

Exploring Mental Wellbeing, Distress and Adjustment in a Blended Learning Environment

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Abstract. In the wake of the COVID-19 pandemic, the education landscape underwent a rapid transformation, with blended learning emerging as a predominant approach. This study employed explanatory sequential analysis to examine the impact of academic and familial distress, as well as adjustment, on students' mental health within the dual continua model. Quantitative results identified three mental health groups: flourishing (21.14%), languishing (39.72%), and moderately mentally healthy (39.14%). Students generally displayed moderate mental well-being, high academic distress, moderate familial distress, and strong adjustment to blended learning. Notably, the relationship between adjustment and academic stress, suggesting the effective adaptation to the demands of blended learning can mitigate academic related stressors. Explaining the quantitative area, qualitative exploration uncovers a deeper understanding of student's lived experiences, emotional states, ranging from resilience and adaptability to anxiety and frustrations. Moreover, it tackles the challenges faced by the students including technological barriers, time management dilemmas and exacerbation of isolation as the effects of pandemic. These revelations underscore the imperative need for educational interventions that seamlessly integrate mental health education into curricula, fostering a healthier and more inclusive blended learning environment. Prioritizing mental health education in the curriculum can enhance students' academic, emotional, and social success in the evolving educational environment.

Keywords: Academic distress; Adjustment; Blended learning environment; Dual continua model.

1.0 Introduction

The shift to online learning and technology-driven education has become a reality for many students, presenting both opportunities and challenges. While some students are tech-savvy and adapt easily, others grapple with navigating online platforms and troubleshooting technical issues. Proficiency with these tools tends to improve with practice and guidance, but this adjustment has not been without consequences. Notably, students have voiced negative effects on their physical and emotional health (Agarwal & Agarwal, 2022; Akpınar, 2021; Sathibabu & G, 2022; Sawhney et al., 2021; Sharma & Sharma, 2021). Prolonged screen time has led to issues like eye strain, neck stiffness, and poor posture. Additionally, mental health concerns, such as anxiety, anger, and hopelessness, have become increasingly prevalent (Ainamlin Dkhar & Grace Lalhlupuii Sailo, 2021; Li & Che, 2022; Mfidi, 2018; Schulte-Körne, 2016).

A key component of blended learning, which blends online and in-person components, is time management and prioritization skills. This change to a more independent learning environment can be intimidating for students who lack self-discipline and time management abilities. Time management abilities are acknowledged as essential for academic achievement in traditional contexts because time management directly affects grades. Conversely, poor time management can result in academic setbacks (Ahmad et al., 2019; Alias et al., 2019; halYazhini et al., 2021; Iqbal Amin Khan et al., 2020; Khan, 2015).

Blended learning entails students taking greater responsibility for their education, necessitating active participation in online discussions, completing assignments independently, and seeking clarification autonomously. While this increased autonomy can benefit self-motivated students, it may overwhelm others. Banditvilai (2016) highlights that a student's autonomy, or their ability to direct their own education, correlates with increased engagement, a positive emotional state, a preference for challenging tasks, improved academic performance, and longer school enrollment. Students that participate in blended learning are typically more focused and independent than their peers in traditional educational environments (Yuan & Kim, 2018). Abbacan-Tuguic (2021), further claims that blended learning improves student attitude towards study management which motivates them to organize their time to study online and collaborate with other students.

However, blended learning may limit possibilities for in-person communication and peer socialization, which may have an adverse effect on students' social and emotional health. Online courses have benefits, such as enhanced accessibility and participation in class activities. For instance, introverted students could discover that online communities encourage more open engagement. However, instances of decreased social engagement have also been reported. The sensation of isolation brought on the pandemic-related social distance measurements is made worse by the lack of in-person academic interactions (Barbieri & Mercado, 2022; Cooper et al., 2021; Hoffart et al., 2022; Pavin Ivanec, 2022). Giusti et al. (2021) found that university students identified the lack of direct face-to-face contact as the most significant drawback of distance education during the pandemic, followed by reduced interaction with instructors (Adnan & Anwar, 2020; Galusha, 1998). Prior research on remote education also underscores the importance of social interaction for students' well-being (Wallace, 2003).

Moreover, students experience stress due to the increased pressure of learning independently and adjusting to new routines (Jie, 2011; Kurniawan, 2022; Ya, 2010). Feelings of isolation, anxiety, and depression can manifest during the transition to blended learning and the broader pandemic-related stress. These emotional challenges can negatively affect various aspects of learning, including time management, concentration, study motivation, and learning methodologies, ultimately impacting academic performance (Idris et al., 2021; Turana et al., 2022).

The pandemic has prompted a surge in research examining its multifaceted effects on people's lives, including the economy, daily activities, academic performance, and physical and mental health. Concerns about the psychological implications of the pandemic on the mental health of children and young adults have been raised, as stress disorders and other mental health issues may emerge (Horesh & Brown, 2020; Schwartz et al., 2021). Understanding the mental well-being of students in these evolving educational environments is crucial for educators, policymakers, and mental health professionals to provide appropriate support and interventions.

This study is guided by the Dual Continua Model of Mental Health and Mental Illness proposed by Keyes (2002). This model distinguishes between mental health, encompassing emotional, psychological, and social well-being, and mental illness, which includes various forms of distress such as anxiety and depression (Keyes, 2002). Individuals can simultaneously experience both positive mental health and mental illness, highlighting the complexity of mental well-being.

The primary goal of this research is to investigate the impact of blended learning on students during the post-pandemic transition. It acknowledges that various contextual factors influence students' thoughts, emotions, and behaviors during this transition. The adjustments students make have been found to support their academic success, particularly for those with high levels of positive psychological adjustment, which reduces the likelihood of mental health issues such as depression, anxiety, stress, or burnout (Alharthi, 2020). This study aims to explore the relationship between distress and adjustment in the framework of the Dual Continua Model and provide

recommendations for educational institutions, instructors, and mental health practitioners to support students' mental well-being in blended learning environments.

