

Investigation on Impact of Pandemic on Social- Emotional learning of Student Community

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Abstract— Social-emotional learning (SOEL) is the process of developing self-control on physical , mental, and societal and interpersonal skills which play a vital role in a student's life during his high school, undergraduate and during career building and finally succeed in his life. When the pandemic has occurred, people struggled intensely for survival. There has been a huge gap in identifying the troubles faced by student community, both in schools and colleges. The paper deals with situation before Pandemic, how the learning environment was and how it is, after the pandemic. The authors conducted a survey amongst college going students who expressed their mental in-abilities and psychological struggles after pandemic. The students spent most of their critical time of their engineering study online and at home. A detailed study and discussions in this paper has been made. The paper explains the techniques to develop social and emotional skills, which eventually end up landing in positivity and wholesomeness. The paper concludes the methods to retain emotional ability and keep the mental strength high.

Keywords—Pandemic, Social emotional learning, COVID-19, Mental Health, Higher education, Teaching.

I. INTRODUCTION

Social-emotional learning (SOEL) is the process of developing self-control on physical , mental, and societal and interpersonal skills which play a vital role in a student's life during his high school, undergraduate and during career building and finally in leading a successful life. People with strong SOEL skills can recover with everyday challenges and benefit academically, professionally, and socially.(Arslan & Demirtas, 2016)

The definition of social and emotional learning (SOEL) is an integral part of education system and human development (Pertegal-Felices, Castejón-Costa, & Jimeno-Morenilla, 2014). SOEL is the procedure through which all the young and the old generation attain and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel, and show empathy for others, establish, and maintain supportive relationships, and make responsible and caring decisions(Riemer, 2003).

SOEL advances educational equity and excellence through authentic college-family-community partnerships to establish learning environments and experiences that feature trusting and collaborative relationships, rigorous and meaningful curriculum and instruction, and ongoing evaluation. SOEL can help address

various forms of inequity and empower young people and adults to co-create thriving institutions and contribute to safe, healthy, and just communities. Broadly speaking, social and emotional learning (SOEL) refers to the process through which individuals learn and apply a set of social, emotional, and related

skills, attitudes, behaviors, and values that help direct students. This includes thoughts, feelings, and actions in ways that enable them to succeed in engineering graduates(Chand, Kumar, & Mittal, 2019).

II. LITERATURE

An article on social and emotional learning (SOEL) addressed on the meaning of SEL. The personal development and way of handling emotional lives among the students becomes more effective when it continues beyond the college and integrates with their whole life including their STEM. Science, Technology, Engineering and Mathematics (STEM) is a hard crunchy stuff that makes the world go round.

Maja Meško and team presented their work on Emotional Intelligence of Engineering Students as Basis for More Successful Learning. They intended to understand personality characteristics related to emotional intelligence and how it can define development program of personal behavior in process of education. This study resulted in significant differences between three dimensions of emotional intelligence like self-regulation and attitude towards changes were positively affected by self-awareness. Development of student emotional potential is a key actuator for success in the era of Industry 4.0 (Veljković et al., 2020). Karen Stansberry Beard et al worked on understanding teacher social and emotional learning supports for student well being during pandemic and beyond. Teachers across United States had to balance transition of their teaching to online platforms and implement social and emotional learning (SEL) standards. The authors contended that teacher well-being is the key determinate to student well-being and also observed how teachers created and innovated online communities to support one another's SEL pedagogy (Beard, K. S., Vakil, J. B., Chao, T., & Hilty, 2021).

Gayanthi A. Ilangarathna and team gave an overview of education during three COVID-19 pandemic periods and the impact on engineering students in Sri Lanka. Like many

countries across the globe, COVID-19 has impacted the engineering education system in Sri Lanka. Quantitative descriptive analysis along with chi-square statistics were used to evaluate the research questions provided to engineering students through google survey form. Authors reported nearly 50% of students' family income has been impacted, either stopped or reduced due to the pandemic and students have issues regarding computing devices, internet connectivity, and the home environment. The study suggests implementing workshops, awareness programs to stakeholders, training in new technologies, etc can be done to improve the new standard education in Sri Lanka (Ilangarathna et al., 2022). El-Sayed Atlam et al researched on new approach in identifying physiological impact of COVID-19 on university students' academic performance. They studied on how students would have suffered from physiological impacts and learning difficulties caused by lockdowns during pandemic. They have used statistics and machine learning approaches to study the impact of pandemic on education systems especially on university students' psychological health. The results predicted positive relation between academic performance of students and digital tools utilized and highlighted the alarming impacts of COVID-19 on education systems. The authors recommended that universities need to play a crucial role in helping students to overcome the impact of pandemic in a healthier psychological manner (Atlam, Ewis, El-Raouf, Ghoneim, & Gad, 2022).

