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Subjective well-being, academic self-efficacy, and stress among college library users

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Abstract

This study explored the relationship between subjective well-being, academic self-efficacy, and academic stress among college students, aiming to develop a psychological intervention program. Specifically, it examined students' demographic profiles (e.g., sex, age, major, academic year level, frequency of library visits, and type of university), assessed their levels of subjective well-being, academic self-efficacy, and academic stress, and tested for differences in these variables based on the demographic profile. The study also investigated the correlations between the three variables and proposes an intervention program to promote students' well-being, self-efficacy, and reduce stress. The research employed a quantitative descriptive design, with a sample of 510 college students from three universities in a province in east-central China. The sample was selected using the Raosoft Calculator, ensuring a margin of error of 5% and a 95% confidence level. The results indicate a diverse student population, with Public Health as the dominant academic discipline. Students displayed moderate levels of well-being, self-efficacy, and academic stress. Significant differences were found in academic self-efficacy and stress based on demographic factors such as sex, age, and major, but no significant correlation was identified between subjective well-being, self-efficacy, and academic stress. Based on these findings, a psychological intervention program is proposed to improve students' well-being and academic self-efficacy while mitigating academic stress. The study also recommends strategies for parents, teachers, counselors, and school administrators to support students' academic and emotional development.

Keywords: academic stress, academic self-efficacy, college students, psychological intervention, subjective well-being

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1. Introduction

Recognizing that academic libraries play a crucial role in supporting students' educational endeavors, college life has been full of manifold academic and social experiences for which students are imposed heavy demands on time management, academic performance, and personal development during their college years. Going through several challenges like achieving the required academic levels, managing finances and involving in extracurricular activities is not an infrequent event in the life of students during college days. But more importantly, they have to make use of library resources for academic purposes. Libraries are regarded as the basic sources of information and research materials, which help students achieve their academic goals. However, the way through which these resources in libraries are utilized by college students depends upon their motivation, the weight of assignments carried, and study habits that enable students to make better use of these resources (Li et al., 2023).

Subjective well-being is the total sum of judgments an individual applies to his life satisfaction and affective experiences. To college students, subjective well-being involves happiness, fulfillment, and mental health. The way pressures from balancing responsibilities in academics, social relationships, and personal growth affect students' capabilities to cope with the challenges would influence their well-being. A high level of well-being is very important; it can be a precursor to whether or not a student will be motivated, resilient, and better equipped to succeed in the classroom and beyond (Lei et al., 2021). Subjective well-being takes a vital part in shaping academic self-efficacy, as students who experience greater life satisfaction, happiness, and mental health are more likely to develop confidence in their ability to succeed academically.

A necessary part of a student's approach to an academic challenge, then, is academic self-efficacy-confidence, that is, in one's ability successfully to execute academic tasks. Indeed, it is students with higher levels of academic self-efficacy who tend to set more ambitious goals and not give up when confronted with difficulties-an approach that leads also to better academic outcomes for college students. Thus, it means that students with a low academic self-efficacy face challenges concerning keeping up with the level of academic performance and, indeed, dealing with the intricacies of higher education. Thus, it is only by establishing the factors influencing academic self-efficacy that students would be appropriately supported to achieve their maximum capabilities (Shan et al., 2022). Self-efficacy and academic stress are highly linked in that students' belief systems about their own ability to cope with academic demands determine how they perceive and then respond to such academic stressors. A very high self-efficacy might serve as an antidote that helps the learner to cope effectively with the problems by approaching each challenge with even more resilience and persistence. In contrast, academically stressed students with low self-efficacy would experience heightened stress, that is, being overwhelmed by academic demands, and further affect their motivation and academic performance. On the other hand, the nurturing of self-efficacy reduces the negative outcomes of the effects of academic stress because it equips students to overcome academically related conditions more effectively.

Stress has been one of the natural things in college. Conflicts about academic, financial, and study-social life, for instance, are stressors to students in colleges (Tekir, 2022). With such significant levels of stress, the students' mental and physical health, their academic performance, and generally well-being can be adversely affected. Sources of stress for college students are mainly due to examination, completion of tasks within given due dates, and pressures from themselves and others. This modest stress inspires a student to give his best while severe or chronic stress leads to burnout, anxiety, and depression, which chokes a student's academic and personal life (Luo et al., 2023).

Although there has been a large amount of research conducted in the areas concerned with subjective

well-being, academic self-efficacy, and stress, still not much is known concerning how these elements interlink among college students. Obviously, research into how these three components interact is far from satisfactory, specifically regarding students who use resources in universities, such as libraries. Further research is required in how different types of stressors affect academic self-efficacy and well-being across different populations of students (Qiu et al., 2024).

As such, this study investigated the relationships of subjective well-being, academic self-efficacy, and stress among college students. From the findings, it would allow students to decide how such factors contribute to their success and overall well-being. More profoundly, an understanding of such elements can provide the aim of informing interventions and support systems aimed at improving the quality of the academic experience and the mental health of college students. Deep insights into these elements could provide the purpose of developing an intervention and support systems that are meant to enhance the quality of the academic experience and mental health of college students.

Objectives of the Study - The study aimed to explore the interplay on subjective well-being, academic self-efficacy and stress among college students as basis for the development of psychological intervention program. Specifically, the study intended to describe the profile of the respondents in terms of their sex, age, major, academic year level, frequency of library visit, and type of the university; assessed the level of subjective well-being, determined academic self-efficacy, evaluate college students academic stress; tested differences on college students subjective well-being, academic self-efficacy and stress when grouped according to profile variables; tested the relationship among the three variables of the study; and proposed an intervention program that promoted college students subjective well-being and academic self-efficacy and mitigate the prevalence of stress.

2. Methods

Research Design - The researcher used a quantitative descriptive research design. Quantitative descriptive research is when numerical data is collected for the description of characteristics and to find patterns or even to understand the relationships within a certain population. It enabled the researchers to measure systematically and analyze levels of academic stress and psychological well-being among Chinese university students. This methodology served to be employed by a researcher seeking to provide an overall estimation of these psychological constructs across the study population. Having used standardized questionnaires, aggregating evidence sizable in measurement, the results collected were very representative and generalized to more extensive populations. Quantitative descriptive research was employed in the study examining subjective well-being, academic self-efficacy, and academic stress among college students to systematically describe and quantify the relationships between these variables. This method is particularly suitable for this research as it focuses on measuring the prevalence and characteristics of subjective well-being and academic stress without manipulating any variables, thereby allowing for a clear understanding of how these constructs interact within the student population. Quantitative descriptive research was an appropriate method for investigating subjective well-being, academic self-efficacy, and academic stress among college students due to its ability to provide clear, quantifiable insights into these constructs without manipulating variables. This method not only facilitates a comprehensive understanding of the current state of these issues but also sets the stage for future exploratory studies aimed at addressing them effectively.

