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Research Article

Academic Excellence Paradox: Self-Imposed Academic Pressure and Well-Being Among Gen-Z Students in a HyFlex Learning Environment

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ABSTRACT

This correlation study examined the complex interrelationship between self-imposed academic pressure, academic performance, and multidimensional well-being among high-achieving undergraduate students (N = 101, 57.7% response rate) at a premier private university in Manila, Philippines. Through rigorous purposive sampling based on established honors criteria (GWA $\geqslant$ 3.0), the study implemented a comprehensive online assessment instrument measuring three primary constructs. Findings revealed pronounced levels of self-imposed academic pressure (Mdn = 6.0 on a 7-point scale, interpreted as High), with academic performance anxiety (Mdn = 7.0, Very High) and future career impact concerns (Mdn = 7.0, Very High) emerging as predominant stressors. Academic achievement metrics demonstrated exceptional performance, with a median GPA of 3.5 and 53.27% of participants attaining GPAs of 3.50 or higher. Despite respondents reporting robust scores across physical (Mdn = 5.5, High), psychological (Mdn = 6.5, High), and social well-being domains (Mdn = 6.0, High), the Spearman Rho test uncovered significant bidirectional relationships. Self-imposed academic pressure exhibited a weak positive correlation with academic performance ($r = 0.327$, $p < 0.01$), explaining approximately 10.7% of the variance in GPA ($r^2 = 0.107$), suggesting that heightened personal standards confer modest performance advantages. However, a more pronounced moderate negative correlation emerged between self-imposed pressure and overall well-being ($r = -0.436$, $p < 0.01$), with particularly strong adverse effects on academic confidence ($r = -0.478$, $p < 0.01$), interpersonal relationship satisfaction ($r = -0.467$, $p < 0.01$), and cognitive function ($r = -0.456$, $p < 0.01$). The differentiated impact across pressure dimensions—with social comparison processes enhancing performance ($r = 0.384$, $p < 0.01$) while coursework management difficulties undermining it ($r = -0.412$, $p < 0.01$)—illuminates a fundamental academic paradox wherein self-imposed pressure simultaneously enhances performance metrics while compromising holistic

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well-being. These findings underscore the imperative for educational institutions to develop balanced academic approaches and targeted support systems that foster both achievement and wellness in HyFlex learning environments, particularly addressing the psychological, social, and physical dimensions most adversely affected by academic pressure.

Keywords: *HyFlex learning, Self-imposed academic pressure, Student achievement, Well-being, Gen-Z, Higher education*

Introduction

Academic achievement has consistently been recognized as a pivotal determinant of students' future success, significantly influencing career trajectories and personal development (Arcinas, 2014; Ozcan, 2021; Veluri et al., 2022). While academic pressure has traditionally been attributed to external factors such as parental expectations, societal norms, and institutional demands, contemporary research increasingly highlights the prominence of self-imposed academic pressure (Jian et al., 2022). This internalized pressure manifests when students establish exceptionally high personal standards driven by intrinsic motivation, perfectionism, and relentless pursuit of excellence (Bong et al., 2014). Although self-motivation can foster resilience and perseverance, excessive internalized stress poses substantial risks to students' psychological well-being, physical health, and social relationships, particularly among high-achieving individuals (Antonio et al., 2023). These adverse effects are further amplified in flexible learning environments such as the Hyflex model, where students must navigate increased autonomy and personal accountability.

The transition to alternative learning modalities, particularly the Hyflex model, has introduced distinct academic challenges that potentially intensify students' self-imposed pressure. The Hyflex model, which seamlessly integrates face-to-face and online learning components, empowers students to select their preferred mode of instruction (Liu & Rodriguez, 2019). While this approach enhances accessibility and flexibility, it simultaneously places greater responsibility on students to manage their learning independently (Samson et al., 2023). Empirical evidence suggests hybrid learning environments, especially those requiring heightened self-regulation and time management skills, can significantly increase stress levels and burnout risk and diminish motivation (Lockee, 2021). Students frequently report feeling overwhelmed by increased workload expectations, extended screen exposure, and the erosion of boundaries between academic and personal domains, all of which exacerbate academic stress (Kabir et al., 2024). Furthermore, the reduced structured in-person interactions may precipitate feelings of isolation and diminish peer support networks essential for academic success and emotional well-being (Irawan et al., 2020).

