

Academic Resilience among High-Performing Students in Higher Education: Evidence from a Philippine State University

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ABSTRACT

Academic resilience is recognized as a key determinant of student success in higher education, enabling learners to maintain academic performance despite educational challenges. Guided by contemporary resilience theory, this study examined the demographic and educational characteristics of high-performing first-year university students, determined their level of academic resilience, and investigated the extent to which selected characteristics predicted resilience. A quantitative descriptive design was employed involving 102 purposively selected high-performing students, operationally defined as those with a General Weighted Average (GWA) of 1.75–1.00(highest), at the University of Science and Technology of Southern Philippines. Data were collected using a structured questionnaire incorporating a 10-item Academic Resilience Scale (Cronbach's $\alpha = .91$) and analyzed using descriptive statistics and multiple linear regression. The respondents demonstrated a high level of academic resilience ($M = 3.71$). However, age, school origin, Senior High School program, perceived economic status, and parents' educational background did not significantly predict academic resilience ($F = 0.289$, $p = .918$, $R^2 = .015$). These findings suggest that resilience among high-performing students is relatively consistent across demographic groups and may be more strongly influenced by psychological resources and supportive educational environments than by demographic characteristics alone. The study contributes context-specific evidence to academic resilience research in Philippine higher education and highlights the importance of strengthening institutional interventions that promote self-regulated learning, academic self-efficacy, growth mindset, and adaptive coping strategies.

Keywords: Academic Resilience; High-Performing Students; Higher Education; Demographic Characteristics; Philippines

INTRODUCTION

Academic resilience has emerged as one of the most important psychological and educational constructs associated with student success in higher education. It refers to the capacity of learners to sustain or improve their academic performance, engagement, and psychological well-being despite experiencing academic setbacks, personal adversities, or environmental stressors. Unlike general resilience, academic resilience specifically reflects students' ability to adapt positively to educational challenges through effective coping strategies, perseverance, self-regulation, and the utilization of available learning resources. Recent evidence suggests that academically resilient students are more capable of maintaining high levels of achievement while effectively managing increasing academic demands, making resilience a critical determinant of success in higher education (Wiguna et al., 2024; Cai & Meng, 2025).

The increasing complexity of higher education has intensified the academic, emotional, and social demands placed upon university students. Rapid technological advancement, globalization, flexible learning modalities, and heightened expectations for academic excellence require students not only to possess cognitive competence but also psychological adaptability. Even high-achieving students, who are often perceived as academically

advantaged, experience considerable pressure arising from maintaining excellent academic standing, balancing multiple responsibilities, meeting scholarship requirements, and preparing for future professional careers. These cumulative demands expose students to stress, anxiety, and academic burnout, highlighting the importance of resilience as a protective factor that enables sustained academic success (Martin & Marsh, 2006; OECD, 2021; Cai & Meng, 2025).

Contemporary scholarship conceptualizes academic resilience as a dynamic and multidimensional process shaped by the interaction of individual psychological resources and contextual environmental influences rather than by demographic characteristics alone. This study is primarily anchored in Resilience Theory, which views resilience as the capacity for positive adaptation despite adversity and emphasizes that successful academic functioning results from interactions among personal strengths, family support, educational experiences, and institutional resources (Masten, 2021). Rather than being a fixed personality trait, resilience develops through ongoing interactions between students and their learning environments.

Complementing this perspective, Social Cognitive Theory posits that students' beliefs in their capabilities, motivation, and behavioral regulation influence how they respond to academic challenges (Bandura, 1997). Students with stronger self-efficacy are more likely to persist through setbacks, regulate their learning behaviors, and maintain academic engagement despite obstacles. Similarly, Self-Regulated Learning Theory emphasizes that effective learners actively plan, monitor, regulate, and evaluate their own learning processes, enabling them to adapt successfully to demanding academic environments (Zimmerman, 2015). Recent studies have consistently demonstrated that self-regulated learning is a key mechanism through which resilience contributes to sustained academic success (Bellhäuser et al., 2024; van der Zanden et al., 2024; Nadeak et al., 2024).

Likewise, Growth Mindset Theory proposes that students who believe intelligence and academic competence can be developed through sustained effort are more likely to interpret academic setbacks as opportunities for learning rather than indicators of failure. Such adaptive beliefs encourage perseverance, resilience, and continuous academic improvement (Yeager & Dweck, 2020). Together, these theoretical perspectives suggest that academic resilience emerges through the combined influence of psychological resources—including self-efficacy, self-regulation, growth mindset, and adaptive coping strategies—and supportive educational environments.

Guided by these theoretical perspectives, the present study recognizes that students' demographic and educational characteristics may serve as contextual influences that shape opportunities for developing resilience rather than functioning as direct determinants of resilient behavior. While psychological resources have consistently been identified as primary predictors of academic resilience, demographic variables such as age, school origin, Senior High School program, perceived economic status, and parents' educational background may influence students' access to educational support, learning experiences, and academic opportunities. Accordingly, the present investigation examines these demographic characteristics as contextual factors associated with academic resilience among high-performing university students while acknowledging that psychological processes remain central to understanding resilient academic functioning.

Recent educational research has increasingly recognized academic resilience as a multidimensional construct shaped by the interaction of cognitive, motivational, behavioral, and environmental factors. Among the most consistently identified psychological predictors are academic self-efficacy, self-regulated learning, growth mindset, and adaptive coping strategies, all of which enable students to respond constructively to academic challenges and setbacks. Academic self-efficacy, grounded in Social Cognitive Theory, reflects students' beliefs in their capability to successfully accomplish academic tasks. Students with stronger self-efficacy are more likely to persevere through difficult learning situations, exhibit greater confidence when confronting academic obstacles, and maintain higher levels of academic achievement than those with weaker efficacy beliefs (Richardson et al., 2017; Cai & Meng, 2025). Similarly, self-regulated learning, characterized by goal setting, strategic planning, self-monitoring, and self-evaluation, enables learners to actively manage their cognitive and motivational processes, thereby facilitating adaptive responses to academic adversity (Zimmerman, 2015). Recent empirical studies further demonstrate that self-regulation significantly predicts academic resilience and

mediates the positive effects of social support on students' educational outcomes (Bellhäuser et al., 2024; Li et al., 2024; Nadeak et al., 2024).

