



## PSYCHOSOCIAL IMPACT OF COVID-19 PANDEMIC ON SCHOOL EDUCATORS' MENTAL HEALTH AND ROLE OF COGNITIVE COMPETENCE IN COPING WITH SUCH ADVERSITIES

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**Abstract:** The impact of psychosocial factors on the mental health of ordinary and professional people is normally a theme in various psychological and clinical studies but now it is more relevant due to the pandemic caused by Covid-19. This study was focused on the effect of different aspects of pandemics like job losses or salary cuts led to economic abuse, gender discrimination, teaching-learning paradigm shift, learning new skills, learning attitude, household workload, the expectation of family members, and responsibilities on educators' negative mental health and role of knowledge, skills, and abilities as components of cognitive competencies in coping and managing such adverse issues. Participants for the study were educators having an age range in early and middle adulthood. Statistical tools descriptive, correlational and regression analysis were used. Educators having high knowledge, skills, and abilities levels have managed this adversity up to some extent, but moderate cognitive competent educators were impacted more and faced negative mental health symptoms. Childhood self-esteem and high cognitive competencies give psychological strength to cope and manage mental health issues from routine stress to the natural disaster-caused negative impacts.

**Keywords:** Cognitive competence, Covid-19, Educators, Mental Health, Psychosocial impacts.

### INTRODUCTION

Schools in India were closed in March 2020, and the Ministry of Home Affairs imposed a complete lockdown in India on March 24, 2020. The human brain is evolved to live in social groups and wired for social interactions. The epidemiological studies show alternation in brain chemistry due to social isolation, discrimination, financial losses, disrupted sleep and routines, intimate partner's mental state and so on. Covid-19 pandemic has altered family and professional dynamics. Pandemic has changed the loving relationships and people are impacted by the adversity of psychosocial factors. This new

unprecedented teaching situation created new socio-demographic challenges to educators as well as educational institutes. This forced educators to shift their paradigms of teaching-learning with the feeling of great uncertainty because in teacher training institutions teachers are yet not trained on the integration of technology in the teaching-learning process.

Before this pandemic, educators, parents and students, no one was ready for this paradigm shift. They were not trained on educational technology as well as digital ethics and lack of digital resources boosted this adversely.

Educators working in self-financed institutions faced socio-economic and socio-demographic issues badly. As Covid-19 emerged, WHO recommended social isolation and the Government of India imposed countrywide lockdown in the first wave. In the second wave, however Government of India have not imposed countrywide lockdown but state governments-imposed lockdowns as containment measures at regional level. But in both the situations staying at home was required; there was infodemic through general media, social media and other means that affected the mental health of individuals including a frontline task force, health workers, and home stayers. In the working professionals' population, educators suffered from mental health issues unintentionally caused by socio-economic and socio-demographics of self-financed institutions, family members, job losses, household workload, curriculum and pedagogical transformations etc.

According to the World Health Organization (WHO, 2004), mental health is 'a state of well-being in which the individual realizes his or her abilities, can cope with the normal stresses of life, can work productively and fruitfully, and can make a contribution to his/ her community'. The current study focuses on the symptomatology in mental health shown by educators due to the effect of various psychosocial factors like emotional support, expectations, respect, engagement, economic abuse, behavior control, the paradigm shift in teaching-learning, collective efficacy, discrimination or exclusion, etc. on educators' mental health during school closure in context to both the waves of pandemic.

UNESCO (2020) identified adverse consequences of school closures on educators' mental health as confusion and stress among teachers due to the lack of familiarity with distance education, the abruptness of such measures, and uncertainty about their duration. During the pandemic, educators suffered from stress accompanied by symptoms of anxiety, depression, and sleep disturbance as a consequence of the increased workload and pressure to adapt for online classes from home.

Emotional factors like attachment and support are positively associated with psychological strength that helps in coping the stress and depression. There is a positive correlation between emotional support provided to a partner, interaction with the caregiver, and the partner's level of distress (Collins and Feeney, 2004; Fraley and Shaver, 1998; Simpson *et al.*, 1992). Psychological strengths are largely dependent on social determinants like parenting style during childhood and emotional attachment, social support, respect, engagement at workplace, society and family, self-regulation, controlling behavior and collective efficacy. All these are positively associated with self-esteem that ultimately enhances the psychological strengths. Cognitive competence is an umbrella term that includes diverse abilities especially cognitive domains like critical and creative thinking developed during the developmental stages. Components of cognitive competence include knowledge, cognitive and practical skills, attitudes, emotions, values, and motivations (Rychen and Salganik, 2001; Weinert, 2001). The primary factor underlying a stressful event is the individual's perceived inefficiency in coping with or controlling it (Bandura, 1997). The self-efficacy is positively related to cognitive competence that makes an individual capable of believing in his/ her own capabilities. Cognitive competence supports in perceiving the adverse issues as less frightening and creating more alternatives because how one perceives, interprets and assigns meaning to events will directly influence the emotions and behaviors (Ricker *et al.*, 1999).