Participants of the Study - The respondents were college library users enrolled in three universities in one Province in China located in the east-central part. University A is a prominent public institution specializing in medical education has 15,986 full-time students, university B is a key comprehensive normal university known for its focus on teacher education and various academic disciplines. has 8,999, and lastly University C which is a prestigious public university recognized for its comprehensive academic programs and significant contributions to research and education has 29, 450 with the total population of 54,435. Using the Raosoft Calculator, using 5% margin of error, 95% confidence level, and sample size needed in the study would be at least 382. To

increase the number of respondents, the researcher decided to distribute 525 questionnaires and only 510 were retrieved. Having this done, it reduced the margin of error and increases the likelihood that sample statistics closely approximate the true population parameters. A larger sample increases the ability to detect a true effect or differences and relationships if they exist, reducing the risk Type II errors (falling to reject a false null hypothesis).

The simple random sampling was used in choosing the respondents to ensure that every student in the target population had an equal chance of being selected. This method involved creating a comprehensive list of all eligible students (the sampling frame) and assigning each a unique identifier. Using tools such as random number generators or a lottery method, the researchers randomly selected participants to form the sample. The inclusion criteria of this study for choosing the respondents were as follows: (1) The respondents must be presently registered full-time college students and who must have actively utilized university library services in the last academic year. They should generally range from the age group that constitutes college students although it is possible to allow some older students in such cases where justified. In addition, respondents were required to give informed consent for participation in the study and had adequate proficiency in the survey language to ensure the comprehension and response of participants.

Measures

Subjective Well-Being Scale. This was the standardized tool used in measuring the respondent's self-efficacy. It was authored by Carol D. Ryff, a psychologist, developed the Psychological Well-Being Scale in order to measure six dimensions of psychological well-being and happiness: autonomy, environmental mastery, personal growth, positive relationships with others, purpose in life, and self-acceptance (Ryff et al., 2007; adapted from Ryff, 1989). A recent study published in 2023 utilized the Ryff Scales of Psychological Well-Being to examine the psychological well-being of college students in Tunisia, focusing on differences between male and female students. The significant finding revealed that female students reported higher levels of self-acceptance and positive relationships with others compared to their male counterparts, indicating that gender may influence aspects of psychological well-being. This suggests that interventions aimed at enhancing psychological well-being in educational settings might need to consider gender-specific strategies to effectively support the unique needs of male and female students. The internal consistency of the PWBS has been established by various studies and Cronbach's alpha coefficients reported for the 42-item scale are typically observed to fall between 0.86 to 0.93, thus indicating good reliability.

Academic Self-Efficacy Scale. This was the test used in determining college students' academic self-efficacy**.** It was developed by Gafoor et al. (2006) to measure the academic self-efficacy of students in secondary schools based on Albert Bandura's theory of self-efficacy and cited within the social cognitive theory. In this scale, it is based on the idea that the efficacy a student has across different dimensions of academic work is what brings together his or her overall academic self-efficacy. Some of the selected dimensions comprise the process of learning, reading, understanding, memory, curricular activities, managing time, interpersonal relationship with the teacher, relationships with peers, the use of resources, goal-directed orientation, adjustment, and examination. The scale comprises a total of 40 statements in which there are 20 positive and 20 negative statements. A recent study conducted in 2023 utilized the Academic Self-Efficacy Scale developed by Gafoor et. al., to investigate the relationship between academic self-efficacy and academic performance among college students in India. The significant finding revealed that higher levels of academic self-efficacy were positively correlated with improved academic performance, indicating that students who believe in their capabilities to succeed academically tend to achieve better grades. Test-retest reliability coefficient was found out to be .85 showing high consistency over time.

Academic Stress Scale. This scale was created by Kohn et al. (1986). The Academic Stress Scale (ASS) is a self-report measurement tool created to gauge the level of academic stress amongst the students. Prepared by James P. Kohn and Gregory H. Frazer in 1986, it has 35 items measuring the level of perceived stressfulness

associated with various academic situations. For each of the items, participants used a 5-point Likert scale wherein 1 stands for "not at all stressful" and 5 for "extremely stressful." In conceptualizing the ASS, it considers the transactional model of stress. A recent study conducted in 2024 utilized the Academic Stress Scale developed by Kohn et. al., to assess the levels of academic stress among undergraduate students in Malaysia. The significant finding indicated that high levels of academic stress were associated with increased anxiety and decreased academic performance, highlighting the detrimental effects of stress on students' mental health and educational outcomes. This underscores the importance of implementing effective stress management strategies within academic institutions to help students cope with their stressors, thereby improving both their psychological well-being and academic success (Tan et al., 2021). This measure is widely acknowledged as reliable and valid in measuring academic stress. Strong test-retest reliability showed an observed correlation coefficient of 0.82

Data Gathering Procedure - The researcher sought approvals from the appropriate institutions such as research ethics boards or university review committees. Approval from relevant ethical guidelines ensured the study met these standards. Such permission included authorization from the relevant academic institutions or organizations in which the data were collected. Additionally, the researcher sent letters to the three authors of the adapted instrument. After obtaining approval, participants were educated about the study's objectives, procedures, risks, and benefits through the informed consent process. Moreover, formal permission from the schools involved in the research was insisted. The criteria for selection of participants were determined, and relevant sampling technique was used to ensure that the process was both representative and ethical. Before starting with the actual process, scheduling data collection, preparation of materials, and confirmation of all arrangements made with institutions or participants were vital steps. All required tools were kept in order - online forms, printed surveys. The questionnaires were administered online through Questionnaire Star, and respondents had the opportunity to fill them out at their own convenience. Online distribution helped collect a large and diverse sample within a relatively short period of time. Respondents were given assurance of the confidentiality and anonymity of their responses; this encouraged straightforward and verifiable reporting. After receiving the responses, the researcher performed data screening and cleaning for the presence of incomplete and inconsistent responses to ensure that the data being used in the analysis did not contain any imperfections or inconsistencies.

Data Analysis - The profile of the respondents was described using frequency and percentage distribution. For the subjective well-being, academic self-efficacy, and academic stress of the college student, weighted mean, standard deviation, and rank were used for the assessment. To test differences on college students' subjective well-being, academic self-efficacy and stress when grouped according to profile variables, the study used independent samples t-test and One-Way Analysis of Variance (ANOVA). For profile variables which possessed two categories (sex and type of university), an independent samples t-test was applied between the two groups as well as to compare their mean subjective well-being, mean academic self-efficacy, and mean stress levels. This analysis was applied in evaluating whether there is any meaningful difference between the two categories for each dependent variable. For variables with more than two categories (age, major, academic year level and frequency of library visit), then the one-way ANOVA technique was applied for ascertaining differences among categories of subjective well-being, academic self-efficacy, and stress. If the groups differ significantly, then post-hoc tests like Tukey's HSD can be done to find out which of the groups are different from one another. To determine the relationship between subjective well-being, academic self-efficacy, and stress, Pearson correlation was applied to check the strength and direction of the linear relationship between these variables and provided insights into how closely related the variables are, with values ranging from -1 to +1, indicating the degree and direction of their association. Results of the Shapiro-Wilk Test were used in order to establish whether the data set is normally distributed. All analyses were conducted by using SPSS version 28.