The impact of academic pressure extends far beyond students' psychological well-being, profoundly affecting their physical and social health. Physiologically, excessive stress has been conclusively linked to sleep deprivation, chronic fatigue, and cardiovascular issues, particularly among students who sacrifice rest to pursue academic excellence (Zhu et al., 2024). The sedentary nature of remote learning has further contributed to musculoskeletal problems and increased obesity risk, driven by prolonged screen exposure and reduced physical activity (Lavie et al., 2019). Additionally, students experiencing intense academic demands often withdraw from social interactions, resulting in pronounced feelings of loneliness and diminished overall life satisfaction (Lan et al., 2023).

While extensive research has documented the effects of academic stress, a significant gap persists in understanding how self-imposed academic pressure influences student well-being with the learning model. Existing literature has explored the psychological consequences of academic stress (Navarez & Navarez, 2022) and

its impact on social interactions. However, the specific mechanisms through which self-imposed academic pressure affects academic performance and holistic well-being are explored in re-education. Furthermore, while some scholars argue that the HyFlex model empowers students with greater autonomy and flexibility (Naidoo, 2023), others contend that it may inadvertently intensify stress by imposing additional self-regulatory demands on learners (Barbayannis et al., 2022).

Research Objective

This study examines the relationship between self-imposed academic pressure and well-being among high achieving University students within the context of the Hyflex learning model.

Research Questions

This study aims to answer these research questions:

1. What is the level of self-imposed academic pressure among Gen Z university students in Manila using the HyFlex learning environment?
2. What is their level of academic performance based on their last GPA?
3. What is their overall state of well-being, including physical, psychological and social health?
4. What is the correlation between self-imposed academic pressure and academic performance (GPA)?
5. What is the correlation between self-imposed academic pressure and well-being (physical, psychological, and social health)?

Significance of the Study

By investigating these relationships, the study aims to contribute meaningful insights that can inform institutional policies and support mechanisms. These findings will help educators and administrators foster academic excellence while ensuring that students maintain a balanced and healthy educational experience.

Methods

Research Design

This study employed a quantitative correlational research design to examine the relationships between self-imposed academic pressure, academic performance, and multidimensional student well-being (physical, psychological, and social) among high-achieving Generation Z college students in a HyFlex learning environment. This methodological approach was selected for its capacity to systematically analyze the strength and direction of relationships between multiple variables without manipulating the independent variables, thereby capturing authentic educational experiences. Data collection utilized a comprehensive online survey instrument employing a structured questionnaire, adhering to established educational research protocols (Song et al., 2015). The survey was administered via Google Forms, ensuring optimal accessibility, participant convenience, and data integrity while capturing nuanced insights on academic pressure manifestations within multimodal learning contexts.

Population and Sampling

The study implemented a rigorous purposive sampling methodology to recruit undergraduate students who met three specific inclusion criteria: (1) current enrollment status at the target institution, (2) minimum age of 18 years, and (3) honor student designation with a Grade Weighted Average (GWA) of 3.0 or higher with no course grade below 2.0. These criteria ensured that the sample comprised high-achieving students likely to experience significant self-imposed academic pressure.

A comprehensive power analysis using G*Power statistical software determined a minimum required sample size of 84 participants (parameters: $\rho = 0.3$, $\alpha = 0.05$, power = 0.80), with an optimal sample size of 101 for robust statistical power. This was rounded to a target of 100 respondents for practical implementation purposes. The recruitment process yielded 175 initial participants, of whom 101 met all inclusion criteria and were included in the final analysis, yielding a participation rate of 57.7%. This sample size exceeded the minimum threshold established by the power analysis, ensuring adequate statistical power to detect meaningful correlations and patterns in the dataset while minimizing Type II error probability.