Complementing these cognitive processes is growth mindset, which refers to the belief that intelligence and academic competence can be developed through sustained effort, effective learning strategies, and constructive feedback. Students who embrace a growth mindset are more likely to perceive academic setbacks as opportunities for learning rather than indicators of fixed ability, thereby fostering greater persistence, resilience, and long-term academic engagement (Yeager & Dweck, 2020). Equally important are adaptive coping strategies, including problem-focused coping, emotional regulation, cognitive reframing, and help-seeking behaviors, which enable students to manage academic stress while preserving psychological well-being and academic performance (Brewer et al., 2019; Masten, 2021). Collectively, these psychological resources underscore that academic resilience extends beyond academic ability and is supported by students' capacity to regulate their thoughts, emotions, and behaviors in response to educational challenges.

Beyond individual psychological resources, the educational environment substantially contributes to the development of academic resilience. Ecological perspectives emphasize that resilience emerges through continuous interactions between individuals and their social and institutional contexts rather than through personal attributes alone (Masten, 2021). Consequently, supportive teachers, positive peer relationships, family encouragement, institutional resources, and inclusive learning environments collectively strengthen students' confidence, motivation, and adaptive capacities. Wang et al. (2025) reported that university students who perceived higher levels of instructional support, positive campus climate, and meaningful teacher–student relationships demonstrated significantly greater academic resilience and academic performance. Likewise, social connectedness and mentoring relationships reinforce students' sense of belonging, reduce psychological distress, and encourage persistence during periods of academic adversity. Recent evidence further indicates that social support enhances resilience indirectly by strengthening students' self-regulated learning behaviors and adaptive coping processes (Li et al., 2024; Nadeak et al., 2024). These findings reinforce the view that academic resilience is best understood as a multidimensional construct influenced by the combined effects of psychological resources and supportive educational environments.

Researchers have likewise explored how demographic and socio-economic characteristics influence academic resilience. Age has been associated with differences in emotional maturity, coping mechanisms, and self-regulatory behaviors that may affect students' responses to academic challenges. Educational experiences prior to university, including whether students graduated from public or private secondary schools, may also shape preparedness, learning strategies, and confidence in navigating higher education. Similarly, the academic strand pursued during Senior High School provides varying levels of academic preparation that may influence students' adjustment to tertiary education.

Socio-economic conditions likewise play a critical role in students' educational experiences. Students from economically disadvantaged households often encounter financial limitations, restricted access to educational resources, and additional family responsibilities that may hinder academic performance. Nevertheless, numerous studies have demonstrated that resilient learners are capable of overcoming these barriers through adaptive coping mechanisms, strong motivation, and effective utilization of institutional support systems (OECD, 2021; Agasisti & Longobardi, 2017). Parents' educational attainment has likewise been recognized as an important contextual factor influencing students' academic development. Parents with higher educational backgrounds often provide greater academic guidance, educational aspirations, and learning support, although resilience may enable students from less advantaged backgrounds to achieve equally successful academic outcomes through perseverance and effective coping strategies.

Among higher education students, the study of resilience becomes particularly significant when examining high-achieving learners. While these students consistently demonstrate excellent academic performance, they frequently encounter hidden challenges associated with perfectionism, fear of failure, increased academic workload, competitive learning environments, and heightened expectations from themselves and others. Contrary to common assumptions, academic excellence does not necessarily equate to psychological well-being. High-performing students may experience significant stress while striving to maintain consistently superior

academic outcomes. Understanding the factors that enable these students to remain resilient provides valuable insights into sustaining excellence while protecting mental health and overall well-being.

Within the Philippine context, research on academic resilience has steadily expanded; however, empirical investigations have largely focused on basic education, disadvantaged learners, or students recovering from disruptions associated with the COVID-19 pandemic. Comparatively fewer studies have examined academic resilience among high-achieving students enrolled in Philippine state universities, particularly within science and technology institutions. More importantly, although international research consistently identifies self-efficacy, self-regulated learning, growth mindset, adaptive coping strategies, and social support as robust predictors of academic resilience (Bellhäuser et al., 2024; Li et al., 2024; Yeager & Dweck, 2020), these psychological constructs remain relatively underexplored within Philippine higher education settings.

Existing local studies have primarily emphasized demographic and socioeconomic characteristics, leaving limited empirical evidence regarding how psychological protective factors interact with students' educational backgrounds to foster resilience among academically successful learners. Addressing these gaps would contribute to a more comprehensive understanding of resilience within Philippine higher education while providing locally relevant evidence for educational planning and student support initiatives.

The University of Science and Technology of Southern Philippines (USTP) provides an appropriate context for investigating these issues. Established in 2016 through the merger of the Mindanao University of Science and Technology and the Misamis Oriental State College of Agriculture and Technology, USTP has developed into one of the country's premier state universities specializing in science, technology, engineering, agriculture, and applied sciences (USTP, 2025). The university serves students from diverse socio-economic backgrounds and educational experiences while maintaining rigorous academic standards. Its competitive academic environment offers an ideal setting for examining the resilience of high-achieving students who continually navigate demanding academic expectations alongside personal, financial, and social challenges.