Ethical Considerations - Ethical research was important to safeguard the protection of respondents, the validity of the results, and the integrity of the research. Therefore, if these criteria were met, research is conducted diligently and knowledge promotion is done in a respectful manner towards the welfare and rights of the individuals. Respondents were at liberty to either participate in or not participate in the research without

undue influence or coercion. The research respondents received an informed consent, which included the freedom to ask questions and be given a comprehensive response, the right to withdraw from the study at any time without facing any repercussions, and an honest and understandable description of the purpose, methods, risks, and benefits of the research. Unless specific consent was sought for disclosure, the researcher made all reasonable efforts to minimize the risks to respondent's physical, psychological, and social well-being. They were also protected of their privacy by ensuring that their identities and information would be kept confidential. All data-gathering, analysis, and reporting aspects are taken as a guarantee to upholds integrity and transparency on behalf of the author. A broader societal perspective regarding impact is also included for what the findings will say in how it will influence other groups or communities.

3. Results and discussion

Table 1

Profile Distribution of the Respondents (n=510)

Profile	Frequency (*f*)	Percentage (%)
Sex		
Male	261	51.2
Female	249	48.8
Age		
15-24 years old	135	26.5
25 to 39 years old (middle youth)	229	44.9
40 to 59 years old (later youth)	146	28.6
Major		
Nursing	58	11.4
Pharmacy	79	15.5
Public Health	135	26.5
Biology	99	19.4
Chemistry	77	15.1
Physical Education	36	7.1
Education	26	5.1
Academic Year Level		
First Year	115	22.5
Second Year	104	20.4
Third Year	121	23.7
Fourth Year	96	18.8
Fifth Year	74	14.5
Frequency of Library Visit		
Always	90	17.6
Sometimes	302	59.2
Rarely	118	23.1
Type of University		
Public	264	51.8
Private	246	48.2

Table 1 presents the profile distribution of the respondents in terms of sex, age, major, academic level, frequency of library visit, and type of university. The demographic profile distribution shows that males make up 261 or 51.2% of the population while female comprises 249 or 48.8%. This indicates that male respondents are somewhat more than the females, meaning males are a majority and the females are minority. This depicts that the genders among the respondent are nearly equivalent in distribution. The same results have been noted by Almasri (2022) when male respondents slightly represented the majority as an outcome showing near equality between the gender group.

Majority of the respondents are 25 to 39 years old (middle youth) based on the tabulated data of 229 or 44.9%. This indicates that a substantial portion of the college student population consists of individuals who are older than the typical age range for college students (18–24 years). Many students in this cohort may return to college much later than traditional-age students for personal, professional, or economic reasons. Some of the students are coming back to class to enhance their skills, change careers, or attain advanced qualifications. This

is consistent with recent trends in the demography of higher education. The National Center for Education Statistics defines non-traditional students as those that are 25 years or older. In the fall of 2021, students aged 25 and older made up a large share of undergraduate enrollments, particularly in some institution types. For example, at private for-profit 4-year institutions, full-time undergraduate students aged 25 to 34 comprised 38% of the student enrollment (National Center for Education Statistics, 2021).

The most common major for the respondents are public health majors (135 or 26.5%). This indicates that public health is the most common major among the college students' respondents. Public health has seen considerable growth in the recent past years, with more than 1,000 percent increase in public health majors within the last ten years ((National Center for Education Statistics, 2021). Most of the respondents were third year level (121 or 23.7%). This means that the majority of respondents are in the third year. Consistent with this result, Levitz (2021) reported that in the academic year of 2020-2021, the largest number was at the third-year level. The results of these studies suggested that third-year students who are usually beyond the introductory phase of their college education are transitioning into more specialized coursework within their major. The majority of the respondents visited the library sometimes (302 or 59.2%). That is, most of the respondents visit the library occasionally rather than frequently or rarely. This might indicate a moderate level of usage of the libraries by the respondents. This is in agreement with the study carried out by Anderson et al. (2019) which had indicated that most students visited the library occasionally. Most of the respondents attended a public university, 264 or 51.8%. This means that most of the students who attended public universities form the majority in this study. This is reflected in the fact that registration has gone up generally for nearly the majority of the registered students in public universities; however, there is an extremely high number of regular colleges and universities that are confirmed by the report of the Ministry of Education of the People's Republic of China, (2023).

Table 2

Subjective Well-Being of the Respondents (n = 510)

Sub-Variables	Σ of Scores	Std Dev.	Rank	Verbal Interpretation
Joy of Learning	11.1824	1.72469	4	*Often*
School Connectedness	11.6333	1.69967	1	*Often*
Educational Purpose	11.5314	1.52323	2	*Often*
Academic Efficacy	11.4275	1.70335	3	*Often*
Overall SWBS	45.7745	4.65743		*Often*

Legend: For SW subscale scoring: Almost Never (4 -5); Sometimes (6 – 9), Often (10 – 13); Almost Always (14 -18); For SW Total scoring: Almost Never (16 -23); Sometimes (24 – 39); Often (40 – 55); Almost Always (56 0 64)

Table 2 displays the respondents' assessment of their subjective well-being. Data in table 2 shows often subjective well-being on the part of the respondents according to the overall mean of 45.7745 and standard deviation of 4.65743. It translates that on average, respondents have a well-balanced yet not very high level of subjective well-being in their academic lives. The standard deviation of 4.65743 indicates that there is some variation in the responses, which implies that while most of the respondents share the same level of well-being, individual differences exist within the group. These findings are consistent with the findings of Tan et al. (2021) and Chen et al. (2021) on the subjective well-being of college students, especially regarding academic and environmental stressors. Tan et al. (2021) suggest that resilience has played a critical role in enabling students to cope with academic and social stressors related to the COVID-19 pandemic, implying that students with greater resilience tend to perform better when dealing with such challenges. Chen et al. (2021) noted the effects of COVID-19 on students' mental health and that students are exposed to compounded stressors like academic pressure and public health concerns that demand a strong support system in place.

Among the sub-variables, school connectedness tallied the highest mean score (11.6333) with standard deviation (1.699967). This statement simply means that, of all aspects of subjective well-being rated positively by the respondents, school connectedness was at the top in terms of highest mean score. That is 11.6333. It would then signify a relatively strong feeling of belongingness, support, and connection in school environment

on the part of the respondents. With a standard deviation of 1.699967, there exists some variation regarding how the respondent perceived his school connectedness. However, if considered as a whole, scores are relatively constant within the group. This ranking suggests that promotion of school connectedness can have a significant impact on overall subjective well-being. This corresponds to the perspective of Cai et al. (2022), who reported that peer support and physical activity are highly relevant in fostering subjective well-being. Their research findings highlighted how peer influence and physical activity contribute positively to resilience in helping students deal with academic stress, which is a very critical factor in provinces like Hubei, where the expectation for academic performance is very high.

The positive perception of school connectedness in the current study suggests that promoting peer relationships and a supportive school environment could be key factors in enhancing students' subjective well-being. In addition, Li et al. (2023) discussed the role of self-esteem in cushioning anxiety and enhancing subjective well-being among students who experience academic stress and adversity, such as those from left-behind or pandemic-affected backgrounds. The average school connectedness in this research implies that establishing self-esteem by means of mentoring and community activities can help cushion the adverse impact of academic pressure. According to Li et al. (2023), it is the very practices that create opportunities for building a sense of community and community connection that would assist in reinforcing subjective resilience and well-being in students, for alienation is probably what characterizes much of their environments, like Hubei. The findings would indicate a need for a more integrated approach that also incorporates individual self-esteem and group school belonging into the pursuit of better mental health. Ranking third, academic self-efficacy posted a mean score of 11.4275 with a standard deviation of 1.70335. A ranking in the third place means that though, on the average, the respondents feel that they could go through pretty much anything moderately because they could always succeed in their academics, yet this element of subjective well-being is not that well perceived in as much depth as school connectedness or educational purpose. The standard deviation of 1.70335 reflects a moderate level of variability in respondents' confidence levels, suggesting that perceptions of academic self-efficacy differ somewhat among individuals. This result implies that while academic confidence is present, there may be opportunities to strengthen it further.