Instrumentation and Data Collection

The self-administered survey instrument comprised four distinct sections strategically designed to assess the primary constructs of interest: 1. Academic Pressure Assessment: Measured using the validated Academic Stress Scale (Bedewy & Gabriel, 2015), consisting of multiple Likert-scale items evaluating factors such as academic expectations, workload perceptions, time management challenges, and self-imposed pressure. Responses were quantified on a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree) to capture nuanced variations in pressure intensity; 2. Well-being Evaluation: Assessed using the World Health Organization Quality of Life (WHOQOL) instrument, a psychometrically robust tool for evaluating physical, psychological, and social dimensions of health on a seven-point Likert scale (World Health Organization, 2012); 3. Academic Performance Measurement: Quantified using participants' Grade Point Averages (GPAs) from the most recent academic term, providing an objective performance metric.

To ensure robust measurement integrity, all responses underwent a comprehensive review for completeness and construct validity. Reliability was rigorously assessed using Cronbach's alpha coefficient with a minimum threshold of 0.70 for internal consistency, supplemented by test-retest analysis to confirm measurement stability across time. These methodological controls enhanced the validity and reliability of the findings, strengthening causal inferences and generalizability within similar educational contexts.

Results and Discussion

Self-Imposed Academic Pressure Among College Students

Findings from 175 college students engaged in a HyFlex learning environment revealed substantial self-imposed academic pressure (Table 1).

Table 1. Level Of Self-Imposed Academic Pressure Among College Students (N=101)

Items	Median Score	Interpretation
I feel anxious about my academic performance	7.0	Very High
I feel stressed when I think about how my grades will affect my future opportunities	7.0	Very High
I feel overwhelmed by the amount of coursework I have this term	6.0	High
I feel stressed about balancing my academic work with other commitments	6.0	High
I frequently compare my academic performance to that of my peers	6.0	High
I feel that I cannot ask for help without seeming inadequate	6.0	High
I struggle to keep up with the demands of my classes and assignments	5.0	Moderate
Overall Median	**6.0**	**High**

Interpretation Scale: 1.00-1.80: Very Low; 1.81-3.40: Low; 3.41-5.00: Moderate; 5.01-6.60: High; 6.61-7.00: Very High

Academic performance anxiety (Mdn = 7.0, Very High) and stress regarding the future impact of grades (Mdn = 7.0, Very High) emerged as the most pronounced sources of pressure. These findings align with Jian et al.'s (2022) and Veluri et al.'s (2022) studies, highlighting how self-imposed academic pressure often manifests as excessive personal standards driven by intrinsic motivation and perfectionism. The high levels of future-oriented stress observed in our study corroborate Bong et al.'s (2014) assertion that the relentless pursuit of excellence, particularly among high-achieving students, can generate significant psychological strain.

Additional significant contributors to academic stress included feeling overwhelmed by coursework demands (Mdn = 6.0, High),

challenges in maintaining academic-life balance (Mdn = 6.0, High), comparative assessment against peers (Mdn = 6.0, High), and reluctance to seek academic assistance (Mdn = 6.0, High). These manifestations of pressure mirror the challenges identified by Lockee (2021), who noted that HyFlex learning environments place greater demands on students' self-regulation and time management skills, potentially intensifying stress levels and burnout risk. Furthermore, our findings on academic-life balance difficulties substantiate Kabir et al.'s (2024) observations regarding blurred boundaries between academic and personal domains in flexible learning environments.

The overall median score across all measurement items (Mdn = 6.0, High) substantiates the pervasive nature of academic pressure among high-achieving university students in HyFlex learning environments, supporting Antonio et al.'s (2023) conclusions that excessive internalized stress poses substantial risks, particularly among high-achieving individuals navigating flexible learning contexts.

Level Of Academic Performance Based On Last Term GPA

Analysis of Grade Point Average (GPA) data from 101 DLSU college students demonstrates a consistently high level of academic achievement across the sample (Table 2).

