



ACADEMIC STRESS OF B.ED. TRAINEE TEACHERS DURING ONLINE LEARNING: COVID-19 PANDEMIC SCENARIO

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Abstract : Covid 19 pandemic affected every aspect of learners' lives irrespective of their age, grade and nature of educational programme pursued. Closure of academic institutions specially impacted the subjects and courses requiring practical and hands-on-experience. The teacher training courses requiring an interactive platform were also largely affected causing academic stress among trainee teachers. In this qualitative survey, researchers investigated the causes of academic stress related to online learning, symptoms of academic stress and how trainee teachers alleviated academic stress. Twenty-three trainee teachers from different B.Ed. institutions participated in this survey and shared their experience. Difficulty in understanding concepts, examination related technical issues and financial problems were reported as major stressors. Stress symptoms were reflected in the form of behavioural, cognitive, psychological, physical and social changes in lives of trainees. Findings suggest that trainee teachers resort to self-efforts and seek support of parents and peers to relieve their stress. Teacher support was not significant in reducing stress and was less sought by trainees.

IndexTerms - COVID 19 pandemic, academic stress, stressors, stress relievers, trainee teachers, online learning.

I. INTRODUCTION

Coronavirus pandemic caused a worldwide devastation and affected both personal and institutional life ([Fuente](#), [Pachón-Basallo](#), [Santos](#), [Peralta-Sánchez](#), [González-Torres](#), [Raquel Artuch-Garde](#), [Paola](#), [Paoloni](#), & [Gaetha](#), 2021). Globally pandemic has affected 90% of the learners across the world including 34 million Indian learners within May 2020 (UNESCO, 2020). Pandemic came as a crisis for the education sector and all stakeholders were anxious regarding the future of educational services, the process of evaluation, fulfilling requirements of the special children (Mahapatra & Sharma, 2021). About 1.2 billion learners are affected due to COVID-19 related school closures and are forced to shift to online education through digital platforms (Chandra, 2020). Across the world, all nations went for strict restrictions and adopted virtual learning (Yasmin, Khalil, & Mazhar, 2020).

Students are stressed about online learning as they feel it can affect their academic performance and career (Alsaady et al., 2020). Though students are technology savvy in this digital age and well accustomed with every technological advancement, but technophobia regarding online learning persists (Yunus et al., 2016). Modern life brings with it stress due to its complexities and COVID 19 aggravated it among all specially students who had to adjust in personal and educational life (Yasmin, Khalil, & Mazhar, 2020).

Pandemic has brought about different stress factors as trainees had to face challenges in personal and academic spheres which they were unprepared to deal with. Dual stressors were visible (internal and external stressors) among learners who were internally stressed due to the fear of the disease, social isolation, loss of near ones and externally they had to cope with new mode of learning (Boruah et al., 2021). The external stress arose due to *low experience-no preparation* condition amidst which the students had to shift to online learning pertaining to campus closure (Ihm et al., 2021). Saade et al. (2017) describes stress related to online learning as "anxiety related to inefficient technology use, arising from lack of training, and causing poorer academic performance."

Although, online learning is accepted as a supplement of classroom education but is unacceptable as the main medium of teaching-learning process (Chandra, 2020). Students report difficulty regarding conceptual understanding, assignment submission and examination in online mode (Moawad, 2020). Moreover, some aspects of an educational programme such as practicum, field visits, laboratory experiments, and practice teaching in training colleges are difficult to conduct in an online mode (Fawaz & Samaha, 2020). This paper tries to explore the stressors associated with adapting to online classes due to the COVID 19 outbreaks faced by trainee teachers of Kolkata district and North 24 Pargana district of West Bengal.

II. RESEARCH QUESTIONS

Researchers tried to investigate following research questions:

1. Which factors associated with online learning causes academic stress among B.Ed. trainee teachers?
2. What are the symptoms of academic stress associated with online learning process?
3. How do B.Ed. trainee teachers alleviate academic stress associated with online learning process?

III. METHODOLOGY

3.1 Population

Researchers tried to explore the stressors associated with adapting to online classes as faced by trainee teachers of Kolkata district and North 24 Pargana district of West Bengal.

