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E-Motions; Assessing Impact of Virtual Learning on Adolescents' Emotional Quotient

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Abstract:

While coronavirus disease 2019 (COVID-19) continues to spread across the globe, many countries have decided to close schools as part of a physical distancing policy to slow transmission and ease the burden on health systems. These school closures are affecting the education of 80% of children worldwide. Although scientific debate is ongoing with regard to the effectiveness of school closures on virus transmission, the fact that schools are closed for a long period of time could have detrimental social and emotional health consequences for children living in poverty, and are likely to exacerbate existing inequalities.

This study aims to assess the vast difference in Emotional quotient of adolescents belonging to two different socio-economic background, during virtual learning by studying the affect on each attribute of Emotional Intelligence.

The study of this project started with online survey of two different group of adolescents, one from higher and other from lower socio-economic background.

The first survey had 20 multiple choice questions related to different attributes of Emotional Intelligence and was conducted on Google Forms. Survey had more than 150 responses from students of grade 10 to grade 12 of schools in urban India.

Second Survey/ Interview was conducted for students from lower socio-economic background. The survey/ Interview had 20 multiple choice questions to be answered by students and was conducted on Google Forms and through interview Survey had more than 150 responses from adolescents living in rural India.

Result shows that, there is a vast difference in Emotional Intelligence of two group of students during pandemic. Students belonging to higher socio-economic background could swim through the pandemic with only effect on self-regulation.

But for students belonging to lower socio-economic background, pandemic has been very tough. It effected all the attributes of Emotional Quotient. All attributes decreased in pandemic leading to major Emotional crisis for such students.



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Key Words: Pandemic, School closure, Socio-Economic background, Self-regulation, Emotional crisis

1. Introduction:

While coronavirus disease 2019 (COVID-19) continues to spread across the globe, many countries have decided to close schools as part of a physical distancing policy to slow transmission and ease the burden on health systems. The UN Educational, Scientific and Cultural Organization estimates that 138 countries have closed schools nationwide, and several other countries have implemented regional or local closures.

These school closures are affecting the education of 80% of children worldwide. Although scientific debate is ongoing with regard to the effectiveness of school closures on virus transmission, the fact that schools are closed for a long period of time could have detrimental social and health consequences for children living in poverty, and are likely to exacerbate existing inequalities.

What is Emotional Intelligence?

When it comes to happiness and success in life, emotional intelligence matters just as much as intellectual ability.

The very root of the word emotion is moterre, the latin verb "to move" plus the prefix "e" to connote "move away", suggesting that a tendency to act is implicit in every emotion. All emotions are, in essence, impulses to act, the instant plans for handling life that evolution has instilled in us.(Goleman,2013)

Emotional Intelligence is the ability to understand, use and manage your emotions in positive ways to relieve stress, communicate effectively, empathize with others, overcome challenges and defuse conflict. People with high degree of Emotional Intelligence know what they are feeling, what their emotions mean and how these emotions can affect other people. (Salovey and Mayer, 1990)

Adolescence is a transitional stage of physical and psychological development that generally occurs during the period from puberty to legal adulthood. Adolescence is usually associated with the teenage years, but its physical, psychological or cultural expressions may begin earlier and end later.

Stressors experienced during this crucial developmental stage may **affect** the trajectory of this neural maturation and contribute to the increase in **psychological** morbidities, such as anxiety and depression, often observed during **adolescence**.

In addition to depression or anxiety, adolescents with emotional disorders can also experience excessive irritability, frustration or anger. Symptoms can overlap across more

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than one emotional disorder with rapid and unexpected changes in mood and emotional outbursts.

The gap in mathematical and literacy skills between adolescents from lower and higher socioeconomic backgrounds has widened during virtual learning.(Amory Martin, Maryia Markhvida,23 July 2020)

Adolescents from low-income households live in conditions that make home schooling difficult. Online learning environments usually require computers and a reliable internet connection. In India, a substantial number of children live in homes in which they have no suitable place to do homework or have no access to the internet.

Beyond the educational challenges, however, low-income families face an additional threat: the ongoing pandemic is expected to lead to a severe emotional imbalance with long lasting consequences on adolescent's emotional health and wellbeing,

As per Daniel Goleman, Emotional Intelligence has five attributes:

1.1 Self Awareness:

The ability to recognize an emotion as it "happen" is the key to our EQ. Developing self-awareness requires tuning into your true feelings. The major elements of self-awareness are:

- Emotional Awareness: Our ability to recognize our emotions and their effects.
- Self Confidence: Sureness about our self-worth and capabilities
- *Self-Awareness*: Our ability to know ourselves better, our likes and dislikes, what job to take, whom to marry.