Table 2. Academic Performance Distribution Based on GPA (N=101)

GPA Range	Frequency	Percentage	Performance Level
4.0	5	4.67%	Outstanding
3.75-3.99	22	20.56%	Excellent
3.50-3.74	30	28.04%	Very Good
3.25-3.49	27	25.23%	Good
3.00-3.24	23	21.50%	Satisfactory

Performance Level Interpretation: 4.0: Outstanding, 3.75-3.99: Excellent, 3.50-3.74: Very Good, 3.25-3.49: Good, 3.00-3.24: Satisfactory.
Note: GPA data based on last term's academic performance of DLSU College students in the HyFlex learning environment

Notably, a majority of participants (53.27%) achieved GPAs of 3.50 or higher, and approximately one-quarter (25.23%) attained "Excellent" or "Outstanding" performance levels, underscoring the high academic caliber of the sample population. These academic achievement patterns suggest that despite the high levels of self-imposed pressure documented in our study, students demonstrate strong performance outcomes, supporting Ozcan's (2021) assertion that academic achievement remains a pivotal determinant of students' future success. Maintaining high GPAs while experiencing significant pressure may reflect what Liu and Rodriguez (2019) described as the empowering aspects of the HyFlex model, which allows students greater autonomy in selecting their preferred mode of instruction.

State of Well-being Among College Students

Results reveal that while students maintain generally positive well-being across multiple dimensions, notable variations exist between physical, psychological, and social domains (Table 3). Regarding physical health parameters, participants reported high capability levels (Mdn = 6.0) in executing academic tasks and managing responsibilities while maintaining physical activity (Mdn = 6.0). However, moderate levels of school-related pain (Mdn = 5.0) and physical manifestations of academic difficulties (Mdn = 5.0) indicate that prolonged academic demands adversely affect physical well-being. The physical health dimension yielded a median score of 5.5 (High), reflecting the counterbalance between strong physical capabilities and moderate physical strain imposed by academic demands. These findings

substantiate the physiological concerns that Zhu et al. (2024) raised, who documented associations between excessive academic stress and
physical health issues, including sleep deprivation and fatigue among students pursuing academic excellence.

Psychological health emerged as particularly robust with a dimension median score of 6.5 (High), characterized by very high ratings in academic value perception (Mdn = 7.0) and intrinsic motivation derived from personal beliefs (Mdn = 7.0). Participants also reported high concentration levels during academic tasks (Mdn = 6.0) and confidence in academic success (Mdn = 6.0, categorized as Very High according to assessment criteria). Although the psychological dimension median falls within the "High" rather than "Very High" range (6.5, High), it nonetheless represents the strongest domain of student well-being. This psychological resilience aligns with Bong et al.'s (2014) findings that self-motivation, even when intense, can foster resilience and perseverance among high-achieving students.

Social health maintained a solid dimension median (Mdn = 6.0, High), though the significant impact of academic demands on social activities and relaxation opportunities registered at the highest possible intensity (Mdn = 7.0, Very High), signaling potential social functioning impairment despite generally positive social health indicators. Other social health components showed consistently high ratings: academic pressure's impact on peer support (Mdn = 6.0, High), social isolation due to academic demands (Mdn = 6.0, High), and satisfaction with family/friend time (Mdn = 6.0, High). This notable tension between maintaining social connections while meeting academic demands reflects the observations of Lan et al. (2023), who documented how students experiencing intense academic pressure often withdraw from social interactions, resulting in enhanced feelings of loneliness and diminished life satisfaction. Moreover, our findings support Irawan et al.'s (2020) concerns that reduced structured in-person interactions in flexible learning environments may exacerbate isolation and compromise peer support networks essential for emotional well-being.

Across all three domains, the overall well-being median score was 6.0 (High), indicating that while students generally maintain positive well-being, the dimension-specific analysis reveals differential resilience across domains: psychological well-being (Mdn = 6.5, High) emerges as the strongest domain, followed by social well-being (Mdn = 6.0, High) and physical well-being (Mdn = 5.5, High). This hierarchical pattern suggests that students' psychological resources may partially buffer against their physical and social challenges in high-pressure academic environments. Nonetheless, the consistently "High" ratings across all dimensions indicate substantial resilience among high-achieving students despite significant academic pressures, though continued attention to holistic well-being support remains essential.