3.2 Sample

Researchers interviewed 23 trainee teachers (Male = 08, Female = 15, age 24-39 years, Language = 8; Social Science = 9; Science = 6), belonging to four different teacher training institutes across West Bengal, India (Table 1). Trainees have attended online classes for at least one month to about two years.

Table 1: Classification of Sample

Name	Gender	Subject	Location of training college
Subhankar Das	M	S. Sc	Kolkata
Taniya Das	F	S. Sc	Kolkata
Sanjukta Siddhanta	F	S. Sc	Kolkata
Drohita Majumder	F	S. Sc	Kolkata
Ratna Gurung	F	S. Sc	Kolkata
Priyanka Sarkar	F	S. Sc	Kolkata
Rohit Bhattacharjee	M	S. Sc	Kolkata
Tarun Singh	M	S. Sc	Kolkata
Arghyadeep Hazra	M	S. Sc	Kolkata
Aditi Das	F	English	24 Pgs (N)
Sheli Malakar	F	English	24 Pgs (N)
Pratibha Sharma	F	English	24 Pgs (N)
Serma Murmu	M	English	24 Pgs (N)
Arpita Gain	F	Bengali	24 Pgs (N)
Rajshree Hazra	F	Bengali	24 Pgs (N)
Sumana Singha	F	Bengali	24 Pgs (N)
Rituparna Paul	F	Bengali	24 Pgs (N)
Rohini Das	F	Math	24 Pgs (N)
Nabanita Halder	F	Math	24 Pgs (N)
Saheli Basu	F	Math	24 Pgs (N)
Arijit Chakraborty	M	Math	24 Pgs (N)
Ankush Maji	M	Chemistry	24 Pgs (N)
Abhijit Dey	M	LifeScience	24 Pgs (N)

3.3 Tools and Design

Present study used a qualitative research design with in-depth interviews, to find out the level of academic stress associated with online learning. The interview schedule contained about twenty open ended questions related to causes, symptoms and possible remedies of academic stress associated with online learning, such as, "Which aspects of online learning causes stress?" "Has any kind of physical, psychological, cognitive, social or behavioural changes occurred in your life after shifting to online mode?" "How do you relieve the academic stress associated with online learning?" Researchers also requested trainee teachers to provide additional information which was not covered in the structured interview schedule.

3.4 Procedure

Informed consent was obtained from all participants and only those who agreed to participate were included. Researchers conducted a forty five-minute interview session with every trainee teacher. Before starting the interview session, the researchers briefed about the purpose of the research and requested participants to provide honest opinions. Confidentiality of responses was guaranteed. Researchers recorded the responses manually, combined their notes, analysed and scrutinized responses, and organized the findings under few themes and sub-themes.

IV. ANALYSIS AND DISCUSSION

The present qualitative study has explored the relationship between academic stress of B.Ed. trainee teachers and online mode of education during the COVID 19 situation in Kolkata and North 24 Parganas in West Bengal, India. Several national and international studies researchers during this period reported about students' stress in their study. In this study researchers tried to find out the stress related to online education among B.Ed. trainee teachers as it is mostly a practical oriented course. The trainee teachers are in such a phase of their lives where they are ready to enter teaching profession after completing training and take on other roles of their life. In this crucial time, they are already in occupational stress which aggravated in the pandemic situation.

Researchers grouped the findings from student interviews under three themes: causes of stress, symptoms and remedies adopted by trainee teachers.

4.1 Causes of stress

4.1.1 Lower Conceptual Understanding

Language students admitted that they have direct as well as indirect problems while understanding the concepts explained in online classes. Some of them have been stressed about using microphone, others had net connectivity problem. Some felt the physical absence of teachers and classmates while others disliked studying alone in online mode which made them isolated, detached from others, anxious and restless. Communication gap with teachers, being unable to use library facility and having issues while clarifying doubts online were also some reasons of lower conceptual understanding (Sheli, Aditi, Sumana, Pratibha, Rajshree, Sumana, Arpita, Serma). Difficulty in joining the class on time and being disconnected from the class due to internet problem were also highlighted by language students as reasons that often affected concept formation.

