

## **CHAPTER IV**

### **FINDINGS AND DISCUSSION**

#### **A. Findings**

##### **1. Factors of Learning Loss**

Amidst the transformative paradigm shift to online learning catalyzed by the global COVID-19 pandemic, concerns have arisen regarding the widespread of learning loss and varying level of learning loss among university students. Before delving into an examination of the factors contributing to this phenomenon, it is crucial to shed light on the broader scope of learning loss and assess its magnitude across diverse academic contexts.

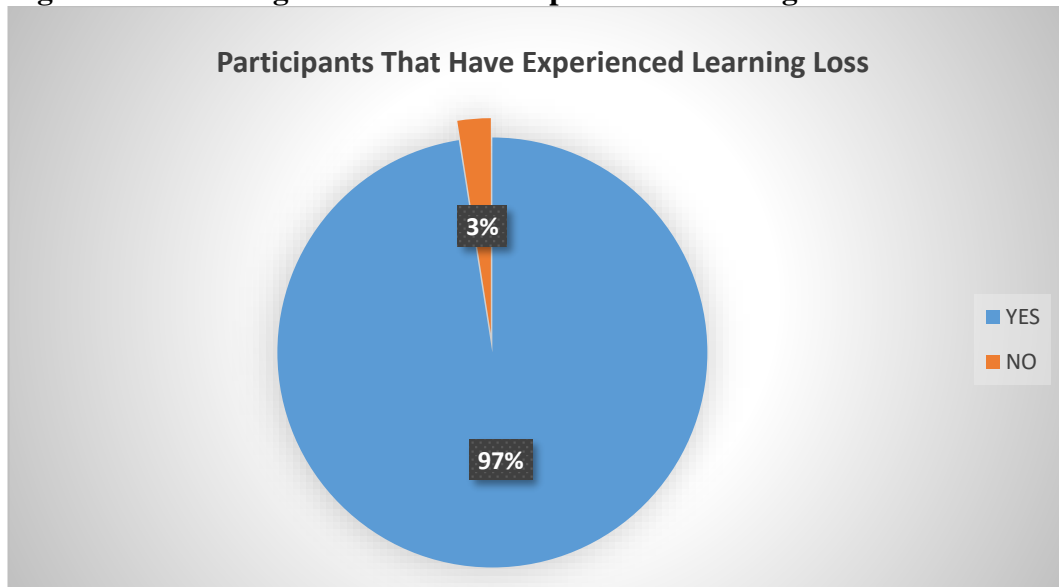
This introductory exploration will commence by scrutinizing the prevalence and levels of learning loss experienced by students at UIN Antasari during the pandemic. Subsequently, the focus will narrow to dissect the factors of learning loss, distinguishing between obstacles and problems encountered in online learning. The elucidation of these factors aims to unravel the complex web of challenges students face in the virtual classroom. Following this exploration, attention will shift to scrutinizing the tangible impacts of learning loss, providing a comprehensive understanding of the multifaceted implications on students' academic experiences and overall well-being.

##### **a. The Widespread of Learning Loss**

The research findings based on figure 4.1 reveal a significant and widespread occurrence of learning loss among university students during the COVID-19 pandemic. Out of the total of 40 participants, an overwhelming majority of 39

individuals (97.5%) reported experiencing learning loss to varying degrees. This striking prevalence underscores the considerable challenges faced by students as they navigated the shift to online learning platforms amidst the pandemic.

**Figure 4.1. The Diagram for The Widespread of Learning Loss**



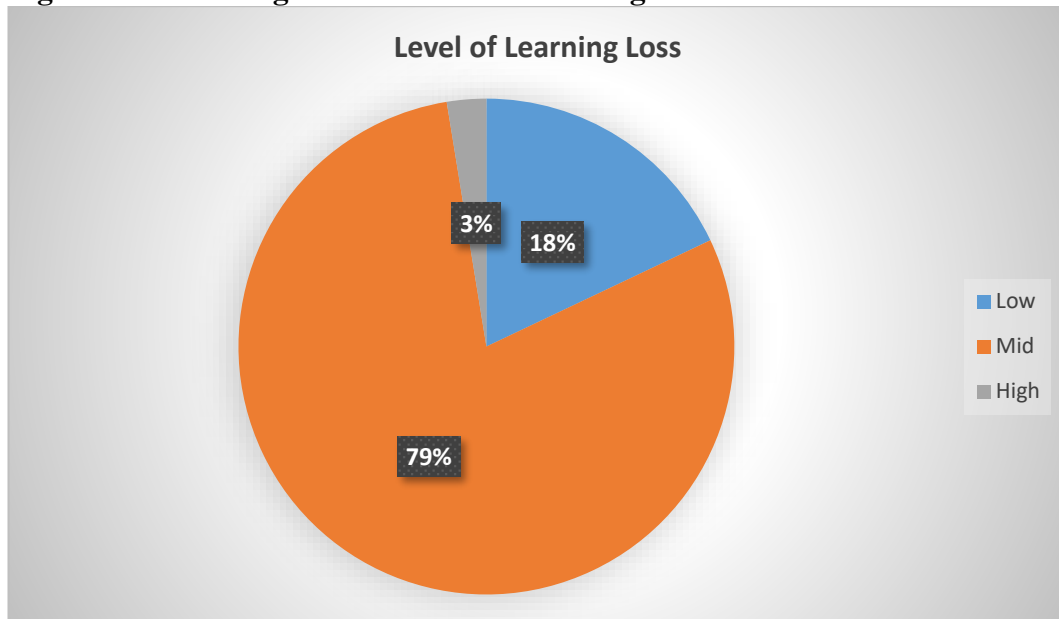
b. Level of Learning Loss

According to analysis of the data in figure 4.2 showcases a distinct pattern in the severity of learning loss experienced by participants. Specifically, 31 out of the 39 (79%) participants reported encountering a moderate level of learning loss. This category represents a substantial portion of the sample and signifies a common trend of disrupted educational progress across diverse academic backgrounds. The experiences shared by these participants suggest that while the transition to online learning has resulted in challenges, the impact is not overwhelmingly severe for this group.

Additionally, the data indicate that 7 out of the 39 (18%) participants reported a low level of learning loss. This subgroup of participants has managed to adapt

more effectively to the online learning environment, possibly due to a combination of factors such as prior familiarity with technology, conducive home study environments, and proactive engagement with online resources.

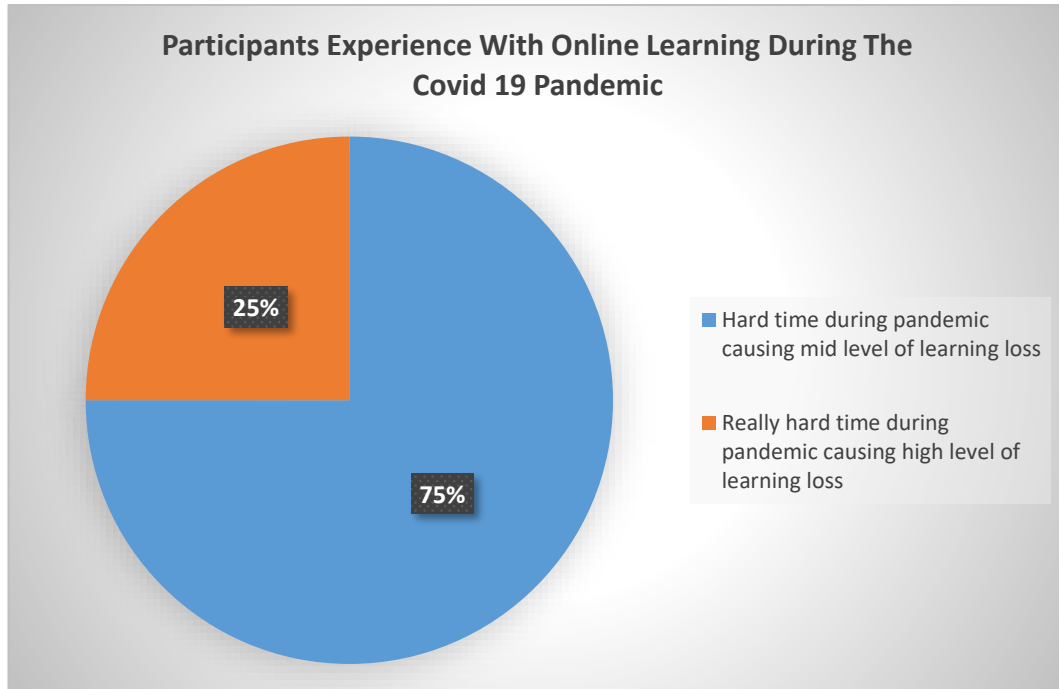
**Figure 4.2. The Diagram for Level of Learning Loss**



Conversely, 1 out of the 39 (3%) participants detailed a high level of learning loss. This individual's experience highlights the extreme end of the spectrum, emphasizing the acute difficulties that some students encountered during the transition to online learning. The factors contributing to this high level of learning loss could encompass technological barriers, limited access to resources, or challenges in adapting to the remote learning format.

Building upon the insights gained from our participants' experiences, based on figure 4.3 the research findings underscore the complex and multi-dimensional nature of learning loss during the COVID-19 pandemic. The varying degrees of learning loss reported by the participants further illuminate the significance of contextual factors that influence the transition to online learning.

