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Impact of Emotional Intelligence on Academic Achievement at Secondary Level in District Mardan

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Abstract: The main purpose of this study was to discover and find the relationship between the student's intellect and their educational attainment at Mardan District Secondary School. The nature of the study was descriptive. The study population was made up of all male students from secondary schools located in the district of Mardan. For the sampling purpose, four government high schools were conveniently selected. In the next stage of sampling, forty learners were selected accidentally for the data collection from each school as a sample; therefore the study had 160 samples. Standard deviation and correlation tests were applied. It was found that the majority of the students have a strong emotional intelligence whereas their SSC score has no bearing on their intelligence. Moreover, the results revealed no association between academic success and IQ. It was recommended that the results of this study be further explored in various settings and with a larger group of students.

Key Words: Emotional Intelligence, Academic Achievement, Secondary Level, District Mardan, Education

Introduction

The capacity to intention, blueprint, resolve complications, think conceptually, comprehend thoughts, utilize semantics, plus learn are only a few of the many connected talents that make up intelligence. Intelligence is defined in many ways. In certain cases, intelligence can include characteristics such as imagination, personality, character, experience, or information. Intelligence originates from the Latin word "intellegere," meaning "to understand." Knowledge (as understanding) is arguably distinct from being "wise" (capable of adapting to one's environment) or "clever" (capable of creativity) by this reasoning.

In guiding and directing our actions, our feelings play a very important role. They seem to dominate us at times in such a manner that the scholars have no additional answer however to perform, as they need us to do. In contrast, if a person has no feelings in him, then in terms of living his life in a normal way, he becomes crippled. In this way, emotions play a key role in giving our actions a specific direction and defining our personality according to their evolution (Mangal, <u>2008</u>).

Emotion is an affective experience that follows widespread linear change and agitated mental and physiological states in the person and shows itself in overt actions (Russell & Gajos, <u>2020</u>). It was described

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that sensation is a dynamic affective understanding that comprises diffuse physical alterations and can be freely conveyed in forms of behavioural characteristics.

At some level, most adolescents experience emotional conflicts. This is hardly shocking, as the rapid and drastic shifts in body image, expected roles and peer relationships are going through. It can also be very stressful to transition from elementary to middle school or junior high and then to high school (Valente & Lourenço, 2020). Emotional distress is transient for most teenagers and is treated effectively, but some stress leads to criminal behaviour, cruelty or reckless efforts (Dodanwala & Shrestha, 2021)

According to Zysberg and Zisberg (2022), children in upper elementary school age frequently have emotional worries related to their physical, cognitive, and social development. While most per-adolescents are content and optimistic, they also have a lot of anxieties, including the dread of not fitting in with their peers, not having a best friend, being disciplined by their parents, having their parents separate, or performing poorly in school.

These kids also experience guilt, frustration, envy, anger (and the worry of not being able to manage it), and anger. It is important to assist teenagers and young people understand that talking about these feelings and having worries is a normal part of growing up. When children behave in ways that are inconsistent with their parents' beliefs and those of their peer group, adults must constantly allow guilt to creep in. Today, more than most other emotions, rage is a common feeling that is expressed with great force. Parents frequently encourage their preadolescent children not to lose their cool, despite the fact that they frequently caution them not to be scared of them.

Statement of the Problem

The goal of this study is to establish the link between emotional intelligence and academic achievement in secondary classes.

Objectives of the Study

- Identification of secondary school pupils' academic achievement and degree of intelligence
- Determining the relation between students' intelligence with academic achievement.

Significance of the Study

This investigation provided an overview of the intellect of the students. The study can also encourage teachers to know the students' relationship to improving teaching between intelligence and academic achievement at the secondary level. The study can be useful for administration to improve teachers' and students ' school environment. Improving the standard of education in schools can be helpful. The most significant aspect of the research is that it will give educators the ability to develop their professional perceptions.