Science students said that conceptual understanding involves practical experience which is not possible in online mode. There remains a possibility of mind getting distracted as teachers cannot monitor physically (Rohini). Conversely, Nabanita and Saheli said online classes save time and they understand better in online mode though it was initially stressful. Most of the science students said that learning all by themselves caused sadness and anxiety which finally led to stress; internet connectivity was also a big stressor; background noises going on in house lowered their attention (Arijit, Ankush, Abhijit).

Social Science trainee teachers were stressed about having lower conceptual understanding in online classes because of difficulty in viewing teacher’s screen or hearing teacher’s voice clearly due to weak and unstable net connectivity (Drohita, Priyanka, Ratna, Rohit, Subhankar, Taniya). Moreover, they were concerned about inadequate library access and attending practical classes online which they believed was not much useful (Priyanka, Rohit and Sanjukta). Trainees were stressed about facing real classroom in future as they missed out on practice teaching experience which is at the heart of B.Ed. course (Arghyadeep, Drohita and Priyanka). Contrarily, Arghyadeep, Ratna, Subhankar and Tarun understood concepts better in online classes as there were no disturbances around.

Table 2: Causes of Stress: Lower Conceptual Understanding

	Language	Social Science	Science
LOWER CONCEPTUAL UNDERSTANDING IN ONLINE MODE	Audio issues	Audio issues, blurred screen	Less practical experience
	net connectivity problem	net connectivity problem	internet connectivity
	feel the physical absence of teachers and classmates	inadequate library access and attending online practical classes	Lower attention due to virtual contact
	Getting disconnected		

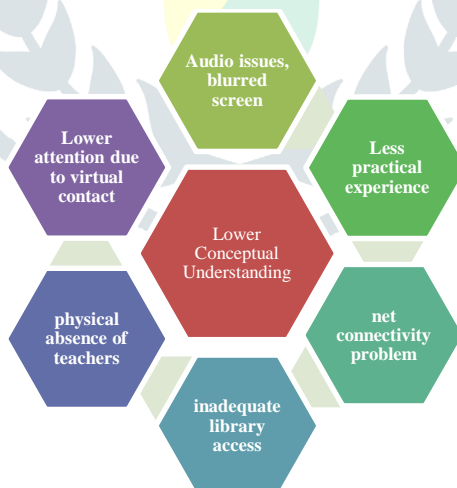


Fig 1: causes of stress: lower conceptual understanding

4.1.2 Examination related

Among the causes of academic stress associated with online classes, the most significant problem was examination related stress. Language trainees faced anxiety while uploading assignments within due time during examination (Aditi and Serma), were worried whether teachers received the answer script (Arpita). While some students had no fear regarding online exam (Sheli) others had faith on online evaluation (Rituparna).

Social Science trainees said even after mock trials regarding examination procedure, they were tensed that they would not be able to upload their answer scripts within scheduled time (Subhankar), or attach large documents properly (Drohita, Priyanka, Ratna), and remained unsure about whether teacher received their answer scripts or not (Drohita, Priyanka, Ratna, Rohit, Sanjukta, Subhankar and Tarun). Stress level increased when they received information about successful submission by peers

while their submission is still pending (Ratna). Contrarily, some trainees had no examination stress because his college gives enough time to upload scripts (Arghyadeep) and some preferred to give examination in isolation to avoid disturbances (Drohita, Ratna and Priyanka), while for some examination in isolation was stressful (Sanjukta). Trainee teachers were also stressed regarding validation of their online B.Ed. degree in future times (Priyanka, Ratna and Rohit) while some were confident that their hard work will be rewarded and their degree will be valued (Arghyadeep, Sanjukta, Taniya). Lastly, online examination without proper monitoring and strict evaluation system was the cause of concern (Priyanka).

Science trainees opined that offline exam is more stressful than online (Abhijit, Rohini, Saheli and Sheli). Though some were worried about PDF construction and uploading the assignments (Ankush and Nabanita) but giving examination in itself was not stressful. Some voiced their stress regarding the acceptance of the degree being awarded online.

