

Understanding the impact of COVID19 on learning continuum for students and psychological wellbeing in army martyr families in North East states of India

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ABSTRACT: The Indian education system has shifted towards accepting the reality of COVID19 pandemic which has resulted impacting the students to adapt and adopt new tools for e-learning. The academic institutions under government directives have closed during lockdown following social distancing, and self-isolation as economy contracted into recession. The transition towards continuing e-learning platform due to closure of schools and universities has been influenced by SES (socio economic status) and PWB (psychological wellbeing). The research explores these dimensions for students of North East India martyr families embracing the transition of physical to virtual classroom environment. The reconceptualisation of new learning environment and initiation towards online classes at home has brought in individual level adjustment in lifestyle. The methodology uses select variables to identify the SES and PWB scale of designed by Ryffused quantitative survey demographics and SES, along with PWB variables for SPSS analysis. Interviews over phone is done into transcripts for thematic analysis in MAXQDA software has supported Ryff PWB dimensions. The findings show locational disadvantages for NE martyr family students in India, though they have adjusted well towards the acceptance of the transition in learning techniques to master technology for accessing e-learning courses. The structural gaps of telecommunication links, isolation at home however has brought out the environmental mastery, purpose in life, self acceptance of reality in NE martyr family students. As they adopted coping strategies of transition in their learning, the crisis of COVID19 shows how academic institutions abrupt shift towards virtual classrooms have affected marginalised SES group and impact on PWB.

Keywords: education, COVID19, teaching, learning, technology

I. INTRODUCTION:

The academic institutions comprising of the schools, universities use the classroom-based face to face learning methods in India has undergone a disruption in the year 2020 (Maity et al. 2020). The COVID19 pandemic outbreak in the beginning of the year, globally, has affected almost all countries and sectors. The education sector has been subject to temporary lockdown with all educational institutions taking note of the government directives (central and provincial), WHO (World health organisation) protocols, to safeguard the health of students. The discontinuation of the face-to-face teaching pedagogy due to the COVID19 contagious spread, has led to academic institutions to search for methods that disrupted the learning process in the academic session 2020.

The issue has been a challenging one as most of the students are confined to their homes across cities in all nations. The 'social distancing' protocols have been adopted to save the students to stay away from crowding, group activities, which has adversely affected the learning and teaching methodology in the academic institutions (Jakhar and Kharya, 2020). The lockdown imposed on the students continued from the beginning of Jan 2020 and was gradually phased out in the months of May 2020 in most of the countries. Education falls in the tertiary sector but an important one, as the closure leads to impact wide range of factors, education programs with goals to be pushed further (Wang et al. 2010) (Bozkurt and Sharma, 2020). UNESCO estimates that over 900 learners in schools alone in 2020 has been affected in 131 countries, segmenting the closure categorised as – partially open, closed due to COVID19, fully open, academic break (UNESCO figures show two thirds of an academic year lost on average worldwide due to Covid-19 school closures, 2020).The figures for India show that

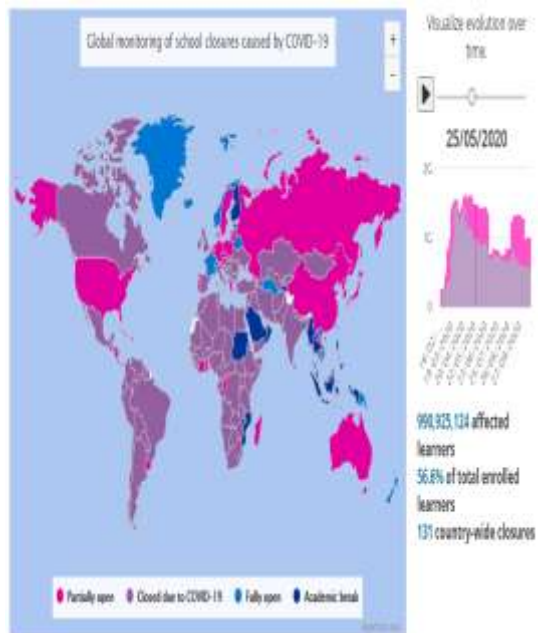


Figure 1: UNESCO closure of schools caused by COVID19

(Source: UNESCO, 2020)

Over 320 million academic students have been affected, out of the 34million belonging in the tertiary education sector (UNESCO Education: From disruption to recovery, 2020). The academic institutions thinking about alternate options could not rationalise the classroom space, against the WHO guidelines of social distancing, in the learning space(Sohrabi et al. 2020) (Zacharia andTwinomugisha,2020). The disruption of the learning continuum due to COVID19, has therefore cornered the current education system, though in some parts of world technology enabled education has been experimented (Brand and Kinash, 2010) (McNeil and Borg, 2018).