To achieve these objectives, the study employs an exploratory sequential mixed-methods approach, combining quantitative surveys and qualitative interviews with students enrolled in blended learning programs across various educational levels and disciplines. The findings will contribute to the existing literature on mental health in educational settings, focusing on the emerging challenges and opportunities associated with blended learning.

This study addresses a critical gap in understanding how the transition to blended learning impacts students' mental well-being. Through the lens of a well-established psychological framework and a comprehensive research approach, it seeks to elucidate the intricate relationship between distress and adjustment in this context, ultimately providing insights for enhancing the educational experience and supporting students' mental health.

2.0 Methodology

2.1 Research Design

This study adopts explanatory sequential mixed method design to explore students' wellbeing, distress and adjustment and how they were impacted by blended learning transition. With this method, it starts with quantitative data collection, followed by qualitative analysis. The purpose of the initial quantitative phase is to explore the study and generate hypothesis and providing thick descriptive for the subsequent qualitative phase. The intent of this design is to find qualitative data to explain initial quantitative results (Creswell & Clark, 2007). Explanatory sequence designs allow researchers to use qualitative data analysis to inform quantitative research issues. Combining qualitative richness with quantitative rigor makes research more holistic and robust. Specifically, the first part of our study employs descriptive, regression, and multivariate analyses to assess the well-being, distress, and adjustment of students within the blended learning context. Subsequently, in the second part, we employed qualitative analysis to explore, from the students' perspective, how this blended learning approach has influenced their experiences and shed light on the underlying reasons for the quantitative findings.

2.2 Research Participants

Participants were three hundred fifty (350), 16-19 years old health-allied senior high school students surveyed from a private medical institution in an urbanized city in southern Luzon, Philippines. The sample was 287 (82%) females and 63 (18%) males. Majority of the participants (88%) reported that they fall into the income bracket of P76,670 and above representing a mix of middle and upper class. Also, majority of the participants (99%) have at least 2 or more gadgets that they can use in blended learning environment. These students had undergone the shift from traditional classroom-based education to fully online or blended learning, making their experiences essential to the study's investigation into distress and adjustment in blended learning environments.

2.3 Research Instrument

To validate the research instruments, a pilot study involved 30 senior high school participants. The pilot study assessed the reliability of instruments such as the Dual-Continua Model Scale (0.93), Academic Distress Scale (0.84), Familial Distress Scale (0.82), and Adjustment Scale (0.90). The Dual-Continua Model Scale, derived from the Mental Health Continuum Short Form (MHC-SF), measured affective, psychological, and social well-being (Keyes, 2002). The Academic Distress Scale assessed distress with a reliability score of 0.91. The Familial Distress Scale adapted from the Brief Family Distress Scale measured familial distress (Weiss & Lunsky, 2011). The Adjustment Scale examined student adjustment in cognitive, affective, and behavioral dimensions, with a reliability range of 0.88 to 0.91. These measures aimed to ensure the reliability and validity of the instruments in the Philippine setting, facilitating comprehensive data collection for the study.

2.4 Data Gathering Procedure

The data collection procedures for this research study began with obtaining formal authorization from the senior high school department's administration, and informed consent from the students in compliance with ethics guidelines. It was emphasized that student participation was voluntary and anonymous, ensuring strict confidentiality. In this study, various statistical techniques including mean, frequency and percentage distribution, standard deviation, regression model, and analysis of variance were applied to analyze the data. Multiple regression analysis, as suggested by Petchko (2018), was used to assess the strength of the relationship

between the dual continua model variables and student distress and adjustment (Eklund et al., 2010). Additionally, thematic analysis was conducted on data transcriptions (Braun & Clarke, 2006).

2.5 Ethical Considerations

This research study followed ethical guidelines. The researchers sought formal authorization from the senior high school department's management to initiate this research study. During this process, it was explicitly emphasized that students' participation was entirely voluntary and anonymous, ensuring that the responses they provided would be held in strict confidentiality. In order to proceed with the survey, students were required to provide informed consent, aligning with the prevailing regulatory guidelines. These guidelines, which are in accordance with current regulations, prioritize several critical principles: (1) safeguarding students from any potential harm, (2) obtaining unequivocal informed consent, (3) preserving the utmost confidentiality of all student-related information, (4) abstaining from any use of deceptive research methods, and (5) affording participants the option to withdraw from the study at any point.

3.0 Results and Discussion

3.1 Mental Health Continuum

Students' mental well-being is being assessed using the dual continua model. This model categorizes students into three groups: flourishing, languishing, and moderately mentally healthy based on their responses to questions related to emotional well-being and positive functioning.

Table 1. Dual Continua Model Classification

LEVEL OF MENTAL WELL-BEING	FREQUENCY	PERCENTAGE (%)
Flourishing	74	21.14%
Moderately Mentally Healthy	137	39.14%
Languishing	139	39.72%
Total	350	100.00

Flourishing students, constituting 21.14% of the sample, displayed high levels of mental well-being and positive functioning, excelling academically, and maintaining fulfilling emotional and social lives. While they are thriving, it's essential to continue nurturing their mental health through leadership roles, extracurricular activities, and mentorship. Moderately mentally healthy students, comprising 39.14% of the sample, demonstrated moderate well-being. They experienced occasional stress but generally coped well with the challenges of blended learning. These students, balancing academics and personal life, benefit from resources for stress and time management and strategies for maintaining mental health during challenging periods. Languishing students, making up 39.72% of the sample, exhibited signs of mental distress, including disinterest in coursework and a lack of motivation. They require immediate attention and support, such as counseling and stress management workshops, to regain their motivation and sense of purpose. Regarding emotional well-being, students reported moderate levels of happiness, interest, and life satisfaction. Positive functioning varied, with students feeling challenged to grow and become better individuals but expressing doubts about their contributions to society and the sensibility of societal workings.

In general, students had moderate well-being, characterized by balanced mental states, emotional resilience, and adaptability. Access to resources for stress and time management is crucial, along with proactive mental health initiatives. Monitoring changes in mental health status is essential, as moderate well-being often correlates with improved academic performance. Students with moderate well-being can progress toward flourishing with the right support, involvement in extracurricular activities, leadership roles, and mentoring programs, creating a positive learning environment.