**Figure 4.3. The Diagram for Participants Experience with Online Learning During Covid 19 Pandemic**



It is noteworthy to draw a cross-examination by comparing our data with insights gathered from another set of interviews. In that study, which included 20 participants, it was revealed that 15 participants (75%) reported facing considerable challenges during online learning, leading to a moderate level of learning loss. This parallel finding supports our own data, indicating that a majority of students across different contexts have encountered obstacles that have impacted their educational progress to a similar degree. This convergence suggests a consistent pattern of disruption in university education due to the shift to online learning.

Furthermore, the cross-examination reveals that 5 out of the 20 (25%) participants from the other study articulated an even higher level of learning loss, characterized by significant difficulties during online learning. This observation is aligned with our own data, where one participant reported a high level of learning

loss. The parallel occurrence of high-level learning loss in both studies emphasizes the potential severity of challenges faced by a subset of students who have struggled profoundly in adapting to online learning modalities.

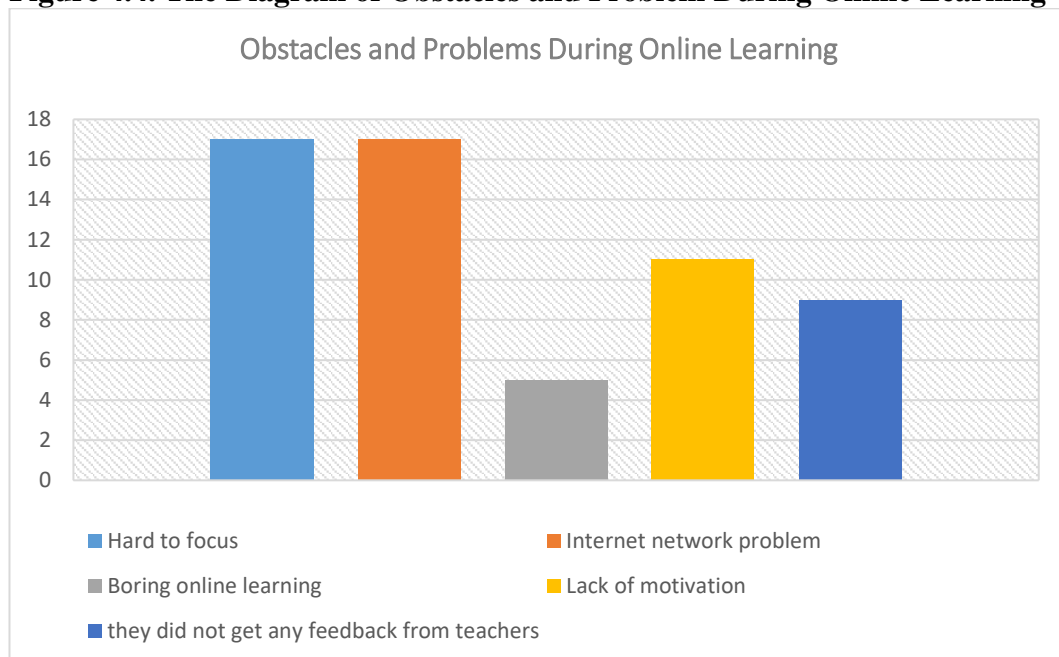
Comparing our findings with data from another study serves to validate the consistency of the phenomenon of learning loss across different participant groups. It corroborates the notion that the transition to online learning during the pandemic has led to varying levels of disruption in the educational journey for university students. The similarities in findings lend credibility to the significance of the issue and suggest that the challenges are not isolated incidents but rather a widespread concern.

In conclusion, the comprehensive analysis of the data, coupled with the cross-examination with findings from another study, provides a comprehensive understanding of the diverse experiences of university students dealing with learning loss due to online learning during the COVID-19 pandemic. The variations in the severity of learning loss, as highlighted by both sets of data, emphasize the critical need for targeted interventions, support mechanisms, and innovative solutions to address the multifaceted challenges faced by students in navigating the new landscape of education.

#### c. Factors of Learning Loss Based on Encountered Obstacles

The research findings cast light on the multitude of obstacles that participants have encountered as they navigate the challenges of online learning during the pandemic. The diverse nature of these hurdles provides valuable insights into the complexities surrounding remote education and its impact on learning outcomes.

**Figure 4.4. The Diagram of Obstacles and Problem During Online Learning**



According to figure 4.4, 17 out of the 40 participants shared that maintaining focus during online learning has been a formidable challenge. This issue underscores the potential attention fragmentation and reduced engagement that remote learning settings may bring about. The transition from conventional classrooms to virtual platforms can lead to diminished concentration, ultimately affecting the quality of learning.

Similarly, another 17 participants identified internet network problems as a significant barrier. Notably, this obstacle is more pronounced among participants from rural areas, emphasizing the digital divide that has been exacerbated by the pandemic. The lack of reliable internet access impedes their ability to fully participate in online learning activities, resulting in unequal learning opportunities.

A distinct concern was voiced by 5 participants who found online learning uninteresting and boring. This sentiment underscores the limitations of remote

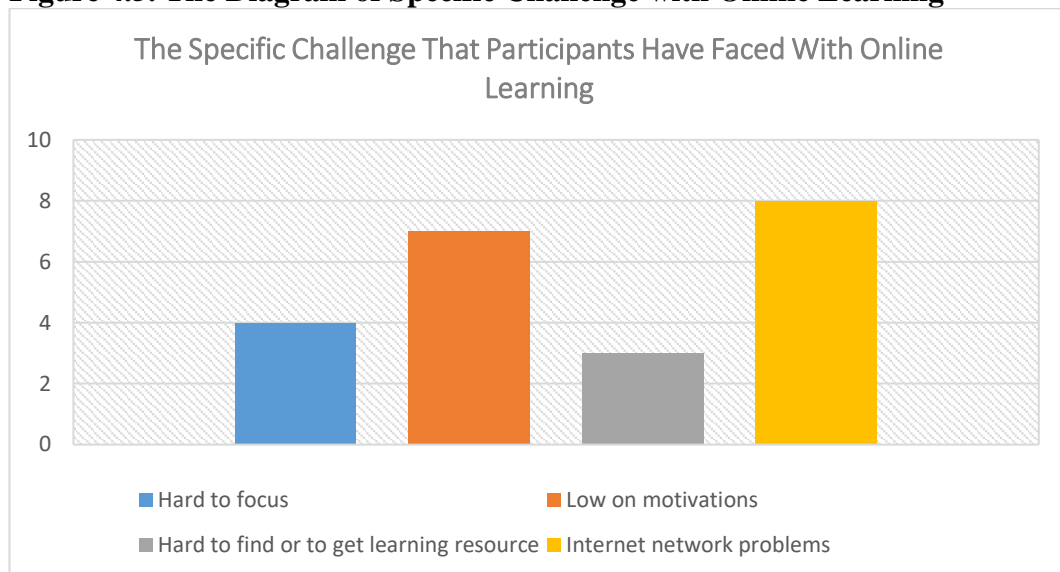
instruction in replicating the dynamic and interactive classroom environment. The absence of physical presence and peer interaction could contribute to a perceived lack of engagement and enthusiasm for the learning content.

For 11 participants, a lack of motivation due to an unsupportive learning environment posed a substantial obstacle. The absence of structured classrooms and the peer influence that accompanies them may have led to a diminished drive to engage with online coursework. The challenges of self-regulation and coping with distractions within the home environment likely contribute to this motivational struggle.

Moreover, 9 participants expressed difficulty in obtaining timely feedback from instructors during online learning. This obstacle underscores the importance of ongoing communication and interaction between students and teachers for effective learning. The limitations of virtual communication might hinder the immediate clarification of doubts and impede the feedback loop.

Collectively, these findings underscore the intricate interplay of obstacles that university students grapple with during the transition to online learning. The fact that participants often face multiple challenges simultaneously emphasizes the need for comprehensive interventions and tailored support mechanisms. Addressing these barriers is essential to empower students to navigate the virtual learning landscape successfully, ultimately mitigating learning loss and fostering a more inclusive educational experience. Subsequent sections of the interpretation will delve deeper into participants' proposed solutions, offering valuable insights into strategies that could alleviate these challenges.

**Figure 4.5. The Diagram of Specific Challenge with Online Learning**



Continuing the analysis based on figure 4.5, the diverse array of obstacles reported by participants paints a comprehensive picture of the intricate difficulties faced during the transition to online learning. These multifaceted challenges have contributed to the varying degrees of learning loss, further emphasizing the need for targeted interventions and solutions. A parallel comparison with data from another interview, as a cross-examination, provides additional insights into the broader landscape of challenges encountered by university students.

Drawing a comparative perspective, data from the second interview study echoes and reaffirms the challenges reported by our participants. In that study, 4 out of 20 participants identified difficulties in maintaining focus as a primary challenge. This resonates with our own findings, where an equivalent number of participants, 17 out of 40, expressed struggles in maintaining concentration during online learning. The similarity in these numbers across two distinct participant groups underscores the universal nature of this challenge and its widespread impact on the quality of online learning experiences.



Furthermore, the cross-examination reveals that 7 out of the 20 participants in the other study cited a lack of motivation as a significant challenge. This closely aligns with our own findings, where 11 out of 40 participants reported a lack of motivation as a key obstacle. The convergence of these results highlights the shared struggle students face in maintaining their enthusiasm and engagement in an online learning environment.

Another challenge identified in the second study was the difficulty in finding learning resources, reported by 3 out of 20 participants. While not explicitly mentioned as a distinct challenge in our own findings, the broader theme of challenges related to resources, access, and engagement resonates across both studies. The challenges encountered in accessing and effectively utilizing learning materials in an online format are consistent themes that contribute to learning loss.