Delimitation of the Study

- 1) The analysis had been delimited to Mardan district.
- 2) In addition, the analysis was delimited to only government educational institutions located in the Mardan District.

Review of Related Literature

Emotional intelligence is one of the key characteristics that affect the teaching and learning process among other things (Krishnan & Awang, 2020). In this part of the paper, the researcher evaluated pertinent material to help readers comprehend emotional intelligence and its connection to students' academic success.

Intelligence

According to Novelli, Taddeo and Floridi (2023), most individuals have an intuitive notion about what intelligence is and several English terms differentiate between various levels of cognitive skill: brilliant,



dull, smart, dumb, clever, sluggish, etc. Much enthusiasm among intelligence researchers stems from their quest to decide exactly what intelligence is. In their descriptions, multiple investigators have stressed various facets of intelligence. Wang and Yoon (2021) argued that yet there is no widely accepted concept of intelligence, and people are still discussing what, exactly, it is. Are there basic issues left? Is intelligence one general capability with many separate capability systems? Is intelligence a brain property, a behavioural trait, or a collection of skills and abilities? In addition, several scholars have given their own descriptions of human intelligence, influential in the fields of psychology and learning.

Howard Gardner (<u>1993</u>) explains it as a human intellectual competence must require a collection of problem-solving skills that enable the person to solve specific problems or challenges he or she faces and, if possible, to produce a successful product and must also have the ability to discover or create problems and thus lay the foundations for the creation of new knowledge. Other scholars Chiu, et.al., (<u>2023</u>) explained it as the willingness to cope with uncertainty in cognition.

According to the APA Psychology Dictionary, emotion is a complicated pattern of reaction that involves sensory, behavioural, and physiological elements and is used by a person to attempt to deal with a personally important experience. It happens accidentally and might have a good or negative valence (Van Kleef & Côté, 2022). Whether feelings ought to be categorized into a variety of statuses (e.g. Russell's circumflex ideal, or else several of the valence approaches in social psychology) or whether emotions are better described as separate (basic) states has been considerably debated. According to Keltner and Cowen (2021), the taxonomy of emotion into eight basic emotions is one of the most prominent classification approaches. The main emotions are; hatred/anger, mad/fear, sadness, gladly /joy, displeasure/disgust, interest/curiosity, astonishment/surprise and acceptance.

It is assumed that primary emotions fuse together from the full range of human emotional experience, similar to the way primary coolers combine. They are recognized as part of our biological heritage and are incorporated into human nature. Ekman (2017) concluded that certain fundamental emotions are inherent in facial expressions. Ekman argues that this adds more support to the belief that in all human beings, at least some emotions are main, inherent, and universal. The Taxonomy of Core Relational Themes for different emotions is similarly provided by Ljungblad (2023). These themes help to describe both the purpose and conditions to be elicited.

Theories of Intelligence Theory of Monarchy

According to this theory, it states that intelligence consists of one variable, a basis of intellectual competence common to all the activities of the individual. The principal proponent of this idea was Edward Thorndike in 1914 (Brock, 2020). This theory, sometimes known as the atomic theory of intelligence, holds that intelligence is a combination of several distinct parts or variables, each of which is a minute component of a larger whole. As a result, we have no type of material like intellect (a single element) instead, a variety of highly independent specialist talents are required to carry out different jobs. This notion of the theory of the Two Factors was advocated by Spearman in 1904. He asserts that each intellectual activity consists of a special aspect that is exclusive to it, as well as a generic factor that it shares with all other intellectual activities. Together with his advisor, Horn (1989) created an intelligence theory that defines two large variables, fluid abilities and crystallized abilities, along with various unique variables that endorse the general ones (Feng, et.al., 2021). Fluid intelligence demonstrates one's capacity in novel or new circumstances to reason and solve problems. On the other hand, crystallized intelligence indicates the degree to which the understanding of a culture has been attained by an individual.