Even though the intention of the academic institution closure is for the elimination of the spread of COVID19 within students, the closure itself has created widespread SES (socio economic status) to be affected drastically (Wanberg et al. 2020). There are free meals in schools in many developing countries across the world, and the rehabilitation programs like school dropout rates, girl child education (free) have now been confined to social isolation. The entire academic fraternity supply side (schools, colleges, universities) and the demand side (students, parents and guardians) are staring at lockdowns that have affected daily lifestyle and social mobility (UNESCO figures show two thirds of an academic year lost on average worldwide due to Covid-19 school closures, 2020). The income of employed parents

during lockdown in small and medium scale industries has been affected especially in the low-income households, like migrant labourers who have many dependents in the family (Zimmerman and Katon, 2005). It is evident that the COVID19 pandemic has created a forced situation impacting the education sector in India just like other parts of the world. Miech and Shanahan (2000) argued that any disruption indirectly affects the jobs, the status (SES), family lifestyle irrespective of their social status, socio economic background. There is evidence of reduction in the industrial activity and consequently the economic activities to come to a halt, creating more inequalities and an unforeseen future that is yet to unfold (Kagitcibasi, 2007).

COVID19 pandemic:

In India, the first news of COVID19 appeared in 30Jan, 2020 in the southern state of Kerala, and has spread all over India barring few states. The concerted efforts of the provincial governments along with the central government in easing of lockdown from March 2020 to May2020, and phased lockdown being lifted in terms of activities, lifting containment zones by pincode in affected areas in each stage is a selective approach for essential services to resume (UNESCO, 2020a) (UNESCO, 2020b). Saxena(2020) states that though learning disruption has had happened, the pace of e-technologies booming has accelerated e-learning pertaining to adoption and adaptation to virtual classes amongst the teachers, student fraternity.

In this research, an attempt is made to uphold the army martyr families in North East part of India, their families and children (surviving members) with education perspective as how they are able to cope with the reality of COVID19. In doing so, the research paper intends to focus on COVID19 crisis impacting the army martyr children and existing policies aimed to protect them. Secondly, the COVID19 crisis creating social inequalities (SES) is explored for army martyr families of in North East Indian families, and thirdly the psychological wellbeing (PWB) of the army martyr families of in North East Indian families is explored.

II. LITERATURE REVIEW:

Chen et al. (2011) research was the earliest mention of the teaching methods that is also termed as e-learning, e-training or remote teaching which was only prevalent in inaccessible geographical areas, online courses or where natural catastrophe has struck.

2.1 Offline and online education:

The telemedicine technology has been borrowed and implemented in the education sector that has helped the students in the lockdown period (Martin, 2020). Rapanta et al. (2020) argued that it has helped to continue receiving lectures over electronic devices like computers (PC desktop, laptop), smartphone, tablets for all students across education levels. Rieley (2020) reported that the risk of losing the academic session and the pending list of courses, has forced the academic institutions to switch to alternate learning modes or methods of learning amidst lockdown. Daniel (2020) referred this as an innovation which can be linked to socio-technical framework, as it helps in bridging the academic gaps in society during the period of lockdown, and also continuance of education using technology. It has helped the disruption in the academic session to end, as the directives of all government is to provide health safety has been met, while teaching faculty have embraced computer (hardware), software (MS Office), communication software (Zoom, Microsoft Teams, GoogleMeet, CISCO Webex) to stream live lectures to students with devices (Leigh et al. 2020). The issue for the poor and marginalised students is a challenge which both the families and academic institutions have realised. Though the online learning process required tools, the academic institutions have started using free Gmail, Google forms, Google calendars, GoogleDrive, Google classroom, Google Jam board, to use for different subjects to compensate for face-to-face classes (Baran and AlZoubi, 2020). The availability of Google in smartphone and computer/laptop has helped individuals in academics to learn and adapt to change fast which also faster learning about techniques involved in digital tools for classroom coaching (Vargo et al. 2020).

