



Students Resilience: The Impact of Online Learning Policies During The Covid-19 Pandemic on Academic Stress

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Abstract

The focus of this research is to investigate the symptoms of academic stress, its causes, and its impact on student resilience during the Covid-19 pandemic's online learning policies. This research used a qualitative approach conducted in April-June 2021 at two state vocational high schools in Salatiga, Central Java, Indonesia through an online survey and interviews. The results show that many students were experiencing symptoms of academic stress when online learning policies during the Covid-19 pandemic such as sleep disturbances, difficulty concentrating, irritability, headaches, and even physical illness due to overwhelming stress levels. The highest indicator that caused academic stress came from pressure to complete all subject's test targets and assignments in a limited time, disruption to the teaching and learning system, limited access to the internet network, preparation for graduation, and the difficulties students experienced in understanding the subject matter. Strong support networks, along with competent self-management, excellent social relationships, emotional control, and integration, can have a significant impact on student resilience. Overall, especially strong self-management has a very large influence in preventing or overcoming academic stress problems. Support networks are very important in limiting the impact of academic stress on student resilience during the Covid-19 pandemic online learning policies.

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INTRODUCTION

The coronavirus disease (Covid-19) is a worldwide biological disaster that has dramatically altered everyone's life and perceptions. This virus has spread rapidly after its discovery in Wuhan, Hubei Province, China (Chen et al., 2020). To prevent further disruptions and to guarantee the safety of students, instructors, and all others concerned, the government has closed all educational facilities in the sector (Chandra, 2020). The Ministry of Education and Culture of the Republic of Indonesia also made related policies at home and even canceled the 2020 national exam (Oktawirawan, 2020). Educational institutions all over the world have welcomed and appreciated the online learning platform. The reasons for this acceptance are accessibility of use, educational flexibility, and a customizable environment (Khan et al., 2020).

Online learning has several advantages and disadvantages in its implementation. The benefit of online learning is that educational activities and classes may be accessed at different times and locations. Various disadvantages that become barriers develop in the adoption of online learning, such as a lack of internet connectivity, a lack of device ownership, a lack of technological competency, and academic stress.

Academic stress is a common problem in various stages of the educational system, and it seriously impacts scholar's particular, psychological, and physical wellness, along with their education and performance circumstances (García-Ros, Pérez-González, & Tomás, 2018; Liu & Lu, 2012; Murberg & Bru, 2004; Murberg & Bru 2007; Natvig, Albrektsen, Anderssen, & Qvarnstrøm, 1999). Academic stress is caused by a combination of instructional-related demands that surpass a person's adaptive resources (Wilks, 2008). Schoolwork stress, school/leisure conflicts, concerns about school success, problems with classmates at school, conflicts with parents and teachers, and concerns about the future can all be indicators of student

stressors (Garca-Ros, Pérez-González, & Tomás, 2018).

Symptoms of academic stress also can be indicated from the physical, behavioral, mental, and emotional aspects (Agustia, 2014). If students are unable to effectively handle academic stress, crucial psycho-social-emotional fitness outcomes may also occur (Arthur, 1998; MacGeorge, Samter, & Gillikan, 2005; Tennant, 2002). However, amidst the disruption and confusion, one thing that stands out is student resilience.

Students' resilience has been identified as one of the elements that contribute to students' mental health (Fawzy & Hamed, 2017). The concept of resilience describes a person's ability to withstand sickness, adapt, and prosper (Galea et al., 2020). It demonstrates their ability to bounce back or recover from stress caused by their sickness, adapt, and thrive (Galea et al., 2020; Gooding et al., 2019; Fawzy & Hamed, 2017). Resilient students can bounce back from setbacks such as technical difficulties or distractions at home while staying focused on their studies.

However, some students have shown remarkable resilience in adapting to this new mode of learning. Research shows that student resilience has been critical in ensuring academic success during these times. This is particularly relevant for lower-income or under-represented students (Brammer, 2020). Even over the best of conditions, such students are especially sensitive to academic disruptions and threats to their well-being (Lederman, 2020). Before the pandemic, student mental health issues in higher educational institutions were on the rise, according to Brown and Kafka (2020). Students' sentiments of grief, isolation, and worry appear to have been increased by the crisis (Global Resilience Institute, 2020).