Table 3: Causes Of Stress: Exam Related

	Language	Social Science	Science
EXAM RELATED ISSUES IN ONLINE MODE	anxiety while uploading assignments	anxiety while uploading assignments, attach large documents	pdf construction and uploading the assignments
	worried whether teachers received the submitted answerscript	validation of their online B.Ed. degree	acceptance of the degree being awarded online
		online examination without proper monitoring and strict evaluation system	

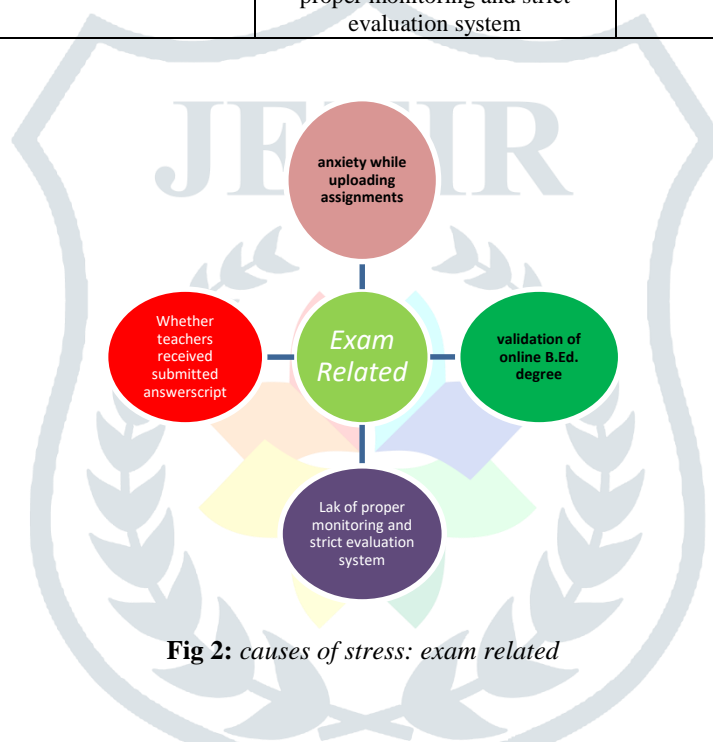


Fig 2: causes of stress: exam related

4.1.3 Financial

Science trainees felt online classes saved transportation cost (Nabanita), on the contrary Social Science trainees were stressed about the cost of internet recharge and some even had to miss classes being unable to recharge or having insufficient data balance (Drohita, Priyanka, Ratna, Rohit, Subhankar, Taniya). Language trainees gave no opinion in this regard.

Table 4: Causes Of Stress: Financial

FINANCIAL ISSUES IN ONLINE MODE	Language	Social Science	Science
	-	High cost of internet recharge	Lower transportation cost

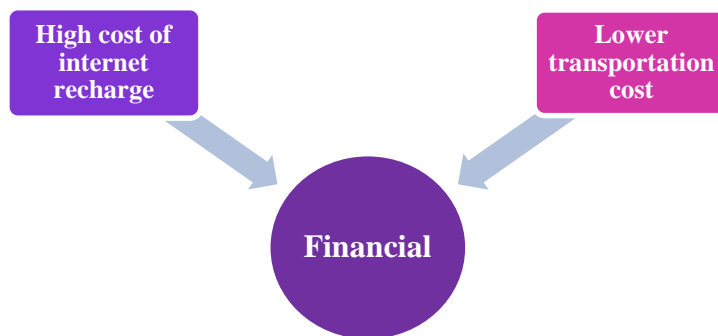


Fig 3: causes of stress: financial

4.2 Symptoms of stress

4.2.1 Physical

Physical fitness is mandatory for giving optimum output in every profession specially in teaching where a teacher has to deal with human resources. Online classes were found to affect physical health of trainee teachers which can be detrimental for their future.

Language trainees reported they suffered headache (Aditi and Rituparna) and eye problem (Arpita, Pratibha and Sumana) from continuously attending classes online and increased screen time. They also had backpain (Arpita, Aditi, Pratibha, Rituparna and Sumana) and neck pain (Arpita and Sumana) from sitting in same posture. Memory problem and drowsiness (Rituparna) was also reported by some.