1.2 **Self-Regulation**:

We experience only six major emotions- anger, sadness, fear, happiness, surprise, and disgust. We often have little control over when we experience emotions. But we can, however, have some say in how long an emotion will last such as anger, anxiety etc. Self-Regulation involves:

- Self-Control: Managing disruptive emotions
- Trustworthiness: Maintaining standards of honesty and integrity.
- Conscientiousness: Taking responsibility for own performance
- Adaptability: Handling change with flexibility
- *Innovation:* Being open to new ideas

1.3 **Motivation**:

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To activate ourselves for any achievement requires clear goals and a positive attitude. Motivation involves:

- Achievement drive: Our constant striving to improve or to meet standard of excellence.
- *Commitment*: Alligning with the goals of the group or organisation
- *Initiative*: Readying ourselves to act on opportunities
- Optimism: Pursuing goals persistently despite obstacles and setbacks

1.4 Empathy:

The ability to recognize how people feel is important to success in our life and career. An empathetic person excels at:

- Service Orientation: Anticipating and recognizing the needs of others.
- Developing Others: Sensing what others need to progress and bolstering their abilities.
- Leveraging Diversity: Cultivating opportunities through diverse people.
- *Understanding Others*: Discerning the feelings behind the needs and wants of others.

1.5 Social Skills:

The development of good interpersonal skills is tantamount to success in our lives and career. People skills are more important now because we must possess a high EQ to understand, empathize and negotiate with others in global economy. Important useful skills are:

- *Influence*: Wielding effective persuasion tactics
- *Communication*: Sending clear messages
- Leadership; Inspiring and guiding people
- Conflict management: Understanding, negotiating and resolving disagreements.
- Building Bonds: Nurturing instrumental relationships
- Collaboration and Cooperation: Working in group towards common goals.
- *Team capabilities*: Creating group synergy in pursuing common goals.

The concept of Emotional Intelligence is atop topic among today's modern adolescents. It is the young people of today that will make up the workplace of tomorrow.

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2. Aim:

To assess the Emotional quotient of adolescents from lower and higher socioeconomic backgrounds during pandemic by studying the affect on each attribute of Emotional Intelligence

3. Methodology:

The study of this project started with online survey of two different group of adolescents, one from higher and other from lower socio-economic background.

First Survey was conducted to measure Emotional Intelligence of students from higher socio-economic background with regards to the coronavirus pandemic and subsequent changes in the educational pattern. The child had to assess whether the pandemic has had positive/negative/no impact on him/her in the respective areas by comparing with pre-lockdown experiences.

The survey had **20 multiple choice questions** related to different attributes of Emotional Intelligence and was conducted **on Google Forms.**

Survey had more than 150 responses from students of grade 10 to grade12 of schools in urban India.

Second Survey/ Interview was conducted for students from lower socio-economic background.

The survey/ Interview had **20 multiple choice questions** to be answered by students and was conducted on **Google Forms** and through interview

Survey had more than 150 responses from adolescents living in rural India.

4. Observations and Analysis:

As each question of the survey was related to a particular element of a Attribute of Emotional Intelligence, hence percentage increase / decrease/ no change was tabulated.

Mean increase/decrease/ no change percentage for each Attribute was then calculated for students of both the groups separately.

Gp (1): Adolescents from high socio-economic background

Gp (2): Adolescents from low socio-economic background

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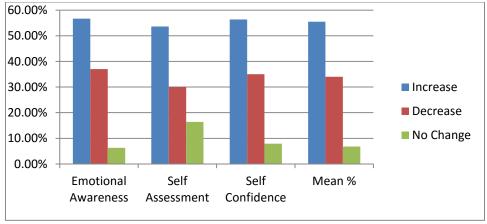
4.1 Self Awareness:

By students Gp (1):

Table 1: Percentage change in various elements of Self Awareness in students from high socio-economic background

ELEMENTS	INCREASE	DECREASE	NO CHANGE
Emotional Awareness	56.7%	37%	6.3%
Self Assessment	53.6%	30%	16.4%
Self Confidence	56.4%	35%	7.9%
Mean %	55.5%	34%	6.8%

Figure 1: Percentage change in various elements of Self Awareness in students from high socio-economic background



By students Gp (2):

Table 2: Percentage change in various elements of Self Awareness in students from lower socio-economic background