This study differs from earlier studies conducted both abroad and in Indonesia (Oktawirawan, 2020; Rahmayani et al., 2021), which investigated the academic stress concerns faced by students while online learning during the Covid-19 pandemic. Several types of studies in India have only examined the positive

attitudes of students' impressions of online learning and the adoption of this new learning method (Khan et al., 2020). Not only that, but it also covered the multiple psychosocial issues that have emerged as the primary cause of academic stress in children and adolescent students, as well as their propensity to cause both short-term and long-term mental illness (Mahapatra & Sharma, 2020). Academic stresses were found in Saudi Arabia by examining student worries and fears during the Covid-19 period (Moawad, 2020).

Preliminary findings from America highlight various factors contributing to student distress during this pandemic (Grubic et al., 2020). Another study investigated resilience and vulnerability in the setting of the Covid-19 pandemic, with an emphasis on how children's adaptive systems are evolving. When adaptive systems are functioning effectively, youngsters will demonstrate resilience to disaster. The ability of children's adaptive systems to function properly is influenced by their developmental experiences along with interpersonal relationships and community assets available to them. It investigated how these factors influence children's adaptability and concluded with recommendations for communities looking to improve resistance to Covid-19's numerous challenges (Herbers et al., 2021).

According to Chinese studies, social support is vital for student resilience throughout Covid-19. Family and friends provided the most reported emotional support, while instructors, classmates, and relatives provided the least perceived assistance, as did concerns about friend reliability and communication with family. Gender didn't affect how the other categories were distributed, and school type did not affect how the subgroups were distributed. The greater the perceived social support, the lower the overall degree of concern among students and the less severe the impact of the Covid-19 pandemic (Mai et al., 2021).

In Indonesia, research has been conducted on the elements that cause student anxiety (Oktawirawan, 2020) and how high-stress levels affect student academics (Rahmayani et al.,

2021) during the Covid-19 pandemic. Social support can boost student resilience in the face of the Covid-19 pandemic. Social support from family members and other close people is one factor that influences a person's ability to adjust to difficult conditions (Asiyah et al., 2020). Previous research concentrated mainly on one of the following aspects of the phenomenon of academic stress or student resilience under online learning policies. In actuality, this research will examine more closely the symptoms of academic stress, as well as its causes and impact on student resilience during the Covid-19 pandemic's online learning policies.

METHOD

This research used a qualitative approach conducted in April-June 2021 at State Vocational High Schools 2 and 3 in Salatiga, Central Java, Indonesia. These schools were chosen because the vocational high school has a bigger capacity in practice than theory in learning. The data collection technique used an online survey via Google Forms to 184 respondents who were students in XII grade. In addition, online interviews with the 10 total students from both schools via Google Meet were used to complete the research data.

To analyze various symptoms of academic stress adopted from the Grid of Student's Academic Stress Symptom Instruments (Agustia, 2014). Some of the indicators used to analyze the causal factors of academic stress adopted from the 30-item version of the Questionnaire on Academic Stress in Secondary Education (QASSE) (García-Ros, Pérez-González, & Tomás, 2018). And lastly, to analyze student resilience adopt the Resilience Index from the Unite Students Insight Report 2016 (McIntosh & Shaw, 2017).

RESULT AND DISCUSSION

The Symptoms of Academic Stress Faced by Students when Online Learning Policies during the Covid-19 Pandemic

It's no secret that the Covid-19 pandemic has drastically changed the way students live and learn. As schools have shifted to online learning policies, students are facing a whole new set of challenges. From technical difficulties to a lack of motivation, it's easy for academic stress to creep in. One key challenge faced by students during online learning is isolation. The lack of direct interaction with classmates and

teachers can lead to feelings of loneliness and disengagement from the learning process.

The following are some of the indicators used to analyze various symptoms of academic stress adopted from the Grid of Student's Academic Stress Symptom Instruments (Agustia, 2014), which was also developed with several open-ended questions to find other symptoms faced by students during online learning.

Table 1. Student's Academic Stress Symptoms

Aspect	Indicator	Percentage
Physical	Increasing Heart Rate	5.4
	Headache	34.7
	Muscles Tense	5.4
	Frequent Urination	8.2
	Holds/Grips Objects Very Tightly	1.1
	Hands Feel Moist and Cold	22.3
	Cold Sweat	9.8
	Stomachache	11.4
	Physical Exhaustion	29
	The Body is Not Able to Rest Optimally	34.3
	Others	14.5
Behavioral	Grumbling	10.9
	Sleeping Difficulty or Insomnia	44
	Likes to be Alone	22.8
	Lying	3.8
	Nervous	12
	Blaming Others	3.8
	Ditching	7.1
	Unable to Help Yourself	10.9
	Taking Shortcuts	17.4
	It's Hard to Discipline Yourself	47.8
Others	8.8	
Mental	Forgetfulness	48.9
	Can't Determine Life Priorities	16.3
	Feeling Confused or Hard to Concentrate	52.7
	Thinking of a Deadlock	7.6
	Decreasing Performance	31
	Losing Hope	9.2
	Negative Thinking	23.4
	Feeling Useless	23.4
Saturated (Feeling Not Enjoying Life)	39.7	
Others	11.6	
Emotional	Restless	26.6