III. HYPOTHESIS

If there's anything the past year in education has made difficult, obvious, it is the urgency of social-emotional education for our students. Students need support and instruction to manage successfully in college (whether that's in person or online) and in life. Skills like recognizing and managing emotions, being a good friend, controlling impulses, communicating effectively, and working with others are invaluable.

IV. THE TREND BEFORE

The worldwide COVID-19 pandemic caused by the Novel Coronavirus has affected all including children. It has made a dreadful impact on education, most notably of poor and deprived families.

As per UNESCO estimates, education of 120 crore students across the world is disrupted by school closures. This includes

32.1 crore children in India. Keeping students in their most important phase of life at home for more than 40 weeks has disturbed their physical, emotional, and social wellbeing. The worst affected among them are the wards of the poor.

Experts say that short time out of education will have

itseffect on students. When colleges are closed for a more extended period, imagine how more and long-lasting the impact would be on them. students may forget what their fundamentals are. While online classes may prevent this regression for some, think of those, who lack access to technology and internet connection (Pokhrel & Chhetri, 2021). As a result of COVID-19, children, adolescent, and college students are experiencing long duration of quarantine, physical isolation from their friends, teachers, and extended family members, and are forced to adapt to a virtual way of learning (Pokhrel & Chhetri, 2021). Due to this unexpected and forced transition, children and college students may not have adequate academic resources, social contact and support, or a learning-home environment, which may lead to a heightened sense of loneliness, distress, anger, and boredom—causing an increase in negative psychological outcomes (Roy & Brown, 2022). Mental health issues may also arise from the disease itself, such as grief from loss of lives, opportunities, and employment. Similar psychological effects have been found from wars and previous disease outbreaks. Additionally, inequities and disparities in the social determinants of health (e.g., income status, immigrant background, language barrier, parents' educational background, and access to adequate healthcare) may contribute further to the development of psychological distress among children and college students living through the COVID-19 pandemic.

The authors gave a platform to around 180 students to express their emotions and write the behavioral changes occurred after pandemic. Most of the students have expressed the following issues.

Mental and Behavioral issues of students during pandemic:

- Impatience
- Indiscipline
- Improper eating
- Depression
- Short Temperament
- Restlessness
- Loss of focus
- Tensions on financial setback of parents
- Problem with maintaining same routine

Apart from the above mentioned, the most critical is to catch up academic schedules being remotely attending the classes. Few students with poor financial background, had issues with pressure of attending classes online, for this maintain high speed network, buy laptops, hi-end mobiles to work on assignments.

V. RESULTS FROM SURVEY

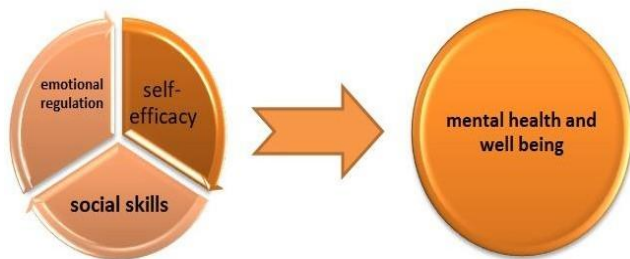
Fig. 1. Survey results as answered by students from 2nd, 3rd, 4th years.

Overall, the most un-desired environment was created for both students and teachers. For the students, to catchup with the pace of learning courses and teachers, to catch up with the pace of transforming digitally.