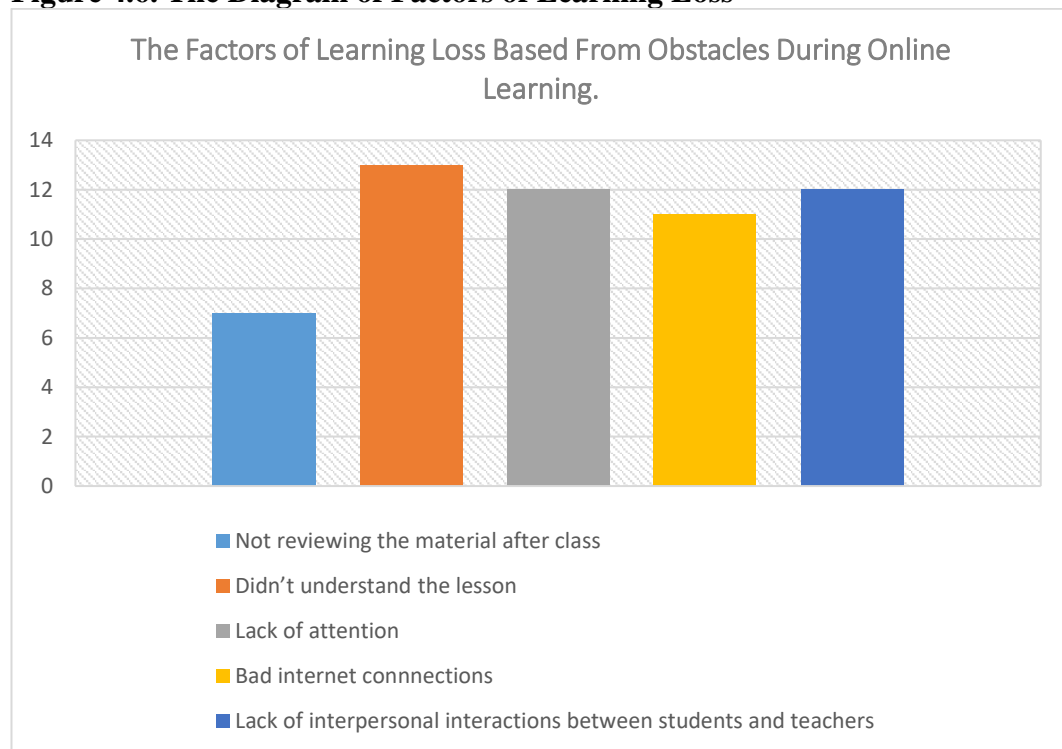
Lastly, 8 out of 20 participants in the other study highlighted internet network problems as their primary challenge. This echoes the concern raised by 17 of our participants, who also cited internet network problems as a substantial obstacle. The consistent prevalence of connectivity issues further underscores the digital divide and its impact on students' ability to access and engage with online learning resources.

In conclusion, the comparative analysis with data from another interview provides compelling evidence of the common challenges faced by university students during the transition to online learning. The cross-examination validates and reinforces the obstacles reported by our participants, highlighting the shared nature of these difficulties across different participant groups. These parallels

emphasize the importance of addressing these challenges collectively and developing comprehensive strategies to mitigate learning loss and enhance the online learning experience for students. The subsequent sections of the interpretation will delve into participants' solutions and suggestions, building upon the comprehensive understanding of obstacles to offer actionable insights for educational improvement.

The examination of data pertaining to the factors contributing to learning loss based on the obstacles encountered during online learning offers a nuanced understanding of the interwoven challenges that shape the educational experiences of university students. These findings illuminate the interdependencies between obstacles and factors, unveiling the complex landscape that impacts learning outcomes.

**Figure 4.6. The Diagram of Factors of Learning Loss**



According to figure 4.6 the research findings unveil a multifaceted web of factors that intensify the impact of learning loss among university students during the transition to online learning. These factors, intricately linked to the obstacles participants faced, provide insights into the intricate mechanisms through which challenges are exacerbated and educational progress hindered.

Analyzing the factors of learning loss reported by participants in relation to the obstacles they encountered during online learning sheds light on the complex interplay of challenges and their impact on educational outcomes.

First, 7 out of 40 participants identified laziness as a factor contributing to their learning loss. The reluctance to review lessons after class, often attributed to laziness, can result in missed opportunities for reinforcement and understanding of the material. This factor highlights the role of individual study habits and self-discipline in the learning process.

Second, 13 out of 40 participants noted that their learning loss was primarily caused by a lack of understanding due to the challenges of adapting to online learning and the difficulty in obtaining timely feedback. The connection between these obstacles and learning loss underscores the importance of adapting teaching strategies to meet the unique demands of online education. Addressing these challenges could improve comprehension and retention of the material.

Third, 12 out of 40 participants pointed to a combination of factors contributing to their learning loss. These factors included difficulties stemming from a short attention span, the perceived boredom of online learning, and a lack of motivation. This cluster of obstacles reflects the intricate relationship between

student engagement, course design, and individual motivation. It highlights the need for more interactive and engaging online learning experiences to combat these challenges.

Fourth, 11 out of 40 participants identified bad internet connection and internet-related problems as factors affecting their learning loss. The additional burden of expensive internet costs and limited government support exacerbates these challenges. These issues underline the urgent need for addressing the digital divide and providing equitable access to quality online education.

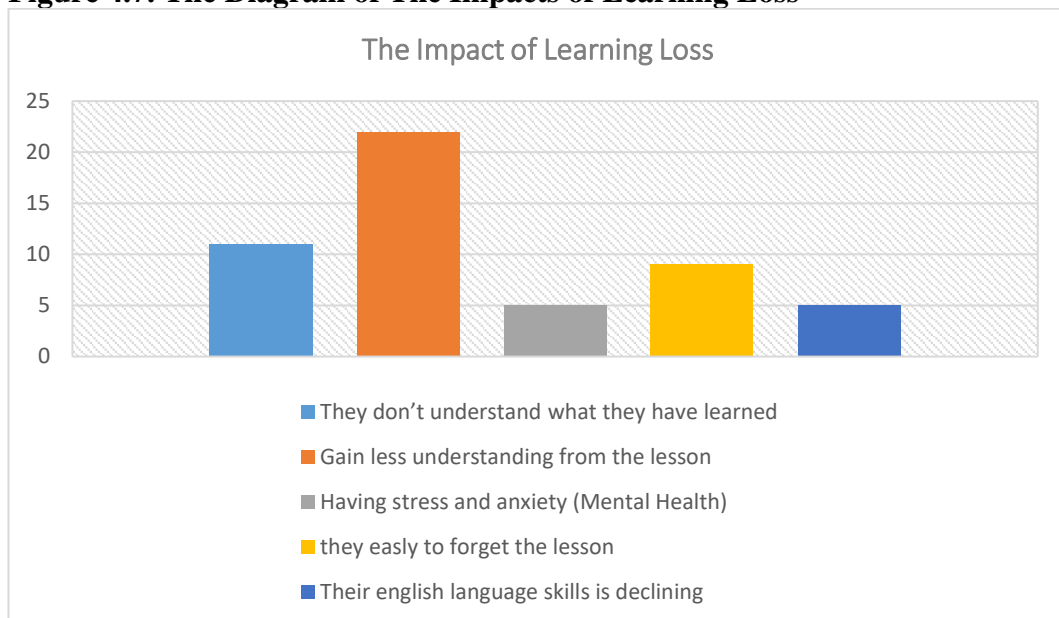
Lastly, 12 out of 40 participants attributed their learning loss to the absence of interpersonal interaction between students and teachers, resulting in a monotonous and unengaging online learning environment. The lack of social interaction in virtual classrooms can lead to disengagement and hinder the development of a supportive learning community.

In summary, the factors contributing to learning loss are closely connected to the obstacles encountered during online learning. Laziness, difficulties in adapting to online learning, lack of timely feedback, short attention spans, boredom, lack of motivation, connectivity problems, and the absence of interpersonal interaction all play significant roles. Addressing these factors requires a multifaceted approach, including instructional redesign, improved internet infrastructure, and support systems that enhance motivation and engagement. These findings emphasize the complexity of the learning loss phenomenon and the need for tailored interventions to mitigate its impact on students' educational outcomes.

d. Impact of Online Learning on Participants' Well-being, Learning Abilities, and Engagement

The third part of the findings sheds light on the diverse and far-reaching consequences of learning loss experienced by university students during the transition to online learning amid the COVID-19 pandemic. These impacts underscore the profound disruptions in educational experiences and highlight the multifaceted repercussions of challenges faced during remote learning.

**Figure 4.7. The Diagram of The Impacts of Learning Loss**



According to figure 4.7 a significant portion of participants (11 out of 40) reported a complete lack of understanding in their lessons, indicating a substantial disconnect in their comprehension. This highlights the severity of the learning loss experienced, where a considerable number of students found themselves unable to grasp the essence of the material taught. Such outcomes have long-term implications, potentially affecting their overall academic progress.

The majority of participants (22 out of 40) expressed a reduced level of understanding in their lessons. This suggests that learning loss has led to a compromised acquisition of knowledge and skills, resulting in a less comprehensive grasp of the subject matter. The broad prevalence of this impact emphasizes the widespread nature of learning loss and its potential to undermine the educational foundations of a significant proportion of students.

A subset of participants (5 out of 40) revealed that learning loss resulted in the development of mental health challenges, such as anxiety, stress, and Obsessive-Compulsive Disorder (OCD). The correlation between learning loss and mental health concerns highlights the emotional toll that the challenges of online learning can take on students. The reliance on technology, coupled with uncertainties about the efficacy of online instruction, has exacerbated feelings of anxiety and stress.