Social Science trainees also suffered similar problems as headache (Drohita, Ratna, Rohit, Subhankar and Taniya) and eye problem (Drohita, Priyanka, Rohit) due to attending online classes everyday. Other symptoms as backpain (Drohita and Taniya) and neck pain (Priyanka) from sitting in same posture were also there. Some suffered from ear problem being compelled to use earphone in order to focus from her noisy home background (Ratna).

Science trainees also voiced similar symptoms of headache (Ankush, Abhijit, Arijit, Nabanita, Rohini and Saheli), eye problem (Ankush, Abhijit, Arijit and Rohini), backpain (Rohini) and neck pain (Rohini) and memory problem (Nabanita and Saheli).

Table 5: Physical symptoms

	Language	Social Science	Science
PHYSICAL SYMPTOMS IN ONLINE MODE	Headache, eye problem,	Headache, eye problem,	Headache, eye problem,
	Backpain and neck pain	Backpain and neck pain	Backpain and neck pain
	drowsiness	Ear problem from using earphone	memory problem

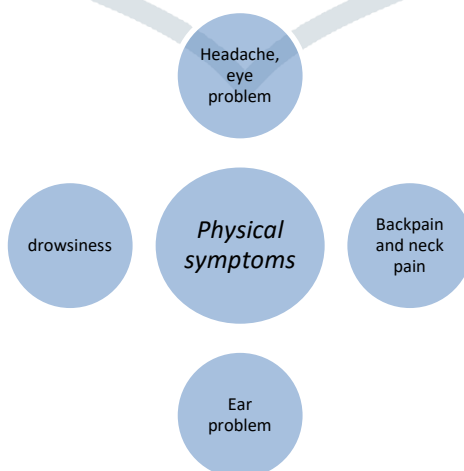


Fig 4: Physical symptoms

4.2.2 Psychological

Psychological stressors may hinder full development of innate potential latent in pupil teachers. Trainee teachers highlighted some negative psychological feelings which they have endured during online learning process.

Language trainees faced sadness, stress and anxiety during online classes (Rituparna), they were irritated getting disconnected (Pratibha) and felt confused upon missing portions of class (Sumana) due to connectivity issues. Contrarily, some reported they felt no negative emotions during online classes (Aditi and Sheli) and also went on to say online classes can be taken occasionally alongside offline classes (Rituparna).

Social Science trainees reported feeling restless and disturbed while attending classes from chaotic home environment (Priyanka and Taniya). They initially felt nervous about handling technological issues and being isolated specially during exam (Ratna). Contrarily, some said that their stress level was normal as they are accustomed to ICT use (Sanjukta). Initially trainees felt adjusted to online classes but when it continued for a long time it was taking a toll on their mental health (Priyanka and Taniya).

Science trainees also reported feeling restless and disturbed while attending classes from chaotic home environment (Arijit and Ankush); faced sadness, stress and anxiety during online classes (Nabanita, Rohini and Saheli); were nervous about handling technological issues and being isolated specially during exam (Arijit); were depressed on missing the offline college environment (Abhijit). Trainees opined that online class is fine for a while but cannot substitute real classes (Arijit) even though they are cost effective (Saheli and Nabanita).

Table 6: Psychological symptoms

	Language	Social Science	Science
PSYCHOLOGICAL SYMPTOMS IN ONLINE MODE	sadness, stress and anxiety	restless and disturbed while attending classes from chaotic home environment	restless and disturbed while attending classes from chaotic home environment
	missed portions of class due to connectivity issues	nervous about handling technological issues	depressed on missing the offline college environment
		nervous about being isolated specially during exam	Long term online classes taking toll on mental health