3.2 Academic Distress Encountered

The level of academic stress was determined using the Academic Distress scale ranging from 1 to 4. Results showed that students had acquired an overall mean of 2.89 and a standard deviation of 1.02 which is interpreted as having a high level of academic distress. This was reflected in the statement "I experience periods of academic stress at least once a week" ($\bar{X}=3.34$, $SD = 0.89$). With these findings, students were having difficulty managing their workloads and task and experience cognitive, affective or behavioral stress which were the result of high demand and pressure experienced in their school. Moreover, students also high level on the statement "I generally

view myself as being stressed during this blended learning experience" ($\bar{X}=2.98$, $SD = 0.91$) and "It's hard to stay motivated in this blended learning environment," ($\bar{X}=2.98$, $SD = 1.01$) which were a key indicator that maybe external and conflicting factors arises as they go through on blended learning environment.

High levels of academic stress can significantly impact students' learning experience in a blended learning environment. It reduces focus since it will be challenging for them to concentrate may hinder their ability to engage effectively with the learning components of blended learning. Anxiety and stress have been observed to impact learning skills such as time management, concentration, study motivation, and learning methodologies, which can have a negative impact on student performance (Grubic et al., 2020). Academic stress often makes people feel bad things, like worry, anger, or self-doubt. These feelings can make it hard to learn, which can affect your general interest, enjoyment, and willingness to work hard on your studies. Consistent with previous research in terms of academic stress when it comes to high percentage on dealing with difficult subject, delivering class presentations, deadlines and academic workload and other related academic problem (Conwi, 2021). Given research showing that students are at particularly high risk of adverse mental health outcomes (Son et al., 2020), this study demonstrate that these concerns persist and in fact may be exacerbated by the pandemic. Moreover, it decreases their motivation since they feel overwhelmed with the workload and struggle to find their reason why they still need to pursue their career path and may create a negative effect on their wellbeing. Also, the pandemic related consequences such as the absence of interpersonal communication may have impacted them to limit their participation and social interaction and may be less likely to actively participate, engage in discussions or collaborate effectively with their classmates leading to diminished learning experience. In addition, students have a difficulty in balancing the demands of both face to face and online learning that leads to difficulties in completing assignments, studying and engaging with online learning materials.

3.3 Familial Distress Encountered

In terms of the level of familial distress, the students had acquired an overall mean of 1.72 and a standard deviation of 1.30 which is interpreted as having a moderate level in terms of level of familial distress. This was reflected in the statement "Things are very stress, but we are getting by with a lot of effort" ($\bar{X}=2.07$, $SD = 1.25$), and "We are currently in distress, but are dealing with it ourselves" ($\bar{X}=2.05$, $SD = 1.32$).

These findings suggest that students are having difficulty learning in blended learning because of familial factors that contribute to the academic stress they experienced. Stress experienced by students is multi-factorial and can be attributed to a variety of different factors. Moderate familial distress among students has multifaceted implications for their mental well-being and academic performance. Familial distress, stemming from various sources like family conflicts or financial difficulties, can evoke emotional turmoil, leading to feelings of anxiety, sadness, or frustration. Consequently, students may encounter challenges in maintaining a balanced mental state, potentially affecting their ability to concentrate on studies and engage effectively in their coursework.

In response to familial distress, students often develop coping mechanisms, ranging from seeking social support among friends to engaging in extracurricular activities. While some students adeptly adapt and sustain their academic performance, others may grapple with finding effective coping strategies. To bridge this gap, educational institutions must offer essential resources and support, such as counseling services and stress management workshops, empowering students to navigate familial distress more effectively.

The relationship between moderate familial distress and academic performance is variable. Some students channel their energy into academic pursuits as a coping mechanism, excelling in their studies. In contrast, others may find it challenging to focus on coursework, resulting in grade fluctuations. In this context, educators and counselors should vigilantly monitor students experiencing familial distress, intervening early with necessary support and accommodations to mitigate potential academic setbacks.

Moreover, students experiencing familial distress may not always seek assistance or divulge their challenges to others due to perceptions of manageability or reluctance to burden peers or mentors. Therefore, educational institutions must cultivate an environment where students feel comfortable seeking help. Promoting open communication and normalizing discussions about mental health and familial stress can reinforce the importance of seeking assistance when needed.

Moderate familial distress can also catalyze personal growth and strengthening family bonds through effective communication and problem-solving. To promote long-term well-being, educational institutions can contribute by offering resources for family counseling and support. Addressing the root causes of familial distress can enhance students' overall mental well-being and academic success.

The task of educating the learners has always been regarded as a shared responsibility. It calls for an active and dynamic participation of parents, guardians, teachers and other stakeholders. This shared responsibility is even more required considering the context of our learners who experienced the pandemic situation and may be suffering from familial distress.

3.4 Adjustment in a Blended Learning Environment

Understanding the level of adjustment among students in a blended learning environment is paramount as it impacts their overall academic success and well-being. In the study, the students' level of adjustment was determined through a student adjustment survey using a five-point Likert scale. Results showed that students had acquired an overall mean of 3.63 and a standard deviation of 1.04 which is interpreted as having a high level in terms of adjustment in blended learning.

This was reflected in the statement "Blended learning has taught me self-discipline and time management." ($\bar{X}=3.85$, $SD = 1.12$), and "I participate in blended learning online discussions and collaborations. ($\bar{X}=3.84$, $SD = 0.97$) and, "The adjustment to blended learning has required me to be more proactive and take initiative in my learning process ($\bar{X}=3.79$, $SD = 1.04$). These findings suggest that students are adjusting to the blended learning setup stipulated by the institution. They were able to express, take part, and be responsible in their learning. However, in the part of the institution, this statement was found "In the context of blended learning, my educational institution adequately supports my emotional wellbeing" ($\bar{X}=3.39$, $SD = 0.92$), which was the institution was actively enhancing student capabilities when it comes to teaching and learning but may not be proactively engaging activities that promote the enhancement of their emotional and mental wellbeing. Students were participating and adjusting instead of the need to survive the stress in academics, though their goal was not to thrive but merely to navigate the overwhelming challenges.