Despite the growing international literature on academic resilience, evidence explaining how demographic characteristics—including age, school origin, Senior High School program, perceived economic status, and parents' educational background—relate to resilience among high-performing students in Philippine higher education remains limited. Moreover, little empirical evidence has been generated within state universities that integrate these characteristics with measures of academic resilience. This lack of localized evidence limits the development of institutional programs specifically designed to strengthen resilience among academically successful students who may nevertheless experience substantial academic and psychological pressures.

Given these considerations, the present study examines the characteristics of high-performing students, determines their level of academic resilience, and investigates the extent to which selected demographic and educational characteristics influence resilience among high-achieving university students. While the present investigation focuses on demographic and educational variables, it is situated within the broader theoretical understanding that academic resilience is a multidimensional construct influenced by psychological, social, and institutional factors.

Consequently, the findings are expected not only to contribute localized evidence regarding resilience among students in a Philippine state university but also to provide a foundation for future investigations examining the roles of academic self-efficacy, self-regulated learning, growth mindset, adaptive coping strategies, and other psychological resources as potential explanatory mechanisms of resilience. Ultimately, the study aims to inform evidence-based institutional policies and student support programs that promote academic excellence, psychological well-being, and sustained student success in higher education.

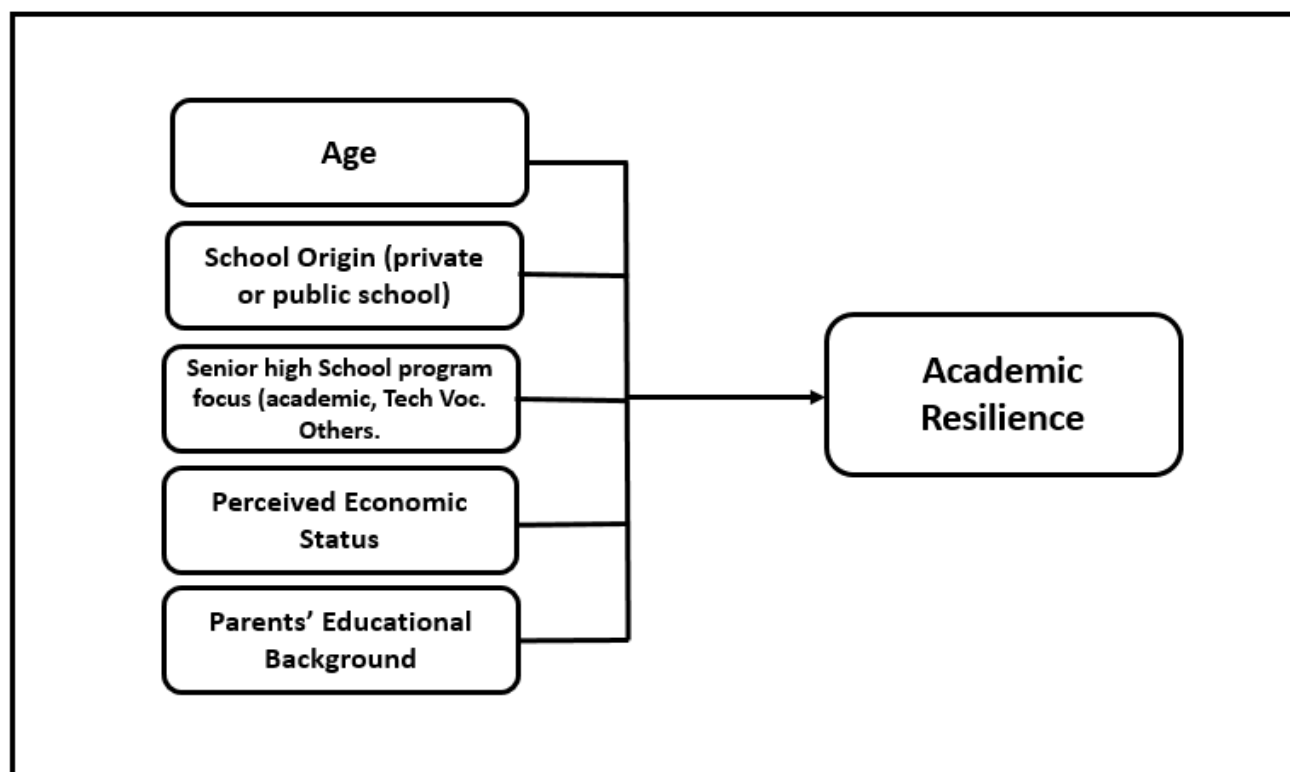


Figure 1 : Schematic Diagram of the Flow of the Study

METHODOLOGY

Research Design

This study employed a **quantitative, cross-sectional descriptive-correlational research design** to examine the relationship between selected demographic and educational characteristics and academic resilience among high-performing students in higher education. The descriptive component was used to characterize the respondents according to age, school origin, Senior High School program focus, perceived economic status, parents' educational background, and level of academic resilience. The correlational component, using multiple linear regression analysis, determined the extent to which these characteristics predicted academic resilience. This design is appropriate for investigating naturally occurring relationships among variables without manipulating the study conditions (Creswell & Creswell, 2018).

Research Setting and Participants

The study was conducted at the University of Science and Technology of Southern Philippines (USTP), a public state university offering science, technology, engineering, mathematics, and applied science programs. The participants consisted of first-year undergraduate students enrolled in Social Science courses during the conduct of the study.

A purposive sampling technique was employed to select 102 high-performing first-year college students who met the study's inclusion criteria. For the purpose of this study, high-performing students were operationally defined as those who obtained a General Weighted Average (GWA) ranging from 1.00 to 1.75, where 1.00 represents the highest academic rating under the University's grading system. Specifically, students with a GWA of 1.00, 1.25, 1.50, or 1.75 during the most recently completed academic term were considered eligible for inclusion. This operational definition was adopted to ensure that the participants consistently demonstrated

outstanding academic performance while examining the factors associated with academic resilience among academically successful university students.