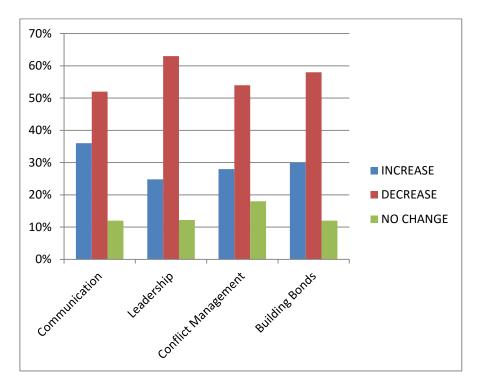
ELEMENTS	INCREASE	DECREASE	NO CHANGE
Emotional Awareness	45%	47%	8%
Self Assessment	30%	58%	12%
Self Confidence	39%	54%	7%
Mean %	38%	53%	9%

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Figure 2: Percentage change in various elements of Self Awareness in students from lower socio-economic background



By Students and Parents together:

Table 3:Percentage change in various elements of Self Awareness by students and Parents

ELEMENTS	INCREASE	DECREASE	NO CHANGE
Self Awareness by Students	55.5%	34%	6.8%
Self Awareness by Parents	53.4%	32.3%	14.2%
Mean %	54.5%	33.2%	10.5%

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70.00% 60.00% 50.00% 40.00% Increase 30.00% Decrease ■ No Change 20.00% 10.00% 0.00% **Emotional** Self Self Mean % Assessment Confidence **Awareness**

Figure 3: Percentage change in various elements of Self Awareness by students and Parents

4.2 Self-Regulation:

By Students Gp (1):

Table 4: Percentage change in various elements of Self-Regulation in students from high socio-economic background

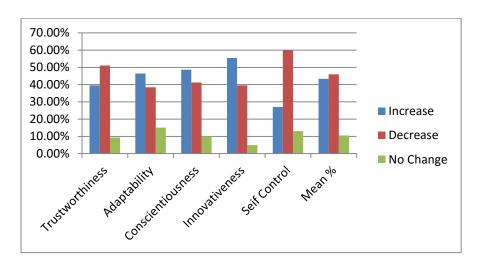
ELEMENTS	INCREASE	DECREASE	NO CHANGE
Trustworthiness	39.6%	51.1%	9.3%
Adaptability	46.4%	38.5%	15.1%
Conscientiousness	48.7%	41.2%	10.1%
Innovativeness	55.4%	39.6%	5%
Seif Control	27%	60%	13%
Mean %	43.4%	46%	10.5%

Figure 4: Percentage change in various elements of Self-Regulation in students from high socio-economic background

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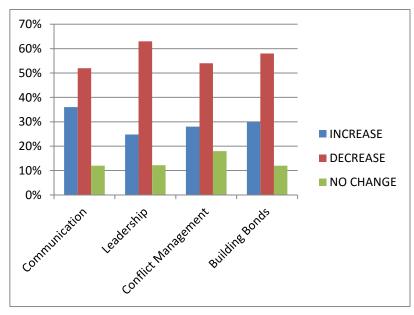


By Student Gp (2):

Table 5: Percentage change in various elements of Self-Regulation in students from lower socio-economic background

ELEMENTS	INCREASE	DECREASE	NO CHANGE
Trustworthiness	35%	58%	7%
Adaptability	53%	43%	4%
Conscientiousness	48.7%	41.2%	10.1%
Innovativeness	53%	42%	5%
Seif Control	21%	76%	3%
Mean %	42.14%	52%	5.8%

Figure 5: Percentage change in various elements of Self-Regulation in students from lower socio-economic background



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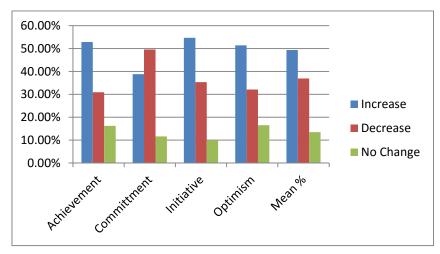
4.3 Self Motivation:

By Students Gp (1):

Table 6: Percentage change in various elements of Self-Motivation in students from higher socio-economic background

ELEMENTS	INCREASE	DECREASE	NO CHANGE
Achievement	52.9%	30.9%	16.2%
Committment	38.8%	49.6%	11.6%
Initiative	54.7%	35.3%	10%
Optimism	51.4%	32.1%	16.5%
Mean %	49.4%	36.9%	13.5%

Figure 7: :Percentage change in various elements of Self-Motivation in students from higher socio-economic background