The finding simply indicates the need for the institution to be more proactive in promoting holistic students' well-being. Korn et al. (2023), claim that academic institutions that initiate social activities for students increase the chance that their students will develop social relationships and have a rich satisfying student experience which can have a positive effect in reducing feelings of distress.

3.5 Relationship between Variables

Table 2. Multiple Regression of Adjustment to Academic and Familial Distress

Adjustment on Blended Learning	Correlation Coefficient (r)	p	Remarks
Academic Distress	-0.116	0.025	Very weak negative; Significant
Familial Distress	0.050	0.154	Moderate; Not Significant

Furthermore, adjustment on blended learning and academic stress had a negative and significant relationship having the value of $r=-0.116$, $p= 0.025<0.05$ indicating that as students' ability to adjust to blended learning increases, their levels of academic distress tend to decrease. Conversely, when academic distress increases, students' adjustment to blended learning tends to decrease as well. This finding aligns with the common sense notion that students who feel more comfortable and confident in their learning environment are likely to experience less academic stress.

Several studies in the field of education and online learning have explored the relationship between adjustment to the learning environment and academic stress, supporting the findings of this study. Li et al. (2016) conducted research on online learners and found that students who reported higher levels of adjustment to the online learning environment also reported lower levels of academic stress. This study highlighted the importance of adapting to the unique demands of online learning to reduce academic stress. Meanwhile, several researchers investigated the experiences of college students in blended learning environments (Ellis et al., 2018; Nikolopoulou & Zacharis, 2023). They found that students who effectively adjusted to the blend of online and face-to-face

learning components reported lower levels of stress related to academic demands. Their study emphasized the role of adaptation in managing academic stress. Moreover, Wang and Hagston (2019) conducted research on university students during the COVID-19 pandemic, a period marked by a rapid transition to online learning. They observed that students who exhibited higher levels of adjustment to remote learning experienced less academic stress and better academic performance. This study emphasized the importance of adapting to unexpected changes in the learning environment. These studies collectively support the idea that students who can effectively adjust to the unique demands of blended learning, which often involves a combination of online and in-person components, are more likely to experience lower levels of academic stress. Conversely, students who struggle to adapt may find themselves experiencing higher levels of academic distress, reinforcing the negative relationship described in the statement. This underscores the importance of providing students with the necessary support and resources to facilitate their adjustment to blended learning environments, particularly during times of rapid transition.

On the other hand, no significant relationship was seen between adjustment on blended learning and familial distress with the value of $r=-0.050$, $p=0.154<0.05$. This indicates that as a construct familial distress may not directly influence the level of adjustment of senior high school students.

Table 3. Multivariate analysis of variance

	ACADEMIC DISTRESS	FAMILIAL DISTRESS	ADJUSTMENT
Groups	F(14.08)<.001	F(20.06)<.001	F(20.42)<.001

The researchers assessed the group that differed significantly by conducting a multivariate analysis of variance in dual continua groups (Flourishing, Languishing, Moderate mentally healthy) which was the independent variable to the level of academic distress, familial distress, and adjustment in blended learning setting. The results showed significant effects of the MANOVA on all three dependent variables, indicating that there were notable differences among these mental health groups in how they perceived and experienced academic distress $F(14.08)<.001$, familial distress $F(20.06)<.001$, and their ability to adjust to blended learning $F(20.42)<.001$.

These findings align with the broader body of research that examines the relationship between mental health and academic outcomes, including academic stress and adaptation. Keyes (2002), who developed the Dual Continua Model of Mental Health and Mental Illness, conducted research showing that individuals with higher levels of mental well-being (Flourishing) tend to experience fewer stressors and better adaptation to various life circumstances, including academic challenges. Hence, this study supported the central premise of Keyes' model. This suggests that promoting mental well-being and positive mental health among students can be a valuable strategy for reducing academic distress and enhancing adaptation in blended learning environments. Implications for education include the need for comprehensive mental health support programs within educational institutions to foster well-being and reduce distress, ultimately improving students' learning experiences and outcomes.

The findings of this study, which show that mental health groups significantly differ in terms of academic distress and adjustment, corroborate the results of Hyseni Duraku & Hoxha, (2020). Their study emphasized that higher levels of distress hindered students' academic performance and adaptation, which aligns with the notion that students with poorer mental health may struggle more in blended learning environments. To address this, educational institutions should prioritize the provision of mental health services and resources to help students manage distress and improve their ability to adapt to changing learning environments.

Moreover, Suldo et al., (2016) conducted a study on the relationship between positive mental health and academic achievement. They found that students with higher levels of positive mental health were better able to manage stressors and adapt to academic challenges, leading to improved academic outcomes. This aligns with the result of our study as it was found that students with higher levels of positive mental health were better equipped to manage stressors and adapt to academic challenges.

The results of these studies collectively suggest that an individual's mental health status plays a significant role in their perception of academic stress, familial distress, and their ability to adapt to new learning environments like blended learning. Flourishing individuals tend to perceive less distress and exhibit better adjustment, while those languishing or moderately mentally healthy may struggle more with these aspects of the educational experience.

In practical terms, these findings emphasize the importance of addressing students' mental health and well-being as an integral part of their educational journey. Institutions and educators should consider providing support services and resources to help students manage stress, promote positive mental health and enhance their adaptation skills among students, particularly for those in the languishing or moderately mentally healthy categories, to improve their overall educational experience and outcomes.

3.6 Qualitative Findings

The section serves as a complementary component to the quantitative analysis in the first part of this study, delving into students' adjustment experiences within the blended learning context. This provide insights and themes that may emerge, such as the difficulties the students encounter, how they are able to overcome obstacles and what has enabled them to do so thus far. Twenty participants were asked to describe their challenges and coping strategies in order to develop appropriate systems, interventions, and strategies to enhance the overall integrated learning experience for incoming students and for the institution's benefit.