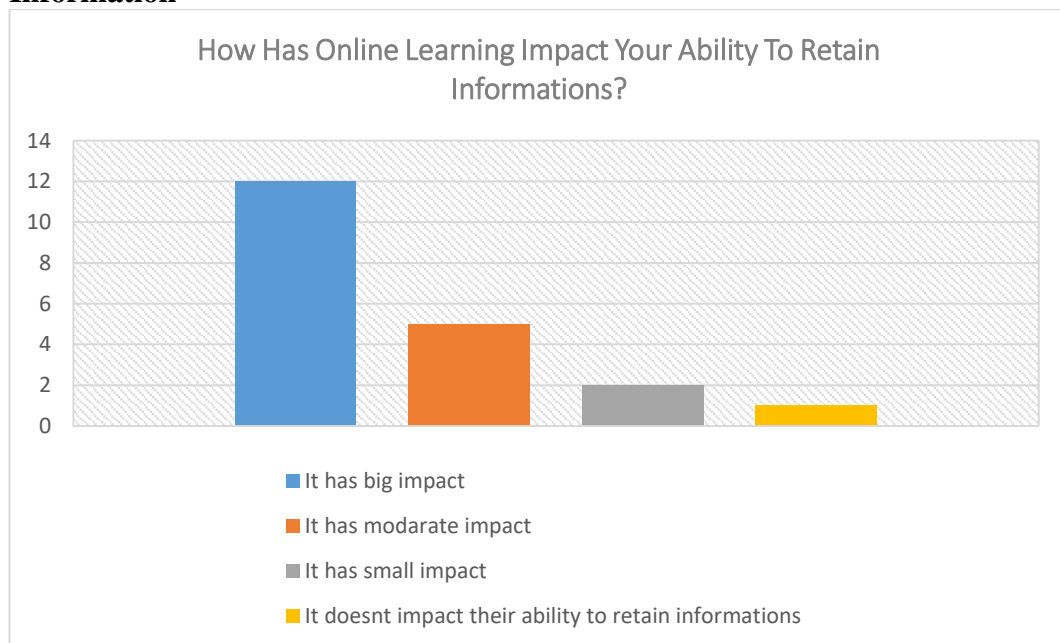
A notable portion of participants (9 out of 40) reported difficulties in retaining what they have learned, indicating a notable impact on their memory. This suggests that the disruptions caused by online learning have affected their ability to consolidate and recall information effectively. Such memory challenges can hinder their long-term academic achievements and hinder the application of knowledge in real-world contexts.

Interestingly, a subset of participants (5 out of 40) noted a decline in their English language skills. This finding is particularly significant given that all participants are from an English education major. The implication is that the shift

to online learning has hindered their language development, possibly due to reduced interactive opportunities and linguistic engagement in virtual settings.

Continuing the analysis, the comparison with data regarding the impact of online learning on participants' ability to retain information offers a broader perspective on the repercussions of remote education and its implications for learning outcomes. This comparison illuminates the variations in experiences across different participant groups and underscores the significance of learning loss within the context of the broader challenges faced by students.

**Figure 4.8. The Diagram of Impact of Online Learning to Ability in Retain Information**



The findings based on figure 4.8 related to the impact of learning loss reveal that a significant number of participants have faced challenges in retaining the knowledge they acquire. This difficulty in information retention can be attributed to various factors, including the abrupt shift to online learning and the unique challenges it poses.

Comparing these findings to data from another interview study, we find compelling similarities and differences. In the other study, 12 out of 20 participants reported that online learning had a "big impact," to the extent that they couldn't understand the lesson at all. This resonates with our findings, where 11 out of 40 participants expressed that they "don't understand what they have learned." Both sets of data underscore the detrimental effect of online learning on comprehension and information retention.

Additionally, 5 out of 20 participants in the other study mentioned a "moderate impact," which resulted in missing a lot of information during lessons. This aligns with the experiences of our participants, where 22 out of 40 reported "gaining less understanding from what they have learned." Both findings point to the challenges students face in capturing and processing the information presented during online classes.

Furthermore, 2 out of 20 participants in the other study noted a "small impact," leading to a reduction in their ability to gain a comprehensive understanding of the lessons. While our study did not explicitly mention this as a distinct finding, it resonates with the broader theme of reduced comprehension and knowledge retention.

Interestingly, 1 out of 20 participants in the other study indicated that online learning did not impact their ability to retain information. This contrasts with our findings, where a considerable number of participants reported difficulties in understanding and retaining knowledge. Such variations in experiences emphasize



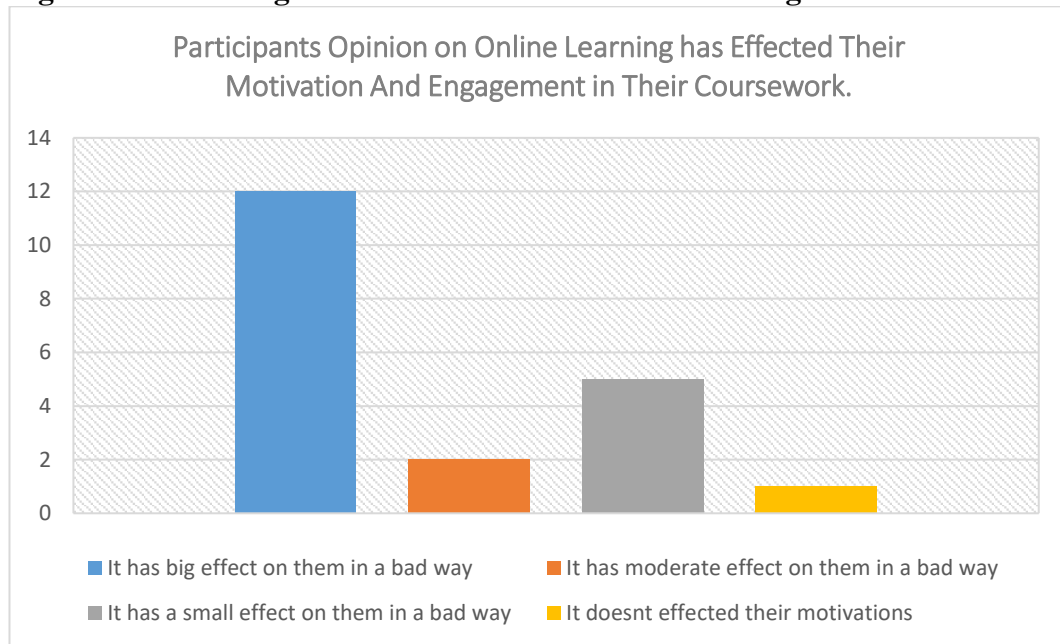
the diverse ways in which students have adapted to online learning and its impact on their information retention.

In summary, the findings from our study and the data from another interview provide a comprehensive perspective on the challenges faced by students in retaining information during online learning. These challenges range from a complete breakdown in comprehension to moderate and small impacts on knowledge retention. These shared experiences underscore the need for targeted interventions to support students in adapting to the demands of online education and mitigating learning loss. Understanding the nuances of information retention challenges is essential for developing effective strategies to enhance the online learning experience and promote successful educational outcomes.

The findings regarding learning loss also shed light on the effects of online learning on students' motivation and engagement in their coursework. It is evident that the transition to online education during the pandemic has brought about a spectrum of challenges in this regard.

Comparing our findings with data from another interview based on figure 4.9, we can draw compelling parallels and distinctions. In the other study, 12 out of 20 participants reported a "big effect" on their motivation and engagement in a negative way. They attributed this primarily to the lack of interaction in class and the perception of classes as boring. This finding aligns with our own, where 11 out of 40 participants mentioned a "lack of motivation" as an obstacle, often citing the unstimulating nature of online classes. Both sets of data emphasize the negative impact on motivation due to the absence of physical classroom interactions.

**Figure 4.9. The Diagram of The Effect of Online Learning on Motivation**



In the other interview study, 2 out of 20 participants noted a "moderate effect" on their motivation primarily due to "lack of attention spans." This finding resonates with our own data, where some participants reported "difficulty in maintaining focus during online learning." Both sets of data highlight the challenges posed by online learning to students with shorter attention spans, resulting in diminished motivation and engagement.

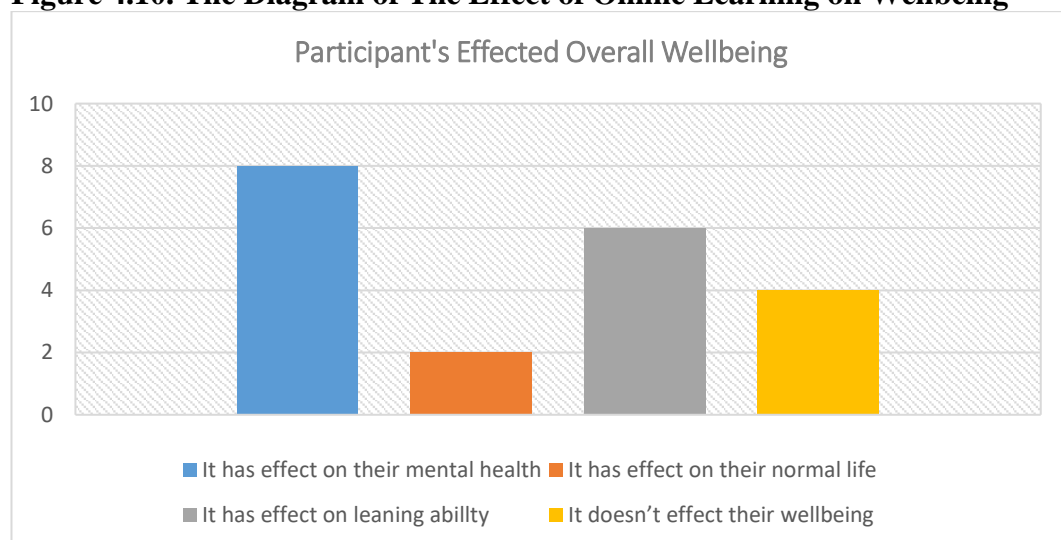
Moreover, 5 out of 20 participants in the other interview study mentioned a "small effect" on their motivation predominantly because of "laziness." This mirrors the experiences of our participants who cited "lack of motivation" as a significant obstacle, often intertwined with the challenges of maintaining self-discipline and combating distractions. Both findings underscore that the transition to online learning can introduce issues related to motivation and self-regulation.