As mentioned, when the authors took the feedback from the students at various years of study, 2nd year engineering, 3rd year Engineering and 4th year of Engineering, the students expressed their issues based on their level in the Engineering program. For example, fourth year students felt less pressure as they were in the fag end of the program. When 2nd year students were asked for their feedback, they were in so much of confusion. They expressed that they were not able to understand critical subjects online like Kinematics of Machinery, Thermodynamics, which needs to be delivered with some practical exposure. They expressed that they could even fail in assessments if the lockdown continues and so are the virtual classrooms.

The third years have an additional concern of attending trainings for placements which were becoming hectic in virtual sessions due to back to back schedules. They were feeling physical exertion, tired by the time they sleep. This recurring cycle has brought in lethargy to the maximum percentage of students to come and physically attend the classes, after pandemic.

Not only this, behavioral issues like short temperedness, impatience etc. have become a matter of concern to



themselves and their parents.

The following are some of social-emotional skills usually expected from learners.

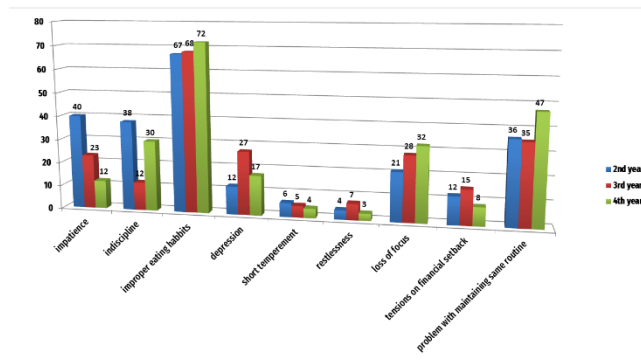


Fig.2. connection indicating mental health dependency



Fig 3. Indicates the skills necessary for a student

The above pie diagram explains the persona of a student with equally important (distributed) qualities. The emotional regulation is to control himself from home and outside environment and focus on the academics. Self-efficacy is to understand his own capabilities and social skills to be helpful and cooperative to each other.

A. But why one must give importance to socio-emotional learning in students?

The students, once enter the teenage require special care emotionally and morally as they will have a hormonal impact on their emotions. They take everything seriously and over react for everything. The tasks they take up, will be deciding their emotional quotient. This is where their mental health also comes into picture. They set unreachable targets for themselves, once not achieved; take it to their heart which eventually leads to depression.

So, to support them during their teens until they are to their graduation is very important for a parent, teacher, anyone who is responsible in building up a healthy citizen.

Socio-emotional learning is vital for their mental development and has been shown to further affect their physical, mental and moral behaviors. These outcomes develop them to achieve in their life and career as a whole. This involves the level of education that students show, their excellence in academics while they are in graduation.

Researchers say and show that the students with balanced social and emotional skills show excellent performances in which ever field they take up. Not only this, they can take up any kind of courses, skills, passions or careers simultaneously and show equal results. This is achievable only from an effective mapping of his emotions with his goals. From this derivation, we can say that improving student's Social and Emotional thinking skills are very important specially when he is in the grooming stage(ideally from 13yrs to 21yrs).

While more analysis is to be done on the student's behaviour with low social and emotional balance, there is a need to understand his role in building up a community, society, state or a nation as a whole.

The advantages of having socio-emotional learning skills:

- A better and holistic approach towards life which is reflected on his academic learning and knowledge on worldly affairs.
- More emphasis to the methods of learning and how they are impacted by the bigger society.
- A substantial reflection of what they have learnt in high-School, under graduation past their graduation. This will establish them as a responsible citizen and handle the crisis with a balance of social and emotional skills.

B. What are the relationship between socio-emotional learning and mental-health and wellbeing?

As discussed in the previous section, the mental stability of the students during their teen age will be fragile and it needs to be concretized by teaching some social and emotional skills. His ability to learn will be maximum as he will be in his growth sprout stage. His mental capacity to learn will be incomparable to adults. It is this time that teachers take utmost advantage of his capabilities and put him in right direction. If the mental health of a student during his childhood and adolescence is strong, he or she will be able to balance his academics and personal life equally. Usually, many students in India are under pressure during this age as they will be planning and preparing for their careers. Their physical self and mental health is totally dedicated to build their academic credentials. Any disturbance to this planning causes him peer pressure and hence forces him into depression. The state of ill mental health persists for a long time and deepens when un-addressed. Hence, the parents, teachers and society around who impact him directly can create a phenomenal change in the mental health of the students.