Theme 1: Emotional States and Experiences

Students expressed stress and academic pressure related to finals, assessments, and research, but some also felt pride and accomplishment after completing tasks. Others reported emotional well-being and relaxation, especially after finishing the academic year or graduating, highlighting the importance of self-care and family time. Some experienced mixed emotions, simultaneously feeling happy and sad, while others described physical and mental exhaustion, including burnout and decreased productivity. Graduation was a significant event that brought both excitement and relief.

These findings suggest that students often navigate a delicate balance between academic demands, emotional well-being, and personal life. Institutions and educators should consider the holistic well-being of students, providing support for managing academic stress and promoting self-care to maintain a healthy balance between academic and personal life.

Theme 2: Student Challenges in Blended Learning Environment

Students confronted several challenges within the blended learning environment, with their experiences revealing key insights. Transitioning between online and face-to-face learning modes proved difficult for many, requiring smoother transitions. Some students struggled to concentrate and absorb lessons during synchronous online classes. This adjustment challenge aligns with previous research findings, which indicate that students transitioning between online and face-to-face learning can face difficulties due to variations in course design, expectations, and communication styles (Means et al., 2009).

Furthermore, the frequent shifts between learning modes posed a considerable hurdle. Students found these constant transitions disorienting, consistent with findings from other studies indicating that such shifts in blended or hybrid courses can be challenging for students (Allen & Seaman, 2013).

Delayed teacher responses in the online setup emerged as a significant issue. Students grappled with delayed feedback from teachers, leading to confusion. Expressing concerns in the online environment also proved challenging, echoing research indicating that delayed responses and a lack of immediate feedback can hinder the learning experience (Liu et al., 2020).

Transportation and dormitory challenges disrupted students' living arrangements and daily routines, stemming from the necessity of staying in dorms due to the blended learning setup. Logistical issues related to transportation and living arrangements can significantly affect students' overall experiences and well-being, as confirmed by related studies (Shea et al., 2012).

Effective time and stress management were highlighted as critical during transitions between online and face-to-face learning modes. A study by Miertschin et al. (2015) explored the role of stress and time management in online learning. It found that effective time and stress management strategies are essential for students to succeed in blended and online courses. The findings of this study underscore the importance of addressing adjustment challenges, facilitating smoother transitions, and providing timely support to students navigating the blended

learning environment. These findings provide insights into the challenges students face during blended learning. They highlight the need for smoother transitions, improved communication with teachers, effective time, and stress management, and addressing logistical issues related to transportation and living arrangements.

Theme 3: Students' Coping Mechanism & Strategies with Distress

Students in the study demonstrated various coping mechanisms in response to the challenges of blended learning. Self-evaluation and faith emerged as prominent strategies. Many students stressed the importance of self-evaluation for assessing their own progress and emotional well-being. Blended learning calls for a high level of self-regulation and may pose a major challenge for those who are poor for those with poor self-regulation (Van Laer and Elen, 2017). Faith and prayers played a crucial role in providing them with emotional strength and stability during difficult times. A study by Diener & Ryan (2009) explored the role of self-evaluation and self-reflection in promoting well-being. It found that individuals who engage in self-evaluation tend to have a better understanding of their emotional states and are more resilient in the face of challenges. This supports the idea that self-evaluation is a valuable coping mechanism. In a study by Pargament et al. (2013), researchers investigated the role of faith and spirituality in coping with stress and adversity. The findings suggest that faith and prayer can provide individuals with a sense of comfort and emotional support during difficult times, aligning with the students' reliance on faith in the qualitative findings.

Peer support and collaboration were also highlighted as significant coping mechanisms. Students valued sharing notes and helping each other academically. Collaborating with peers, whether through online research or seeking clarification on assessments, was considered essential for addressing academic challenges. The students' reliance on classmates for academic help aligns with the principles of the Zone of Proximal Development (ZPD). In a study by Abraham (2016), the importance of peer support in higher education was highlighted. It was found that peer interactions and collaborative learning experiences contribute to students' sense of belonging and academic success, which supports the students' emphasis on peer support in the qualitative findings.

Personal growth and adaptation were acknowledged by students as outcomes of their challenges in the blended learning environment. Students noted increased independence and improved time management skills as products of their experiences. This aligns with the concept of a growth mindset, suggesting that individuals who believe in their potential for growth are more resilient in the face of challenges. The works of Wang et al. (2007) indicate that improving resilience can reduce the adverse effect of stress and improve the ability to adjust the environment. Additionally, the idea of positive reappraisal, where challenges are seen as opportunities for personal growth, resonated with the students' experiences. Dweck's research on growth mindset suggests that individuals who believe in the potential for personal growth and development are more likely to adapt positively to challenges (Yeager & Dweck, 2012). This aligns with the students' acknowledgment of personal growth as a result of facing challenges. A study by Hanley & Garland (2014) on coping mechanisms proposed the concept of "positive reappraisal," where individuals reinterpret challenges as opportunities for personal growth. This concept supports the idea that challenges can lead to personal growth, as mentioned by the students in the qualitative findings.

Moreover, students demonstrated a diverse range of coping strategies to effectively manage distress in their lives. These strategies encompassed various dimensions of their daily experiences. Many students sought solace in creative outlets, such as reading, drawing, and pursuing hobbies, recognizing the therapeutic effects of these activities. Rest and relaxation during their free time emerged as a crucial coping strategy, with students acknowledging the stress-reducing and well-being-enhancing benefits of relaxation practices. Seeking social support, particularly through conversations with friends, was underscored as a significant coping strategy, aligning with research emphasizing the protective nature of social support against stress. Additionally, some students adopted a stoic mindset, consciously avoiding overthinking as a strategy to cope with distress, drawing from the philosophy's association with emotional resilience. Spending quality time with loved ones and engaging in self-reflection were also emphasized as essential coping mechanisms, in line with existing research highlighting their positive impact on emotional well-being. Finally, students incorporated their faith and personal values into their coping strategies, with previous studies supporting the role of faith and values in enhancing resilience and emotional well-being.