Easy to Get Angry	39.1
Fear	12.5
Feeling Neglected	14.7
Easily Offended	17.9
Not Feeling Satisfied	27.7
Feeling Unhappy	24.5
Anxious	24.5
Easy to Panic	25.5
Others	12

Several crucial aspects which are found in Table 1, show that the mental aspect has the largest percentage indicating symptoms of academic stress, two of which are feeling confused or hard to concentrate (52.7%) and forgetfulness (48.9%). on the behavioral aspect, there is it's hard to discipline yourself (47.8%) and sleeping difficulty or insomnia (44%). emotional aspects in the form of easy to get angry (39.1%) and not feeling satisfied (27.7%). then the last is the physical aspect, namely headache (34.7%) and the body is not able to rest optimally (34.3%).

With all these indicators combined, it's no wonder that many students were experiencing symptoms such as sleep disturbances, difficulty concentrating, irritability, headaches, and even physical illness due to overwhelming stress levels. However, this sudden shift to virtual classrooms created significant academic pressure among them. Of course, the academic stress faced by students when online learning policies were implemented during the Covid-19 pandemic did not appear suddenly. There must be various causal factors around the student's learning life that caused this to happen.

The Factors that Caused Academic Stress Faced by Students when Online Learning Policies During the Covid-19 Pandemic

According to interviews, students were uncomfortable about academic activities being conducted online during the Covid-19 pandemic. There were various kinds of media used by students during online learning, such as Jagaratu (58.2%), Microsoft Teams (31.9%), WhatsApp Group (1.8%), Google Classroom (2.7%), Google Meet (2.7%), Zoom (2.2%), and Sekolah Digital SMKN 3 Salatiga (0.5%). Moreover, they are vocational high school students who have a greater percentage of practice than theory in their learning system. The pressure is felt to increase because they were at the XII grade level which prepared them for graduation and their education at a higher level.

A survey assessment is used to complement research data on various factors that cause academic stress. The following are some of the indicators used to analyze the causal factors of academic stress adopted from the 30-item version of the Questionnaire on Academic Stress in Secondary Education (QASSE) (García-Ros, Pérez-González, & Tomás, 2018), which was also developed with several open-ended questions to find other factors faced by students during online learning.

Table 2. Student's Academic Stress Factors

Indicator	Percentage
Taking exams	78.3
Work presentations in class	73.9
Participating in class (e.g., asking questions, participating roles in debates)	43.5
Interacting with the teacher outside of class (e.g., in homeroom, offices visits)	31
Academic overburdening (having too many tests and assignments to do)	67.4
A lack of time to complete all of the tasks assigned to us	67.4
Competition between classmates	49.5
Completing tasks that require information gathering and writing	80.4
The study task (e.g., adhering to defined schedules, amount of work)	69
Working on class projects with classmates in class	57.6
Problems or disagreements with teachers	5.4
Problems or disagreements with classmates	8.2
Attending all of the lessons	46.7
Too much duty to fulfill my responsibilities	52.2
Getting good ratings in many subjects	47.3
Future academic and professional goals	70.1
Subject selection for next courses	40.8
Obtaining or retaining a study grant	47.3
Completing the XII grade in the time frame specified	76.1
Family pressures to get good grades	24.5
Teachers' lack of support	12
Maintaining studies and tasks	63
My interactions with my classmates	52.7
Doing well in all of the course's subjects	55.4
Conflicts in my family as a result of my studies	21.7
Making recreational activities and academic work compatible	68.5
Pressure from my teacher on my work and behavior	33.2
My parents are constantly on top of me (e.g., whether I do my school work and activities, my grades, etc.)	39.7
Performing disappointingly on an exam	27.7
My classmates' perceptions of me as not a good student	9.2
Others	14.1

Table 2 mentions that the highest indicator that caused academic stress came from assignment activities from the school as the responsibility for obtaining grades for each subject (80.4%). Even in interviews, students also said that the process of disruption to the teaching and learning system had not been fully accepted by students. The pressure to fulfill all assignments given in all subjects and present them in online classes is felt to be too burdensome, especially with limited access to

the internet network from the location where students live.