If anyone interprets events positively, s/he will usually feel better. Conversely, negative interpretations often lead to or exacerbate discomfort. Multiple studies conducted on interpersonal violence found a positive association between natural disasters and interpersonal violence (Antai *et al.*, 2014). Natural disasters make pre-existing inequalities or disruptions worse where people are disproportionately victimized psychologically due to various social factors like limited social support, physical confinements, unemployment,

economic disruption, and scarcity of basic provisions (Gearhart *et al.*, 2018).

Crisis and traumatic stress interfere with sleep. The majority of educators faced sleep disturbance as a distinguished symptom of depressive conditions. Sleep is associated with health and well-being (Casola *et al.*, 2006; Horne, 2006; Vandekerck hove and Cluydts, 2010). Ellis (1993, 1999), a prominent psychologist who developed a rational emotive behavior therapy, believed that emotional disturbance results not from reality but irrational unusual thinking. Depression is characterized by feelings of hopelessness and helplessness. Studies on the role of interpersonal support and well-being concluded that when adversity and trauma strike interpersonal support may be the single most powerful factor to foster resilience. Enlisting the support of friends and family of those affected by adversity can be not only effective but also highly efficient as well. (McCormack *et al.*, 2015).

Personal control or controlling one's behavior is something that is exercised by people who are high on self-esteem, mindful and compassionate. Perhaps there is a need that this ubiquity should come, but how much? It could be believed that a person may control his/ her behavior on events that make things uncontrollable. Because of the socio-cultural context, men in India believe in dominance and women are just at the receiving end in all aspects including economic abuse and financial losses. Intimate partner violence has detrimental effects on mental health and well-being. Female educators suffered more mental health-related issues due to gender biases. A study conducted by Stylianou (2018) showed that economic abuse was uniquely associated with negative mental health. Gender discrimination and poor mental health are closely related. Females are infantilized by partners or family members. Various clinical studies revealed that women who were reported with sex discrimination, sexual abuse, or sexual harassment were found three times more decline in mental health including depression over the next 3-4 years.

Studying the long-term impacts of the corona virus in human's body, brain, society and perhaps

its understanding will take more time. Among the population, a majority of people felt disrupted sleep as a hallmark of the pandemic and suffered from insomnia, depression, irritability, domestic violence, stress, and other negative mental health symptoms due to various socio-demographic factors that arose as a result of pandemic. More screen time, endless routines, dissolving boundaries between work and personal life, altered habits, salary cuts or delay, work and workplace transformation, the paradigm shift in the mode of teaching-learning impacted educators' mental health negatively.

A number of researches and literatures are available about the impacts of Covid-19 on environment, society, education, children and so on (Verma and Prakash, 2020; Kumari and Shukla, 2020; Srivastava and Reddy, 2020; Roy *et al.*, 2020; Roy and Chaube, 2021) but little work is done regarding its psychosocial impacts. In this study, author tried to fill this gap and focuses on the effect of cognitive competency on the ability to manage negative impacts of psychosocial factors caused by natural disasters like the Covid-19 pandemics on educators' mental health. Women educators' being at the receiving end faced more negative health impacts during both waves of Covid-19 with marginalized differences. This correlational study is in fact a testing of the hypothesis that in educators having a high level of knowledge, skills, abilities, potentials and secure attachment with caregivers promote psychological strengths leading to the development of cognitive competencies. These are positively related to coping and managing with negative mental health issues enforced by psychosocial factors emerging due to natural disasters like covid-19. To address this especially in the context of educators, the study examined the effect of variables like social factors on cognitive competencies, and the impact of cognitive competencies on managing psychosocial factors, and its effects in coping and managing skills in pandemic-like adverse conditions.

## **MATERIALS AND METHODS**

For survey and data collection, a mixed-method approach is employed with four methods. Besides the paucity of high-quality standardized

tests for cognitive competence, some qualitative methods were adopted. These include face-to-face interactions as interviews to assess their cognitive abilities and level of cognitive competencies in participants like for self-esteem, RSES (Rosenberg self-esteem scale), was used for assessment of stress and depression, DASS-21 scale (Depression, anxiety and stress scale), questionnaires and self-reports, rating scales for behavior analysis, family counseling data. To collect systematic longitudinal data, evidence from participants like school assessment records, participation in Olympiad, NTSEs, competitive examinations, participation in standardized assessments like PISA, TOEFL, at higher education level data of participation in various co-curricular activities, etc. were procured.