The initiation process into learning and overcoming technical difficulties for various Google online tools has been predominantly peer to peer, while both teachers and students sought two-way interaction (Saxena, 2020). Al-Marouf et al. (2020) stated that technology adoption fear affected both the teachers and students explored the pedagogical approach and adjustments to be made in offering quality education, while laboratory class instruction based learning has been tough (Gamage et al. 2020) The students and teachers however are dependent on availability of one device at home, accessible at the time of e-learning classroom and internet service provider (ISP) connection is adequate in that area where students and teachers live which McBrien et al. (2009) stated space and technology based synchronisation. Williamson et

al. (2020) acknowledged that it is evident that the new learning space is more complex, dynamic and that emergency lockdown has made the available choices of Google tools, to be utilised in the right time and right phase. However, the mode of e-learning addresses the academic session lag, government restrictions on social distancing, that has led the academic world to conceptualize the demands of the COVID19 impact. Empirical studies from Chinese schools resuming with alternate day schools (Huang et al. 2020), odd-even students in classroom maintaining social distancing have been reported while Denmark in Europe has been the first one to reopen schools after lockdown was lifted, showing strict social distancing norms that affected normal face to face teaching. Thus, the reconceptualization of the academic pedagogy against the online/classroom-based teaching had to be adapted keeping COVID19 restrictions and protocols in mind for Indian context (Joshi et al. 2020). Emmen et al. (2013) stated that there are issues like affordability, accessibility with e-learning which finds support from policies implemented by academic institutions, faculty and students, and easy to adopt technology (Vargo et al. 2020) to develop favourable perception about e-learning. The advantages of e-learning in terms of flexibility using 'Microsoft teams' by education institutions and students (Pal and Vanijja, 2020) shows effective and efficient learning progress, is also initiated by Indian teachers (Tandon, 2020), but it required the students to accommodate devices that had to overcome the challenges over time. Khamrang (2012) shows that perceived QWL is north east cities is low, while there are NGOs have been lending their smartphones in rural countryside for streaming academic courses in some districts of West Bengal state in India.

There is no relevant research pertaining to children of the army martyr families, receiving online education (at school, college or university level) and challenges faced by them which makes it a research gap.

2.2 SES (socio economic status):

SES or socio-economic status is the combined measure of individuals work experience, or family, position in society in relation to others (Williams et al. 2010) (Conger et al. 2010). Chen and Miller (2013) stated that generally attributed as high, low and medium it generally consists of income, education and occupation as variables. The issues may vary as in poorer income shelter and food is a priority, higher income requires social position, or adolescent (Cohen et al. 2010) youth category suffers from drug, obesity (Dinsa et al.

2012) or pregnancies. The shutdown of Indian economy has led to industrial sectors (manufacturing), and services sectors to be hit as the government tried to control the spread of COVID19 virus. Though the direct impact on the Indian workforce, migrant labourers, white collar workers, blue collared jobs in shutdown sectors, or large, medium, small scale enterprises is too early to be estimated, the impact has been adverse on the lower income strata of the society (Deb and Modak, 2010). Irrespective of dual income families, or single income earners, the Indian context of lockdown immediate economic impact has either led to partial wages, losing their job, or to have furloughed as the lockdown progressed in the early part of 2020. Das et al. (2020) stated that the cut in income level (partial or full) and their financial commitments to pay EMI (equated monthly instalments) to financial institutions, has led to household income and the changing levels of SES to be adversely affected. The families are found to survive on their savings during the shocks from the environment and scaling back on their earlier levels of expenditure to survive and sustain the daily living spends on the groceries, communication, and utility bills while its long term impact is on psychological identity (Destin et al. 2017).