Table 3. State of Well-being Among DLSU College Students (N=101)

Dimensions and Items	Median Score (1-7)	Interpretation
Physical Health		
Capability to carry out academic tasks	6.0	High
Management of responsibilities while staying physically active	6.0	High
Experience of pain/discomfort due to school	5.0	Moderate
Physical impact of academic difficulties	5.0	Moderate
Physical Health Dimension Median	*5.5*	*High*
Psychological Health		
Value placed on academic abilities	7.0	Very High
Personal beliefs' role in motivation	7.0	Very High
Concentration during academic tasks	6.0	High

Dimensions and Items	Median Score (1-7)	Interpretation
Confidence in academic success	6.0	Very High
Psychological Health Dimension Median	*6.5*	*High*
Social Health		
Impact on social activities and relaxation	7.0	Very High
Academic pressure's impact on peer support	6.0	High
Social isolation due to academic demands	6.0	High
Satisfaction with family/friend time	6.0	High
Social Health Dimension Median	*6.0*	*High*
Overall Well-being Median	**6.0**	**High**

Interpretation Scale: 1.00-1.80: Very Low; 1.81-3.40: Low; 3.41-5.00: Moderate; 5.01-6.60: High; 6.61-7.00: Very High

Correlation Between Self-Imposed Academic Pressure and GPA

Statistical analysis examining the relationship between self-imposed academic pressure and academic performance (GPA) using Spearman Rho correlation coefficient revealed nuanced associations with varying directions and strengths (Table 4). The overall correlation between academic pressure and GPA emerged as weakly positive ($r = 0.327$, $p < 0.01$), indicating that while heightened academic pressure demonstrates a statistically significant association with improved GPA outcomes, it explains only approximately 10.7% of the variance in academic performance ($r^2 = 0.107$). This relationship supports the complex dynamic suggested by Jian et al. (2022), wherein self-imposed academic pressure can simultaneously motivate achievement while potentially undermining well-being.

Among the specific pressure dimensions, three factors demonstrated moderate positive correlations with GPA: peer performance comparison ($r = 0.384$, $p < 0.01$), future impact stress ($r = 0.342$, $p < 0.01$), and academic performance anxiety ($r = 0.315$, $p < 0.01$). These findings suggest that social comparison processes and future-oriented concerns may function as performance motivators, aligning with Bong et al.'s (2014) research on perfectionism and its role in driving academic excellence through heightened personal standards. Two additional factors—coursework overwhelm ($r = 0.287$, $p < 0.01$) and academic-life balance stress ($r = 0.276$, $p < 0.01$)—demonstrated weak positive correlations with academic performance, potentially reflecting the adaptive aspects of moderate pressure identified by Antonio et al. (2023).

Conversely, struggling with class demands ($r = -0.412$, $p < 0.01$) demonstrated a moderate negative correlation with GPA, implying that students experiencing significant challenges in managing coursework tend to achieve lower academic outcomes. Similarly, help-seeking hesitation ($r = -0.298$, $p < 0.01$) exhibited a weak negative correlation with academic performance, suggesting that a reluctance to access academic support may compromise performance outcomes. These negative correlations substantiate Barbayannis et al.'s (2022) concerns that self-regulatory demands in flexible learning environments may inadvertently increase stress by imposing additional management burdens on learners.

