship management is the key to operative organizational behavior. The level of CQ in the teaching-learning experiences given in Library Science classes increases the dependence of students to organizational beliefs and ethos. Thus CQ capacities in library students help in predicting their future success as library professionals and so on.

The conceptual framework of the research study revolves around the socio-demographic background, teaching-learning experiences and academic performance of the students of Library science in the context of cultural intelligence. The CQ four-faceted model comprises of components of CQ like:

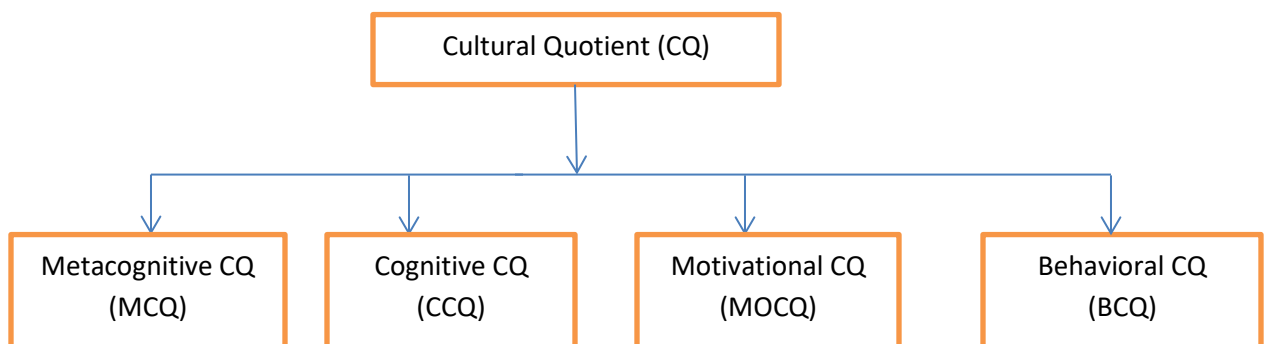


Figure 1 CQ Four-factor model (Ang & Dyne, 2008)

## 7. Data analysis

Table 3: Correlation between Academic Performance and Cultural Quotient University wise

Universities	Correlation coefficients	P value
Assam University	0.31	0.18
Gauhati University	0.50	0.012*
Dibrugarh University	0.81	0.000*

Table 3 shows the correlation between Cultural quotient and Academic Performance of the university students. Analysis signifies that Cultural Intelligence has a significant positive correlation with Academic Performance in Gauhati University ( $r=.012$ ) and Dibrugarh University ( $r=.000$ ) respectively.

### 7.1. Assam University

Table 4: Predictors of Library Performance in Assam University

Table 4(a): Model Summary			
R	R Square	Adjusted R square	Std. Error of the Estimate
.747 <sup>a</sup>	.558	.067	.566

**a. Predictors:** (Constant), Age, Gender, other professional qualification, any work experience, Place of residence, MCQ, CCQ, MOCQ, BCQ and CQ.

Table 4(b): ANOVA table					
Model	Sum of squares	df	Mean Square	F	Sig
Regression	3.639	10	.364	1.137	.428 <sup>b</sup>
Residual	2.881	9	.320		
<b>Total</b>	<b>6.520</b>	<b>19</b>			

**a. Dependent Variable:** library performance

**b. Predictors:** (Constant), Age, Gender, other professional qualification, any work experience, Place of residence, MCQ, CCQ, MOCQ, BCQ and CQ.

**Table 4(c): Coefficients table**

<b>Model</b>	<b>Unstandardized coefficients</b>		<b>Standardized coefficients</b>	<b>T</b>	<b>Sig</b>
(constant)	6.207	2.010		3.088	.013
Age	-.034	.306	-.043	-.111	.914
Gender	.669	.321	.559	2.083	.067
Any other professional qualification	.267	.496	.187	.538	.604
Any work experience	-1.202	.692	-.632	-1.738	.116
Place of residence	.046	.382	.040	.120	.907
MCQ	1.126	1.518	1.776	.742	.477
CCQ	.451	1.885	.390	.239	.816
MOCQ	1.008	1.720	1.271	.586	.572
BCQ	.386	1.733	.495	.223	.829
CQ	-2.727	6.545	-2.413	-.417	.687