The emergence of work from home (WFH) in certain sectors that uses computers and telecommunication devices (Arntz et al. 2020), to support the job description are certain bright spots in the economy. The key determinant of these alternate options is linked to the sector the family has exposure and work history along with the SES which defines their affordability, while Daraei and Mohajery (2013) study linked SES in India with life-satisfaction. The type of job profile and computer literacy factor reflects in the age of the workforce, their physical health, psychological health (Matthews and Gallo, 2011). Again, the low paid workers are not found to be exposed to computers due to the manual labour and opportunities of switching to WFH. Differences of education level of the wage earners is a predictor and the position in the organisation, type of sector therefore determines the opportunities of WFH (work from home). Thus, the SES factor is the key to funding of the siblings academic requirements directly as the academic institutions stressed on the use of smartphones, PC, laptops to continue education continuum active for the students amidst lockdown. There is no relevant research particularly for the surviving Indian army martyr families who are a part of the workforce and their

children as to how their demographics impact SES during COVID19.

2.3 Psychological well-being (PWB):

Diener (2009) cited the definition outlined by Ryff that PWB consists of six dimensions. They are autonomy, environmental mastery, positive relations, personal growth with purpose in life, self-acceptance (Ryff, 2014). The COVID19 impact has been unexpected and has penetrated through all sections of the society. The people from rich, middle class and even the low wage earners are confined to home, during the crisis period (Khan, 2013), is undergoing tremendous amounts of social isolation every day (Williamson and Robinson, 2006) which has been reflected in Indian context (Mehrotra et al. 2013). This has been an unexpected and sudden event that has spread quickly to reach a level of global pandemic which Somasundaram and Jamunanatha (2002) attributes due to war (Hussain and Sarma, 2016), violence, riots. The rapid spread, government imposing lockdown, rules for social distancing, has disrupted the normal lifestyle of the citizen (Bar-Tal, 2013). While physical activity (home based exercise) has been referred for psychological health (Sharma and Sharma, 2010), the context has changed during COVID19, the issue for the students has remained largely unexplored. It is certain that the sudden lockdown has affected wellbeing continuum, as a family where they live, while greater frequency of the calling relatives, extended familial relationships was seen in Indian context. The research conducted on males, females, LGBT was considered relevant as India is considered to be more family centric society and has high population density, while SES, demographics create additional stratification of the social groups (Bowman, 2010) (Aggarwal-Gupta et al. 2010). The sudden disruption of routine work at pre-lockdown phases (pre-March 2020) and low income has been attributed to cause psychological distress in earning members (Lund et al. 2010).

There are no relevant studies that studies the student psychological wellbeing, for the lockdown period, irrespective of the history of depression, anxiety and loneliness symptoms (Park et al. 2004). Rajadhyaksha (2012) stated that the problem of alienation in the walls of the home confinement suddenly affects the psychological makeup of students especially when parents, jobs are also affected. The issue is relevant as the lockdown imposed on the citizens of India, has been forced activity, which has restricted the individual roles like the social interactions to stop, deprivation, adaptation to new technology environment. The student centric approach to this

research during COVID19 impacting the eating and sleeping cycle during lockdown are not researched, as the interaction less life impacts the psychology wellbeing and quality of life during lockdown. The traditional approach of SES and PWB impact on health (physical) has been considered in psychosocial perspective due to absence of physical movement in social setting (Deaton, 2008). Thus, the main questions which are formed in the research study, are as follows:

RQ1: What are the impacts on social economic status (SES) level on student(s) from Indian army martyr families in NorthEast during COVID19?

RQ2: What are the options explored and exercised by the student(s) from Indian army martyr family in NorthEast to continue education during COVID19 period?

RQ3: What is the level of PWB (psychological well-being) in student(s) from Indian army martyr families in NorthEast to continue education during COVID19 period?

III. RESEARCH METHODS:

The research has been conducted using mixed methods keeping in mind that above factors require to be probed deeper using subjective questions.