By Studenst (Gp (2):

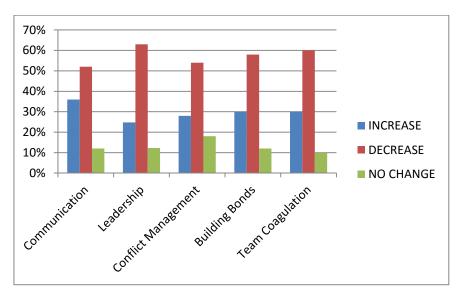
Table 8: Percentage change in various elements of Self-Motivation in students from lower socio-economic background

ELEMENTS	INCREASE	DECREASE	NO CHANGE
Achievement	24%	58%	18%
Commitment	33%	48%	19%
Initiative	45%	36%	19%
Optimism	48%	34%	18%
Mean %	37.5%	44%	18.5%



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Figure 8: Percentage change in various elements of Self-Motivation in students from lower socio-economic background



4.4 Social Awareness:

By Students Gp (1):

Table 9: Percentage change in various elements of Social Awareness in students from higher socio-economic background

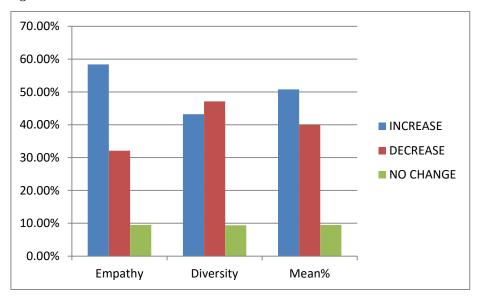
ELEMENTS	INCREASE	DECREASE	NO CHANGE
Empathy	58.4%	32.1%	9.5%
Diversity	43.2%	47.1%	9.4%
Mean%	50.8%	40%	9.5%

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Figure 9: Percentage change in various elements of Social Awareness in students from higher socioeconomic background



By Students Gp (2):

Table 10: Percentage change in various elements of Social Awareness in students from Lower socioeconomic background

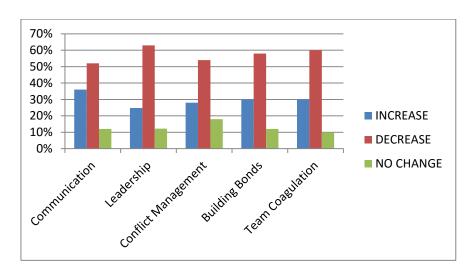
ELEMENTS	INCREASE	DECREASE	NO CHANGE
Empathy	35%	58%	7%
Diversity	52%	38%	10%
Mean%	43.5%	48%	8.5%

Figure 10: Percentage change in various elements of Social Awareness in students from Lower socio-economic background

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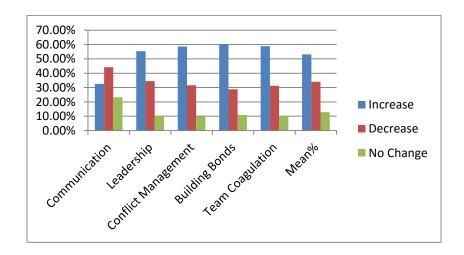
4.5 Social Skills:

By Students Gp (1):

Table 11: Percentage change in various elements of Social Skills in students from higher socio-economic background

ELEMENTS	INCREASE	DECREASE	NO CHANGE
Communication	32.6%	44.2%	23.2%
Leadership	55.3%	34.5%	10.2%
Conflict Management	58.6%	31.6%	9.8%
Building Bonds	60.3%	28.8%	10.9%
Team Coagulation	58.8%	31.2%	10%
Mean%	53.1%	34%	12.8%

Figure 11: Percentage change in various elements of Social Skills in students from higher socio-economic background



By Students Gp (2):

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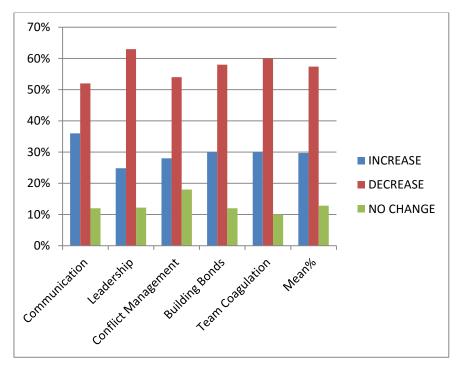


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Table 12: Percentage change in various elements of Social Skills in students from lower socio-economic background

ELEMENTS	INCREASE	DECREASE	NO CHANGE
Communication	36%	52%	12%
Leadership	24.8%	63%	12.2%
Conflict Management	28%	54%	18%
Building Bonds	30%	58%	12%
Team Coagulation	30%	60%	10%
Mean%	29.7%	57.4%	12.8%

Figure 12: Percentage change in various elements of Social Skills in students from lower socio-economic background



5. Interpretation:

As the Questionaire survey contained questions related to various attributes of Emotional Intelligence, data in % was Statistically Analysed using Mean Descriptive Statistics.