In summary, students employed a range of coping strategies, including self-awareness, faith, personal beliefs, peer support, personal growth, and adaptation, to navigate the challenges of blended learning. These findings underscore the importance of holistic support systems that address emotional, social, and academic dimensions to promote student well-being and success in educational settings.

Theme 4: Proposed Programs for Managing Academic Stress

Several proposed programs have been outlined to effectively manage academic stress in blended learning environments. One key initiative is the adoption of technology enhanced education, integrating advanced educational technologies to improve the blended learning experience. This includes providing user-friendly platforms and tools that empower students to navigate their coursework more efficiently. Additionally, there's an emphasis on the appreciation of socio-emotional learning, with the integration of programs into the curriculum that focus on nurturing emotional intelligence, resilience, and interpersonal skills among students.

Another critical aspect is the development of a tailored curriculum that considers the unique challenges of blended learning, ensuring it remains flexible, engaging, and aligned with the diverse needs of student populations. Creating a positive environment within educational institutions is vital, where students feel valued and supported, reducing stressors associated with social isolation. Furthermore, Conscientious training for educators and staff is proposed to raise awareness of the mental health challenges students may face and equip them with strategies to offer appropriate support.

Involving parents, students, and educators in collaborative events to discuss the challenges and benefits of blended learning is also recommended, fostering a collective approach to addressing student stressors. Clear guidelines for student mental health, including resources like counseling services, hotlines, and self-help materials, can provide essential support. Establishing safe spaces within the institution allows students to openly discuss their concerns, seek guidance, and connect with peers who share similar challenges. Additionally, coaching sessions for teachers are suggested to help educators adapt their teaching methods to the unique demands of blended learning, with a focus on reducing academic stress. Finally, mentorship programs with experienced advisers or educators guiding students through their blended learning journey offer both academic and emotional support. These programs collectively form a comprehensive support system aimed at enabling students to effectively manage academic stress and thrive in blended learning environments.

4.0 Conclusion

This study comprehensively investigated students' well-being, distress, and adjustment within a blended learning environment, employing a mixed-methods approach. It aimed to gain insights into the emotional experiences of students during the transition from traditional to blended learning environments, using both quantitative and qualitative data. The research revealed substantial insights into students' emotional states and experiences in blended learning. Quantitatively, a significant proportion of students fell into the "languishing" category, highlighting lower emotional well-being. Students demonstrated moderate mental well-being, coupled with high academic distress, moderate familial distress, and strong adaptation to blended learning. The study unveiled a notable negative relationship between adaptation and academic stress, indicating that improved adaptation correlated with reduced academic distress. MANOVA results further underscored significant differences among these mental health groups in terms of their experiences with academic and familial distress and adaptation to blended learning. Qualitative findings shed light on diverse emotional states and experiences, the challenges students faced in the blended learning environment, and the coping mechanisms they employed. These insights emphasize the importance of recognizing students' emotional diversity in blended learning environments and the need for tailored support and orientation programs. Educational institutions should prioritize timely communication, stress and time management resources, and peer support to foster a supportive learning environment. Further research is necessary to explore the long-term effects of blended learning on student well-being and academic outcomes.

5.0 Contributions of Authors

LC - conceptualization, editing, writing, supervising. FP - data analysis, editing, writing. JD- editing

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7.0 Conflict of Interests

The authors affirm that the research was conducted without any commercial and financial affiliation that might pose a conflict of interest