The Gardner Multiple Intelligence Principle

In the theory of multiple intelligence, in addition to mathematical and linguistic ability, Gardner (<u>1983</u>) extended the idea to the following points.

• Intelligence logical-mathematics: It consists of the ability to identify trends, deductively reason and objectively think. The most frequent correlation of this intellect with scientific and mathematical reasoning.

- Intelligence in Linguistics: This requires getting language mastery. The capacity to efficiently use language to convey oneself rhetorically or poetically is included in this intellect.
- Intelligence spatial: In order to solve problems, the previous studies prove a bulk that to operate plus construct cerebral dreams. This intelligence is not limited to visual domains.
- Intelligence from music: It requires the capability of understanding and writing harmonious tones, tendencies, and pulses. (In order to improve this intelligence in terms of pitch and tones, auditory functions are needed for a human, but for the understanding of rhythm it is not necessary.)
- Intelligence bodily-kin esthetic: It's the capacity to use one's mental abilities to organize the movements of one's own body. The common assumption that mental and physical behaviours are incompatible is challenged by this knowledge.
- Personal intelligence: It requires others' interpersonal feelings and intentions and the capacity of interpersonal knowledge to consider one's own feelings and motives. These two kinds of intelligence are different. Nevertheless, they are also related together due to their close connection in most cultures.
- Knowledge Naturalist: It defines the human capacity to distinguish between living creatures. Moreover, it also focuses on a person's understanding of other features of the surrounding environment.

Achievement

Achievement is the term used to describe a student's aptitude and success; it has many facets, is intricately linked to human growth and cognitive, mental, social, and physical development; it refers to the whole child; it is not associated with a single instance but rather develops over time and stages, from a student's time in public school to their time in post-secondary education and their working lives (Madigan & Curran, 2021). Achievement is defined by Merriam-Webster as the constancy and totality of a student's efforts. The more or less accurate explanation of this analysis is in the second, as the first was very detailed (Agustin, Wahyudin & Isnaini, 2021). We require the pupils' constancy in their work in this case; we need to calculate the average of all of their grades from the first semester of the current academic year.

Intelligence of Emotions

It has the capacity to track and distinguish between our own and other people's moods and emotions and utilizes that information to guide our actions and thoughts (Saxena, Khanna & Gupta, 2020). According to them, an emotionally intellectual individual is skilful in four zones: emotion recognition, use, knowledge, and management. Managing our emotions, motivating ourselves, identifying others' feelings (empathy), and dealing with relationships are the five components of emotional intelligence. Resnik and Dewaele (2020) claim that emotional intelligence is a subset of Gardner's inter plus intrapersonal intellects and consists of skills which would be classified into five dominions.

Academic Achievement

Academic success is defined as the personal accomplishment of objectives connected to various specializations and competencies. Based on an individual's age, past knowledge, and competence in terms of education, socialization, and certification, society defines these priorities. Studies on academic achievement focus in particular on student success and individual, institutional and organizational achievement factors, along with experiences in social relationships that decide, promote or impede academic achievement (Jabůrek, Cígler, Valešová & Portešová, 2022). On the four-point scale, Adequate Academic Status usually implies a Grade Point Average of 2.0 or higher. Satisfactory Academic Status, as established by the faculty in question, means satisfactory. If there was no description made by the Faculty. Satisfactory Academic Standing means being able to participate in or graduate from the program in which the student is enrolled, and authorized to remain on probationary status, exclusive of those students.

Factors Related to Academic Achievement

On the subject of accomplishment, there has been comprehensive research. Several factors linked to good academic performance have been noted by researchers. Bempechat (2018) established that student



motivation, parent position and teaching and textbook quality as influences on student achievement. Various studies have covered the behaviours of parents and students and their connection to achievement. A study should also concentrate on individual values and learning attitudes. As predictors of student success, parents, educational performance, number of family members, and specific strategies geared to improving minority education.