**a. Dependent variable: Academic performance**

Table 4 presented summary statistics for multiple regression analysis, to examine whether academic performance was significantly predicted by age, gender, other professional qualification, any work experience, place of residence, MCQ, CCQ, MOCQ, BCQ and CQ of Assam University students. The results of regression analysis were not found to be statistically significant, stating that age, gender, other professional qualification, any work experience, place of residence, MCQ, CCQ, MOCQ, BCQ and CQ of university students did not predict academic performance among Assam University students, where  $F= 1.137, p>0.05$ .

**7.2. Gauhati University**

Table 5: Predictors of Library Performance in Gauhati University

**Table 5(a): Model Summary**

<b>R</b>	<b>R Square</b>	<b>Adjusted R square</b>	<b>Std. Error of the Estimate</b>
.629 <sup>a</sup>	.395	.070	2.684



- a. Predictors: (Constant), Age, Gender, other professional qualification, any work experience, Place of residence, MCQ, CCQ, MOCQ, BCQ and CQ.

**Table 5(b): ANOVA table**

Model	Sum of squares	df	Mean Square	F	Sig
Regression	3.980	10	.398	2.887	0.05 <sup>b</sup>
Residual	6.087	13	.468		
<b>Total</b>	<b>10.066</b>	<b>23</b>			

**a. Dependent Variable:** library performance

**b. Predictors:** (Constant), Age, Gender, other professional qualification, any work experience, Place of residence, MCQ, CCQ, MOCQ, BCQ and CQ.

**Table 5(c): Coefficients table**

Model	Unstandardized coefficients		Standardized coefficients	T	Sig
(constant)	3.841	1.408		2.727	.017
Age	.024	.275	.024	2.508	.01
Gender	.210	.336	.162	2.819	.005
Any other professional qualification	-.668	.855	-.341	-.781	.449
Any work experience	1.113	.983	.475	2.183	.02
Place of residence	.000	.306	.000	.002	.999
MCQ	.439	1.130	.585	.388	.704
CCQ	.217	1.065	.338	.204	.842
MOCQ	.117	.994	.187	2.916	.004
BCQ	.234	1.067	.308	3.214	.002
CQ	1.426	4.183	1.500	3.041	.003

**a. Dependent variable: Academic performance**

Table 5 presented summary statistics for multiple regression analysis, to examine whether academic performance was significantly predicted by age, gender, other professional qualification, any work experience, place of residence, MCQ, CCQ, MOCQ, BCQ and CQ of

Gauhati University students. The results of regression analysis were found to be statistically significant, stating that age, gender, other professional qualification, any work experience, place of residence, MCQ, CCQ, MOCQ, BCQ and CQ of university students significantly predicted academic performance among Gauhati University students, where  $F= 2.887$ ,  $p<0.05$ .

### 7.3. Dibrugarh University

Table 6: Predictors of Library Performance in Dibrugarh University

<b>Table 6(a): Model Summary</b>				
<b>R</b>	<b>R Square</b>	<b>Adjusted R square</b>	<b>Std. Error of the Estimate</b>	
.936 <sup>a</sup>	.876	.067	2.433	

**a. Predictors:** (Constant), Age, Gender, other professional qualification, any work experience, Place of residence, MCQ, CCQ, MOCQ, BCQ and CQ.

**Table 6(b): ANOVA table**

<b>Model</b>	<b>Sum of squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig</b>
Regression	7.983	10	.798	4.253	0.04 <sup>b</sup>
Residual	1.126	6	.188		
<b>Total</b>	<b>9.109</b>	<b>16</b>			

**a. Dependent Variable:** library performance

**b. Predictors:** (Constant), Age, Gender, other professional qualification, any work experience, Place of residence, MCQ, CCQ, MOCQ, BCQ and CQ.