The use of purposive sampling was appropriate because the study specifically targeted students who satisfied the predetermined academic performance criterion and were therefore capable of providing information relevant to the investigation of academic resilience among high-achieving learners.

Instrumentation

Data were collected using a structured, self-administered questionnaire composed of two sections.

Part I. Respondent Characteristics. This section gathered demographic and educational information, including age, school origin (public or private), Senior High School program, perceived family economic status, and parents' educational background.

Part II. Academic Resilience. Academic resilience was measured using a shortened 10-item version of the Academic Resilience Scale (ARS) adapted from Cassidy (2016). The instrument assessed students' capacity to persist, adapt, and recover from academic challenges using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), with higher scores indicating greater academic resilience.

Prior to the conduct of the study, the adapted questionnaire underwent expert validation to establish content relevance and clarity. The internal consistency reliability of the 10-item ARS was evaluated using Cronbach's alpha, yielding a coefficient of 0.91, which indicates excellent internal consistency and demonstrates that the instrument is highly reliable for measuring academic resilience among the participants (Taber, 2018). This reliability coefficient exceeds the recommended minimum threshold of 0.70 for research instruments, supporting the instrument's suitability for quantitative analysis.

Test Administration and Data Gathering

Prior to data collection, permission to conduct the study was obtained from the appropriate university authorities. Eligible participants were informed of the objectives of the research, the voluntary nature of participation, confidentiality of their responses, and their right to withdraw from the study at any stage without any consequences. Written informed consent was obtained before the administration of the questionnaire.

The survey was conducted in designated classrooms using a self-administered questionnaire under the supervision of the researchers. Participants were instructed to answer all items honestly and independently and were given approximately **30 minutes** to complete the instrument.

The questionnaire consisted of the following sections:

Part I collected information on the respondents' age, school origin (public or private), Senior High School program focus, perceived family economic status, and parents' educational background.

Part II measured academic resilience using ten statements rated on a five-point Likert scale ranging from **1 (Strongly Disagree)** to **5 (Strongly Agree)**.

Upon completion, all questionnaires were checked for completeness before coding and statistical analysis.

Statistical Treatment of Data

The collected data were encoded, verified, and analyzed using appropriate statistical software. Descriptive statistics, including **frequency, percentage, weighted mean, and standard deviation**, were used to describe the respondents' characteristics and determine their level of academic resilience.

To determine the extent to which respondents' characteristics predicted academic resilience, **multiple linear regression analysis** was performed. The independent variables included age, school origin, Senior High School

program focus, perceived economic status, and parents' educational background, while academic resilience served as the dependent variable. Model fit was evaluated using the multiple correlation coefficient (R), coefficient of determination (R^2), adjusted R^2 , F-statistic, regression coefficients, and associated p -values. Statistical significance was evaluated at the **0.05 level of significance**.

Study Limitations

The findings of this study should be interpreted in light of several limitations. First, the results reflect the experiences of participants within a single institutional context; consequently, caution should be exercised when extending the findings to other higher education settings with different academic cultures, institutional characteristics, or student populations. Second, the study examined only selected demographic and educational characteristics as predictors of academic resilience. Other theoretically important psychological variables, such as academic self-efficacy, self-regulated learning, growth mindset, coping strategies, motivation, and perceived social support, were not included and may account for additional variation in students' academic resilience. Finally, the cross-sectional quantitative design captured respondents' resilience at a single point in time and did not explore how resilience develops throughout students' academic journeys or how students experience and cultivate resilience in different contexts.

Future research should therefore employ multi-institutional and comparative designs involving students with varying levels of academic achievement, incorporate relevant psychological and contextual variables, and utilize longitudinal or mixed-methods approaches to provide a more comprehensive understanding of academic resilience in higher education.

RESULT AND DISCUSSION

Table 1 presents the age distribution of the 102 high-performing students who participated in the study. The respondents were predominantly **18 years old** ($n = 72$, **70.59%**), followed by those aged **19 years** ($n = 25$, **24.51%**). Only **4 respondents** (**3.92%**) were **20 years old**, while **1 respondent** (**0.98%**) was **17 years old**.

Table 1. Frequency Distribution of Respondents According Age

Age	Frequency	Percent
17	1	0.98
18	72	70.59
19	25	24.51
20	4	3.92
Total	102	100.00

The age profile indicates that the respondents were concentrated within the typical age range of first- and second-year undergraduate students in Philippine higher education. This demographic composition is consistent with the transition from late adolescence to emerging adulthood, a developmental period characterized by increasing independence, identity formation, and heightened academic and psychosocial demands (Arnett, 2015). During this stage, students are expected to navigate more autonomous learning environments, assume greater responsibility for their academic progress, and adapt to the cognitive and social expectations of university life.

From an educational perspective, this age group is particularly relevant to the study of academic resilience because the early years of higher education often involve significant academic adjustment. Students encounter increased coursework complexity, greater expectations for self-directed learning, and expanding social and personal responsibilities. These developmental and contextual transitions require adaptive coping, effective self-regulation, and sustained motivation, all of which are recognized as core components of academic resilience (Cassidy, 2016; OECD, 2021). Consequently, examining resilience among students within this age range provides an appropriate context for understanding how high-achieving learners maintain academic excellence despite the challenges associated with university education.

Although age has frequently been included as a demographic variable in resilience research, empirical evidence suggests that chronological age alone is not a robust predictor of academic resilience. Instead, resilience is more strongly associated with psychological resources, learning strategies, self-efficacy, and supportive educational environments (Cassidy, 2016; Martin & Marsh, 2006). The relatively homogeneous age distribution observed in this study therefore minimizes potential age-related variability and enables greater attention to other individual and contextual factors that may explain differences in academic resilience among high-performing students. This demographic profile strengthens the internal consistency of the sample while providing an appropriate basis for examining the influence of educational and socio-demographic characteristics on academic resilience.

