



A STUDY TO ASSESS THE INFLUENCE OF INTELLIGENCE QUOTIENT (IQ), EMOTIONAL QUOTIENT (EQ), ADVERSITY QUOTIENT (AQ), SPIRITUAL QUOTIENT (SQ) ON THE ACADEMIC PERFORMANCE AMONG UNDERGRADUATE STUDENTS

Psychiatry

Ms. Simran Dhillon

Lecturer, MOH College of Nursing, Ludhiana, Punjab

Dr. Mrs. Triza Jiwan

Professor & Principal, DMCH College of nursing, Ludhiana, Punjab

Mrs. Shailza Sharma

Associate Professor, DMCH College of nursing, Ludhiana, Punjab

Ms. Shagun Thakur

Lecturer, MOH College of Nursing, Ludhiana, Punjab

ABSTRACT

Academic performance is a key criterion use to evaluate the progress of students and it is influenced by many cognitive and non cognitive factors. The study aims to assess the influence of Intelligence Quotient (IQ), Emotional Quotient (EQ), Adversity Quotient (AQ) and Spiritual Quotient (SQ) on the academic performance among undergraduate students. A quantitative research approach & non-experimental descriptive survey design was used in the study. Data was collected from 300 students of DMCH College of Nursing, Malakpur, Ludhiana selected by using total enumerative sampling technique. Responses were collected on Test of General Intelligence, The Assessing Emotions Scale, structured Adversity Quotient Scale and Scale for Spiritual Intelligence. Academic performance data was collected from result cards. Data was tabulated and analysis was done by using descriptive & inferential statistics. Results indicated majority of students had average level of IQ, above average level of EQ, were campers, had average level of SQ and belonged to 2nd division. There was statistical significant positive correlation of intelligence quotient, emotional quotient spiritual quotient with academic performance. No statistical significant correlation was found between adversity quotient and academic performance.

KEYWORDS

Intelligence Quotient, Emotional Quotient, Adversity Quotient, Spiritual Quotient, academic performance.

INTRODUCTION:

In today's competitive world, the quality or standard of performance is a key factor responsible for personal success. In students' life, academic performance is a key criterion used to evaluate their progress by measuring or recognizing their potentialities and capabilities. It is a centre around which whole education system revolves and is influenced by many factors including cognitive intelligence, ability to manage emotions, capacity to face adversities and adaptive use of spiritual information in problem solving.

Intelligence quotient, emotional quotient, adversity quotient and spiritual quotient are interrelated and work in a unity of interconnected systems. All four are indispensable in determining academic success of students. Every individual has all kind of intelligences but it is one or two intelligences that dominates a person either cognitive intelligence, emotional, adversity or spiritual. Thus every individual has its own strengths and weaknesses that make them unique. For example one student can have high intelligence quotient but low emotional quotient and other one can have high emotional quotient but low adversity and spiritual quotient. For students balance development of all the quotients is extremely important because, being a student is not about going to school and attend a class, more than that, it involves capacity to adapt to environment, ability to perceive, manage and regulate emotions, ability to face adverse situations and overcome them, act with compassion, maintaining high academic performance and achieving goals.

But Students have lack of knowledge and awareness about the importance of maintaining the balance between these quotients. This unawareness about any quotient not only affects the academic performance but also affects the development of other quotients.

OBJECTIVES

1. To assess the levels of Intelligence Quotient (IQ), Emotional Quotient (EQ), Adversity Quotient (AQ) and Spiritual Quotient (SQ) among undergraduate students.
2. To assess the academic performance among undergraduate students.
3. To find out the correlation between the Intelligence Quotient (IQ), Emotional Quotient (EQ), Adversity Quotient (AQ), Spiritual Quotient (SQ) and the academic performance among undergraduate students.

Review Of Literature

Lalchhanhimi G and Vadhera R.P. (2020) assessed the relationship between the general intelligence and academic achievement among undergraduate students. The sample consisted of 575 under-graduate students from arts (301), science (158) and commerce (116) streams of 5th and 6th semester were selected from 14 colleges from 5 districts in Mizoram. Test of General Intelligence by Misra K.S & Pal S.K. was used to assess general intelligence. For academic achievement scores of the students were collected from examination department Mizoram University. Results revealed the statistically significant positive correlation between academic achievement and general intelligence in students from arts stream, in students from science stream, in students from commerce stream.