On the other hand, the "joy of learning" received the lowest mean score at 11.1824 with a standard deviation of 1.792469. A low mean score for "joy of learning" showed that an average respondent reported lower enjoyment in learning compared to other factors. The standard deviation is 1.792469. It shows the middle degree of variation among participants since though most participants had scored around the mean, others had reported level. The same applies to the research study of Xin et al. (2022), who researched on the decline in the subjective well-being of Chinese college students and associated it with social pressures and shift in the expectations within the society. If this is the reason behind students not having fun in class, then it might be due to social and academic stressors causing a drop in the intrinsic motivation of the students and hence a general reduction in enjoyment in learning. For college students in Hubei, it is essential to understand such pressures so that interventions could be developed that would address the subjective well-being of students and promote a more positive learning environment.

In addition, Deng et al. (2024) described the positive effects of moderate-to-vigorous physical activity on subjective well-being, which they inferred as suggesting that the findings of the study indicate that perhaps adding physical activities to a student's schedule might ease symptoms of subjective aspects. This further gives credence to the idea that finding a balance in academic workloads and physical health activities enhances overall well-being. In the study, low joy of learning calls for interventions that integrate support for academic success with opportunities to engage in some form of exercise and social life, which increases students' enjoyment of learning and builds their resilience against broader societal and academic pressures. Such an approach would be especially relevant in Hubei, where students are experiencing both academic stress and societal pressures.

Table 3 discloses the respondents self-efficacy. The results show that the respondents had moderate self-efficacy since the overall mean score was 121.1686 with a standard deviation of 6.96377. This means that

the average self-efficacy of the respondents is moderate.

Table 3

Academic Self-Efficacy of the Respondents (n=510)

Sub-Variables	Σ of Scores	Std Dev.	Rank	Verbal Interpretation
Learning process	5.7059	1.44845	12	Low
Reading	9.2333	1.79129	4	Low
Comprehension	8.5765	1.72723	6	Low
Memory	6.0647	1.37824	9	Low
Curricular Activities	12.0706	2.24854	3	Moderate
Time Management	5.8000	1.73805	11	Low
Teacher Student relationship	6.4588	1.49040	7	Low
Peer Relationship	5.9059	1.64387	10	Low
Utilization of resources	8.7882	1.93973	5	Low
Goal Orientation	6.0745	1.52592	8	Low
Adjustment	21.0353	2.85448	2	High
Examination	21.6196	2.82711	1	High
OVERALL ASES	121.1686	6.96377		Moderate

Legend: For Overall Academic Self-Efficacy Scale Low self-efficacy: 40–93; Moderate self-efficacy: 94-146; High self-efficacy: 147-200; For Sub-Variable: Low Self-Efficacy (5 -11); Moderate Self-Efficacy (12 -18); High Self-Efficacy (19 -25)

This indicates that the respondents generally have the confidence to be able to tackle problems or tasks, but not exceptionally so. The score represents a balanced belief in their ability-to-be-able neither very high nor low. The standard deviation shows the extent of range about the mean for all respondents. Given that a moderate standard deviation is like 6.96377, this means that many participants have scores quite close to the mean but varies at the same time. This indicates that some respondents possess much higher and lower self-efficacy levels than the mean. It supports the conclusion reached by Barsha et al. (2023) on how AI has the potential to transform the creation of individualized adaptive learning environments like libraries into places that can better aid the students in their academic self-efficacy. This implies that the learning environment should become responsive to changing students' needs in a way that the services it offers are tailor-made, increasing both efficiency and access. That is what was found in this study: moderate self-efficacy. Students need personalized and adaptive academic environments, and students will gain confidence in the execution of their academic tasks when libraries and other learning spaces integrate technologies that personalize academic support. Technology does seem to make it easier for them to have lessor feelings of inadequacy and greater confidence in overcoming such feelings. In a similar vein, Shukur et al. (2023) emphasized the role of collaborative learning spaces in university libraries, including group study rooms, to enhance peer-to-peer learning and reduce study-related stress. It is found that students who have access to flexible, collaborative spaces tend to feel more supported and engaged in their learning. This is consistent with the moderate self-efficacy observed in the study, as students may find that such environments reduce stress, foster collaboration, and help them feel more capable of handling academic challenges. By providing students with spaces that encourage joint learning and reduce academic pressure, universities can further support students' self-efficacy.

Among the sub-variables of academic self-efficacy, examination achieved the highest mean score of 21.6196 with a standard deviation of 2.82711. High mean scores in examination could indicate that the students mostly consider it a task that they could carry out fairly well, probably through better preparation strategies or even better study habits. The score variation shows that though many students are confident of their ability to do well in exams, others may have a higher or lower level of self-efficacy. This is an area for targeted interventions, such as academic support or test-taking strategies, to boost the confidence of students who may feel less self-assured. These findings can be related to the studies by Amarasekara et al. (2020) and Parsons et al. (2022), which talk about how students' perceptions of their learning environment influence their academic self-efficacy and confidence in academic tasks. Amarasekara et al. (2020) established that students' perceptions of the library environment, such as organization, cleanliness, and availability of resources, impact their academic self-efficacy. The high mean score for examination indicates that the students are probably confident in dealing with exams, which may be associated with the conducive learning environments developed by the well-organized libraries.

Libraries which develop a feeling of warmth and belongingness among students and offer easy access to resources probably develop the confidence level of students and contribute to this high self-efficacy score. Such resources could include an intervention that enhances the students' confidence at a time of lower self-efficacy levels. Similarly, Parsons et al. (2022) note that non-traditional forms of media and resources, for example, sound recordings of biology, enhance creative thinking and increases self-confidence to perform academic activities. By expanding the scope of available academic tools, libraries can help students develop more confidence in their abilities to approach academic challenges, including exams. The ability to engage with a variety of resources and adopt creative approaches to learning may increase students' self-efficacy in handling academic tasks like examinations. This relates to the high levels of confidence expressed in the research about exams since students who believe they are well supported by varied resources are more likely to believe they will be able to pass exams.

Respondents' self-efficacy in terms of adjustment (Mean=21.0353, SD=2.85448, Rank 2), curricular activities (Mean=12.0706, SD=2.24854, Rank 3), reading (Mean=9.2333, SD=1.79129, Rank 4), utilization of resources (Mean=8.7882, SD=1.93973, Rank 5), comprehension (Mean=8.5765, SD=1.72723, Rank 6), teacher student relationship (Mean=6.4588, SD=1.49040, Rank 7), goal orientation (Mean=6.0745, SD=1.52592, Rank 8), memory (Mean=6.0647, SD=1.37824, Rank 9), peer relationship (Mean=5.9059, SD=1.64387, Rank 10), and time management (Mean=5.8000, SD=1.73805, Rank 11).