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9.0 References

- Abraham, L. (2016). The Importance of Peer Support in Fostering Interdisciplinary and Inter Institutional Collaboration Among Post-Graduate and Research Students. AARN: Learning & Students (Sub-Topic). <https://www.semanticscholar.org/paper/The-Importance-of-Peer-Support-in-Fostering-and-and-Abraham/15fd8b06b59411e23b232d6ddcac69753f75a3dc>
- Adnan, M., & Anwar, K. (2020). Online Learning amid the COVID-19 Pandemic: Students' Perspectives. Online Submission, 2(1), 45–51.
- Agarwal, A., & Agarwal, D. (2022). Implication of online learning on the physical and mental well-being of students. *International Journal of Research in Engineering and Innovation*, 06(05), 366–369. <https://doi.org/10.36037/IJREL2022.6508>
- Ahmad, S., Batool, A., & Choudhry, A. H. (2019). Path Relationship of Time Management and Academic Achievement of Students in Distance Learning Institutions. *Pakistan Journal of Distance and Online Learning*, 5(2), 191–208.
- Ainamlin Dkhar & Grace Lalhupuii Sailo. (2021). Mental Health Problems Among School Going Adolescents In India: A Literature Review. *EPRA International Journal of Multidisciplinary Research (IJMR)*, 44–47. <https://doi.org/10.36713/epra6667>
- Akpınar, E. (2021). The Effect of Online Learning on Tertiary Level Students' Mental Health during the Covid19 Lockdown. *The European Journal of Social & Behavioural Sciences*, 30(1), 52–62. <https://doi.org/10.15405/ejbs.288>
- Alharthi, M. (2020). First-Year Students' Adjustment to University Life: A Case Study of Implementing College Buddy Program. *International Journal of Higher Education*, 9(1), 116–125.
- Alias, A., Mohd Noor, N. A., Mohamad Bhkari, N., & Ariffin, K. (2019). Student Learning Time: A Needs Analysis for University Students' Time Management Skills. 125–134. https://doi.org/10.1007/978-981-13-0203-9_12
- Allen, I. E., & Seaman, J. (2013). Changing Course: Ten Years of Tracking Online Education in the United States. Sloan Consortium (NJ1). <https://eric.ed.gov/?id=E541571>
- Banditvilai, C. (2016). Enhancing Students' Language Skills through Blended Learning. 14(3).
- Barbieri, M., & Mercado, E. (2022). The impact of stay-at-home regulations on adolescents' feelings of loneliness and internalizing symptoms. *Journal of Adolescence*, 94(7), 1022–1034. <https://doi.org/10.1002/jad.12084>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Conwli, L. J. C. (2021). Socio-Demographic Characteristics, Personality Traits and Stress Level of Senior High School Students. 1, 87. <https://doi.org/10.32789/tel.2021.1007>
- Cooper, K., Hards, E., Moltrecht, B., Reynolds, S., Shum, A., McElroy, E., & Loades, M. (2021). Loneliness, social relationships, and mental health in adolescents during the COVID-19 pandemic. *Journal of Affective Disorders*, 289, 98–104. <https://doi.org/10.1016/j.jad.2021.04.016>
- Creswell, J. W., & Clark, V. L. P. (2007). Designing and conducting mixed methods research (pp. xviii, 275). Sage Publications, Inc.
- Diener, E., & Ryan, K. (2009). Subjective well-being: A general overview. *South African Journal of Psychology*, 39(4), 391–406. <https://doi.org/10.1177/008124630903900402>
- Eklund, K., Dowdy, E., Jones, C., & Furlong, M. (2010). Applicability of the Dual-Factor Model of Mental Health for College Students. *Journal of College Student Psychotherapy*, 25(1), 79–92. <https://doi.org/10.1080/87568225.2011.532677>
- Ellis, R. A., Han, F., & Pardo, A. (2018). Measuring Engagement in the University Student Experience of Learning in Blended Environments (R. A. Ellis & P. Goodyear, Eds.; pp. 129–152). Springer Singapore. https://doi.org/10.1007/978-981-10-7155-3_8
- Feng, X., Wei, Y., Pan, X., Qiu, L., & Ma, Y. (2020). Academic Emotion Classification and Recognition Method for Large-scale Online Learning Environment – Based on A-CNN and LSTM-ATT Deep Learning Pipeline Method. *International Journal of Environmental Research and Public Health*, 17(6), Article 6. <https://doi.org/10.3390/ijerph17061941>
- Galusha, J. M. (1998). Barriers to Learning in Distance Education. <https://eric.ed.gov/?id=ED416377>
- Grubic, N., Badovinac, S., & Johri, A. M. (2020). Student mental health in the midst of the COVID-19 pandemic: A call for further research and immediate solutions. *International Journal of Social Psychiatry*, 66(5), 517–518. <https://doi.org/10.1177/0020764020925108>
- Halverson, L. R., & Graham, C. R. (2019). Learner Engagement in Blended Learning Environments: A Conceptual Framework. *Online Learning*, 23(2), 145–178.
- halYazhini, P., Priya, V., & Gayathri, R. (2021). Awareness on Time Management Techniques among College Students. *Journal of Research in Medical and Dental Science*. <https://www.semanticscholar.org/paper/Awareness-on-Time-Management-Techniques-among-halYazhini-Priya/da5b6df2f07466b7ba267b7abf0715be3c6484e5>
- Hanley, A. W., & Garland, E. L. (2014). Dispositional mindfulness co-varies with self-reported positive reappraisal. *Personality and Individual Differences*, 66, 146–152. <https://doi.org/10.1016/j.paid.2014.03.014>
- Hoffart, A., Johnson, S. U., & Ebrahimi, O. V. (2022). Loneliness during the COVID-19 pandemic: Change and predictors of change from strict to discontinued social distancing protocols. *Anxiety, Stress, & Coping*, 35(1), 44–57. <https://doi.org/10.1080/10615806.2021.1958790>
- Horesh, D., & Brown, A. D. (2020). Traumatic stress in the age of COVID-19: A call to close critical gaps and adapt to new realities. *Psychological Trauma: Theory, Research, Practice, and Policy*, 12(4), 331–335. <https://doi.org/10.1037/tra0000592>
- Hyseni Duraku, Z., & Hoxha, L. (2020). The impact of COVID-19 on higher education: A study of interaction among Kosovar students' mental health, attitudes toward online learning, study skills, and lifestyle changes.
- Idris, F., Zulkipli, I. N., Abdul-Mumin, K. H., Ahmad, S. R., Mitha, S., Rahman, H. A., Rajabalaya, R., David, S. R., & Naing, L. (2021). Academic experiences, physical and mental health impact of COVID-19 pandemic on students and lecturers in health care education. *BMC Medical Education*, 21(1), 542. <https://doi.org/10.1186/s12909-021-02968-2>
- Iqbal Amin Khan, Alam Zeb, Shabir Ahmad, & Rizwan Ullah. (2020). Relationship Between University Students Time Management Skills and Their Academic Performance. *Review of Economics and Development Studies*, 5(4). <https://doi.org/10.26710/reads.v5i4.900>
- Jie, D. (2011). Adjustment of Role Stress of Free Normal Students. *The Guide of Science & Education*. <https://www.semanticscholar.org/paper/Adjustment-of-Role-Stress-of-Free-Normal-Students-Jie/1b96fba794140ba894cccd7e77b9aae05e4de43>
- Keyes, C. L. M. (2002). The Mental Health Continuum: From Languishing to Flourishing in Life. *Journal of Health and Social Behavior*, 43(2), 207–222. <https://doi.org/10.2307/3090197>
- Khan, S. (2015). The Impact of Time Management on the Students' Academic Achievements. *Journal of Literature, Languages and Linguistics*. <https://www.semanticscholar.org/paper/The-Impact-of-Time-Management-on-the-Students'-Khan/5323eda5c428e91bc050823c972234f326606e6>
- Kurniawan, E. (2022). Peran Kemandirian Terhadap Prestasi Belajar Mahasiswa Pada Era New Normal. *Griya Journal of Mathematics Education and Application*, 2(2), 327–334. <https://doi.org/10.29303/griya.v2i2.196>
- Li, J., & Che, W. (2022). Challenges and coping strategies of online learning for college students in the context of COVID-19: A survey of Chinese universities. *Sustainable Cities and Society*, 83, 103958. <https://doi.org/10.1016/j.scs.2022.103958>
- Liu, N., Zhang, F., Wei, C., Jia, Y., Shang, Z., Sun, L., Wu, L., Sun, Z., Zhou, Y., Wang, Y., & Liu, W. (2020). Prevalence and predictors of PITSS during COVID-19 outbreak in China hardest-hit areas: Gender differences matter. *Psychiatry Research*, 287, 112921. <https://doi.org/10.1016/j.psychres.2020.112921>
- Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2009). Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies [Monograph]. Centre for Learning Technology. <https://repository.alt.ac.uk/629/>
- Mfidi, F. H. (2018). Mental Health Issues of School-Going Adolescents in High Schools in the Eastern Cape, South Africa. *Africa Journal of Nursing and Midwifery*, 19(3). <https://doi.org/10.25159/2520-5293/2219>
- Miertschin, S., Goodson, C., & Stewart, B. (2015). Time Management Skills and Student Performance in Online Courses. 2015 ASEE Annual Conference and Exposition Proceedings, 26.1585.1–26.1585.16. <https://doi.org/10.18260/p.24921>
- Nikolopoulou, K., & Zacharis, G. (2023). Blended Learning in a Higher Education Context: Exploring University Students' Learning Behavior. *Education Sciences*, 13(5), 514. <https://doi.org/10.3390/educsci13050514>
- Pargament, K. I., Smith, B. W., Koenig, H. G., & Perez, L. (1998). Patterns of Positive and Negative Religious Coping with Major Life Stressors. *Journal for the Scientific Study of Religion*, 37(4), 710–724. <https://doi.org/10.2307/1388152>
- Pavin Ivanec, T. (2022). The Lack of Academic Social Interactions and Students' Learning Difficulties during COVID-19 Faculty Lockdowns in Croatia: The Mediating Role of the Perceived Sense of Life Disruption Caused by the Pandemic and the Adjustment to Online Studying. *Social Sciences*, 11(2), Article 2. <https://doi.org/10.3390/socsci11020042>