**Table 6(c): Coefficients table**

<b>Model</b>	<b>Unstandardized coefficients</b>		<b>Standardized coefficients</b>	<b>T</b>	<b>Sig</b>
(constant)	.467	1.851		.253	.809
Age	.626	.330	.551	1.895	.107
Gender	-.008	.373	-.006	-.022	.983
Any other professional qualification	.109	.635	.048	3.041	.003

Any work experience	.482	.356	.279	1.353	.225
Place of residence	.877	.375	.598	2.338	.058
MCQ	.175	1.631	.207	2.508	.01
CCQ	.590	1.850	.664	1.71	.05
MOCQ	.073	1.793	.076	.041	.969
BCQ	.143	1.857	.175	2.819	.005
CQ	.115	6.928	.109	3.505	.001

**b. Dependent variable: Academic performance**

Table 6 presented summary statistics for multiple regression analysis, to examine whether academic performance was significantly predicted by age, gender, other professional qualification, any work experience, place of residence, MCQ, CCQ, MOCQ, BCQ and CQ of Dibrugarh University students. The results of regression analysis were found to be statistically significant, stating that age, gender, other professional qualification, any work experience, place of residence, MCQ, CCQ, MOCQ, BCQ and CQ of university students significantly predicted academic performance among Dibrugarh University students, where  $F= 4.253, p<0.05$ .

## 8. Findings

### 8.1. Findings based on objective 1

- a. In Gauhati University, demographic variables like age, gender and work experience were found to strongly predict academic performance. The motivational and behavioral components of cultural intelligence were found to be having higher predictability, along with the CQ score. Library Science students were found to be eager to learn new cultural skills and accordingly manage behaviour in novel and altered cultural situations.
- b. In Dibrugarh University, demographic variables like possession of any professional qualification and place of residence were found to strongly predict academic performance. The motivational, cognitive and behavioral components of cultural intelligence emerged as strong predictors of academic performance, along with the CQ score. Here, the Library Science students were quite motivated to amass new knowledge on different cultures and manage behaviors in diverse situations.
- c. However in Assam University, a poor relationship was observed between CQ and academic performance among the library students.

## 8.2. Findings based on objective 2

Since library science is a skill based course, emphasis is given on giving instructional experiences pertaining to focused organizational behavior. Organizational skills based on CQ competency should be blended with common teaching techniques for prospective library professionals. Some of the common teaching-learning practices encouraging CQ undertaken in the sampled universities were categorized under the following heads:

- a. **Observational learning:** Also known as experiential learning, it induced the students take responsibility the direction and pace of their learning. Students are encouraged to learn by doing by observing and experiencing the situation involved.
- b. **Shared learning:** Also known as collaborative learning, it made the students work with others on some problem for solution. It enhanced the cooperative skill of the students amidst diversity of nature and culture.
- c. **Scholastic learning:** such formal academic learning takes advantage of formal courses and training offered in the classroom. It mainly focused on theoretical aspects of knowledge like the cognitive side of culture.
- d. **E-learning:** Library students are required to learn via computer technology, so that they can deal with library software i.e. SOUL, KOHA etc.
- e. **Situational learning:** Incidental learning presents situations for every learner for unexpected and unplanned experiences. Through a variety of practical activities in the library, the students were taught to meet unexpected cultural incidences judiciously.
- f. **Mindfulness and optimization:** Students needed to be mindful of a number of personal characteristics in relation to the people with whom they were interacting. Identifying differences and normalizing the odds requires patience and careful awareness of the cultural gap.

## 9. Conclusion

Cultural skills cannot be ignored today amidst global consciousness. Conventional wisdom says that CQ comes down through common sense and intuition, but research shows contrary findings. Anyone can improve their CQ, which requires intervention techniques and training sessions, especially in academic settings. As such the students of today have the potential to become unquestionably the future leaders of tomorrow. This provides a rational base to the assessment of

CQ scores of library students not only to predict their future success as a part of a cultural workforce, but also to discover their weak areas and remedy them. International exposure need to be given in the form of social networking, language training, visits to organizations and study organizational behavior in cultural context. Research is on to discover new ways to evolve our library settings in the spirit of Cultural Intelligence competencies.

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