5.1. Self Awareness:

- I) According to 56.7% students belonging to high social-economic background, Emotional Awareness of students increased during pandemic while that of students belonging to lower social-economic background decreased by 47%.
- II) According to 53.6% students belonging to Gp-1, there was an increase in Self-Assessment. There was decrease in Self-Assessment by 58% students belonging to Gp 2.
- III) According to 56.4% students of Gp-1, there was increase in Self Confidence of Adolescents. But there is decrease in Self Confidence by 54% of students of Gp2.

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Overall, there was an *increase in Self Awareness* by 55.5% of students belonging to higher socio-economic background. On the other hand *Self Awareness decreased* by 53% of students belonging to lower socio-economic background.

5.2. Self Regulation:

- I) According to 51.1% students of Gp 1 and 58% students of Gp 2, Trustworthiness decreased during pandemic.
- II) According to 46.4% students of Gp 1 and 53% students of Gp 2, Adaptability showed upward trend during these tough times.
- III) 48.7% students of Gp 1 and Gp 2 reported increase in Conscientiousness.
- IV) According to 55.4% students of Gp1 and 53% students of Gp2 reported upward trend for Innovativeness.
- V) According to 60% students of Gp 1 and 76% students of Gp2, There was decrease in Self Control.

Overall there was a *decrease in level of Self-Regulation* in both the groups.

5.3. Self Motivation:

- I) According to 52.9% students of Gp1 and reported increase in levels of Achievement. But 58% students of Gp 2 reported decrease in Achievement levels.
- II) According to 49.6% students of Gp1 and 48% students of Gp 2, there was decrease in levels of Commitment.
- III) 54.7% students of Gp1 and 45% of Gp2 showed increase in levels of taking Initiative.
- IV) Levels of Optimism showed upward trend by 51.4% students of Gp 1 and 48% of Gp2.

Overall there was *a increase in levels of Self Motivation* by 49.4% by students of higher economic background. But levels of *Self Motivation* of students of lower economic background *decreased* by 44%.

5.4. Social Skills:

- I) 44.2% students of Gp 1 and 52% of Gp 2 showed decrease in levels of Communication
- II) 55.3% students of Gp 1 showed increase in Leadership during pandemic. But 63% students of Gp 2 showed decrease in Leadership.
- III) 60.3% students of Gp1 reported increase in Building Bonds. At the same time 58% students of Gp 2 reported decrease.
- IV) 58.6% students of Gp 1 reported increase in Conflict Management while 54% students of Gp2 reported decrease in Conflict Management.
- V) 58.8% students of Gp 1 agreed to increase in Team Coagulation. While 60% reported decrease in Coagulation.

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Overall there was *a increase in Social Skills* by 53% of students belonging to higher economic strata While there was a *decrease in Social Skills* by 57% of students belonging to lower economic strata.

5.5. Social Awareness:

- I) According to 58.4% students of Gp 1, there was increase in Empathy. While there was decrease in Empathy by 58% students belonging to Gp2.
- II) 47.4% Students of Gp 1 and 52% of Gp2 reported decrease in levels of Diversity.

Overall there was *a increase in Social Awareness* by 50.8% by students of higher economic strata and a decrease by 48% by students of lower economic strata.

6. Result and Discussion:

From above interpretation, it is shown that during pandemic, there is a vast difference in Emotional Intelligence of two group of students. Students belonging to higher socio-economic background could swim through the pandemic with only effect on self-regulation.

But for students belonging to lower socio-economic background, pandemic has been very tough. It effected all the attributes of Emotional Quotient. All attributes decreased in pandemic leading to major Emotional crisis for such students.

7. Conclusion:

While learning might continue unimpeded for children from higher income households with less effect on their emotional quotient, children from lower income households are likely to struggle to complete homework and online courses because of their precarious housing situations. Beyond the educational challenges, however, low-income families face an additional threat: the ongoing pandemic is expected to lead to a severe economic recession. Previous recessions have exacerbated levels of child poverty with long lasting consequences for children's Emotional health and wellbeing.

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