Table 4. Correlation Between Self-Imposed Academic Pressure and GPA (N = 101)

Academic Pressure Items	Correlation Coefficient (r)	p-value	Strength and Direction
Peer performance comparison	0.384**	< 0.01	Moderate Positive
Future impact stress	0.342**	< 0.01	Moderate Positive
Academic performance anxiety	0.315**	< 0.01	Moderate Positive
Coursework overwhelms	0.287**	< 0.01	Weak Positive
Academic-life balance stress	0.276**	< 0.01	Weak Positive

Academic Pressure Items	Correlation Coefficient (r)	p-value	Strength and Direction
Help-seeking hesitation	-0.298**	< 0.01	Weak Negative
Struggle with class demands.	-0.412**	< 0.01	Moderate Negative
Overall Academic Pressure	**0.327****	**< 0.01**	**Moderate Positive**

***Note**: Items are arranged in descending order of positive correlation strength, followed by negative correlations.*
*** Correlation is significant at the 0.01 level (2-tailed).*
Correlation Strength Interpretation: |r| = 0.00-0.19: Very Weak; |r| = 0.20-0.39: Weak; |r| = 0.40-0.59: Moderate; |r| = 0.60-0.79: Strong; |r| = 0.80-1.00: Very Strong

This bifurcated pattern of positive and negative correlations illuminates the complex relationship between academic pressure and performance metrics. The data reveal that different dimensions of academic pressure can have opposing effects on academic achievement: aspects involving social comparison, future concerns, and performance anxiety enhance performance, while difficulty managing coursework and reluctance to seek help undermine it. These findings address the gap identified in our introduction regarding how self-imposed academic pressure influences academic performance in HyFlex learning environments.

Correlation between Academic Pressure and Well-being

Statistical analysis revealed a moderate negative correlation between academic pressure and overall well-being ($r = -0.436$, $p < 0.01$), indicating that heightened academic pressure is significantly associated with diminished well-being across physical, psychological, and social domains (Table 5). This finding directly addresses the concerns raised by Antonio et al. (2023) regarding the substantial risks that excessive internalized stress poses to students' psychological well-being, physical health, and social relationships.

In the physical health domain, academic pressure demonstrated a moderate negative correlation with overall physical health ($r = -0.425$, $p < 0.01$). Specifically, academic pressure negatively impacted students' physical capabilities ($r = -0.384$, $p < 0.01$) and ability to maintain physical activity while managing responsibilities ($r = -0.412$, $p < 0.01$). Concurrently, increased academic pressure was positively associated with elevated school-related pain experiences ($r = 0.467$, $p < 0.01$) and physical manifestations of academic difficulties ($r = 0.438$, $p < 0.01$), suggesting that intensive academic demands compromise physical well-being through multiple pathways. These results provide empirical support for Lavie et al.'s (2019) observations regarding the sedentary nature of remote learning and its contribution to physical health problems, including musculoskeletal issues stemming from prolonged screen exposure and reduced physical activity.

Within the psychological health domain, academic pressure negatively correlated with overall psychological well-being ($r = -0.452$, $p < 0.01$). This domain-level correlation manifested through pronounced negative associations with academic confidence ($r = -0.478$, $p < 0.01$) and concentration capabilities ($r = -0.456$, $p < 0.01$) while demonstrating a weak positive correlation with academic value perception ($r = 0.312$, $p < 0.01$) and a weak negative correlation with motivational beliefs ($r = -0.387$, $p < 0.01$). These findings align with the psychological consequences of academic stress documented by Navarez and Navarez (2022). They extend their work by empirically demonstrating how persistent academic pressure can undermine cognitive functioning while reinforcing achievement values, creating a psychological tension that may exacerbate student stress.

Regarding social health indicators, academic pressure demonstrated a moderate negative correlation with overall social health ($r = -0.432$, $p < 0.01$). This relationship manifested through substantial negative correlations with family and friend time satisfaction ($r = -0.467$, $p < 0.01$) and peer support access ($r = -0.398$, $p < 0.01$) while positively associating with social isolation ($r = 0.445$, $p < 0.01$) and adverse impacts on social activities ($r = 0.489$,

$p < 0.01$). These results strongly support Lan et al.'s (2023) findings on how academic pressure can lead to social withdrawal and diminished life satisfaction. Furthermore, they validate Irawan et al.'s (2020) concerns about how reduced structured in-person interactions in flexible learning environments may lead to feelings of isolation and compromise peer support networks essential for emotional well-being.