Table 2 presents the distribution of respondents according to their Senior High School origin. Of the **102 high-performing students** included in the study, **58 respondents (56.86%)** graduated from **public Senior High Schools**, while **44 respondents (43.14%)** completed their Senior High School education in **private schools**.

Table 2. Frequency Distribution of Respondents According to School Origin
(Senior High School – Private or Public School)

Code in Scoring	Type of School Origin	Frequency	Percent (%)
1	Public School	58	56.86
2	Private School	44	43.14
TOTAL		102	100.00

The findings indicate that high-performing students in the present study originated from both public and private educational institutions, with a slightly higher proportion coming from public schools. This distribution reflects the diversity of educational backgrounds among students enrolled in higher education and suggests that academic excellence is not confined to a particular type of secondary school. In the Philippine context, the implementation of the K–12 Basic Education Program has sought to standardize learning competencies across public and private schools through a common curriculum while allowing institutions flexibility in instructional delivery and resource utilization (Department of Education [DepEd], 2024). Consequently, students entering higher education may possess comparable foundational competencies despite differences in school governance and educational resources.

School origin has frequently been examined as a demographic variable because differences in institutional resources, instructional practices, class size, and learning opportunities may influence students' academic preparedness and transition to higher education. Studies have shown that school context contributes to students' academic engagement, self-efficacy, and learning experiences, although these relationships are often mediated by individual characteristics and family background rather than school type alone (OECD, 2019; OECD, 2023). Similarly, research on educational effectiveness suggests that students' academic outcomes are shaped by the combined influence of personal motivation, quality of instruction, socioeconomic conditions, and school climate, indicating that the distinction between public and private schooling should not be viewed as the sole determinant of later academic success (Schleicher, 2018).

Within the framework of academic resilience, the respondents' school origin provides an important contextual variable for understanding differences in students' adaptation to university learning environments. The transition from Senior High School to higher education requires students to adjust to increased academic rigor, greater autonomy, and more complex learning demands. Previous educational experiences may influence students' preparedness for these transitions; however, resilience is increasingly recognized as a dynamic process that develops through the interaction of individual capabilities and supportive educational environments rather than through prior schooling alone (Cassidy, 2016). Therefore, examining school origin alongside other demographic and contextual characteristics contributes to a more comprehensive understanding of the factors associated with academic resilience among high-performing students in higher education.

Table 3 presents the distribution of respondents according to their Senior High School (SHS) program focus. Of the **102 high-performing students** included in the study, **88 respondents (86.27%)** graduated from the

Academic Strand, whereas **14 respondents (13.73%)** completed a **Technical–Vocational–Livelihood (TVL) strand**. No respondents reported graduating from other Senior High School program tracks.

Table 3. Frequency Distribution of Respondents According to Senior High School Program Focus (Academic, Tech-Voc, Others)

Code	Sen High Program	Frequency	Percent (%)
1	Technical - Vocational	14	13.73
2	Academic Strand	88	86.27
Total		102	100.00

The findings indicate that the majority of the high-performing students who pursued higher education came from the Academic Strand. This distribution is expected because the Academic Track under the Philippine K–12 curriculum is specifically designed to prepare learners for university education through specialized strands such as Science, Technology, Engineering and Mathematics (STEM), Accountancy, Business and Management (ABM), Humanities and Social Sciences (HUMSS), and the General Academic Strand (GAS) (Department of Education [DepEd], 2016). These strands emphasize academic preparation, analytical thinking, research competencies, and discipline-specific knowledge that facilitate students' transition to tertiary education.

Although graduates of the Academic Strand comprised most of the respondents, the presence of students from the Technical–Vocational–Livelihood track demonstrates that academic excellence in higher education is not exclusively associated with one Senior High School pathway. The Philippine K–12 curriculum recognizes that all Senior High School tracks are intended to develop learners' knowledge, competencies, and lifelong learning skills while providing multiple pathways for employment, entrepreneurship, middle-level skills development, or higher education (Department of Education, 2016). Consequently, students from the TVL track who subsequently enroll in university programs may demonstrate comparable academic success when supported by effective learning strategies, motivation, and institutional resources.

Previous studies have suggested that students' prior educational experiences may influence their academic preparedness, self-efficacy, and adjustment during the transition to higher education. Learners whose Senior High School curricula closely align with their university programs often report greater confidence in managing academic demands during the initial years of college (OECD, 2023). However, contemporary research emphasizes that prior educational background alone does not determine academic success. Rather, students' capacity to adapt to new learning environments, regulate their learning behaviors, and effectively respond to academic challenges plays a more substantial role in sustaining achievement (Cassidy, 2016; Richardson et al., 2017).

Within the context of the present study, Senior High School program focus serves as an important educational characteristic that may provide insights into differences in academic resilience among high-performing students. While the Academic Strand may offer greater exposure to university-oriented learning experiences, resilience is increasingly understood as a dynamic construct shaped by the interaction of individual attributes, previous educational experiences, and supportive learning environments rather than by curricular background alone (Cassidy, 2016). Therefore, examining students' Senior High School program alongside other demographic and contextual variables contributes to a more comprehensive understanding of the factors associated with academic resilience in higher education.

Table 4 presents the distribution of respondents according to their perceived economic status. Among the 102 high-performing students, the largest proportion identified themselves as belonging to the lower middle-income group (44 respondents, 43.14%). This was followed by respondents who perceived themselves as belonging to the low-income group (28 respondents, 27.45%) and the middle-income group (27 respondents, 26.47%). Only 2 respondents (1.96%) reported belonging to the upper middle-income group, while 1 respondent (0.98%) perceived their family as belonging to the high-income group.