This exercise of behaving composed during pressure will take the student, a long way. He will be able to calm himself during instability and exposure to unexpected situations. After the occurrence of the pandemic, there are evidences (news) of students taking up severe pressure of maintaining academic performances, physical fitness.

Specifically, building social and emotional learning skills can help children retort to the complex and chaotic in a cool, composed and emotionally regulated manner, enabling them to set out and develop strategies for dealing with complex situations and problems, and to discuss and collaborate with others to mitigate problems.

The hard fact that this problem of lack of social and emotional learning in students has not taken the light yet, although the evidences are clearly shown in the form of their academic performances, societal behaviour, does not realize his capabilities, preference of isolation etc.

To strengthen the subject, the authors conducted a free end-to-end talk with final year students of Engineering. Being a professional education, Engineering studies expect utmost focus and concentration of many core courses and thorough understanding to excel and come out successfully.

The students were asked to write their heart out and express

how their emotional and social thinking has changed with pandemic. What are the challenges they are presently facing post pandemic. Many students have expressed their deep sense of confusion; the students with higher capabilities have challenged their own diligence.

The following are the words used by students while writing down their feelings:

1. Loss of self confidence
2. Confusion and chaos
3. Laziness
4. Loss of interest
5. Feel of pressure
6. Tensions about financial management at home
7. Isolation (not meeting friends)

While few have expressed the above-mentioned issues, few students have expressed that they could spend some time with their families during the lock down, to build some mental strength, create good bonding between family members which helped them in developing positivity, self-control, balance of emotions etc. (Www.activeminds.org, n.d.).

There is an immediate need to understand the mental condition of students, especially after the impact of pandemic situation. There are some simple possible ways to improve oneself in improving their social and emotional thinking (Elharake, Akbar, Malik, Gilliam, & Omer, 2022).

C. 14 best possible ways to improve social and emotional thinking:

1. Teamwork
2. Listening skills
3. Physical stability
4. Emotional Balance
5. Art of expression
6. Culture of humility
7. Conflict management with peer mediation
8. Progress monitoring of their career plans
9. Cultivate spending quality time with family
10. Encouraging the friends
11. Develop the community as a whole
12. Learn mindfulness
13. Venting the exertion through an art/passion/hobby
14. Decision making with composure

D. Teaching SOEL skills, the role of teachers:

There are many strategies one can use to teach SOEL:

1. Listening to them
2. Find out their hurdles to achieving excellence
3. Create a learning eco-system
4. Be available, present, and Observant.
5. Create a Supportive Atmosphere.
6. Share real Life Experiences and case studies.
7. Share struggle and success stories.
8. Stimulate positive Discussion.
9. Give the Students the Opportunity to Practice.

Teachers need to create a healthy classroom talking where students speak their heart out. Such classrooms are usually called as “buddy classroom” where they can share their troubles, pressures, fears, goals, and hurdles which they face to achieve their mission etc. (U. mental Health, n.d.)

The above mentioned could be the remedies for teens whereas the teachers and personnel are critical in supporting children's transition back to in-person classroom learning, particularly after extended periods of school closure.

V: DISCUSSIONS

Teachers are constantly focused on how to utilize various skills to keep a check of their students’ emotional and learning well-being even when schools are closed. As the schools are now back to physical functioning of the following suggestions might be helpful.

1) Listen to students’ (adolescent) concerns

Mental health and well-being adolescents and children were greatly impacted due to COVID-19 and school closures. This arises students concerns and being teachers, it is required to listen to them and demonstrate empathy and understanding. One-to-one mentoring is the best way to have a conversation with students and discuss their concerns, behavioral changes during the school closure. If the students are sharing any problem or any concern proper protection needed to be taken through child safeguarding protocols.