In contrast, 1 out of 20 participants in the other study reported that online learning did not affect their motivation. This differs from our findings, where a

substantial number of participants faced challenges related to motivation and engagement. These discrepancies emphasize the diversity of student experiences and adaptive strategies in response to online learning.

In conclusion, our findings and data from another interview study provide a comprehensive understanding of the impact of online learning on students' motivation and engagement. These impacts range from significant challenges arising from a lack of interaction and perceived boredom to moderate and small effects attributed to attention spans and laziness. Understanding the complex relationship between online learning and motivation is crucial for developing targeted interventions to enhance student engagement and foster a more enriching learning experience.

**Figure 4.10. The Diagram of The Effect of Online Learning on Wellbeing**



The impact of online learning on students' overall wellbeing is a critical aspect of our findings. As we delve into this facet, we can compare our data with insights from another interview study to gain a more comprehensive understanding. In our study, a subset of participants (5 out of 40) reported experiencing mental health

challenges, including anxiety, stress, and Obsessive-Compulsive Disorder (OCD), primarily due to their reliance on technology for online learning. Additionally, 9 out of 40 participants mentioned difficulty retaining what they have learned, and 5 out of 40 participants noted a decline in their English language skills. These findings illustrate the multifaceted impact of online learning on participants' overall wellbeing, encompassing cognitive, emotional, and language domains.

Comparing this to data from another interview study based on figure 4.10, we find that 8 out of 20 participants reported that online learning had an effect on their mental health, resulting in experiences of anxiety, stress, and even OCD. This aligns with our own findings, where mental health challenges were reported as a significant consequence of learning loss during the pandemic.

Furthermore, 6 out of 20 participants in the other study indicated that online learning had an effect on their learning ability. They highlighted difficulties in understanding lessons, easy forgetting of course material, and gaining less understanding from lessons. These experiences resonate with our findings, where participants reported learning loss, memory challenges, and a decline in language skills. Both sets of data underscore the diverse academic challenges that can arise from online learning, contributing to overall wellbeing concerns.

In the other interview study, 2 out of 20 participants mentioned that online learning had an effect on their normal life, such as the financial burden of having to invest in internet connection costs. This aligns with our findings, where financial implications were not explicitly stated but are certainly relevant, especially given the digital divide and varying access to resources among students.

Lastly, 4 out of 20 participants in the other study stated that online learning did not affect their overall wellbeing. This contrasts with our findings, where a significant number of participants reported challenges related to mental health, learning, and language skills. These differences highlight the individual variability in how students perceive and adapt to the challenges of online learning.

In summary, the comparison between our findings and data from another interview study provides a comprehensive perspective on the multifaceted impact of online learning on participants' overall wellbeing. Both sets of data emphasize the significance of addressing the cognitive, emotional, and practical challenges students face, while also acknowledging the individual differences in their responses to online learning's impact on wellbeing. Understanding these nuances is crucial for developing holistic strategies to support students during and beyond the pandemic.

## 2. The Solutions for Learning Loss

Amidst the evolving landscape of online education catalyzed by the global COVID-19 pandemic, addressing the challenges posed by learning loss has become imperative for fostering resilient academic environments. This exploration into solutions begins by understanding how participants themselves grapple with and triumph over learning loss. Participants' insights into effective strategies and personal initiatives to address these challenges provide a nuanced perspective on overcoming obstacles in the online learning sphere. Subsequently, attention will shift towards the broader educational ecosystem, highlighting the collective responsibilities of stakeholders; teachers, parents, and governmental bodies in

mitigating learning loss. Analyzing the proactive measures that institutions and policymakers can take underscores the significance of collaborative efforts in navigating the complexities of the pandemic-induced educational paradigm. Finally, this discourse culminates in an examination of a tangible metric; Grade Point Average (GPA), comparing students' academic performance between the pre-pandemic and post-pandemic periods. This holistic approach aims to provide actionable insights into crafting effective strategies for both individual learners and the educational stakeholders who shape the future of learning in these challenging times.

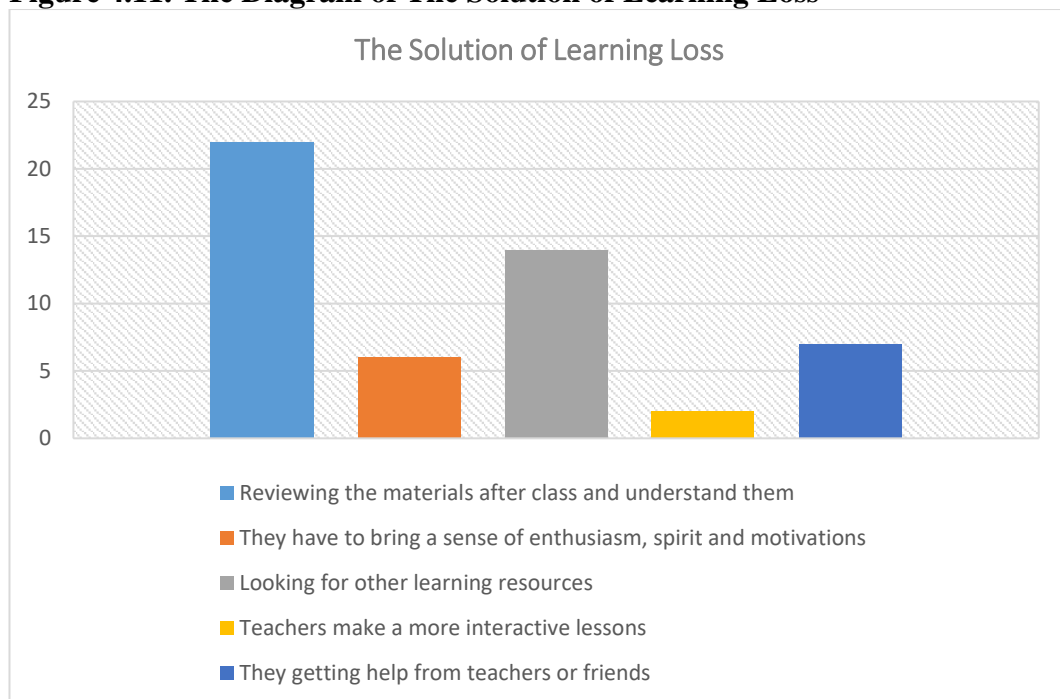
a. Participants' Solutions to Address and Overcome Learning Loss

The fourth part of the findings sheds light on the strategies employed by university students to mitigate the impact of learning loss experienced during the COVID-19 pandemic's transition to online learning. Participants demonstrated a range of proactive measures and coping mechanisms to address the challenges posed by remote education.

According to figure 4.11, a significant portion of participants (22 out of 40) emphasized the importance of reviewing course materials and making concerted efforts to understand them as their primary strategy to overcome learning loss. This approach reflects their recognition of the need for self-regulation and active engagement in the learning process. By revisiting lessons and striving for comprehension, participants aim to reinforce their understanding and bridge the gap caused by learning loss.

For some participants (6 out of 40), cultivating enthusiasm, a spirited mindset, and intrinsic motivation emerged as the key solution. Their acknowledgment of the role of motivation in mitigating learning loss underscores the significance of maintaining a positive outlook and a self-driven commitment to overcome educational challenges. This aligns with theories of motivation that highlight the pivotal role of intrinsic motivation in achieving learning objectives.

**Figure 4.11. The Diagram of The Solution of Learning Loss**



A notable number of participants (14 out of 40) turned to supplementary learning resources, such as YouTube videos and articles, to bolster their understanding and compensate for learning loss. This strategy showcases their adaptability and resourcefulness in seeking knowledge beyond traditional course materials. It aligns with the principles of self-directed learning, demonstrating participants' capacity to actively pursue information from diverse sources.

A minority of participants (2 out of 40) highlighted the value of interactive lessons facilitated by teachers as a means to overcome learning loss. This approach underscores the importance of engaging pedagogical methods and collaborative learning environments in enhancing understanding and motivation. Participants recognize the role of interactive instruction in addressing the challenges of remote learning effectively.

A substantial portion of participants (7 out of 40) opted for seeking assistance from teachers or collaborating with peers when confronted with challenges in understanding lessons. Their willingness to seek support and engage in collaborative learning underscores the social aspects of learning. It aligns with theories emphasizing the significance of social interaction and peer support in positively impacting learning outcomes.