Many test targets must be met in a limited time and preparation for graduation to enter tertiary institutions is a particular concern given the difficulties students have in understanding subject matter in terms of theory and practice (78%). Although the school also provided tolerance for students if they are constrained in accessing assignments, they can get and collect their assignments at school on a limited basis.

In Table 2, it appears that other indicators outside the academic field that come from the student learning environment in the form of teachers and families also influence being a cause of academic stress, although not significant. However, the social environment with school friends or classmates is one of the indicators that have a greater contribution (57.60%) compared to teachers (33.20%) and family (39.70%). The family environment, especially the role of parents, is a low indicator of causing academic stress.

The results of the interviews stated that students missed the social environment with friends at school that was dynamic, competitive, and conducive to being able to support their enthusiasm for learning and pursuing graduation targets. It's true that indicators outside the academic field, such as the student's learning environment, can lead to academic stress during the Covid-19 pandemic's online learning policies. While these factors may not always have a significant impact individually, when combined, they can affect a student's overall well-being and academic performance.

Teachers and families play a crucial role in supporting students' learning, especially during remote learning. However, the sudden shift to online education may have caused challenges for both students and their families in adapting to new learning methods and managing the increased responsibilities that come with it. This adjustment period, coupled with potential technical difficulties and lack of access to necessary resources, can contribute to additional stress for students.

On the other hand, the social environment, particularly interactions with school friends or classmates, can have a greater impact on a student's well-being and academic stress levels. Peer relationships are an essential aspect of a student's social development and can

provide emotional support, motivation, and a sense of belonging. During the pandemic, the loss of face-to-face interactions and limited opportunities for socialization can lead to feelings of isolation and loneliness, which in turn can affect a student's ability to cope with academic stress. However, the role of teachers, school staff, and families can affect the condition of students' resilience in dealing with academic stress.

The Academic Stress Impact on Student Resilience when Online Learning Policies During the Covid-19 Pandemic

Academic stress faced by students during the Covid-19 pandemic had a substantial impact on student resilience, particularly with the change to online learning. A resilient student possesses a variety of specified qualities, referred to as internal variables here, and uses them to rebound from setbacks and difficult situations. To maintain resilience, certain ambient or external variables must also be present.

Self-management (which involves goal planning and perseverance) and emotional control (the ability to resist lingering on negative memories or overreacting to stimuli) are examples of internal variables. Social integration (perceived integration with specific groups of other students, such as flatmates or roommates, or other students on the same course) is one of the external variables. This is related to Liz Thomas' work on a sense of belonging), support networks (the perceived ability to get help from a formal or informal support network), and social relationships (satisfaction with current relationships, including family and friends from home, membership in friendship groups in comparison to others, and the level of friendships with other students). The Unite Students Insight Report 2016 (McIntosh & Shaw, 2017) Resilience Index was used.

Table 3. Student Resilience Index

Aspect	Indicator	Percentage
Social Relationships	My dearest friend attending my school	1.1
	I have friends who I get together with to socialize (outside of study) at least twice a week, excluding housemates	5.4
	I talk to my schoolmates' friends for dating or relationship advice	8.2
	I have schoolmates I can confide in with my deepest secrets	5.4
	I have discussed my financial worries with a friend at school	1.1
	One of my school friends and I have discussed my health issues	3.8
	Relations with my own family	39.7
	Relations with my roommates or housemates	21.7
	Relations with friends outside of school	5.4
	Relations with other students in the class	57.6
	Relations with my school friends (not those who are housemates or in my course)	52.7
	Have friends and acquaintances	24.5
	Belong to groups/cliques of friends or acquaintances	27.7
	Belong to clubs or organizations	22.8
	Others	14.5
Self-Management	If something is worth starting, I will finish it	33.2
	I often feel anxious under pressure	52.2
	When things do not go as planned, I can get upset	67.4
	I quickly seek help from others when I need it	3.8
	I rely on myself for handling any situation	95
	I think about how my activities will affect other people	3.8
	I usually take on short-term discomfort for long-term gain	14.1
	I have got an obvious idea of the objectives I want to accomplish in the upcoming year	70.1
	I don't let disappointment stop me from trying again	68.5
	If attainable, I try to avoid complaining	47.8
	I can plan my way out of negative situations	63
	I have chosen to place blame on others rather than accepting my faults	3.8
	I have depended a lot on others to make decisions for me	10.9
I have avoided doing something from fear of failure	27.7	
Others	8.8	
Emotional Control	I have spent more time than necessary dwelling on bad experiences	48.9
	A setback negatively impacted my confidence for some time	52.7
	I overreacted to a setback, damaging relationships with friends or flatmates	8.2
	My reaction to the situation made things worse	55.4
	Others	1.1
Integration	Students in my flat or house	26.6
	Students in my accommodation block	39.1
	Students in my course	57.6
	Overall students at my school	52.7