Table 4. Frequency Distribution of Respondents According to Perceived Economic Status

Code in Scoring	Perceived Economic Status	Frequency	Percent(%)
1	Low	28	27.45
2	Lower Middle	44	43.14
3	Middle	27	26.47
4	Upper Middle	2	1.96
5	High	1	0.98
TOTAL		102	100.00

The distribution suggests that most high-performing students in the present study perceived their families as belonging to low- and middle-income socioeconomic groups. This finding reflects the broad socioeconomic diversity commonly observed in Philippine public higher education institutions, where access policies and government scholarship programs have expanded educational opportunities for students from economically disadvantaged households. As a state university, the University of Science and Technology of Southern Philippines (USTP) serves students from varied socioeconomic backgrounds, making it an appropriate setting for examining how economic circumstances relate to academic resilience.

Socioeconomic status has consistently been recognized as an important contextual factor influencing educational experiences and academic outcomes. Students from economically disadvantaged families are more likely to encounter challenges such as financial constraints, limited access to educational resources, digital inequality, and competing family responsibilities, all of which may affect learning opportunities and academic engagement (OECD, 2023). Nevertheless, contemporary educational research emphasizes that socioeconomic disadvantage does not inevitably result in poor academic performance. Many students demonstrate positive educational outcomes despite limited economic resources, a phenomenon commonly described as **academic resilience**, wherein learners achieve high levels of academic success despite experiencing socioeconomic adversity (OECD, 2019).

Recent international evidence further indicates that resilient students from disadvantaged socioeconomic backgrounds often exhibit stronger self-regulation, higher academic motivation, effective learning strategies, and greater utilization of institutional support services than their peers with similar economic circumstances (OECD, 2023). Similarly, educational resilience is strengthened when universities provide supportive learning environments, accessible financial assistance, academic advising, and opportunities that reduce barriers associated with socioeconomic disadvantage (Agasisti & Longobardi, 2017). These findings reinforce ecological perspectives of resilience, which conceptualize academic success as the result of dynamic interactions between individual capabilities and environmental supports rather than socioeconomic conditions alone.

It is important to note that the present findings describe respondents' **perceived economic status**, reflecting students' subjective assessment of their family's financial situation rather than objective measures such as household income. Subjective socioeconomic status has gained increasing attention in educational and psychological research because students' perceptions of their economic position influence their academic confidence, educational aspirations, psychological well-being, and sense of belonging, independent of actual income levels (Organisation for Economic Co-operation and Development [OECD], 2019). Consequently, examining perceived economic status provides valuable contextual information for understanding variations in academic resilience among high-performing university students.

Overall, the predominance of respondents from lower middle- and low-income backgrounds suggests that high academic achievement can be attained across different socioeconomic circumstances. Rather than viewing economic status as a deterministic factor, the findings underscore the importance of investigating how individual attributes, educational experiences, and institutional support systems interact to foster academic resilience among students facing diverse socioeconomic conditions.

Table 5 presents the distribution of respondents according to their parents' educational background. Among the **102 high-performing students**, the largest proportion reported that their parents had attained **secondary education (40 respondents, 39.22%)**. This was followed by those whose parents had earned a **bachelor's degree (24 respondents, 23.53%)** and those whose parents had completed **vocational education (16 respondents, 15.69%)**. Meanwhile, **11 respondents (10.78%)** indicated that they had **no information** regarding their parents' educational background. A smaller proportion reported that their parents had attained only **primary education (7 respondents, 6.86%)**, while **4 respondents (3.92%)** indicated that their parents had completed **graduate or postgraduate education**.

Table 5. Frequency Distribution of Parents' Educational Background

Code	Description	Frequency	Percent (%)
1	Primary	7	6.86
2	Secondary	40	39.22
3	Bachelors Degree	24	23.53
4	Graduate and Post Graduate	4	3.92
5	Vocational	16	15.69
6	Others : No Idea	11	10.78
Total		102	100.00

The findings demonstrate considerable variation in parental educational attainment among the respondents, indicating that high-performing students in higher education come from families with diverse educational experiences. Although the largest proportion of respondents reported parents whose highest educational attainment was at the secondary level, a substantial number also came from households where parents had completed tertiary or vocational education. This diversity suggests that academic excellence is represented across different family educational backgrounds rather than being concentrated among students whose parents possess advanced academic qualifications.

Parental educational attainment has long been recognized as an important component of family socioeconomic and cultural capital. Parents with higher levels of education are generally more likely to provide educational guidance, academic encouragement, and learning resources that support their children's educational development (OECD, 2023). Moreover, higher parental education is frequently associated with greater familiarity with educational systems, stronger educational aspirations, and increased capacity to assist children in making academic decisions. However, contemporary research also emphasizes that parental education influences student outcomes indirectly through home learning environments, parental involvement, educational expectations, and access to academic resources rather than through educational attainment itself (Eccles & Roeser, 2016).

Within the context of academic resilience, parental educational background should be viewed as one of several contextual factors that may shape students' educational experiences. Resilience research increasingly adopts an ecological perspective, recognizing that students' ability to overcome academic challenges emerges from dynamic interactions among personal characteristics, family support, school environments, and institutional resources (Masten, 2021).

Consequently, while students whose parents possess higher educational attainment may benefit from greater educational support and guidance, many learners from less educated families likewise achieve outstanding academic performance through strong self-regulation, intrinsic motivation, perseverance, and effective utilization of school and university support systems (Cassidy, 2016). This perspective is consistent with evidence demonstrating that resilient students frequently succeed despite experiencing social or educational disadvantages.