However, the mean value of self-efficacy pertaining to the learning process was the lowest at 5.7059 with a standard deviation of 1.44845. Students have perceived that managing the learning process, like how to plan for studying, what is learned, or the handling of academic work, is relatively low. This may indicate that there are problems with specific parts of the learning process that students go through that reflects on their actual academic performance generally. A standard deviation of 1.44845 signifies a moderate degree of variation. Even though most students are close to the mean score regarding confidence in handling the learning process, some might feel more or less confident. This variation means that the perception of self-efficacy in the learning process is not uniform and may be based on individual factors such as study habits, time management, and learning strategies. The results can also be connected with Meng et al. (2021) and Yi (2020), stating that libraries are of utmost significance for students with regards to students' academic self-efficacy, especially amid the post-pandemic situation. According to their studies, health information services change with the emerging requirements of students post-COVID-19, resulting in a larger demand for well-being and mental health resources. They concluded that the self-efficacy of the students in academic performance depends not only on academic challenges but also personal challenges, like mental health issues. Yi (2020) talked about the increased regional cooperation of university libraries within China and underlined that resource sharing can boost academic self-efficacy, since it facilitates students' access to more material, including support materials. This may allow the creation of an environment in which students feel more supported in their learning process. That is, the low mean score of this variable indicated that students may not feel entirely confident in handling tasks independently and could increase collaboration and resource distribution to increase the self-efficacy score in the learning process.

Table 4

Academic Stress of the Respondents (N= 510)

Sub-Scales	Σ of Scores	Std Dev.	Rank	Verbal Interpretation
A. Relating to Other People	19.0863	3.29976	4	Low
B. Personal Factors	28.7000	6.48969	1	Moderate
C. Academic Factors	27.8902	5.91091	2	Moderate
D. Environmental Factors	21.0765	7.87126	3	Low
OVERALL AS	96.7529	11.67174		Moderate

Legend: Score Range Stress Level; Lower third (e.g., 40–93) Low academic stress; Middle third (e.g., 94–146) Moderate academic stress; Upper third (e.g., 147–200) High academic stress. For sub-scales: Low Stress (10 -23); Moderate Stress (24 -37); and High Stress (38 – 50)

Table 4 shows the respondents level of academic stress. Based on the over mean of 96.7529 and standard

deviation of 11.67174, it can be noted that respondents experienced moderate academic stress. This means that, on average, students report experiencing a balanced level of stress—not excessively high or low. A moderate score means that most of the students are likely under academic pressure; however, most may not experience such pressures significantly. The standard deviation of 11.67174 indicates that there is a moderate degree of variation in how individual students experience academic stress. While many respondents' stress levels are close to the mean, some may experience much higher or lower levels of stress. This variation reflects the fact that individual factors—such as personal coping mechanisms, workload, and support systems—play a significant role in students' academic stress levels. This finding is consistent with literature that underscores the interplay of academic stress with other variables, including physical activity, sleep, and mental health. Zhu et al. (2021) reported that intensified academic requirements, which possibly contributed to the moderate levels of stress recorded in this study, can reduce the quality of physical activity and sleep and thus worsen the mental health problems. This finding supports the idea that while academic stress may not be overwhelming for all students, it still impacts other areas of life, leading to a balanced but significant level of stress. With moderate variation in stress levels as indicated by the standard deviation, the study underlines the importance of holistic interventions, such as promoting physical activity and ensuring adequate sleep, to mitigate academic stress. Furthermore, emotional intelligence has been seen to play a very important role in buffering academic stress, especially among students experiencing acculturative stress (Gebregergis et al., 2020). This is particularly relevant for international students in Hubei, who may experience heightened academic pressures due to cultural adaptation challenges. Hence, enhancement of emotional intelligence could be the best approach towards dealing with academic stress by having students better respond to emotional demands of stressors and increase ability to cope up with academic tasks. This matches with the thinking of providing supportive environment which creates emotional well-being along with achieving academic success in the eyes of moderate levels of academic stress encountered in the research study.

Among the sub-scales of academic stress, personal factors ranked first and obtained the highest mean score of 28.7000 with standard deviation of 6.48969. The result showing that personal factors ranked first among the sub-scales of academic stress, with a mean score of 28.7000 and a standard deviation of 6.48969, suggests that students perceive personal aspects of their lives (such as family issues, financial concerns, or personal health) as the most significant contributors to their academic stress. The high mean score indicates that, on average, students report considerable stress from personal factors, which likely affect their ability to focus on academics and handle academic demands effectively. The standard deviation of 6.48969 indicates that there is a moderate level of variation in how students experience personal stress. Other than this, other students report at similar levels from personal factors while others experience greater or lesser amounts of stress that are influenced by the personal situations such as a student's personal background, social support systems, and coping mechanism. This therefore differs, in that some students have effective ways of controlling their personal challenges and others may be more affected than others. The findings are also similar to some related studies like Zhu et al. (2021), whose results indicated personal and social factors to be greatly influencing academic stress. They, in their work, pointed out that increased pressure from academics interacts with physical health and mental well-being, and for interventions to become effective, addressing personal factors on top of academics would be indispensable. The importance of care for psychological well-being and personal issues support could also serve to counterbalance the academic stress of the personal challenges.

Academic factors follow (Mean=27.8902, SD=5.91091). The outcome that academic factors ranked second with a mean score of 27.8902 and a standard deviation of 5.91091 indicates that academic-related challenges, such as heavy workloads, deadlines, exams, or academic expectations, also contribute significantly to students' stress levels. The mean score, therefore, gives an indication of the students experiencing moderately to a high level of academic task-related stress. Moderation in this case is exemplified by a standard deviation of 5.91091 for the variation shown in the students' perception and experience of academic stress. Most students have reported the same level of stress regarding academic tasks, but other students are significantly more or less stressed than others due to their own personal circumstances, such as coping strategies, time management skills,

or academic preparedness. This outcome concurs with the previous studies, such as Zhu et al. (2021), which was an explanation for how academic stress impacts the students' mental well-being. Being that academic-related factors are among the most crucial sources of pressure, educational centers can intervene through time management methods, academic advice, or supplying resources for reducing stress. Gebregergis et al. (2020) also suggest other holistic well-being practices that would help students overcome academic stress while maintaining their emotional and mental well-being.

Ranked third is environmental factors (Mean=21.0765, SD=7.87126). The result revealing that environmental factors ranked third with a mean score of 21.0765 and a standard deviation of 7.87126 implies that external factors including the study environment, campus conditions, and social atmosphere also do play a prominent role in causing academic stress to students. The mean score represents that environment does not hold the position of being a moderate source of stress, thus not being a major source of stress but contributing to the overall level of stress of students. Standard Deviation 7.87126 Meaning that students are having a greater degree of variation of thought about environmental factors being sources of stress for them. Some students might experience these factors more strongly, particularly if they feel that their environment (e.g., noise, lack of resources, or uncomfortable study spaces) is not conducive to their academic success, while others may be less affected by their surroundings. It can be related with Zhu et al. (2021), as they have shown the importance of physical and emotional environments in molding the well-being of students. It is aligned with Shukur et al. (2023), discussing how the availability of collaborative learning spaces, the study environment from the perspective of students, has an influence on their academic self-efficacy and overall levels of stress. Hence, the improvement of the physical and social environment might reduce the stress caused by the environmental factors by improving campus facilities, quiet collaborative study spaces, and supportive social atmospheres.