	Others	3.8
	School support staff	63
	Tutors	78.3
	Assistants in residential care, or wardens	3.8
	Designated mentors/buddies for students	52.7
Support Networks	The staff at my accommodation with whom I could talk to	17.9
	Flatmates/house	70.1
	University counselors	68.5
	Family	80.4
	Friends at school	73.9
	Friends from outside of school (i.e. at home)	33.2
	Others	12

Data shown in Table 3, that the main aspect that influences student resilience is the support network, in which self-management has the highest percentage: I rely on myself for handling any situation (95%), I have got an obvious idea of the objectives I want to accomplish in the upcoming year (70,10%), and I don't let disappointment stop me from trying again (68,50%); support networks: family (80,40%), tutors (78,30%), friends at school (73,90%); social relationships: relations with other students in the class (57.60%), relationships with my friends at school (not housemates or on my course) (52,70%), relations with my own family (39,70%); emotional control: my reaction to the situation made things worse (55,40%), a setback negatively impacted on my confidence for some time (52,70%), I have spent more time than necessary dwelling on bad experiences (48,90%); and the last is integrations: students in my course (57,60%), overall students at my school (52,70%), and students in my accommodation block (39,10%).

Self-management is the ability to properly regulate one's thoughts, emotions, behaviors, and activities. Students can increase their resilience capacity to overcome obstacles, adapt to novel situations, and excel academically by creating goals, successfully managing time, upholding discipline, managing stress and emotions, and engaging in self-reflection. Students with strong self-control skills are better equipped to handle challenges and setbacks in the classroom, which can strengthen their overall resilience.

Support networks are the relationships and resources on which students can rely during challenging times. This includes family members, friends, teachers, mentors, counselors, and other people who offer advice, support, and help. A strong support network can provide emotional support, academic assistance, and practical assistance, all of which can enhance a student's resilience.

Social relationships are the connections and interactions that students have with their peers. Positive social relationships can provide emotional support, as well as chances for collaboration and teamwork. Students' resilience is increased when they feel connected to and supported by their peers, who are more willing to persist in the face of difficulties and setbacks.

Emotional control refers to the ability to perceive, comprehend, and effectively manage one's emotions. Resilient students are often adept at managing their emotions, remaining calm under pressure, and recovering from setbacks. Students can manage stress, keep a positive outlook, and adjust to changing situations by gaining emotional control, all of which contribute to their resilience.

Integration, the process of linking many parts of a student's life, such as academics, extracurricular activities, personal interests, and relationships, is referred to as integration. Students' resilience improves when they can discover a sense of clarity and purpose in their life. Integration assists students in seeing the broad picture, understanding how different areas

of their lives interact, and finding meaning in their experiences.

Overall, when online learning policies are implemented during the Covid-19 pandemic, competent self-management complemented by solid support networks becomes important in reducing the negative effects of academic stress on student resilience.

CONCLUSION

The sudden shift to virtual classrooms created significant academic pressure among students. Many students were experiencing symptoms of academic stress when online learning policies during the Covid-19 pandemic such as sleep disturbances, difficulty concentrating, irritability, headaches, and even physical illness due to overwhelming stress levels.

The highest indicator that caused academic stress came from school assignment activities such as the responsibility for obtaining grades for each subject, disruption to the teaching and learning system that hasn't been fully accepted by students, pressure to complete all test targets and assignments given in all subjects in a limited time, limited access to the internet network from the location where students live, preparation for graduation to enter tertiary institutions, and along with the difficulties students faced in understanding subject matter in terms of theory and practice.

Strong support networks, along with competent self-management, excellent social relationships, emotional control, and integration, can have a significant impact on student resilience. Overall, especially strong self-management has a very large influence in preventing or overcoming academic stress problems. Support networks are very important in limiting the impact of academic stress on student resilience during the Covid-19 pandemic online learning policies.

To foster student resilience during the implementation of online learning policies due to the Covid-19 pandemic, collaborative efforts are needed between educators, family members,

and policymakers. Teachers and school staff must create a supportive virtual environment where students feel connected despite physical distance while parents or guardians must provide a supportive environment for their child's education at home. The government must also provide learning support by providing subsidized learning facilities and developing internet network access for remote villages to reach signal availability.

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