The study uses exploratory interview methods that contain the variables from the above factors framed into open ended questions. The interview questions are shared through WhatsApp to the students of the army martyr families living in the North East part of India. The qualitative data of the interviews is also accompanied by the Google form-based survey instrument to collect the demographics data. The participants agreed to voluntarily participate in the survey and reply to the questionnaire for the research purpose was accepted as implied consent. The demographics context or definition of the sample size had the following requirements – Indian citizen, member of Indian army martyr family, knows English, Hindi as the method of communication, families consisting of student(s) studying in a school/college/university currently in the 2020 session. The research focusses on school students, college or university students and hence to assess SES and learning continuum the following variables have been selected from empirical studies- mode of learning, syllabus covered, awareness of Indian govt e-library (e-pathshala), time spend on education per day, attendance of online class, gadgets used, gadgets owned/rented, socialisation factor using gadgets, prior experience of online classes.

The quantitative analysis is done with the use of SPSS software that uses multivariable regression in the socio-demographic variables and independent variables like (student in school, college, university), age, gender, parents' annual income, current educational qualification, own-residence/rented-place to be related to the PWB (optimism, depression, anxiety, alienation), online e-learning (adjusting, accommodating, indifference) for a sample of 150 respondents. The mixed method exploratory study has helped to first test the crisis factor in education in martyr families and then convenience sampling is used for subjective open-ended interviews to probe deeper. The SES (socioeconomic level) was identified and PWB (psychological wellbeing) scale by Ruff was used to measure the impact of COVID19 disruption on school learning continuum. The scale of physical and psychological states in PWB is taken from Ryckman et al. (1982) and Ryf (1995) respectively in the context of the research. The thematic analysis of the interview transcripts is done, for the qualitative data using MAXQDA software for 25 interviews. It has 6 dimensions, self-acceptance, purpose in life, environmental mastery, positive relations with others, personal growth, autonomy. The Likert scale used (6 strongly agree to 1 strongly disagree) adapted to the Indian version that has proven reliability and validity.

IV. ANALYSIS:

4.1 Quantitative analysis:

The following is the association of the SES (socio economic status) of martyr families responding in this research with the social variables listed below (age, economic status, family type, siblings, years passed after martyred, education level, residency). The age of the student in martyr families residing in North East is in the age group of (8-23) ranging from school to universities. The economic status of the students in the martyr family has been rated as 'enough to certain limit' and 'not enough' that emerges as a strong indicator of the economic condition of the families in which the students hail from. The family with post-martyrdom status, is mostly joint families living with parents or in-laws, while they also have surviving brothers and sisters. The years passed after the family member (Indian soldier) was martyred is higher in the (over 5 years and 10 years) to represent the most. The classification of students who are surveyed is studying in schools (primary and secondary) rest in university as per the family life cycle stage. Most of the students

surveyed in Indian martyr families in North East

hailed from their cities.

Variables	Rating	Never	Sometime	Always	ChiSquare	df	p-value
Student age	8-11	6	12	34	7.11	4	0.125 NS
	12-15	1	10	8			
	16-19	4	5	9			
	20-23	3	2	47			
Economic Status	Enough	6	9	10	30.81	4	0.001 HS
	up to certain Limit	1	16	31			
	Not Enough	2	20	16			
Family type	Nuclear family	3	30	30	40.98	4	0.000 HS
	Joint family	5	70	26			
Siblings	1-2	7	50	48	1.399	4	0.889 NS
	3-4	2	20	12			
	>5	1	10	1			
Years passed after martyred	1-4years	8	80	9	2.999	4	0.679 NS
	5-9years	9	70	13			
	Over 10 years	7	50	29			
Educational level	Primary	3	10	9	21.455	4	0.019 HS
	Secondary	9	20	19			
	College	11	40	23			
	University	10	22	20			
Residency	Urban	8	80	18	7.356	4	0.029 HS
	Rural	5	20	48			

The questions which were distributed asked about the mix of learning mode only e-learning or mix of text books at home with online, and if the student made efforts in reading with own effort. Most of martyr students used home based Android smartphone as they had news of attending online classes a compulsory process. The responses show the mixed approach suitable as most of the martyr students surveyed are from CBSE (Central Board of secondary education) Indian schools textbook and online method during transition from physical to digital e-learning platform. The progress of curriculum or syllabus shows that academic institutions especially the teaching

faculty delivery as per scheduled time varied from institution to institution, but online performance evaluation has been lenient (Lyngdoh, 2020). The learning continuum was disrupted during COVID19, but Indian govt directives by UGC (university grants commission), which is has been probed for the students in the martyr families in Indian (North East) states in 2020. Gaps in responses from martyr students from NE India are the awareness about e-pathshala repository was evident, less than normal academic reading time during COVID19, frequency of online classes, gadgets borrowed from family and neighbours.