Meanwhile, academic stress in terms of relating to other people registered the lowest mean score (19.0863) with standard deviation of 3.29976. The result that academic stress related to other people registered the lowest mean score of 19.0863 with a standard deviation of 3.29976 suggests that, on average, students perceive relatively low levels of stress associated with interpersonal relationships, such as those with peers, instructors, or family members. This finding indicates that social factors, including relationships and interactions with others, do not appear to be a major source of stress for most students. The standard deviation of 3.29976 indicates that there is relatively low variation in how students perceive stress related to interpersonal relationships. This suggests that the majority of students share similar levels of stress regarding others, with fewer students reporting significantly higher or lower levels of stress in this regard. It implies that social support networks, communication, or the general social atmosphere in academic settings may be functioning well for most students. This is in agreement with the conclusion drawn by Yi (2020) that a cooperation and sharing of resources by the students was also needed. Such an encouraging environment can facilitate an even-balanced academic experience which would help decrease the probability of interpersonal stress. Moreover, decreased academic stress by others is related to the fact that students would feel relatively secure in their social relationship with peers or faculty, which serves to support their academic well-being. Conversely, there are contrasts such as the study by Liu et al. (2022), which came to examine the psychological status of Wuhan local college students during the COVID-19 pandemic. Their study established the fact that a pandemic worsened pre-existing factors of academic distress, resulting in increased symptoms for anxiety and depression. Therefore, academic stress triggered by other persons could have had an impact following the outbreak since students faced significant levels of isolation or uncertainty associated with the interaction, which resulted in magnification of interpersonal pressure.

Table 5 displays the differences of responses on subjective well-being when grouped according to profile. It indicates that there are no significant differences in the Social Well-Being Scale (SWBS) factors—such as joy of learning, school connectedness, educational purpose, academic efficacy, and overall SWBS—when grouped according to profile variables like sex, age, major, academic year level, and frequency of library visits. These results imply that the demographic as well as the behavioral characteristics do not appear to come forward to become even a dominant factor in influencing students' social well-being or perceptions of academic and social

experience. It is also supported by Shukur et al. (2023), which indicated that, for students, collaboration and space use, such as in the library, did not have a significant effect on the academic success of students as hypothesized, thus indicating complexities beyond the superficial differences among students along demographic lines.

Table 5

Differences of Responses on Subjective Well-being when grouped according to Profile

Profile Variables/ SWBS	*t/F*	*p-Value*	Interpretation
Sex			
Joy of Learning	0.242	0.623	Not Significant
School Connectedness	0.008	0.930	Not Significant
Educational Purpose	0.010	0.922	Not Significant
Academic Efficacy	0.080	0.778	Not Significant
Overall SWBS	0.006	0.937	Not Significant
Age			
Joy of Learning	0.555	0.574	Not Significant
School Connectedness	2.892	0.056	Not Significant
Educational Purpose	0.417	0.660	Not Significant
Academic Efficacy	0.805	0.447	Not Significant
Overall SWBS	1.201	0.302	Not Significant
Major			
Joy of Learning	1.535	0.165	Not Significant
School Connectedness	0.389	0.886	Not Significant
Educational Purpose	1.382	0.220	Not Significant
Academic Efficacy	1.485	0.181	Not Significant
Overall SWBS	0.795	0.574	Not Significant
Academic Year Level			
Joy of Learning	0.335	0.855	Not Significant
School Connectedness	0.919	0.453	Not Significant
Educational Purpose	1.125	0.344	Not Significant
Academic Efficacy	0.172	0.953	Not Significant
Overall SWBS	0.579	0.678	Not Significant
Frequency Of Library Visit			
Joy of Learning	1.520	0.220	Not Significant
School Connectedness	0.527	0.591	Not Significant
Educational Purpose	1.090	0.337	Not Significant
Academic Efficacy	1.200	0.302	Not Significant
Overall SWBS	1.252	0.287	Not Significant
Type of University			
Joy of Learning	0.045	0.832	Not Significant
School Connectedness	0.900	0.343	Not Significant
Educational Purpose	0.836	0.361	Not Significant
Academic Efficacy	0.000	0.994	Not Significant
Overall SWBS	0.015	0.902	Not Significant

Similarly, Barsha et al. (2023) noted the role of library environments in fostering academic self-efficacy, but their review also suggested that other non-demographic factors—such as technology integration and personalized learning—may be more influential in determining students' educational experiences and well-being. Therefore, the lack of significant differences in SWBS scores across profile variables may indicate that perhaps a holistic focus on both the academic environment and individual support systems is more effective than targeting an individual demographic characteristic.

Table 6 discloses the differences of responses on academic self-efficacy when grouped according to profile. It presents other significant differences in the ASES grouped into profile variables. Sex is significantly different for the profile (p=0.049). It implies that there could be a gender influence on what students perceive their peer relationships to be. Regarding age, significant differences are found in teacher-student relationships (p=0.006), adjustment (p=0.003), and examination (p=0.012), suggesting that older students may have different experiences with academic stressors related to relationships with instructors, adjustment to academic demands, and exam preparation. This further indicates major differences, especially in the learning process (p=0.007), utilization of

resources (p=0.002), and examination (p=0.000), with the implication that students across disciplines may experience their academic situations, utilize their resources, and face examination pressures differently. For academic year level, significant differences are observed in reading (p=0.002), teacher-student relationship (p=0.017), adjustment (p=0.004), and examination (p=0.002), indicating that students' academic experiences, including their relationships with faculty and ability to adjust to academic life, may change across academic years. Frequency of library visit significantly differs in memory (p=0.006), utilization of resources (p=0.000), goal orientation (p=0.000), and overall ASE (p=0.003), indicating that frequent visits to the library have a positive effect on students' academic efficacy in terms of memory, resource usage, and goal setting.

Table 6

Differences of Responses on Academic Self-Efficacy when grouped according to Profile

Profile Variables/ ASES	*t/F*	*p-Value*	Interpretation
Sex			
Peer Relationship	3.905	0.049	Significant
Age			
Teacher Student relationship	5.119	0.006	Significant
Adjustment	5.768	0.003	Significant
Examination	4.437	0.012	Significant
Major			
Learning process	2.964	0.007	Significant
Utilization of resources	3.574	0.002	Significant
Examination	4.956	0.000	Significant
OVERALL ASE	2.994	0.007	Significant
Academic Year Level			
Reading	4.327	0.002	Significant
Teacher Student relationship	3.026	0.017	Significant
Adjustment	3.938	0.004	Significant
Examination	4.259	0.002	Significant
Frequency of Library Visit			
Memory	5.168	0.006	Significant
Utilization of resources	9.298	0.000	Significant
Goal Orientation	9.080	0.000	Significant
Type of University			
Comprehension	4.279	0.039	Significant
Utilization of resources	5.717	0.017	Significant
Adjustment	4.137	0.042	Significant