Ali H.S and Mohammed Q.Q. (2020) investigated influence of emotional intelligence on Academic Achievement among Students at Secondary Schools. Total of 586 students out of which 282 males and 304 females were selected from 4 secondary schools using simple random sampling technique. Self-structured questionnaire was developed and used to assess the emotional quotient. The findings indicated positive correlation between the emotional quotient and academic performance which indicated the influence of students' emotional intelligence on academic achievement.

Khairani A.Z and Abdullah S.M.S. (2017) identified relationship between adversity quotient and academic well being among Malaysian students. Total of 325 undergraduate students out of which 70 males and 278 females were selected from School of Pharmacy and School of Medical Sciences. Self report questionnaire was administered to determine adversity quotient and academic well - being. Findings revealed strong positive correlation was found between the adversity quotient and academic well-being.

Khan M.A and Kumar R. (2019) investigated the role of spiritual intelligence in relation to academic achievement of university students. Sample consisted of 80 University students within age range from 18 to 20 years from different faculties of Aligarh Muslim University, India. Spiritual intelligence of students was observed by Spiritual Intelligence Self Report Inventory (SISRI-24) and academic achievement was measured by the students' achievement scores in their last examination. The findings revealed the significant positive

correlation between the spiritual intelligence and academic achievement. ($r=0.35, p<0.01$).

METHOD

A quantitative research approach and non experimental descriptive survey research design was used to collect data on Intelligence Quotient (IQ), Emotional Quotient (EQ), Adversity Quotient (AQ), Spiritual Quotient (SQ) and academic performance. The target population was undergraduate students of DMCH College of Nursing, Malakpur, Ludhiana, Punjab. The sample was comprised of B.Sc. (N) 2nd year, B.Sc. (N) 3rd year and B.Sc. (N) 4th year students. Sample was selected by using total enumerative sampling technique. Calculated sample size was 224 but total enumerative sampling technique was used in the study. Hence, 300 subjects were taken. Socio-Demographic profile, Test of General Intelligence given by Pal S.K & Misra K.S. (2005), The Assessing Emotions Scale given by Schutte N.S, Malouff J.M & Bhullar N. (2009), Structured Adversity Quotient Scale and Scale for Spiritual Intelligence given by Kumar V.V & Mehta M. (2011) were used to assess the Intelligence Quotient, Emotional Quotient, Adversity Quotient and Spiritual Quotient among undergraduate students. Pilot study was carried out on 30 B.Sc. nursing students of DMCH College of Nursing, Malakpur, Ludhiana, Punjab. Academic performance data was collected from result cards of students. 27 subjects had reappear so their percentage of marks was not available. Thus, correlation of intelligence quotient, emotional quotient, adversity quotient and spiritual quotient with academic performance was calculated with remaining 273 subjects.

RESULTS

Table 1: Socio-demographic profile

N=300

Socio -demographic variables	f (%)
Age (in years)*	
17 – 19	80 (26.66)
20 – 22	212 (70.68)
23 – 25	8 (2.66)
Gender	
Male	31 (10.33)
Female	269 (89.67)
Habitat	
Urban	159 (53)
Rural	141 (47)
Place of stay	
Hostel	235 (78.33)
Home	49 (16.33)
Paying Guest	13 (4.34)
With relatives	3 (1)
Religion	
Hindu	98 (32.66)
Sikh	188 (62.66)
Muslim	7 (2.34)
Christian	7 (2.34)
Type of family	
Nuclear	216 (72)
Joint	76 (25.34)
Extended	8 (2.66)
Birth order	
1st	165 (55)
2nd	109 (36.34)
3rd	24 (8)
4th	2 (0.66)
Type of School during +2	
Govt. School	50 (16.67)
Private School	250 (83.33)
Education of father	
Illiterate	2 (0.66)
Primary	19 (6.34)
Secondary	119 (39.67)
Graduate & above	160 (53.33)
Education of Mother	
Illiterate	6 (2.0)
Primary	43 (14.33)
Secondary	119 (39.67)
Graduate & above	132 (44.0)
Working status of Father	
Working	281 (93.66)
Not working	19 (6.34)