Learning continuum

Variables	Frequency	Percentage
Mode of learning		
Both textbook and online	87	37.8
Online studying	72	31.3
Reading textbook with own effort	70	30.9
Syllabus Covered		
<30 percent	88	39.1
30-50 percent	59	25.1
>60 percent	26	11.9
Exam completed	31	13.4
Exam not yet conducted	24	10.9
Awareness about e-Pathshala		
Yes	50	21.5
No	151	67.4
Don't know	27	12.9
Time Spending during COVID19		
Less than normal	124	54.9
More than normal	40	17.8
Like before	65	29.4
Information about online classes		
Attendance in online class per week		
Over 3days a week	70	31.1
Below 3days a week	90	53.8
Daily	25	13.2
Gadgets used for online class		
Smartphone	150	71.1
Computer	50	24.2
Laptop	10	5.1
Gadgets owned or rented		
Self-owned	30	11.1
From family members	111	70.9
From neighbour	52	19
Sociability using online platform during lockdown		
Institution academic staff	159	89.1
Classmates, batchmates	40	11.9

Experienced online classes before COVID19

Yes	65	26.8
No	142	73.2

The interaction revolved around martyr family students who used online classes to interact with teachers' majority of the time and only specific instances of interaction with peers. While experiences show that these students have been exposed to online classes (only a fraction) for majority of them, it was a new exposure to digital platform that has gained their attention and adoption. The other dimension in school academic

course disruption is measured by PWB, where the transition to e-learning and online classes, confinement to home environment is tested.

PWB:

The descriptive statistics conducted shows the modified PWB for the martyr family students in North East part of India. The two-step approach in CFA was tested in SPSS.

Variables	1	2	3	4
Perceived physical abilities	1			
Self-presentation confidence	0.11**	1		
Psychological well being	0.29	0.25	1	
Organisational citizenship behaviour	0.09	0.31	0.29	1
Mean	2.99	3.08	0.31	3.28
Standard Deviation	0.98	1	0.98	0.96

The above responses have been captured on 5point Likert scale, **p<0.01, *** p<0.001 where the confirmatory factor analysis shows that physical activity and abilities did not meet the threshold of (0.70), though all factors were statistically significant. Discriminant validity has been supportive as AVE (average variance scores) show correlation pair of variables. The reliability of the PWB construct is good, as shown in above table.

4.2Qualitative analysis:

The audiotaped version of the interviews conducted over smartphone during the period April 2020 to July 2020, have been converted into transcripts which is uploaded in the MAXQDA qualitative software for thematic analysis. The martyr family narratives from 25 online interviews, show emotional reaction due to sudden lockdown due to COVID19 as it affected their normal life processes, their social engagements, outer world and within family relationships, their sense of self (mental and physiological). These are reflective of their life perspective as the major themes which emerge from the study using follow-up interviews after quantitative study, to essentially validate (cross validate). The stress of new technology in e-learning impacting their perception about digital knowledge environment, the physical classroom knowledge and that of digital classroom

environment has been challenging. The inequalities are exposed as top income households are able to earn better income and lifesavings, to be utilised for the children education, which the low-income Indian households are not able to adopt immediately. Demographically the martyr families in India with children with closure of schools during lockdown, had to cope with the psychological stress as new education mode thrust upon by the Indian academic institutions. It shifted the physical classroom of learning experience to digital online platformleaving a disconnect in learning continuum. Findings show that both students in the martyr families as well as family members are coping with isolation stress for extended periods. Their SES linked to outcomes of their physical and mental health too (social position),as they had to arrange for electronic gadget suitable for online classroom. The martyr family students experience stress related to learn new techniques in managing e-learning software,while there is stress due to loss in transmission quality (video, audio) during the virtual classroom sessions.