The finding that approximately one in every ten respondents was unaware of their parents' educational background is also noteworthy. Such responses may reflect variations in family communication, caregiving arrangements, or household circumstances rather than a lack of educational support. Accordingly, this category should be interpreted cautiously and not as an indicator of parental involvement or educational disadvantage. Future studies may benefit from collecting more detailed family background information to better understand how parental education interacts with other family characteristics in shaping students' academic resilience.

Overall, the results suggest that high academic achievement among university students is observed across a broad spectrum of parental educational backgrounds. Rather than functioning as an independent determinant of resilience, parental education provides an important contextual characteristic that may interact with students' personal attributes, family support, and educational opportunities in fostering academic resilience. Examining this variable alongside other demographic and educational characteristics therefore contributes to a more comprehensive understanding of the factors associated with resilience among high-performing students in higher education.

Table 6 presents the distribution of respondents according to their level of academic resilience. The findings indicate that the respondents generally demonstrated **high levels of academic resilience**, as reflected by an overall **mean score of 3.71**. More than half of the respondents (**60, 58.82%**) were classified as having a **high level of academic resilience**, while **14 respondents (13.73%)** exhibited a **very high level**. In contrast, **24 respondents (23.53%)** demonstrated a **moderate level** of resilience, and only **4 respondents (3.92%)** were categorized as having **low resilience**. None of the respondents fell within the **very low** resilience category.

Table 6. Frequency Distribution of Respondents According to Level of Academic Resilience

Range	Descriptions	Frequency	Percent
4.21 – 5.00	Very High	14	13.73
3.41 – 4.20	High	60	58.82
2.61 – 3.40	Moderate	24	23.53
1.81 – 2.60	Low	4	3.92
1.00 – 1.80	Very Low	0	0.00
TOTAL		148	100.00

Mean = 3.71

Description : High Level of Resilience

The predominance of respondents with high and very high levels of academic resilience suggests that most high-performing students possess the adaptive capacities necessary to maintain academic functioning despite encountering educational challenges. Academic resilience is widely conceptualized as the ability to effectively cope with academic adversity, recover from setbacks, sustain motivation, and continue striving toward educational goals despite experiencing stress or obstacles (Cassidy, 2016). Rather than reflecting an absence of academic difficulties, resilience represents students' capacity to respond constructively to demanding learning environments through persistence, self-regulation, and adaptive coping strategies.

The observed level of resilience is consistent with contemporary perspectives that characterize academic resilience as a dynamic developmental process shaped by interactions among individual, familial, and institutional factors. According to Masten (2021), resilience develops through adaptive systems that enable individuals to maintain positive functioning under conditions of adversity. Within higher education, these adaptive systems include cognitive self-regulation, emotional competence, academic self-efficacy, supportive peer relationships, effective teaching practices, and access to institutional resources. Consequently, students who consistently achieve high academic performance are likely to draw upon multiple protective factors that facilitate successful adaptation to rigorous academic demands.

The findings also align with empirical evidence indicating that resilient university students demonstrate greater persistence, stronger engagement in learning, and more effective responses to academic stress than their less resilient peers. Cassidy (2016) reported that students with higher levels of academic resilience are more likely

to recover from academic setbacks, maintain confidence in their learning abilities, and employ constructive coping strategies when confronted with academic challenges. Similarly, OECD (2023) emphasized that resilient learners are characterized not only by strong academic achievement but also by their capacity to succeed despite personal, social, or economic challenges, highlighting resilience as a critical contributor to educational equity and long-term academic success.

Nevertheless, the presence of respondents with **moderate** and **low** levels of resilience indicates that resilience is not uniformly experienced among high-performing students. Academic excellence does not necessarily imply that students are equally equipped to manage academic pressure, emotional stress, or the increasing complexity of university learning. Previous research has shown that even academically successful students may experience anxiety, perfectionism, academic burnout, and psychological distress while striving to maintain high levels of performance (American College Health Association [ACHA], 2024; Masten, 2021). These findings underscore the importance of providing continuous institutional support that promotes students' psychological well-being alongside academic achievement.

Overall, the results suggest that high-performing students generally possess strong adaptive capacities that enable them to navigate the academic demands of higher education successfully. However, the variability observed across resilience levels reinforces the multidimensional nature of academic resilience and highlights the importance of examining how demographic characteristics, prior educational experiences, family background, and socioeconomic conditions interact to influence resilience among university students. Such evidence may inform the development of targeted institutional interventions aimed at strengthening resilience and promoting sustained academic success among diverse student populations.

Table 7 presents the multiple linear regression analysis examining the extent to which respondents' demographic and educational characteristics—age, school origin, Senior High School program, perceived economic status, and parents' educational background—predict academic resilience among high-performing university students. The overall regression model was not statistically significant ($F = 0.289, p = .918$), indicating that the combined influence of the five predictor variables did not significantly explain variations in academic resilience. Likewise, the model yielded a very weak positive relationship (Multiple $R = 0.122$), with an R^2 value of 0.015, indicating that only 1.5% of the variance in academic resilience was explained by the selected demographic variables. The negative adjusted R^2 (-0.036) further suggests that the model possessed minimal predictive value. Moreover, none of the individual predictors reached statistical significance, indicating that age, school origin, Senior High School program, perceived economic status, and parents' educational background did not independently influence the academic resilience of the respondents.