These empirical findings address the gap identified in our introduction regarding how self-imposed academic pressure influences holistic well-being within HyFlex learning environments. They highlight the critical need for institutional support mechanisms, accessible mental health resources, and structured social interaction opportunities to help students effectively manage academic pressure while maintaining holistic well-being, as Barbayannis et al. (2022) suggested.

Table 5. Correlation between Academic Pressure and Well-being Domain (N = 175)

Well-being Domains and Items	Correlation Coefficient (r)	p-value	Strength and Direction
Physical Health Domain			
1. Physical capability for tasks	-0.384**	< 0.01	Weak Negative
2. Physical activity management	-0.412**	< 0.01	Moderate Negative
3. School-related pain/discomfort	0.467**	< 0.01	Moderate Positive
4. Physical impact of difficulties	0.438**	< 0.01	Moderate Positive
Overall Physical Health	*-0.425**	*< 0.01*	*Moderate Negative*
Psychological Health Domain			
1. Concentration ability	-0.456**	< 0.01	Moderate Negative
2. Academic value perception	0.312**	< 0.01	Weak Positive
3. Academic confidence	-0.478**	< 0.01	Moderate Negative
4. Motivational beliefs	-0.387**	< 0.01	Weak Negative
Overall Psychological Health	*-0.452**	*< 0.01*	*Moderate Negative*
Social Health Domain			
1. Peer support access	-0.398**	< 0.01	Weak Negative
2. Social isolation	0.445**	< 0.01	Moderate Positive
3. Family/friend time satisfaction	-0.467**	< 0.01	Moderate Negative
4. Social activities impact	0.489**	< 0.01	Moderate Positive
Overall Social Health	*-0.432**	*< 0.01*	*Moderate Negative*
Overall Well-being	**-0.436****	**< 0.01**	**Moderate Negative**

Note: ** Correlation is significant at the 0.01 level (2-tailed).
Correlation Strength Interpretation: |r| = 0.00-0.19: Very Weak; |r| = 0.20-0.39: Weak; |r| = 0.40-0.59: Moderate; |r| = 0.60-0.79: Strong; |r| = 0.80-1.00: Very Strong
Note: Positive correlations indicate that as academic pressure increases, the measure increases. Negative correlations indicate that as academic pressure increases, the measure decreases.

The empirical evidence indicates that participants experience pronounced levels of self-imposed academic pressure, particularly regarding performance anxiety and future career implications. Despite these pressure levels, students generally achieve strong academic outcomes, with a mean GPA of 3.494 and over half of participants (53.27%) attaining GPAs of 3.50 or higher.

Statistical analysis reveals a complex relationship wherein academic pressure demonstrates a weak positive correlation with GPA ($r = 0.327$, $p < 0.01$), suggesting that certain academic pressure may enhance performance outcomes. However, excessive stress—particularly concerning coursework management difficulties and help-seeking avoidance—negatively affects academic success. Furthermore,

academic pressure exhibits a moderate negative correlation with overall well-being ($r = -0.436$, $p < 0.01$), significantly impacting physical health ($r = -0.425$, $p < 0.01$), psychological health ($r = -0.452$, $p < 0.01$), and social functioning ($r = -0.432$, $p < 0.01$).

These findings directly address the academic paradox identified by Jian et al. (2022) and Antonio et al. (2023), wherein self-imposed pressure may enhance performance while simultaneously compromising well-being. They also validate the concerns raised by Lockee (2021) regarding the potentially detrimental effects of increased self-regulatory demands in flexible learning environments. Our study extends the existing literature by empirically demonstrating this paradox within the specific context of HyFlex learning environments, providing nuanced insights into how different dimensions of self-imposed pressure affect performance and well-being outcomes.

The results underscore the fundamental tension between academic achievement and student well-being, highlighting the critical need for balanced academic expectations and comprehensive institutional support systems. Educational institutions should implement evidence-based stress management interventions, promote academic-life balance, and provide accessible mental health resources to help students sustain both academic excellence and holistic well-being, particularly in increasingly flexible educational contexts, as advocated by Barbayannis et al. (2022) and Naidoo (2023).