4.3Final analysis:

The students in the martyr families in North East part of India, has faced the economic hardship due to COVID19 pandemic, the process of sudden shift from physical classroom to virtual

experience breaking learning continuum that confirms the Sohrobi et al. (2020) research as space and environment has undergone a radical change. Though there was lockdown in the social behaviours are almost curbed in the initial months of 2020, the Indian martyr family students have faced an abrupt discontinuation in their academic curriculum. It echoes similar research by Martin (2020) but shows Rieley (2020) research outcome disagreement as forced imposition of online classes was done. Learning continuum has experienced shock at structural level where physical classroom experience did not yield the outcomes of digital learning initiatives. The transition period had gap, though the momentum towards e-learning gradually gained over time overcoming the initial fear as discussed by (Al-Marroof et al. 2020). The thematic analysis shows deeper insights about the COVID19, social restrictions of lockdown which has impacted the Indian martyr family children as they are equally suffering from mild bouts of depression, a little bit anxiety. The transition of physical classroom to digital learning continuum has induced academic stress to learn, adoptions stress of new technology and also learn techniques to engage in e-learning process in virtual classroom. The evidence of the learning status, its progress has been changed as it was static during lockdown COVID19, but required students to adopt additional knowledge to access online classes. The forced imposition of academic protocols from respective institutions has pushed NE martyr family students to respond to show skills of technological mastery in procurement of technology gadget (hardware, software) which has been confirmed by Williamson et al. (2020) research outcomes as well.

The pedagogy has been difficult, as not all academic subjects has been able to replicate physical classroom lecture delivery in virtual mode as evident from the thematic analysis results. The SES shows borrowing of electronic device (PC, laptop, smartphone) to access class, that shows that even they stay in urban society, their digital learning experience has been challenging during COVID19. The findings seem to meet the (Deb and Modak, 2010) research outcomes as the digital disruption in uniform treatment of NE martyr family students in the Indian education system, has failed. It has ignored and failed to take note of marginalised martyr family students in remote North East part of India. It also brings out the aspects of structural inadequacy of education, telecommunication and geography from digital learning experience perspective during COVID19 crisis management. The implications of rural urban

divided is exposed while digital platform bridges the disruption in education sector, has been almost accessible free (open-source IT platform) being used for academic content delivery that is also showcased in Williams et al. (2010) research findings.

The learning continuum in India has been affected due to problems of structural issues, process centric issues, telecommunication network issues (software login problems, issues with audio or video reception (or both), unengaging presentation of subject as evident from thematic analysis. Even though these issues are external in nature, has been highlighted in (Gamage et al. 2020) study as reconceptualisation of academic pedagogy and adjustment is happening due to COVID19. The digital representation of classroom on a virtual platform has created a lack of community feeling (in-class feeling), a virtual isolation that has made understanding the instructional goals in e-learning to be a challenge as evident from the thematic interview outcomes. In terms of virtual classroom engagement, the continuum in learning suffered from lack of preparation in terms of academic competencies (faculty) or low level of preparedness (students) due to perception of virtual classes offering e-learning systems. It leads to conclusion that initial level structural adjustment of e-learning did not have teachers support as found by Tandon, (2020) that affected martyr student confidence. Even though a lot of issues is faced by martyr family students in North East, the above problems are faced by almost all students in India across education levels, as telecommunication connectivity, weather is a situational constraint in real time learning process that impacts the ability to connect and adapt without online learning classes. The findings highlight NE Indian martyr lifestyle that impacts the upbringing of students and inaccessibility of technology due to reduction in family income as per Das et al. (2020) research is evident in this research too. It has created a wide impact on the education sector and student's learning continuum. Further linking the SES, the device availability issues, capability along with connectivity issues has been varying that has affected student's perception about new e-learning environment. It also affected the long-term isolation, career and purpose of life, self-acceptance of consequences of COVID19, positive relations with others, and confidence level as a NE Indian martyr family student. The outcomes of developing abilities were perceived, while each student tried to build a digital identity of their own irrespective of SES and the psychological health

research outcomes (Matthews and Gallo, 2011), and also similarities with (Destin et al . 2017) research outcomes.