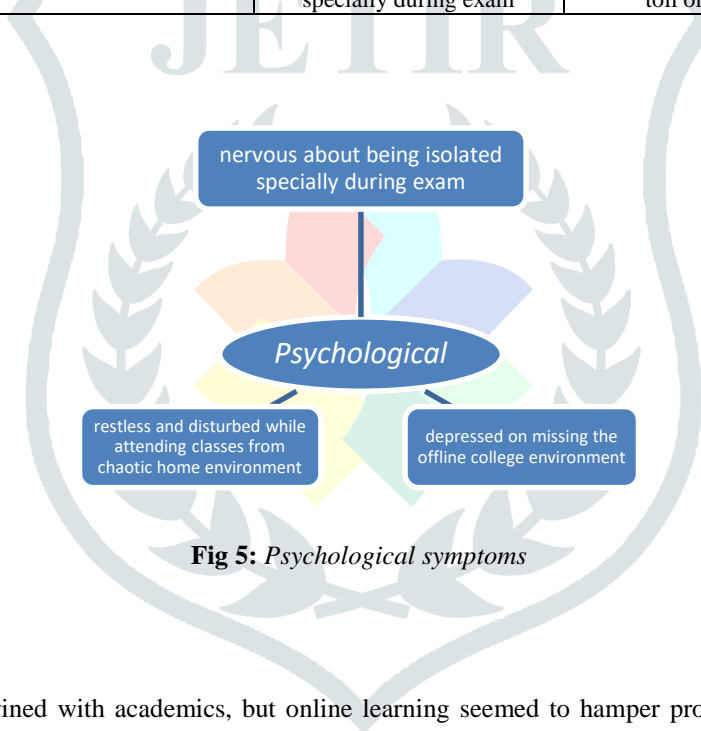


Fig 5: Psychological symptoms

4.2.3Cognitive

Cognitive dimension is intertwined with academics, but online learning seemed to hamper proper satisfaction of the cognitive needs.

Language pupil teachers faced difficulty in concentrating and maintaining proper attention level during online classes and felt monotony and loneliness while attending classes in isolation (Pratibha and Rituparna). Trainees reported that online learning did not procure the feeling of real learning as conceptual understanding was affected (Pratibha, Serma and Sumana); due to lowered teacher-student communication which lessened the scope of doubt clarification (Pratibha and Rituparna) and lowering of attention (Serma) during the end of the day or in subjects disliked by the trainee (Arpita and Pratibha). Conversely, few students found they could concentrate better in isolation and it is not difficult to explain concepts online (Aditi and Sheli).

Social Science trainees also faced difficulty in concentrating and maintaining proper attention level during online classes (Drohita, Rohit, Subhankar, and Taniya). Monotony and loneliness while attending classes in isolation (Sanjukta) were also seen, ineffective conceptual learning (Priyanka) was reported and only some students felt concentration is better in isolation (Aditi and Tarun).

Science trainees opined conceptual understanding requires practical experience for certain subjects and bipolar communication (Ankush and Rohini) and though for higher classes the problem of conceptual understanding is lesser but it is a real problem for children (Saheli). Attention level falls in online classes at the end of the day or in subjects disliked by the trainee were common among trainees (Ankush, Abhijit, Arijit and Serma), monotony and loneliness occurs while attending classes in isolation (Arijit) and only introverts reported being more comfortable in online class than offline classes (Rohini).

Table 7: Cognitive symptoms

	Language	Social Science	Science
COGNITIVE SYMPTOMS IN ONLINE MODE	difficulty in concentrating and maintaining proper attention level	difficulty in concentrating and maintaining proper attention level during online classes	lack of bipolar communication
	ineffective conceptual learning	Monotony and loneliness while attending classes in isolation	practical experience for certain subject lacking
	lowered communication which lessened the scope of doubt clarification	lowering of attention during the end of the day	difficulty in conceptual understanding in lower classes
	did not procure the feeling of real learning		