2). Checking state of mind of students

It becomes an essential part of teachers and academic personal

TABLE I
 SUBJECTS RELATED TO STUDENTS’ SOEL

Episode	Instructional Topic
1.	Respect (self-Respect and respecting others)
2.	Looking towards the future (consequences, role models, and action plans)
3.	Taking responsibility(responsibility and impulse control)
4.	Communicating (verbal and nonverbal; productive and receptive)
5.	Understanding the situation (assumptions and perspective thinking)
6.	Building friendships(friendship skills and social initiation)
7.	Cooperating with others (cooperation, compromise and peer pressure)
8.	Emotional regulation (self-awareness, regulation and interference)
9.	Review and Integration across social skills

to check the status of mind of a student. Most common issues among students are it might take more time to concentrate and get back to their routine to be ready for learning. Allowing

students to take small breaks, sit and move time, and connecting with their peers can help them adjust faster to the school environment.

2) Providing accurate information around COVID-19 to students.

Adolescent Children might have different thoughts and queries regarding COVID-19 when they return to the college. Students may be more curious to know more information. There are multiple sources of student friendly and age wise resources so that their questions can be answered appropriately based on the documented data.

3) Create student-friendly, comfortable classroom environment

It would always be a good idea to seek students in making the class more engaging, safe, welcoming, and comfortable. Also give equal importance to follow the institution safety protocols and able to use resources sustainably.

Suggestions can be taken from the students who are able to be balanced and able to come out well to some extent. Extracurricular activities like painting, sports, arts will keep their mind occupied and will prepare them to face mental pressures. They can paint and write messages colorfully on walls and work in groups which create a friendly atmosphere and supportive environment. This will give an exposure to the students on how to support each other and bring learning back to classroom. Appreciation to their contributions and support acts as icing on the cake. With interaction and developing positive relationships, teachers can inculcate a sense of safety and secured feeling among students. Practicing their daily routines can also help them feel safe and secure in school premises and after school and make them return to the school daily.

4) Observe for any warning signs in students that affects their ability to learn and explore

Teachers play a key role in observing the students’ behavior as the changes might inhibit them to actively participate in classroom activities and hinder their ability to explore and be functional. In such scenarios the teachers should follow some protocols and approach for proper help and support. Teacher can immensely support struggling students and can also refer them to physicians, mental health professionals and student counselors when needed (Education, n.d.). Teachers can provide continuous support and guidance or also provide extra support, apply small techniques/ slowing down the learning process a bit for a particular child can help the child to learn and concentrate.

5) Encouraging interests and sports to promote interaction among students

As it is essential in many countries strict physical distance is

followed as part of COVID-19 protocols which prevents to play in playgrounds and other spaces that hinders interaction between their peers. As the children have missed connecting to their peers, it is always necessary to allow students to get lot of opportunities to play, interact and socialize alongside following COVID-19 protocols in school.

6) *Modeling better coping mechanisms for students – be honest, caring, calm and welcoming.*

Teachers are always positive role models for large numbers of students. Children will follow teachers as inspiration and adapt and learn the skill, small techniques used by teachers to handle stressful situations. Teachers need to be calm composed and caring and inculcate positive attitude to students.

7) *Self-care and know one's boundaries*

Especially post COVID teaching profession is the most stressful profession. Rather than only concentrating on students' wellbeing its equally important to focus on protection of personal and mental health like healthy eating options and proper sleep habits, connecting and maintaining social relationships, rest. It's always important to ask for help during stressful situations.

VI. CONCLUSION

On one side, people appreciate pandemic for paving way for a complete digitalization of teaching culture, impacting the traditional system, the other side pandemic crisis has proved the vital imperfections of traditional education systems around the world and has divulged the deeply rooted and often hidden discrepancies that different students' societies face.

The authors explained the necessity of social and emotional learning skills in students and also indicated the link between SOEL with mental health. The feedback taken from the students helped the authors to understand the situation better and tried to express that the situation is alarming and it is the right time to react to and take necessary remedies to treat the issue. The authors also mentioned the role of the teachers, society as a whole in improving the SOEL in students, especially after the pandemic crisis.

As adults, we all have diverse needs and different ways of coping with stressful situations. For children, it is the same. Some children will have dealt well with restrictions and school closures caused by the COVID-19 pandemic. For others, it is challenging to cope with all the changes and uncertainty. Some children will return to school having experienced some level of stress, anxiety, isolation, and grief. Some may have experienced increased violence at home.

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