In order to make the data more authentic (validity and reliability), domain-specific psychometric tests were also conducted in the clinics. Socio-demographic aspects were also taken into consideration while analyzing and evaluating the performance in psychometric tests. The study sample consisted of 740 male and female educator clients whose ages ranged from 25 to 55 years ( $M = 39.74$ ,  $SD = 6.13$ ). Not all, but a maximum number of educator clients faced negative mental health issues during the pandemic. Self-esteem, depression, anxiety, and stress are taken as criterion variables, and psychosocial factors like emotional and social support, respect and engagement, self-identity, self-confidence, economic abuse, expectation, allostatic load, and self-control are taken as predictive variables.

For the cognitive competencies; self-esteem, knowledge domains, skill, and abilities are taken as criterion variable, as predictor variable; legislative thinking styles, global and local thinking styles, collective efficacy, behavior controlling, reasoning and logical thinking, self-reflection and coordinating multiple views were also taken into consideration. For the statistical analysis, descriptive, regressions, as well as correlational analysis were conducted to find out the association among the variables. Participants were divided into two groups based on their

educational level, knowledge, skills, abilities, and cognitive competencies assessed by self-reports and other clinical measures.

## RESULTS AND DISCUSSION

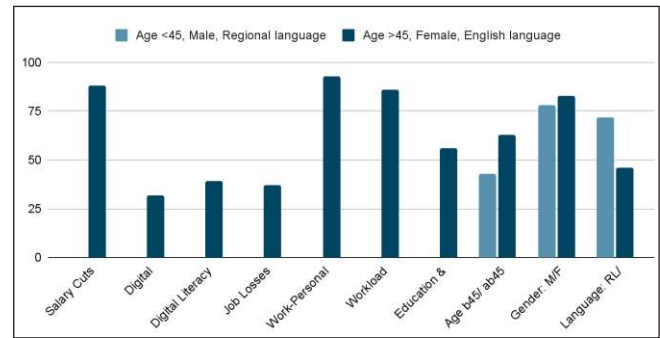
Descriptive statistics and bivariate correlations are reported in tables 1 and 2. Participants who identified more strongly with emotional support, social support, respect and engagement, self-confidence, and self-identity have higher levels of self-esteem and lower levels of negative mental health symptoms. Cognitive competencies are positively associated with the coping of negative mental health issues.

Out of the total participants 651 educators reported economic losses in the form of salary cuts (87.88%) and delay in salaries. This pandemic was a sudden transformation in the teaching-learning process where a major paradigm shift was to transform from physical classroom to digital classroom. Before this pandemic, educators were trained for physical classrooms but not trained to cope this situation and were not equipped with digital literacy. Only 236 educators (31.88 %) of educators having digital resources and 288 educators (39%) of educators were equipped with digital literacy. Lacking digital literacy and digital resources (device, LMS, and data) are also identified as causes of negative mental health. About 37% of educators faced job losses, replaced due to diverse reasons. Due to work from home, 93% of educators suffered from work-personal life imbalances and the number of female educators is identified slightly higher than male educators. The paradigm shift from classroom and teaching-learning foisted educators and 86% of educators perceived workload in learning new skills including digital skills.

The educators engaged in professional development and having high qualifications experienced less stress, 56% of educators not engaged in the professional development program and suffered from negative mental health. Learning new skills and digital skills was noticed quite easier for educators below age 45 years, only 43% of educators experienced



unpleasantness while educators above age 45 years experienced difficulty and 64% of educators find this professional development unpleasant and irritating due to excessive expenditure of time. Transforming and developing national educators as global educators was quite easy for educators who were proficient in the English language than the educators proficient in a regional language only (fig.1).



**Figure 1: Socio-economic and socio-demographic factors.**

**Table 1: Descriptive statistics and correlations between variables for socio-economic and socio-demographic factors.**

Criterion variable	Predictor variable	M	SD	SE	$\phi$	p	R <sup>2</sup>
Self-esteem	Respect and engagement	5.31	0.93	0.14	0.96	0.346	0.99
	Social support	5.23	0.92	0.14	0.96	0.348	0.99
	Emotional support	4.06	1.17	0.14	0.94	0.308	0.97
	Self-identity	4.78	1.18	0.13	0.93	0.302	0.97
	Self-confidence	5.41	0.87	0.15	0.92	0.352	0.96
Depression	Economic abuse	4.17	1.17	0.13	0.97	0.349	0.99
	Expectations	4.98	1.02	0.12	0.89	0.373	0.94
Anxiety & Stress	Allostatic load	4.71	1.18	0.14	0.92	0.349	0.98
	Self-control	4.63	1.17	0.14	0.88	0.358	0.95