Most of the difference in student achievement is explained by context characteristics; others reported additional variables that were related to achievement. Ford (2013) found that the attitudes and beliefs of parents towards schooling were correlated with the attitudes and beliefs of the students. The orientation of achievement was referred to as these behaviours and beliefs.

Research Methodology

This research aimed to find out the association between the student's intellect and their educational attainment at Mardan District Secondary School. The nature of the study was descriptive and the research process consisted of the following steps.

Population and Sample

The study population was made up of all male students from secondary schools located in the district of Mardan. For the sampling purpose, four government high schools were conveniently selected. In the next stage of sampling, the researcher selected forty learners from each school as a sample randomly for the data collection from each school, therefore the study had 160 samples.

Research Instrument

A structured questionnaire was developed keeping in view all the aspects of the topic under study by consulting all the stakeholders concerned (Teachers, Students and Parents) under the supervision of the research thesis supervisor. The questionnaire consisted of 40 items each.

Data Collection and Interpretation

The questionnaire was distributed personally among the randomly selected students of sampled institutions, for data collection. The collected data were tabularized, evaluated and interpreted on the basis of the mean and standard deviation objectives of the analysis for this reason and a standard diversion was applied.

Discussion and Results

The study was aimed at finding out the relationship between academic achievement and the intelligence of the students.

Table 1

Relationship between academic achievement and intelligence of all students

| Category | Ν | X | SD | Correlation Ratio |
|--|-----|-------|-------|--------------------------|
| Academic Achievement | 160 | 473 | 68.37 | |
| The intelligence level of the students | 160 | 97.62 | 8.61 | -0.007 |

The above table shows the mean scores of the SSC results and Intelligence are 473 and 97.62 respectively. The standard deviations of the SSC results are 68.37 and Intelligence is 8.61. The ratio of correlation is – 0.007, which displays a negative relationship between the Secondary school certificate results and the Intellect of each and every learner.

Table 2

Relationship between intelligence and academic achievement of Boys GHS No.1 Mardan

| Category | Ν | X | SD | Correlation Ratio |
|--|----|--------|-------|-------------------|
| Academic Achievement | 40 | 464.35 | 55.45 | |
| The intelligence level of the students | 40 | 98.75 | 5.71 | 0.246 |

The above table 2 describes the mean scores of Secondary school certificate results & Intelligence which are 464.35 and 98.75 respectively. Standard deviations of the SSC results and Intelligence are 55.45 and 5.71 respectively. The relationship ratio is 0.246, which shows that there is no relationship between the SSC results and the Emotional Intelligence of Govt. Boys High School No.1

Table 3

Relationship between intelligence and academic achievement of GHS No.2 Mardan

| Category | Ν | X | SD | Correlation Ratio |
|--|----|-------|-------|-------------------|
| Academic Achievement | 40 | 508.2 | 51.86 | |
| The intelligence level of the students | 40 | 99.4 | 6.85 | -0.085 |

The given table shows us the mean scores of the SSC results and Intelligence are 508.2 and 99.4 respectively. The Standard deviation of the SSC result is 51.86 and Intelligence is 6.85. The correlation ratio is -0.08551, so this value indicates a negative relationship between the Secondary School Certificate outcomes and the Intellect of Govt. Boys High School No.2.

Table 4

Relationship between intelligence and academic; achievement of govt centennial modal school Mardan

| Category | Ν | X | SD | Correlation Ratio |
|--|----|--------|-------|--------------------------|
| Academic Achievement | 40 | 481.74 | 34.99 | |
| The intelligence level of the students | 40 | 99.14 | 6.71 | 0.180 |

The given table of the research study shows the marks or scores of the students at the SSC level whose value was found to be out481.74 while the level of intelligence of the students was 99.14. The value of Standard deviations was 34.99 while for the level of intelligence of the students, the SD value was 6.71. The correlation ratio is 0.180, which shows no relationship between the SSC results and the Intelligence of Govt Centennial Modal School Mardan.