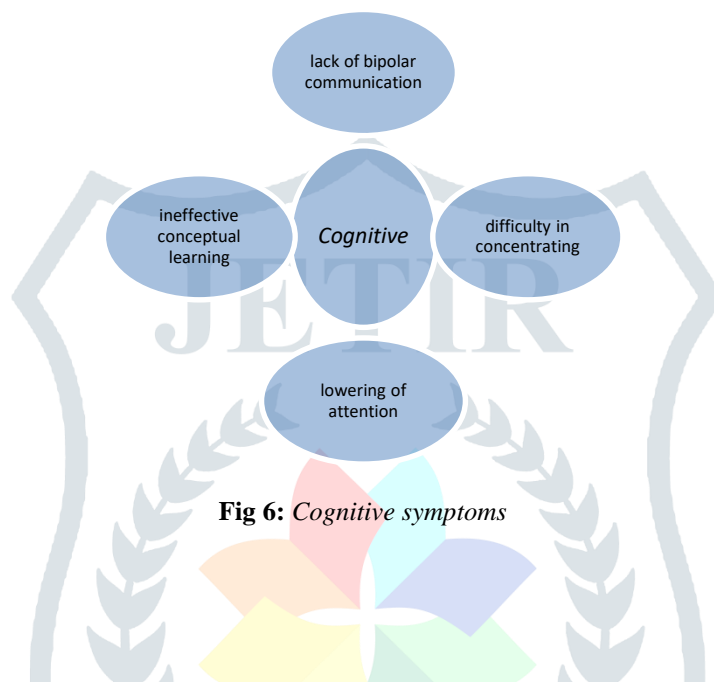


Fig 6: Cognitive symptoms

4.2.4 Social

School closures have greatly affected social bonding with teachers and peers. Though every trainee had android mobiles and access to social media but now chats have become restricted to academic discussion.

Language trainees said during online learning group projects were hampered due to social isolation and they hated to study alone without peers (Sumana and Serma); felt isolated and detached from peers which blunted their communication skills (Rituparna). Further, their movement was restricted to their room only during online classes (Arpita and Pratibha). Conversely, few reported no change in their social life (Aditi and Sheli).

Social Science trainees complained about lessened interaction with peers (Drohita and Ratna) and commented that they only interact with friends after the class, discussions are mainly academic oriented (Priyanka, Rohit, and Taniya). The reason given was that they feel tired after day long online classes and they know their friends virtually which is not enough for informal interactions. Some of them highlighted in this regard that ‘social media has become professional’(Drohita). Only one of the prospective teachers (Sanjukta) said that her social life improved, as now she can reach out to old and new friends more often, which would not have been possible in offline mode.

Science trainees also voiced similar concern as difficulty with group projects (Rohini) due to social isolation; missing out on classroom interaction with peers (Ankush, Abhijit and Arijit); feeling isolated and detached from peers (Nabanita and Saheli). Virtual friendships could not develop social bonds between trainees. As it is important for a teacher to be social, the online mode does not provide trainees the opportunity to develop this quality.

Table 8: Social symptoms

	Language	Social Science	Science
SOCIAL SYMPTOMS IN ONLINE MODE	group projects were hampered due to social isolation	interaction with peers has lessened	group projects were hampered due to social isolation
	did not like to study alone without peers	interact with friends after the class, discussions are mainly academic oriented	interaction with peers has lessened
	isolated and detached from peers		interact with friends after the class, discussions are mainly academic oriented
	online classes blunted her communication skills		
	movement was restricted to their room only		

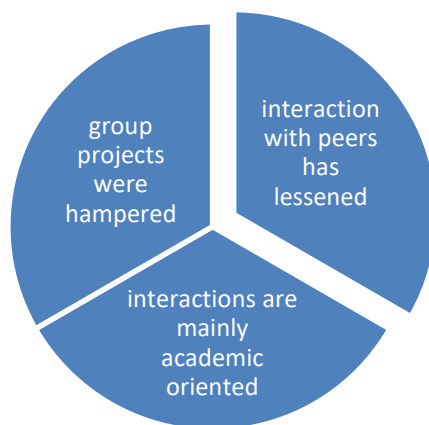


Fig 7: Social symptoms

4.2.5 Behavioural

Though less prevalent but pupil teachers have faced some behavioural changes as a result of online class.

Language trainees complained about their daily schedule being disturbed due to online classes (Aditi and Rituparna) which affected their eating pattern (Arpita, Pratibha and Sumana); sleeping pattern (Sheli and Pratibha); caused mood swings (Arpita, Pratibha and Sumana). Few trainees reported no such physical causes (Serma).