These findings reflect how different factors, including gender, age, major, academic year level, and library usage, contribute to students' self-perception of their academic abilities, confirming the multifaceted nature of academic self-efficacy as a determinant of student success. Such results coincide with two studies. Zhu et al. (2020) investigated how teacher-student relationships and adjustment challenges affected students' academic efficacy in the context of online learning during the COVID-19 pandemic. Their findings indicated that students who had a good relationship with instructors and appropriate strategies for adjustment had higher academic self-efficacy. This is in line with the strong differences found for teacher-student relationships (p=0.006) and adjustment (p=0.003) in the current data, especially for students of different age groups and academic year levels. It suggests that the ability to adapt to academic challenges and connect with teachers is crucial for enhancing self-efficacy in diverse learning environments. The research indicated that those students who actively engaged with campus resources, like libraries, reported higher levels of self-efficacy in terms of managing their academic tasks and achieving their goals. This comes out in marked differences in utilization of available resources (p=0.000), and goal orientations (p=0.000) according to the study. The use of available resources for academic use is therefore shown to be pertinent in enhancing efficacy and goal orienting behaviors for students who keep visiting the libraries.

Table 7 reflects the differences of responses on academic stress when grouped according to profile. Results indicate several significant differences in the Academic Stress (AS) responses when grouped according to profile variables, specifically in the areas of academic, personal, and interpersonal factors. The most distinguishing

significant difference shows up in academics for profile variable differences, among which are found to be those of sex: p = 0.000, age: p = 0.042, and major: p = 0.019.

Table 7

Differences of Responses on Academic Stress when grouped according to Profile

Profile Variables/ AS	*t/F*	*p-Value*	Interpretation
Sex			
Academic Factors	13.978	0.000	Significant
Age			
Relating to Other People	3.822	0.023	Significant
Personal Factors	3.968	0.019	Significant
Academic Factors	3.178	0.042	Significant
Major			
Academic Factors	2.555	0.019	Significant
Frequency Of Library Visit			
Relating to Other People	3.940	0.020	Significant
Type Of University			
Relating to Other People	4.057	0.045	Significant

All these indicate an academic stress coming from expectations and workload and high performance as very important sources. For example, in responding to academic pressure, there could be a variation of responses that would relate to the student's sex, age, and field of study since these point out the difference in the nature of academic demands, the level of stress from a specific major field, and individual coping. Relating to other people, differences were significant in all those variables: grouped by age, p = 0.023; frequency of library visit, p = 0.020; and type of university, p = 0.045. The overall findings are in line with other research suggesting interpersonal factors like those of peers, instructors, or family members impact how students might experience academic stress, depending upon the different ages or environments they belong to. Such students would usually have less interpersonal stress because of an established social network or greater communication skills, which is often gained by older students or those that regularly visit the library. Likewise, students in other forms of universities may also differ in expectations about interacting with others, which may impact their stress levels in this area. There were significant differences in personal factors between the two groups for age, p = 0.019, indicating that students' personal characteristics and self-perceptions, such as time management or self-efficacy, contribute to how they experience academic stress. This outcome highlights the importance of personal attributes in mediating stress, as shown by Chen et al. (2021), who argued that age-related maturity and personal coping strategies affect the way students manage academic pressure.

Table 8

Correlation Matrix of Subjective Well-Being, Academic Self-Efficacy and Stress Among College Students

		OVERALL ASE	**OVERALL AS**
Overall SWB	Pearson Correlation	0.044	0.036
	Sig. (2-tailed)	0.326	0.417
	Interpretation	Not Significant	Not Significant
OVERALL ASE	Pearson Correlation		-0.024
	Sig. (2-tailed)		0.586
	Interpretation		Not Significant

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Table 8 reflects the Subjective Well-being, Academic Self-Efficacy, and Stress Correlation Matrix for College Students. The Pearson correlation coefficient of overall SWB and overall ASE is 0.044. The value for the significance level is 0.326. This implies that there is no significant correlation between the subjective well-being of the students and their academic self-efficacy. Intuitively speaking, there would be a sense that how well students feel regarding their well-being would be intuitively related to their academic confidence. However, this result tells us that this is not an especially strong relation in the sample. This result contradicts with the study by Alkhatib (2020) which found a positive relationship between subjective well-being and self-efficacy,

indicating that students with higher well-being levels tended to have a greater self-efficacy belief.

The Pearson correlation between overall SWB and overall AS is 0.036 with a p-value of 0.417. Similar to the previous finding, this indicates that there is no significant relationship between subjective well-being and academic stress. This result suggests that students' overall happiness or life satisfaction does not necessarily correlate with the level of academic stress they experience. Stated result refutes the study by Kaya et al. (2021) which indicated a positive relationship between students' well-being and academic achievement, suggesting that higher levels of well-being are associated with better academic performance.

Pearson Correlation overall ASE and overall AS is - 0.024, while Significance P of 0.586 reflects almost a negligible-negative relationship in both academic self- efficacy and the academic stresses is not found. The sign says that an effective academic self-efficacy may go poorly with poor level of Academic Stresses with minimum strength. Moreover, this suggests that students' confidence in their academic abilities does not significantly correlate with the level of academic stress they experience. This is further affirmed by Liu et al. (2024) which found that stress was negatively correlated with academic self-efficacy, with heightened stress significantly predicting lower levels of academic self-efficacy over time. However, greater academic self-efficacy did not significantly predict lower stress. This suggests a unidirectional negative relationship from stress to academic self-efficacy.

Table 9

Proposed Intervention Program on College Students' Subjective Well-Being, Academic Self -Efficacy and Academic Stress

Key Results Area Objectives	Strategies	Person/s Involved Time Frame	Success Indicators
Subjective Well-Being (Often) Enhance students' overall joy of learning and satisfaction with academic life.	1. **Mindfulness Training**: Introduce mindfulness and stress-relief techniques to help students focus on present learning experiences. 2. **Peer Support Groups**: Create peer study groups to encourage social connection and emotional support in the academic environment.	Faculty, counselors, peer mentors Semester-long	• Increased student participation in mindfulness activities such as meditation sessions, breathing exercises, and yoga. • Improved focus and classroom engagement as observed by faculty. • Enhanced self-awareness and emotional regulation, leading to better academic performance. • Positive feedback from students on the effectiveness of mindfulness techniques in managing academic stress. • Higher student participation in study groups and peer mentoring sessions. • Improved academic performance and confidence in handling coursework, as measured by grades and self-assessments. • Increased reports of emotional support and social connectedness in student surveys.
Moderate Level of Academic Self-Efficacy Improve students' confidence in their academic abilities and learning processes.	1. **Mentorship Programs**: Pair students with academic mentors to guide them in goal setting and overcoming academic challenges. 2. **Goal-Oriented Task Setting**: Encourage students to set small, achievable academic goals to build their self-efficacy and motivation over time.	Faculty, academic advisors, mentors 6-8 weeks	• Improved self-reported academic confidence. • Positive feedback from mentorship program participants.
Moderate of Level of Academic Stress Reduce academic stress related to personal factors such as time management, self-esteem, and	1. **Stress Management Workshops**: Provide workshops on coping strategies for academic stress, including time management and relaxation techniques. 2. **Personal Counseling Services**: Offer one-on-one counseling sessions for students struggling with self-esteem 3. **Student**	Counselors, wellness staff, faculty Ongoing (monthly sessions)	• Decreased reported stress levels in follow-up surveys. • Increased utilization of counseling services. • Positive changes in self-reported stress and anxiety levels.

motivation.	**Awareness Campaigns**: Launch awareness campaigns about stress, its effects, and practical stress-reduction strategies.