Table 7. Multiple Linear Regression Analysis Predicting Academic Resilience from Respondents' Characteristics

Independent Variable	Dependent Variable	Regression Model	F	Significance
Age, School Origin, Senior High School Program Focus, Perceived Economic Status, Parents' Educational Background	Academic Resilience	$\hat{Y} = 2.182 + 0.079X_1 + 0.041X_2 - 0.030X_3 - 0.001X_4 + 0.024X_5$	0.289	Not Significant

Model Statistics	Value	Interpretation
Multiple R	0.122	Very Weak Positive Relationship
R^2	0.015	Explains 1.48% of the variance in Academic Resilience
Adjusted R^2	-0.036	No meaningful predictive value
F-test	0.289	Not Significant

Although the regression model was not statistically significant, these findings should not be interpreted as evidence that demographic characteristics are unimportant. Rather, the results indicate that academic resilience among high-performing university students appears to be relatively consistent across respondents with different demographic and educational backgrounds. From a practical perspective, this suggests that students who consistently achieve high academic performance may develop comparable adaptive capacities that enable them to cope effectively with academic demands regardless of differences in age, prior school experiences, socioeconomic conditions, or parental educational attainment. The uniformly high level of academic resilience observed in this study supports the view that resilience among academically successful students is not primarily determined by demographic characteristics but may instead reflect shared personal and academic strengths developed through their educational experiences.

The findings are likewise consistent with contemporary perspectives that conceptualize academic resilience as a multidimensional and dynamic construct arising from the interaction of individual psychological resources and supportive educational environments rather than demographic characteristics alone (Masten, 2021). Previous studies have shown that resilience is more strongly associated with students' adaptive psychological competencies than with their background characteristics. In particular, **academic self-efficacy** enables students to maintain confidence in overcoming academic challenges, while **self-regulated learning** promotes effective planning, goal setting, monitoring, and evaluation of learning activities that sustain academic success (Zimmerman, 2015; Richardson et al., 2017). Likewise, students who possess a **growth mindset** are more likely to interpret setbacks as opportunities for improvement, thereby demonstrating greater persistence and resilience during academic adversity (Yeager & Dweck, 2020). Recent studies further demonstrate that resilience is strengthened by **adaptive coping strategies**, social support, and teacher support, all of which contribute significantly to students' capacity to overcome academic challenges and maintain high levels of achievement (Bellhäuser et al., 2024; Li et al., 2024; Nadeak et al., 2024; Cai & Meng, 2025).

These psychological and contextual variables were beyond the scope of the present investigation and were therefore not included in the regression model. Their omission may explain the limited explanatory power of the selected demographic variables and the nonsignificant regression results. Consequently, the present findings should not be interpreted as indicating the absence of meaningful determinants of academic resilience. Rather, they suggest that demographic characteristics alone are insufficient to explain resilient academic behavior among high-performing students and that resilience is more likely influenced by internal psychological resources together with supportive institutional and social environments. Thus, the nonsignificant regression model remains theoretically meaningful because it reinforces current resilience theory, which emphasizes that students' capacity to thrive academically is shaped more by adaptive cognitive, motivational, and behavioral processes than by demographic background.

The findings also have important implications for higher education institutions. Since demographic characteristics demonstrated limited predictive value, universities may achieve greater improvements in student resilience by implementing interventions that strengthen psychological competencies associated with resilient learning. Programs that promote academic self-efficacy, self-regulated learning, growth-oriented beliefs, adaptive coping skills, faculty mentoring, counseling services, and supportive learning environments may be more effective in sustaining students' academic success and psychological well-being than interventions based solely on demographic characteristics. Such initiatives may be particularly beneficial for high-performing students who often encounter substantial academic pressure despite consistently demonstrating excellent academic performance.

Overall, the results indicate that while demographic and educational characteristics provide useful contextual information about students, they possess limited explanatory power in predicting academic resilience among high-performing university students. These findings underscore the importance of adopting more comprehensive theoretical models that incorporate psychological, social, and institutional variables to explain resilient academic functioning. Future studies are therefore encouraged to include constructs such as academic self-efficacy, self-regulated learning, growth mindset, coping strategies, teacher support, and perceived social support, while employing multi-institutional and comparative research designs to develop a more robust understanding of academic resilience in higher education.

CONCLUSION

This study examined the demographic and educational characteristics of high-performing first-year students at the University of Science and Technology of Southern Philippines (USTP), determined their level of academic resilience, and investigated the extent to which selected characteristics predicted their resilience. The findings revealed that the respondents generally demonstrated a high level of academic resilience, indicating that they possessed the capacity to adapt positively and sustain academic performance despite academic demands and challenges. However, multiple regression analysis showed that age, school origin, Senior High School program, perceived economic status, and parents' educational background did not significantly predict academic resilience.

Although the selected demographic characteristics were not significant predictors, these findings should not be interpreted as evidence that they are inconsequential. Rather, the results suggest that academic resilience among high-performing students is relatively consistent across diverse demographic and educational backgrounds. This finding supports contemporary perspectives that conceptualize academic resilience as a dynamic and multidimensional construct influenced more strongly by students' psychological resources and supportive learning environments than by demographic characteristics alone. Consequently, the nonsignificant regression model is theoretically meaningful because it highlights the limited explanatory power of demographic variables and underscores the importance of considering broader psychological and contextual determinants of resilient academic functioning.

The study contributes to the growing body of literature on academic resilience by providing context-specific evidence from a Philippine state university and demonstrating that demographic characteristics alone are insufficient to explain resilience among academically successful students. These findings reinforce the need for higher education institutions to promote resilience through interventions that strengthen self-regulated learning, academic self-efficacy, growth mindset, adaptive coping strategies, and supportive educational environments. Such initiatives may help sustain students' academic excellence while enhancing their psychological well-being and persistence.

Given the methodological scope of the study, future research should employ multi-institutional and comparative designs involving students with different levels of academic achievement and incorporate key psychological and contextual variables, including self-efficacy, self-regulated learning, growth mindset, coping strategies, teacher support, and perceived social support. Longitudinal and mixed-methods approaches are likewise recommended to provide a more comprehensive understanding of how academic resilience develops and is sustained throughout students' higher education experiences.

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