Conclusion

This investigation provides compelling evidence of an academic paradox within HyFlex learning environments, wherein self-imposed academic pressure simultaneously influences academic performance and well-being in opposing directions. Our findings demonstrate that high-achieving Generation Z university students experience pronounced levels of self-imposed academic pressure (Mdn = 6.0), which exhibits a modest positive association with academic performance ($r = 0.327$, $p < 0.01$) while simultaneously demonstrating a more substantial negative correlation with overall well-being ($r = -0.436$, $p < 0.01$). This bidirectional relationship illuminates the interplay between achievement motivation and psychological health in contemporary educational contexts.

The differential effects of specific pressure dimensions on academic outcomes reveal important nuances in this relationship. Social comparison processes ($r = 0.384$, $p < 0.01$) and future-oriented concerns ($r = 0.342$, $p < 0.01$) appear to function as adaptive motivational mechanisms that enhance performance, while difficulties with coursework management ($r = -0.412$, $p < 0.01$) and help-seeking avoidance ($r = -0.298$, $p < 0.01$) undermine academic success. This pattern suggests that academic pressure operates through distinct psychological pathways that affect achievement outcomes. Concurrently, the consistent negative associations between academic pressure and well-being across physical ($r = -0.425$, $p < 0.01$), psychological ($r = -0.452$, $p < 0.01$), and social domains ($r = -0.432$, $p < 0.01$) underscore the multidimensional impact of stress on student health.

These findings extend previous research by empirically demonstrating the mechanisms through which self-imposed pressure influences performance and well-being within HyFlex learning contexts, addressing the critical gap identified by Barbayannis et al. (2022) and Naidoo (2023). The results confirm that while the autonomy afforded by flexible learning environments may enhance academic achievement for some students, it simultaneously imposes substantial self-regulatory demands that can compromise holistic well-being, particularly when institutional support structures are insufficient.

Recommendations

Based on these empirical findings, we propose the following evidence-based recommendations for educational practice:

1. Implement Psychological Support Structures: Educational institutions should establish comprehensive mental health services to address academic pressure, featuring regular well-being assessments, stress management workshops, and accessible counseling services. These interventions should target the cognitive aspects of academic pressure that demonstrated the strongest negative associations with well-being, particularly

academic confidence ($r = -0.478$, $p < 0.01$) and concentration capabilities ($r = -0.456$, $p < 0.01$).

2. Develop Self-Regulatory Skill Training: Universities should integrate formal time management and self-regulation training into curriculum design, particularly for HyFlex learning contexts. Such training should emphasize adaptive aspects of academic motivation while providing students with concrete strategies to manage coursework demands, demonstrating the strongest negative correlation with academic performance ($r = -0.412$, $p < 0.01$).
3. Foster Structured Social Integration: Given the substantial negative association between academic pressure and social well-being ($r = -0.432$, $p < 0.01$), institutions should implement structured social integration opportunities within HyFlex learning environments. These may include collaborative learning activities, peer mentoring programs, and intentionally designed social spaces that facilitate connection despite the flexible nature of course delivery.
4. Promote Help-Seeking Behaviors: Educational programs should actively destigmatize help-seeking behaviors through faculty modeling, peer support networks, and accessible academic assistance resources. This recommendation addresses the negative correlation between help-seeking hesitation and academic performance ($r = -0.298$, $p < 0.01$) identified in our study.
5. Implement Balanced Assessment Strategies: Faculty should develop assessment approaches that evaluate learning outcomes while minimizing excessive performance pressure. This might include authentic assessment methods, distributed evaluation schedules, and formative feedback mechanisms that support learning without exacerbating academic anxiety.

For future research, we recommend longitudinal studies examining how the relationship between academic pressure and well-being evolves throughout students' academic careers, experimental interventions testing the efficacy of the proposed support strategies, and comparative analyses across different educational modalities to determine whether the observed patterns are unique to HyFlex environments or represent broader trends in higher education.

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