Working Status of Mother	
Working	89 (29.67)
Not working	211 (70.33)
Personal history of psychiatric illness	
Yes	0
No	300 (100)
Family history of psychiatric illness	
Yes	5 (1.67)
No	295 (98.33)
Socio- Economic status	
Upper	21 (7)
Upper middle	154 (51.33)
Lower middle	96 (32)
Upper lower	27 (9)
Lower	2 (0.67)

*Mean age (in years) = 20.29 ± 1.22

Table 2: Frequency of undergraduate students as per their IQ levels N=300

LEVELS OF IQ	f (%)
Borderline Intellectual Disability	20 (6.6)
Below Average	32 (10.7)
Average	224 (74.7)
Above Average	20 (6.6)
Superior	4 (1.4)

Table 3: Frequency of undergraduate students as per their EQ levels N=300

LEVELS OF EQ	f (%)
Low EQ	1 (0.3)
Below Average EQ	1 (0.3)
Average EQ	18 (6)
Above Average EQ	218 (72.7)
High EQ	62 (20.7)

Table 4: Frequency of undergraduate students as per their AQ levels N=300

LEVELS OF AQ	f (%)
Quitters	1 (0.3)
Campers	156 (52)
Climbers	143 (47.7)

Table 5: Frequency of undergraduate students as per their SQ levels N=300

LEVELS OF SQ	f (%)
Low SQ	0 (0)
Below Average SQ	3 (1)
Average SQ	161 (53.7)
Above Average SQ	135 (45)
High SQ	1 (0.3)

Table 6: Frequency of undergraduate students as per their Academic performance N=300

LEVELS OF ACADEMIC PERFORMANCE	f (%)
Distinction	0 (0)
First Division	63 (21)
Second Division	205 (68.34)
Pass	5 (1.66)
Reappear/Fail	27 (9)

Table 7: Correlation between the Intelligence Quotient (IQ), Emotional Quotient (EQ), Adversity Quotient (AQ), Spiritual Quotient (SQ) and the academic performance among undergraduate students. N=273

Variables	Academic performance
Intelligence Quotient	$r = 0.149$ $p = (0.01)^*$
Emotional Quotient	$r = 0.142$ $p = (0.01)^*$
Adversity Quotient	$r = 0.110$ $p = (0.71)NS$
Spiritual Quotient	$r = 0.140$ $p = (0.02)^*$

*Significant $p < 0.05$ level
 NS (Non Significant) $p > 0.05$

Moreover it was found that Intelligence quotient had statistically significant positive correlation with emotional quotient ($r=0.147$, $p=0.01$) and adversity quotient ($r=0.125$, $p=0.03$) at $p<0.05$ whereas, it had statistically highly significant positive correlation with spiritual quotient ($r=0.237$, $p=0.00$) at $p<0.01$.

Emotional quotient had statistically significant positive correlation with intelligence quotient ($r=0.147$, $p=0.01$) at $p<0.05$ whereas, it had statistically highly significant positive correlation with adversity quotient ($r=0.484$, $p=0.00$) and spiritual quotient ($r=0.430$, $p=0.00$) at $p<0.01$.

Adversity quotient had statistically significant positive correlation with intelligence quotient ($r=0.125$, $p=0.03$) at $p<0.05$ whereas, it had statistically highly significant positive correlation with emotional quotient ($r=0.484$, $p=0.00$) and spiritual quotient ($r=0.581$, $p=0.00$) at $p<0.01$.

Spiritual quotient had statistically highly significant positive correlation with intelligence quotient ($r=0.237$, $p=0.00$), emotional quotient ($r=0.430$, $p=0.00$) and adversity quotient ($r=0.581$, $p=0.00$) at $p<0.01$.

CONCLUSION:

Majority of undergraduate students had average level of intelligence quotient, above average level of emotional quotient, were campers and had average level of spiritual quotient. It was concluded that intelligence quotient, emotional quotient and spiritual quotient had statistically significant positive correlation with academic performance which indicates that increase in levels of intelligence quotient, emotional quotient and spiritual quotient improves academic performance among undergraduate students. It was also concluded that intelligence quotient, emotional quotient, adversity quotient and spiritual quotient were correlated which indicates with the increase in intelligence level, the ability to manage emotions, ability to face adversities of life and spirituality increases.

Scope For Future Study

1. A methodological study can be conducted on compilation of Adversity Quotient Scale for college students.
2. A comparative study can be conducted to assess intelligence quotient, emotional quotient, adversity quotient and spiritual quotient among medical & arts students.

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