Higher values of psychosocial factors related to self-esteem on 7-point rating show higher levels of psychological strength positively associated with self-esteem. Phi coefficient value and R<sup>2</sup> score show a high correlation between respect, engagement in family/ community, emotional and social support, self-identity, self-confidence, and self-esteem. Respect in relationships and engagement of family members with the educators in institutional, domestic and household works, decision making has found a high positive correlation with self-esteem boosting. Respect in the relationships, respectfulness by the school authority, emotional bond with school head and among family members is found helpful in enhancing self-confidence and self-esteem. Economic abuse in the form of salary deductions, salary delays, job

losses, or from family, relatives and friends, and over expectations of family, school including layers of leadership are highly correlated with depression. Due to these socio-economic and demographic factors, a majority of educators suffered from the allostatic load. Self-control is taken as a term for the ability of the participants to control his/ her own behavior and is measured through clinical measures/ scale.

Creative and critical thinking as core components of cognitive competencies are assessed through the key elements of competencies like legislative thinking, global thinking and local thinking. Key elements of competency enhance the higher-order knowledge. Data analysis in phi coefficient and R<sup>2</sup> shows a high positive relation in criterion and predictor variables, key elements of

**Table 2: Descriptive statistics and correlations between variables for cognitive competencies.**

Criterion variable	Predictor variable	M	SD	SE	$\phi$	p	R <sup>2</sup>
Self-esteem	Legislative thinking style	5.43	0.93	0.15	0.94	0.353	0 . 9 8
	Global thinking style	5.17	0.92	0.14	0.96	0.357	0 . 9 9
	Local thinking	5.16	0.92	0.14	0.95	0.318	0.96
	Collective efficacy	4.09	1.18	0.13	0.93	0.323	0.92
	Behavior controlling	4.76	1.17	0.14	0.94	0.359	0 . 9 7
Skills & Abilities	Reasoning	5.78	0.95	0.15	0.98	0.359	0.99
	Logical thinking	5.86	0.95	0.14	0.87	0.387	0.88
Knowledge	Self-reflection	5.05	0.91	0.13	0.94	0.356	0.98
	Coordinating multiple views	4.93	1.04	0.12	0.91	0.368	0 . 9 6

competencies have positive role in developing self-esteem. Collective efficacy and behavior controlling were also highly correlated with self-esteem boosting. Logical thinking and reasoning as components of skills and abilities enhance problem-solving and decision making hence support in stress coping. Educators having moderate educational level, knowledge domains, skill, abilities, and cognitive competencies were noted with lower self-esteem with higher level of negative mental health symptoms. They have faced more difficulties in coping and managing negative mental health issues. Educators having high educational levels, knowledge, skill, abilities, and cognitive competencies were noted with high self-esteem and lower level of negative mental health symptoms. Despite facing disrupting adverse social factors, they have efficient coping and managing skills towards negative mental health issues.

## CONCLUSIONS

As the brain is wired to connect, lack of social interaction has played a role in causing stress, depression-related mental health issues. Brain and mind could influence each other and the training of mind on competencies from schooling to higher education support to develop

cognitively competent people. This helps in coping with day-to-day stress and other negative mental health issues. Due to adversities created by pandemic-like situations, the majority of educators face imbalances in hormones and neurotransmitters that are connected with mental health.

A perfect professional development *i.e.*, update in knowledge, skills, abilities to promote psychological strengths leading to the development of cognitive competencies which are positively related to coping and managing with negative mental health issues enforced by psychosocial factors emerging due to natural disasters like Covid-19. This study reveals that the effect of social, economic, and demographic factors on psychological strength are positively correlated. The effect of cognitive competencies on managing psychosocial factors and differences in coping and managing skills in pandemic-like adverse conditions is also positively related. The psychosocial impact of Covid-19 on educators' mental health is different for different educators due to differences in cognitive competencies.

Author suggests that assessment of cognitive competence at school, undergraduate and post

graduate level education is must to mitigate the gaps in developmental domains. High-quality psychometric tests must be incorporated during admission and terminal assessment. Developing a higher level of controlling behavior with secondary control is needed for high self-esteem. More is needed for the awareness of parenting styles. Author advised for further studies on student empowerment at the ground level, mere designing a high-quality curriculum is not sufficient, pedagogical planning and developing independence through developing higher-order thinking skills from childhood are the most needed initiatives.

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