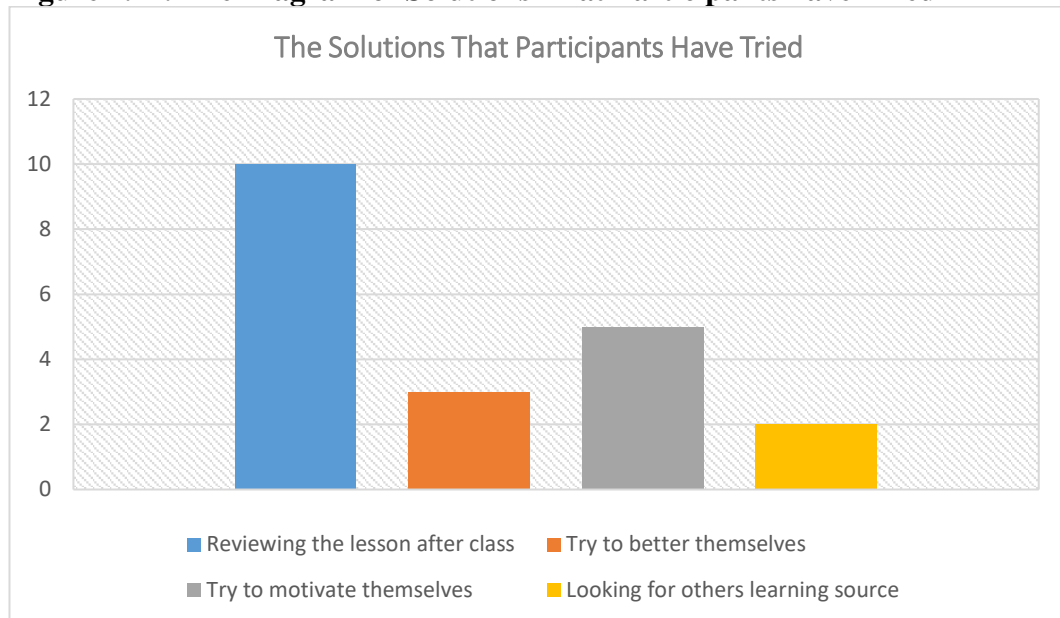
These interpretations highlight the diverse and proactive strategies employed by participants to mitigate the effects of learning loss. These solutions align with various theoretical perspectives, emphasizing the importance of motivation, self-regulated learning, resourcefulness, social interaction, and positive mindset in addressing the challenges posed by online education during the pandemic.

Continuing the analysis of the fourth part of the findings, participants in this study demonstrated a range of strategies to address learning loss during online learning in the context of the COVID-19 pandemic. Their proactive approaches reflect their resilience and adaptability in the face of educational disruptions. A comparison with data from another interview study, as a cross-examination,



provides additional perspectives on the solutions participants have tried or suggested.

**Figure 4.12. The Diagram of Solutions That Participants have Tried**



Based on figure 4.12, a significant portion of participants (10 out of 20) emphasized the practice of reviewing lessons after class as their primary solution. This approach underscores the importance of revisiting course materials to reinforce understanding and bridge the gap caused by learning loss. It aligns with principles of self-regulated learning, where students take active steps to consolidate knowledge.

Some participants (3 out of 20) emphasized taking personal responsibility for addressing learning loss. They suggested that self-improvement is the key, recognizing that challenges often stem from inherent factors like laziness or short attention spans. This perspective highlights the role of individual agency in overcoming obstacles and emphasizes the importance of cultivating self-discipline.

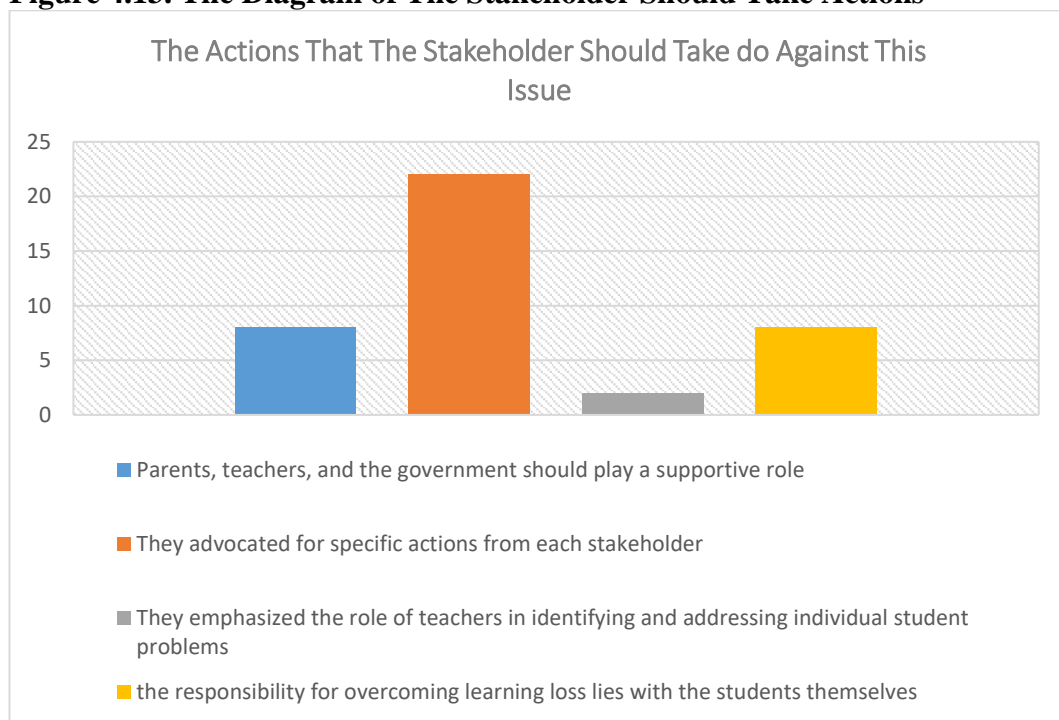
Another subset of participants (5 out of 20) underscored the significance of self-motivation as a solution. They acknowledged that online learning can be monotonous and that teachers may not always provide engaging lessons. Therefore, participants proposed that self-motivation is crucial in staying engaged and proactive in their learning journey. This aligns with theories of motivation that highlight the pivotal role of intrinsic motivation in achieving learning objectives.

A smaller group of participants (2 out of 20) highlighted the value of seeking additional learning resources beyond the classroom setting, such as YouTube videos or articles. This approach reflects their resourcefulness in diversifying their learning sources and accessing supplementary materials to enhance understanding.

In conclusion, the comparative analysis with data from another interview study provides valuable insights into the common solutions participants have tried or suggested to address learning loss during online learning amid the pandemic. While there are shared strategies, the differences highlight the individuality and adaptability of students in their efforts to enhance their learning experiences. These findings offer actionable insights for educational stakeholders seeking to support students in overcoming the challenges of online education and mitigating learning loss.

Continuing the analysis, participants were asked about their perspectives on whether teachers, parents, and the government should take action against learning loss during the COVID-19 pandemic. Their responses shed light on their expectations and perceptions regarding the roles of these stakeholders in addressing the issue.

**Figure 4.13. The Diagram of The Stakeholder Should Take Actions**



According to figure 4.13 a group of participants (8 out of 40) expressed the belief that parents, teachers, and the government should play a supportive role. They emphasized the importance of these stakeholders caring for and encouraging students in their studies. This view underscores the significance of emotional and motivational support from parents and teachers, as well as broader government initiatives to foster a conducive learning environment.

The majority of participants (22 out of 40) advocated for specific actions from each stakeholder. They suggested that teachers should redesign or improve their lessons to make them more interesting and engaging. Additionally, they called on the government to enhance learning facilities and infrastructure. Simultaneously, they expected parents to provide support in their children's studies. This perspective highlights the shared belief in a collaborative effort among these stakeholders to address learning loss comprehensively.

A smaller group of participants (2 out of 40) emphasized the role of teachers in identifying and addressing individual student problems. They believed that teachers should take an active role in understanding and helping students overcome their challenges. This perspective emphasizes the need for personalized support and intervention within the classroom.

Another group of participants (8 out of 40) expressed the belief that the responsibility for overcoming learning loss lies with the students themselves. They indicated that the problem originates from within and that individuals must take initiative to overcome it. This view underscores the importance of self-reliance and personal agency in addressing learning challenges.

The participants' responses reflect a spectrum of views regarding the responsibilities of teachers, parents, and the government in addressing learning loss during the pandemic.

The group that advocates for care, encouragement, and support from parents, teachers, and the government emphasizes the need for a nurturing and enabling environment. This perspective aligns with the idea that emotional and motivational support can enhance students' well-being and resilience in the face of educational challenges.

The majority of participants calling for specific actions from each stakeholder highlight the interconnected roles of teachers, parents, and the government. They recognize that improving the quality of online education requires collaboration and contributions from all parties involved. This view emphasizes the importance of curriculum redesign, facility improvements, and parental involvement.

The participants who emphasize the role of teachers in identifying and addressing student problems underscore the significance of personalized support and intervention within the classroom. This perspective aligns with the idea that teachers can play a pivotal role in understanding individual student needs and adapting their teaching accordingly.

Lastly, the group that places responsibility on students themselves underscores the importance of self-motivation and personal agency. They believe that individuals must take proactive steps to overcome learning challenges, reflecting a sense of self-reliance.