The other dimension of e-learning as a virtual experience and the the student's non seriousness in virtual classroom environment has exposed the power to shift from teacher to students making digital classroom and e-learning environment to be fragile against physical classroom coaching. The teaching faculty failed to rise upto e-content delivery due to slow integration, harnessing of e-resources to impact quality of education. Das et al. (2020) research confirms that COVID19 has brought in 'digital inequality' as both in Indian educational institutions and student learning opportunities even though technology is an enabler. For NE martyr students, it has also posed problems both for teaching faculty and the students to connect during virtual classes on the behalf of academic institutions has faced technological challenges that also boosted learning continuum irrespective of their SES and PWB evident from the thematic analysis findings.

WEF (World economic forum) reports education is has been disrupted as traditional methods have been replaced by technology-based education that requires procedural innovation and change. However, for developing nations WEF report does not hold true, for those SES marginalised group. The issues of SES (socio economic status) come to the forefront, as globally, there are affluent and not so affluent families in urban and rural context. In this research, most of the NE martyr families are in rural and urban setting that differentiates their outlook as tech-savvy families and non-tech savvy ones, but its impact on learning continuum has shown neglected approach by Indian government as per (Daraei and Mohajery, 2013) that WEF has failed to capture. Results from quantitative survey show that crisis in device availability has been outsourced within social reference group, learning of software techniques shared through peers. This can be attributed to the mental tension of NE Indian martyr family students wanting to prioritise their availability for the online classes. This new 'digital adaptability' behaviour during crisis of lockdown. The SES and PWB linked shows that positive relations, environmental mastery is linked to personal growth. Here quicker adoption is a purpose of life as e-learning is a dominant medium of academic instruction. There is self-acceptance as well as per Ryff's six dimensions (Ryff, 2014), which shows NE Indian martyr family students to handlesituations as contingency plans. As remote learning takes prominence, digital relationships at

official (interaction with teachers) and personal level (almost nil digital interaction with classmates) shows PWB environment mastery to be low in official and personal interactions to be limited during COVID19.

The impact on the psychological well-being (PWB) has been evident as every student is stressed at home, peer pressure along with parents, faculty and technology to be learnt. The is lack of ACP academic continuity plan from medium to long term perspective as COVID19 cure has not yet arrived while opening academic institutions cannot risk the life of enrolled students, their career journey. The 'e-pathshala' the e-repository scheme of Indian government for 'open education', with online school university course repositories, but it lacks information awareness within all students. They fail here to link their personal growth and environmental mastery due to structural telecommunication facilities in NE part of India. The stress on the capacity to adopt transition towards accepting new e-learning technologies and techniques, has been caught between the forces of supply side and demand side of education. Transition took time while both teachers and students realigned themselves towardse-course, e-technology and e-delivery dimensions on online learning matches the findings of (Arntz et al. 2020).

The impact of PWB and technology on the martyr students in North East remote areas of India, show that finding technology and electronic device (smartphone, laptop, PC) during lockdown has been stressful but has tested the Ryff's PWB dimensions like environmental mastery, positive relations that eclipses the SES characteristics of personal growth with purpose in life meeting the findings of (Saxena, 2020). Though qualitative thematic analysis evidence show they are deprived due to their NE India location, the type of device they own, telecommunication connectivity, the learning methods in India has tried to be inclusive. The Indian government (Ministry of Education), has created e-repository of e-books, while virtual classroom has been missed by teachers and martyr students due to external forces (unforced). The choice of platform for mass media education has been used in India, to sustain the education to reach across regions, socio economic classes, boards and education levels (school, universities).

These incidents in the martyr family residing in remote North East part of India is significant as there is urban and rural divide as a community, while individual level SES and its impact on PWB due to sudden nation lockdown has been noted. While community level SES and

collaboration has not been noted between martyr families locally, but aspect of deprivation of technology (device, access) for continuing education journey has been found at individual student level. The sample represented the lifecycle stage of high school and university students from martyr families residing in North East of India, that shows matured and rationality in decisions (differentiating childhood SES and adulthood SES). The initial months of deprivation has found to impact psychological states predominantly and not physiological indicators during lockdown. The perception of Indian education system, faculty response, academic institution response, government response has led to severity of stress exposures in the students of NE martyr families. The social support from families (extended) and neighbours or friends gives explanatory power to the SES objectivity, PWB in shaping the learning continuum using integrative and collaborative behaviour.

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