Social Science trainees also had disturbed eating pattern (Priyanka, Ratna, Rohit, and Subhankar) and sleeping pattern (Sanjukta).

Sciencetrainees only reported change in their eating pattern has changed (Nabanita and Saheli).

Table 9: Behavioural symptoms

BEHAVIOURAL SYMPTOMS IN ONLINE MODE	Language	Social Science	Science
	eating pattern changed	eating pattern changed	eating pattern changed
	sleeping pattern affected	sleeping pattern affected	
	mood swings		

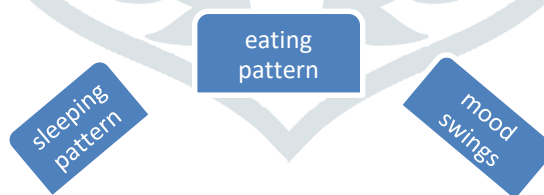


Fig 8: Behavioural symptoms

4.3 Relieving stress

Language trainees said friends, parents and teachers understand and help to relieve stress (Aditi, Arpita, Pratibha, Sheli and Sumana), while few said as middle-class Indian parents are not well aware about stress and anxiety (Rituparna). Mostly trainees watch cricket on TV, listen music or read books, do paint or watch movie and spends time with friends and family to relief their stress (Sheli, Aditi, Pratibha, Rajshree, Rituparna, Serma, Sumana and Arpita).

Science trainees spend some good times with family members, gossip with friends, do academic reading and invest in hobbies to manage stress (Rohini). Again, some do exercise every day (Nabanita), sing, dance and draw (Abhijit), read story book, listen music, write diary (Ankush) to control stress. Trainees felt friends prevent isolation, teachers provide mental support and demonstrate positive attitude, while parents acted as friend to some (Ankush), which help to relieve stress in many ways (Arijit, Rohini, Saheli).

Social Science trainee teachers handled academic stress through self-efforts and support of others. In the former case, some preferred Music (Ratna, Rohit, Taniya), read poems (Drohita), were active on social media (Ratna), watched motivational videos (Taniya) or movies (Arghyadeep), and others opted walking (Rohit) and exercise (Taniya). Some trainees simply maintained

silence of 10 minutes and reflected (Sanjukta), while some practiced self-motivation by comparing oneself to those who are underprivileged (Subhankar). Yet others slept and ate more (Priyanka), or disconnected from class when stressed too much (Tarun),

In the latter case, *parental support* was a major stress reliever (father for Taniya, mother for Subhankar and Sanjukta, and both parents for Arghyadeep, Drohita, Priyanka, Ratna, Rohit), while few reported parents do not understand their problems related to online learning (Tarun). *Peers* were also a major source of support in relieving stress (Ratna, Sanjukta, Tarun) and showing a way forward (Arghyadeep), while some trainees were strong enough and helped peers in stress reduction (Priyanka, Rohit, Taniya). Only few trainees opened up to *teachers* during stress (Subhankar), some consulted them during initial stages of online learning (Rohit), while others took help only if the problem was regarding academics (Priyanka). Most of the trainees were not very comfortable opening up to teachers.

V. CONCLUSION

From the results it is clear that shift to online mode has caused academic stress among trainee teachers regarding conceptual understanding, examination issues and financial stress. Past researchers also concluded examination related stress and internet connectivity are major stressors in online mode (Moawad, 2020). Present researchers found various symptoms of stress caused by online learning from feeling depressed, anxious, isolated to physical problems of headache and back pain. Previous studies also found depression, anxiety and stress among university students studying in online mode (Fawaz & Samaha, 2020). Present study also reported that students resort to various coping strategies to reduce stress which is in line with earlier studies which found students meditate and use self-distracting activities to relieve stress (Chandra, 2020). Academic Stress can be largely reduced by authorities through provision of information and guidance at every step.

ACKNOWLEDGMENT

Both the authors acknowledge the support of the Head of institutions from where the sample has been collected. Authors are grateful to all B.Ed. trainees who participated in the research. Both the authors acknowledge the support of the Head of institutions where they are currently affiliated.

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