The proposed intervention program intends to address subjective well-being among college students, academic self-efficacy, and academic stress through a multi-faceted approach that affects both the cognitive and emotional spheres of student life. Below are the objectives, strategies, and success indicators for each key result area. To enhance students' overall joy of learning and academic satisfaction, mindfulness training can be implemented as a structured intervention to improve subjective well-being. This strategy focuses on introducing mindfulness and stress-relief techniques that help students remain present in their learning experiences, reducing anxiety and fostering a positive academic mindset. It engages faculty members, school counselors, and peer mentors in leading this initiative to ensure that students have access to guided mindfulness practice. The activities for the program are semester-long mediation sessions, breathing exercises, and yoga, with the goal of improving the emotional regulation and stress management of students. These activities promote self-awareness and focus in students, enabling them to tackle academic challenges better. Therefore, success measures include increased participation by students in mindfulness activities, enhanced classroom involvement according to reports from faculty members, and a higher academic achievement rate because of better emotional control. Also, the students' appreciation of how mindfulness practices may help in lessening academic stress will be an indication of how effective the program is, and thus vindicating the importance of implementing such a support system in terms of creating an effective and harmonious learning process.

Peer support groups should also be allowed to create as much social support and emotional enhancement as possible. This strategy calls for the initiation of study groups among students; they will use these groups as a platform on which to jointly work on assigned coursework, relate their academic woes, and thus provide mutual reinforcement, thereby strengthening a sense of belonging that facilitates better well-being. Faculty members, counselors, and peer mentors will lead these groups to ensure that there is real interaction and structured support. The program takes the form of a semester-long program that, among other things, provides the students with mentorship, collaborative learning, and an emotional network. A student who participates in any such activity will most likely, in relation to grades and self-appraisal results, show an improvement. The measurement of the students' success also includes higher scores in study group and peer mentorship participation with increased reports by students on feelings of emotional support and social interconnectedness in class surveys. Regular group interactions will also enhance the communication and collaboration skills that will make the academic experience positive and interesting. The initiative is to ensure that there is a supportive academic and social network among the students in order to improve retention and reduce the feeling of isolation. The peer support groups will offer the academic and interpersonal relationships among the students who are strong in nature, thereby making them fit for the process overall in the education setup.

Targeted interventions like a mentorship program and setting goals for learning can enhance the confidence of the student in his or her academic abilities and learning. A mentorship program is designed with the goal to assign a student an academic mentor, such as a faculty member, an academic advisor, or even an experienced peer, who will assist the student in setting goals, strategies for studying, and overcoming academic challenges. Such a personalized support system motivates, enhances students' problem-solving skills, and elicits improvement in a growth mindset. This helps students organize their academic burden into smaller bits of work in a goal-oriented task setting by reinforcing a feeling of accomplishment that gradually builds a sense of efficacy. Students acquire confidence in and maintain motivation because they set reachable goals and see incremental progress throughout their academic work. These will be executed for a period of 6–8 weeks, which would give enough time for the students to experience observable improvements in their self-perception and academic performance.

The success of these strategies will be evaluated through self-reported academic confidence levels, positive feedback from mentorship participants, and observed improvements in students' ability to manage academic

tasks effectively. By integrating mentorship and structured goal-setting activities, students will be better equipped to navigate their academic responsibilities with greater confidence and resilience. To reduce the level of academic stress related to personal factors, including time management, self-esteem, and motivation, a combination of stress management workshops, personal counseling services, and student awareness campaigns can be provided. Monthly stress management workshops will be held in order to offer students hands-on coping skills in the form of time management, relaxation, and mindfulness, thus helping them manage academic demands more effectively. These counseling workshops will be offered by counselors, the wellness staff, and some faculty members who can give professional guidance on how to overcome academic pressure. Personal counseling services will also be provided to all students who may face difficulties and challenges in low self-esteem or lack motivation in learning; these students will have one-to-one support in resolving the problems they face. These will guide them individually on their personal approaches toward the management of academic pressure while boosting their confidence and building resilience. There will be student awareness campaigns to make students aware of the impact of academic stress and how it can be practically managed. This can be done through social media posts, posters, and interactive events that encourage students to take care of their mental well-being. Success of these programs will be assessed by a reduction in the reported stress levels through follow-up surveys, increased utilization of counseling services, and positive changes in students' self-reported stress and anxiety levels. By integrating these approaches into the school's existing wellness programs, students are likely to be better able to face academic stress and maintain more balanced, healthy approaches to their academic work.

4. Conclusions and recommendations

The demographic profile analysis reveals a diverse distribution across age, academic major, and university type. Public Health emerged as the most represented academic discipline, with a higher proportion of third-year students attending public universities, and a notable variance in library visit frequency among respondents. College students revealed often manifestation of subjective well-being, moderate self-efficacy and academic stress which highlights the critical role of academic libraries in supporting student well-being There is no significant difference in subjective well-being among college students based on their profile. However, significant differences in academic self-efficacy and academic stress were observed across various profile variables, including sex, age, major, academic year level, library visit frequency, and type of university. These differences were particularly notable in areas like peer relationships, teacher-student relationships, and academic factors. There is no significant correlation between subjective well-being, academic self-efficacy, and academic stress among college students. A psychological intervention program that promotes college students' well-being and academic self-efficacy and mitigates academic stress is proposed.

College students may benefit from engaging in resources that foster greater self-efficacy and well-being, such as peer support groups and stress management workshops. School community may implement mental health and well programs to support students' subjective well-being, self-efficacy and reduce academic stress. School library may provide academic supports services, such as tutoring sessions assistance, and workshops on effective study habits to enhance subjective well-being, self-efficacy and reduce academic stress. Parents may create a positive, nurturing home environment that encourages open communication, emotional validation, and the development of healthy coping strategies. Additionally, they may actively engage in their children's academic journey and fostering a growth mindset which may enhance academic self-efficacy while helping to manage academic stress. Teachers may enhance students' subjective well-being by creating an inclusive, supportive classroom environment where students feel valued and encouraged to express themselves. By incorporating active learning strategies and providing consistent, constructive feedback, teachers may build students' academic self-efficacy and reduce academic stress through a sense of achievement and mastery. Guidance counselors may improve students' subjective well-being by offering individualized support that focuses on emotional resilience, stress management, and fostering a positive self-image. By helping students set realistic academic goals and providing coping strategies for stress, counselors may enhance students' academic self-efficacy and reduce

feelings of overwhelm. School administrators in coordination with the school's Librarian may consider incorporating targeted programs to address the differences in academic self-efficacy and stress among students based on their profiles by providing conducive study environments, access to resources, and wellness initiatives that promote mental health and reduce stress. Future researchers may explore the relationship between demographic factors and academic outcomes in different educational contexts. The implementation of the proposed intervention program may help improve students' overall well-being and academic performance..

5. References

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