- Sathibabu, A., & G, D. K. (2022). Physical Health Issues of the Students Faced by Online Learning and Its Impact on their Growth. *Technoarete Transactions on Application of Information and Communication Technology(ICT) in Education*, 1(4). <https://doi.org/10.36647/TTAICTE/01.04.A003>
- Sawhney, R., Singh, P., Agarwal, G., Sharma, S., B, D., & Karmakar, M. (2021). Impact Of Online Classes on The Health And Wellbeing Of Young Learners. *Humanities & Social Sciences Reviews*, 9(4), 175–187. <https://doi.org/10.18510/hssr.2021.9425>
- Schulte-Körne, G. (2016). Mental Health Problems in a School Setting in Children and Adolescents. *Deutsches Ärzteblatt International*. <https://doi.org/10.3238/arztebl.2016.0183>
- Schwartz, K. D., Exner-Cortens, D., McMorris, C. A., Makarenko, E., Arnold, P., Van Bavel, M., Williams, S., & Canfield, R. (2021). COVID-19 and Student Well-Being: Stress and Mental Health during Return-to-School. *Canadian Journal of School Psychology*, 36(2), 166–185. <https://doi.org/10.1177/08295735211001653>
- Sharma, M., & Sharma, P. (2021). Effect of online classes on physical and mental well-being of students during COVID-19. *Indian Journal of Physical Therapy and Research*. <https://www.semanticscholar.org/paper/Effect-of-online-classes-on-physical-and-mental-of-Sharma-Sharma/4100eedf059301dd2e25573fa40d1e6950be9e6e>
- Son, C., Hegde, S., Smith, A., Wang, X., & Sasangohar, F. (2020). Effects of COVID-19 on College Students' Mental Health in the United States: Interview Survey Study. *Journal of Medical Internet Research*, 22(9), e21279. <https://doi.org/10.2196/21279>
- Suldo, S. M., Thalji-Raitano, A., Kiefer, S. M., & Ferron, J. M. (2016). Conceptualizing High School Students' Mental Health Through a Dual-Factor Model. *School Psychology Review*, 45(4), 434–457. <https://doi.org/10.17105/SPR45-4.434-457>
- Turana, Y., Primatanti, P. A., Sukarya, W. S., Wiyanto, M., Duarsa, A. B. S., Wratsangka, R., Adriani, D., Sasmita, P. K., Budiyanti, E., Anditirina, D., Ainin, D. Q., Sari, K., Darwata, I. W., Astri, Y., Prameswarie, T., Tursina, A., Purbaningsih, W., Kurniawan, A., Widysanto, A., ... Kurniawan, F. (2022). Impact on Medical Education and the Medical Student's Attitude, Practice, Mental Health, After One Year of the Covid-19 Pandemic in Indonesia. *Frontiers in Education*, 7. <https://www.frontiersin.org/articles/10.3389/feduc.2022.843998>
- Velasquez, A., Graham, C. R., & Osguthorpe, R. (2013). Caring in a technology-mediated online high school context. *Distance Education*, 34(1), 97–118. <https://doi.org/10.1080/01587919.2013.770435>
- Vygotsky, L. S., & Cole, M. (1978). *Mind in Society: Development of Higher Psychological Processes*. Harvard University Press.
- Wallace, R. M. (2003). Online Learning in Higher Education: A review of research on interactions among teachers and students. *Education, Communication & Information*, 3(2), 241–280. <https://doi.org/10.1080/14636310303143>
- Weiss, J. A., & Lunsby, Y. (2011). The Brief Family Distress Scale: A Measure of Crisis in Caregivers of Individuals with Autism Spectrum Disorders. *Journal of Child and Family Studies*, 20(4), 521–528. <https://doi.org/10.1007/s10826-010-9419-y>
- Ya, Z. (2010). A Review on the Research of Learning Adjustment of Undergraduates and Educational Measures. *Journal of Southwest University*. <https://www.semanticscholar.org/paper/A-Review-on-the-Research-of-Learning-Adjustment-of-Ya/65454d59e77c37961a354517bc7455ae19d2804c>
- Yeager, D. S., & Dweck, C. S. (2012). Mindsets That Promote Resilience: When Students Believe That Personal Characteristics Can Be Developed. *Educational Psychologist*, 47(4), 302–314. <https://doi.org/10.1080/00461520.2012.722805>
- Yuan, J., & Kim, C. (2018). The effects of autonomy support on student engagement in peer assessment. *Educational Technology Research and Development*, 66(1), 25–52. <https://doi.org/10.1007/s11423-017-9538-x>