Table 5

Relationship between intelligence and academic achievement of GHS Chamtar Mardan

| Category | Ν | X | SD | Correlation Ratio |
|--|----|--------|-------|--------------------------|
| Academic Achievement | 40 | 546.43 | 67.69 | |
| The intelligence level of the students | 40 | 94 | 6.4 | -0.128 |

The given table 5 of this research paper shows that the value of the mean scores or academic achievement of the students of SSC is 546.43 whereas for intelligence level of the student's value is 94. Standard deviations of the metric results and Emotional Intelligence are 67.69 and 6.4 in that order. The correlation ratio is -0.128, which shows a negative relationship between the SSC results and the fan Intellect of Government Boys High School Chamtar Mardan.

Table 6

Overall comparison of emotional intelligence (E1) scores

| Institution | Ν | X | SD |
|---|-----|-------|------|
| All | 160 | 97.62 | 8.61 |
| Govt. Boys High School No.1 Mardan | 40 | 98.75 | 5.71 |
| Govt. Boys High School No.2 Mardan | 40 | 99.4 | 6.85 |
| Govt. Boys Centennial Modal School Mardan | 40 | 99.14 | 6.71 |
| Govt. Boys High School Chamtar Mardan | 40 | 98.91 | 7.29 |

The mean score ranges between 99.4 and 94. Govt. High School No.2 Mardan has maximum mean scores whereas Government High School Tambulak Mardan has minimum mean scores. The mean score of overall schoolboys is 97.62 which is greater than two institutions whereas also lesser than four institutes.

The standard deviation ranges between 5.71 and 7.29. Govt. Boys High School No.1 has minimum mean scores whereas Govt. Boys High School Chamtar Mardan has minimum mean scores. The standard deviation of all students is 8.61, which is greater than the standard deviation of all institutions.

Findings, Conclusions, and Recommendations

The following findings were drawn in the light of analysis:

- 1) Mean scores and standard deviations were 473 and 68.37 in the SSC outcomes, while mean scores and standard intelligence deviations were 97.62 and 8.61 respectively. A correlation ratio of -0.007, indicated no association between the results of the SSC and the intellect of all students.
- 2) The value 464.35 plus 98.75 is the mean score of the SSC results and intelligence. The SD for both of them were 55.45 and 5.71 with 0.246 the ratio of correlation.
- 3) The third finding of the said research shows that 508.2 and 99.4 were the mean score values of the students of SSC and emotional intelligence respectively. The SD values of SSC results were 51.86 and the emotional intelligence value was 6.85 respectively with_0.085 value of correlation ratio.
- 4) It was found that 481.74 and 99.14 were the mean scores of the SSC results and Intelligence. For the student's results of SSC, the value of SD was 34.99 and 6.71 with a 0.018 correlation ratio.
- 5) It was also found that 520.26 and 98.91 were the mean scores of the metric results and Intelligence. Standard deviations of the metric results and Intelligence are 61.92 and 7.29 correspondingly with the correlation ratio is -0.025.
- 6) The Mean scores of the SSC results and Intelligence are 546.43 and 94 in that order. Standard deviations of the SSC results and Intelligence are 67.69 and 6.4 respectively. The value of the correlation ratio is 0.128.

When solving such a questionnaire the learners displayed very serious interest and they were all very pleased and excited. Conclusions drawn from the findings of the study were as under:

Most of the pupils have a strong emotional intelligence. The SSC scores of all children have no bearing on their intelligence. The results revealed no association between academic success and IQ.

The results of this study may be further explored in various settings and with a larger group of students. The development of emotional intelligence questionnaire item banks is necessary for the standardization of student intelligence evaluations across age groups. According to the performance of the student's intelligence test, the Expressive Intellect Form should be utilized in all classes to assess the effectiveness of the institution.

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