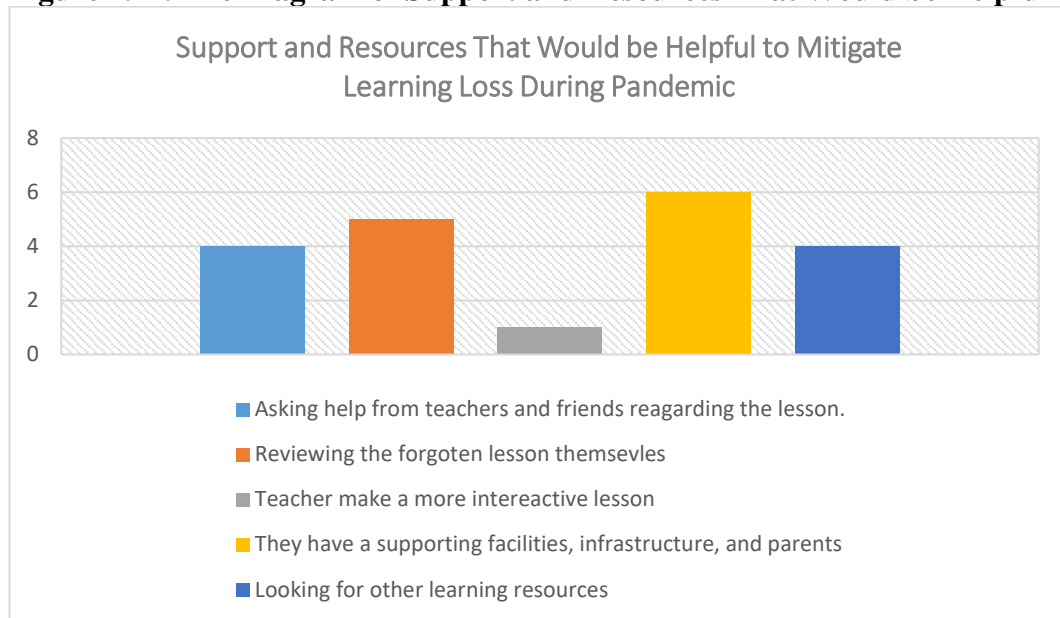
In conclusion, participants' views on the actions of teachers, parents, and the government against learning loss during the pandemic reveal diverse perspectives, ranging from collaborative efforts to personal responsibility. These viewpoints offer insights into the complex dynamics surrounding educational support and underscore the need for multifaceted approaches to address learning loss effectively.

Continuing the analysis, participants were also asked about the support and resources that would be helpful for them in mitigating learning loss during the COVID-19 pandemic. Their responses provide insights into the types of assistance and provisions they believe would be beneficial.

According to figure 4.14 a group of participants (4 out of 20) highlighted the importance of seeking help from teachers and friends regarding the lesson. They recognized the value of interpersonal support and collaborative learning. This

approach underscores the significance of peer interactions and teacher-student communication as supportive resources.

**Figure 4.14. The Diagram of Support and Resources That Would be Helpful**



Another group of participants (5 out of 20) emphasized the need for personal review of forgotten lessons. They acknowledged the responsibility of revisiting course materials independently to reinforce understanding and mitigate learning loss. This approach aligns with self-regulated learning strategies, emphasizing individual effort.

One participant (1 out of 20) expressed the desire for teachers to make lessons more interactive. This suggestion implies the importance of engaging pedagogical methods to sustain student interest and active participation in online learning.

A significant portion of participants (6 out of 20) emphasized the need for comprehensive support, including facilitating facilities, infrastructure improvements, and parental involvement. This perspective underscores the belief that a conducive learning environment, equipped with necessary resources, can

significantly aid in mitigating learning loss. Parental support and involvement are seen as essential components of this ecosystem.

A subset of participants (4 out of 20) advocated for the availability of additional learning resources beyond the classroom. They believed that access to supplementary materials, such as online resources, videos, or articles, would be beneficial in enhancing their understanding and addressing learning loss.

The emphasis on seeking help from teachers and friends resonates with the idea of collaborative learning and the value of interpersonal support. This aligns with the importance of peer interactions and teacher-student communication in addressing learning challenges.

The recognition of the need for personal review of forgotten lessons underscores the role of self-regulated learning strategies, where individuals take initiative to reinforce their understanding independently. This approach aligns with the idea that individual effort plays a pivotal role in mitigating learning loss.

The desire for more interactive lessons highlights the importance of engaging pedagogical methods to sustain student interest and participation in online learning. This perspective emphasizes the role of teachers in creating dynamic and stimulating virtual classrooms.

The call for comprehensive support, including facilities, infrastructure, and parental involvement, underscores the importance of a conducive learning environment equipped with necessary resources. Parental support is seen as an essential component of this ecosystem. The advocacy for access to additional

learning resources beyond the classroom reflects the importance of diverse learning materials and the role of technology in supplementing traditional instruction.

In conclusion, participants' preferences for support and resources to mitigate learning loss align with recognized educational strategies and underscore the multifaceted nature of addressing this challenge. These findings offer insights into the types of assistance and provisions that can be most beneficial for students during the pandemic.

b. The Comparison of GPA Between The First Semester (Pre-Pandemic)  
And The Sixth Semester (Post-Pandemic)

**Table 4.1. The GPA of The First and The Sixth Semesters**

No	Name	The First Semester GPA	The Sixth Semester GPA	Increase in GPA	Decrease in GPA
1	Participant 1	3,48	3,78	0,3	
2	Participant 2	3,68	3,83	0,15	
3	Participant 3	3,55	3,79	0,2	
4	Participant 4	3,45	3,76	0,3	
5	Participant 5	3,7	2,54		1,15
6	Participant 6	3,48	3,83	0,35	
7	Participant 7	3,8	3,7		0,1
8	Participant 8	3,8	3,7		0,1
9	Participant 9	3,45	3,93	0,35	
10	Participant 10	3,4	3,83	0,35	
11	Participant 11	3,63	3,78	0,15	
12	Participant 12	3,5	3,74	0,25	



13	Participant 13	3,58	3,83	0,25	
14	Participant 14	3,6	3,7	0,1	
15	Participant 15	3,6	3,7	0,1	
16	Participant 16	3,23	3,79	0,5	
17	Participant 17	3,65	3,85	0,2	
18	Participant 18	3,36	3,23		0,1
19	Participant 19	3,53	3,85	0,3	
20	Participant 20	3,52	3,25		0,25
21	Participant 21	3,63	3,83	0,2	
22	Participant 22	3,58	3,83	0,15	
23	Participant 23	3,4	3,76	0,35	
24	Participant 24	3,58	3,82	0,15	
25	Participant 25	3,45	3,74	0,3	
26	Participant 26	3,58	3,85	0,3	
27	Participant 27	3,23	3,51	0,25	
28	Participant 28	3,63	3,78	0,15	
29	Participant 29	3,65	3,85	0,2	
30	Participant 30	3,35	3,67	0,3	
31	Participant 31	3,7	3,5		0,2
32	Participant 32	3,15	3,73	0,55	
33	Participant 33	3,75	3,67		0,1
34	Participant 34	3,53	3,83	0,3	

35	Participant 35	3,45	3,87	0,4	
36	Participant 36	3,55	3,8	0,25	
37	Participant 37	3,38	3,85	0,5	
38	Participant 38	3,2	3,75	0,55	
39	Participant 39	3,48	3,8	0,3	
40	Participant 40	3,45	3,5	0,05	
Average GPA:		3,5	3,7	0,27	0,28

The data presented in this section offers insights into the academic performance of the study participants before and after the onset of the COVID-19 pandemic, with a specific focus on their Grade Point Averages (GPAs). The interpretation of these findings is as follows:

In the first semester (pre-pandemic), the participants exhibited an average GPA of 3.5 on a 4.0 scale. As the pandemic unfolded, they faced the challenges of transitioning to online learning. In the sixth semester (post-pandemic), their average GPA increased to 3.7. This represents an average GPA increase of 0.2 points. The data illustrates that, on average, participants experienced a modest improvement in their academic performance during the pandemic period.

It is crucial to acknowledge the individual variations observed within the dataset. A significant majority of participants, specifically 33 out of 40 (82.5%), demonstrated an increase in their GPA from the first semester to the sixth semester. On average, these participants experienced a GPA improvement of approximately 0.27 points. This suggests that a substantial portion of the participants adapted

successfully to the challenges posed by the pandemic and online learning, resulting in improved academic outcomes.

Conversely, a smaller subset of participants, comprising 7 out of 40 (17.5%), experienced a decrease in their GPA from the first semester to the sixth semester. On average, these individuals witnessed a GPA decrease of approximately 0.28 points. This group's experience highlights the unique challenges and disruptions faced by some students during the transition to online learning and the broader impact of the pandemic on their academic performance.

In summary, the interpretation of these findings indicates that, on average, participants experienced a modest increase in their GPAs during the COVID-19 pandemic and the subsequent transition to online learning. While the majority of participants demonstrated improved academic performance, there were notable individual variations, with some participants experiencing a decline in their GPAs. These findings provide valuable insights into the complex interplay of factors influencing academic outcomes during periods of disruption and underscore the need for tailored support and interventions to address the diverse experiences of students in such challenging circumstances.

## B. Discussion

### 1. Factors of Learning Loss Based on Encountered Obstacles

The present study sought to investigate the factors contributing to learning loss among university students during the COVID-19 pandemic, with a focus on how these factors relate to the obstacles encountered during online learning. The findings provide valuable insights into the nuanced interplay between challenges,

factors, and subsequent learning outcomes. By examining the correlations between obstacles and factors, this discussion aims to shed light on the implications of these interdependencies.

The findings align closely with theoretical frameworks which are researches by Astuti (2022) and Sovayunanto (2022) that emphasize the multifaceted nature of the learning process. Concepts such as self-regulated learning and the transactional model of learning underscore the significance of learners' agency, motivation, and interactions with the learning environment. The factors identified, such as lack of post-class review, connectivity issues, and disengagement due to short attention spans, resonate with these theories. The learning environment, whether physical or virtual, plays a crucial role in shaping the learners' experiences and outcomes.

Building upon existing theoretical perspectives, our findings suggest the need to modify the theories to account for the unique challenges posed by the online learning environment, particularly during a global pandemic. The emergence of interconnected factors, such as the relationships between lack of motivation, boredom, and short attention spans, signifies a complex web of influences that traditional theories might not fully capture. This points to the potential for an emerging theory that specifically addresses the interplay of obstacles, factors, and learning outcomes within the context of online learning disruptions.

The implications of these findings are manifold. Firstly, the correlations between obstacles and factors underscore the importance of a holistic approach to addressing learning loss. Interventions should not merely target immediate

obstacles but also address underlying factors that amplify the impact of these challenges. Secondly, recognizing the role of structural inequalities in exacerbating learning loss due to connectivity issues highlights the need for policy changes to bridge the digital divide.

However, the study also bears limitations. The data were gathered through self-reporting, which might introduce biases and subjective interpretations. Additionally, the study focuses on a specific university and might not fully capture the diversity of experiences across different educational institutions. Future research should consider larger and more diverse samples to enhance generalizability.

In conclusion, the implications of these findings extend to educational institutions, policymakers, and educators, emphasizing the urgency of creating inclusive, engaging, and supportive online learning environments to mitigate learning loss and foster successful educational experiences during times of unprecedented challenges.

## 2. Impact of Online Learning on Participants' Well-being, Learning Abilities, and Engagement

The third part of the findings delves into the wide-ranging implications of learning loss experienced by university students during the transition to online learning amidst the COVID-19 pandemic. The data provides a comprehensive understanding of how remote education has affected participants' mental health, learning abilities, overall well-being, and engagement in coursework. This discussion aims to analyze the implications of these findings in relation to the

research objectives, theoretical framework, emerging theories, and the broader context of educational disruptions.

The findings present a multi-faceted picture of the consequences of learning loss, aligning with the previous research Sovayunanto (2022) which is to investigate the impact of online learning on university students. The diverse range of experiences, including adverse effects on mental health, reduced learning abilities, challenges in information retention, and varying degrees of impact on overall well-being, reflects the complexity of challenges posed by the shift to remote education. These insights underscore the significance of understanding the broader ramifications of learning loss on students' educational journeys.

The theoretical underpinnings of this study, encompassing theories of self-regulated learning and transactional models of learning, illuminate the intricate connections between challenges, factors, and their effects on learning outcomes. The impacts reported by participants are closely intertwined with the theoretical frameworks that emphasize the role of motivation, engagement, and social interactions in the learning process. The findings provide empirical evidence of how disruptions in these aspects can lead to adverse outcomes, aligning with the previous research Sovayunanto (2022).

The findings allude to the potential emergence of a new theory that specifically addresses the interplay between learning loss, remote education challenges, and their cumulative impact on students' well-being, learning abilities, and motivation. The complex relationships revealed through this study suggest the

need to expand existing theories or consider a new theoretical perspective that accounts for the nuanced dynamics of online learning disruptions.

The implications of these findings are significant for educational institutions, policymakers, and educators. The shared experiences of participants regarding the impact on motivation, engagement, well-being, and learning abilities underscore the pressing need for tailored interventions. Strategies should not only target the immediate challenges but also address the underlying factors that exacerbate their effects. The implications extend beyond academic performance, encompassing mental health and overall student well-being.

However, the study also has limitations. The data is based on self-reported experiences, which may be subject to individual perceptions and biases. Moreover, the study's focus on a specific university and major could limit the generalizability of findings to broader contexts. Future research should aim for larger, more diverse samples to enhance the breadth of understanding.

In conclusion, the impact of online learning on participants' mental health, learning abilities, overall well-being, and engagement unveils a profound narrative of the challenges posed by the pandemic-induced transition to remote education. The alignment of findings with theoretical perspectives highlights the relevance of existing frameworks while also hinting at the emergence of new theories. The implications emphasize the need for comprehensive interventions that address both immediate challenges and underlying factors to foster a conducive online learning environment. As educational institutions navigate these challenges, acknowledging the interplay between learning loss and its wider repercussions is pivotal in

providing effective support and enhancing the overall learning experience during these unprecedented times.

### 3. Participants' Solutions to Address and Overcome Learning Loss

The fourth part of the findings investigates participants' proposed solutions to combat learning loss during the COVID-19 pandemic. Additionally, it examines their perspectives on the roles of teachers, parents, and the government in addressing this issue. In this discussion, we will address how these findings align with the statement of the problem, interpret them in light of relevant theoretical frameworks, explore their potential to modify or inform new theories, and finally, discuss the implications and limitations of the findings.

The statement of the problem for this study centers on understanding the factors contributing to learning loss in university students during the COVID-19 pandemic and exploring potential strategies to mitigate it. The findings from this portion of the study directly address the latter aspect of the problem statement, shedding light on the solutions and perspectives offered by participants.

From a theoretical perspective, these findings intersect with several educational theories. Firstly, the emphasis on self-reliance and personal agency in addressing learning loss aligns with aspects of self-regulated learning theory. This theory posits that students can take an active role in managing their own learning processes. Participants who advocate for self-improvement and motivation reflect the principles of self-regulated learning.

Secondly, the call for collaborative efforts among teachers, parents, and the government resonates with socio-ecological models of learning. These models



emphasize the interconnectedness of various factors within the learning environment. Participants recognize that a conducive learning ecosystem, involving multiple stakeholders, is essential for effective education.

While the findings align with existing theories from the previous research by Astuti (2022), they also point to the need for a more nuanced understanding of the role of individual agency in online learning. The prominence of self-reliance as a proposed solution suggests that future research could explore the development and effectiveness of interventions aimed at fostering self-regulated learning skills among students. This could contribute to the modification or expansion of existing theories regarding student agency in online education.

The implications of these findings extend to educational practice and policy. Recognizing the multifaceted nature of challenges in online learning, educational stakeholders should consider collaborative efforts, resource provision, and support for self-regulated learning skills to mitigate learning loss effectively. These findings can inform the development of targeted interventions and policies that address these challenges comprehensively.

However, this study has limitations that warrant consideration. The sample size, while providing valuable insights, may not fully represent the diversity of university students. Additionally, reliance on self-reporting introduces the potential for response bias. Furthermore, the findings are context-specific to the COVID-19 pandemic and online learning, limiting their applicability to other educational settings.

In conclusion, the fourth part of the findings aligns with the statement of the problem by addressing strategies to mitigate learning loss during the pandemic. These strategies intersect with existing educational theories and suggest opportunities for further research in the field. The implications highlight the need for collaborative efforts and targeted interventions, while recognizing the limitations of this study. Understanding and addressing learning loss is essential for fostering resilience and adaptability among students in the face of educational disruptions.

#### 4. The Comparison of GPAs Between The First Semester (Pre-Pandemic) And The Sixth Semester (Post-Pandemic)

The comparison of Grade Point Averages (GPAs) between the first semester (pre-pandemic) and the sixth semester (post-pandemic) on a 4.0 scale delves into the academic performance of participants during the challenging backdrop of the COVID-19 pandemic and the shift to online learning. In the context of our research problem, this analysis offers a unique perspective on how students' academic outcomes were influenced by the disruptions brought about by the pandemic.

The findings presented here are intriguing and, to some extent, unexpected. On average, participants exhibited an increase in their GPAs during the pandemic period. This outcome stands in contrast to theoretical expectations that the disruptive effects of the pandemic, coupled with the challenges of online learning, might lead to a decrease in academic performance for a significant portion of students.

The theoretical review highlights the potential negative consequences of disruptions to traditional learning environments. The theoretical framework often suggests that such disruptions can lead to learning loss, which should be reflected in reduced GPAs. However, our findings challenge this theoretical assumption, indicating that GPA alone may not fully capture the nuanced impact of learning loss during the pandemic.

The contradiction between theoretical expectations from the previous study by Durongkaverroj (2023), our findings prompts us to consider modifications or new theoretical perspectives. One possible explanation is that GPAs, while quantitative indicators of academic performance, may not encompass the qualitative dimensions of learning loss experienced by students. Learning loss can manifest in various ways, such as decreased understanding of subject matter, difficulties in knowledge retention, or heightened stress and mental health challenges factors not always reflected in GPA.

These results suggest the need for a broader conceptualization of learning loss that considers both quantitative and qualitative dimensions. Such a perspective could help educational researchers and policymakers better understand the multifaceted impact of disruptions like the pandemic on students' educational experiences.

The implications of these findings are substantial. They underscore the complexity of learning loss during times of crisis and the importance of adopting a holistic approach to address the diverse experiences of students. While the overall GPA improvement is promising, it is crucial to recognize and support those who

faced academic setbacks or experienced learning loss in qualitative ways that GPA may not capture.

However, it can be noted that the certain limitations of this study. The sample size and composition may not be fully representative of the entire student population. Additionally, GPA, as a single metric, has its limitations in capturing the full spectrum of learning loss experiences. Future research should explore additional indicators and qualitative assessments to provide a more comprehensive understanding of the impact of disruptions on students' learning journeys.

In conclusion, the analysis of GPAs before and after the pandemic offers a nuanced perspective on academic performance during challenging times. The unexpected findings challenge theoretical assumptions, suggesting the need for a refined framework that considers both quantitative and qualitative dimensions of learning loss. These results emphasize the importance of tailored support and interventions to address the diverse experiences of students during crises like the COVID-19 pandemic.