

Perceived Social Support and Grit as Predictors of General Self-efficacy among Undergraduate Students

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Abstract. Perceived social support is pivotal in fostering students' motivation and resilience. Student's social ties with their friends, family, and significant others are crucial as they receive support. Moreover, social support enhances belief in one's ability to achieve goals and manage difficulties. This belief is crucial for motivation and academic performance, influencing how students tackle tasks and respond to setbacks. Grit is defined as perseverance and passion for long-term goals. It focuses on sustained effort, enabling individuals to remain motivated despite ongoing challenges. Despite the growing body of literature on perceived social support, grit, and self-efficacy, there is a dearth of studies examining these factors within the local context, where cultural and societal conditions may influence these associations. This research quantitatively explored the prediction between perceived social support, grit, and general self-efficacy among undergraduate students ($n=342$) in a state university in Pampanga, Philippines. The sample size was determined through the Raosoft application, and the respondents were selected through a stratified proportionate sampling technique. JAMOVI application was used to run the analysis. The findings revealed a significant and weak positive relationship ($p. <0.001$, $R=0.41$) between perceived social support and general self-efficacy. Furthermore, grit and general self-efficacy have no significant relationship ($p. <0.76$, $R=0.2$) among undergraduate students. However, the subdomains of grit revealed that consistency of interest had a positive but weak association with general self-efficacy ($p. <0.001$, $R=0.37$). In contrast, the second subdomain, perseverance of effort, showed a negative and weak relationship with general self-efficacy ($p. <0.001$, $R=-0.44$). Furthermore, the regression analysis revealed that perceived social support, perseverance of effort, and consistency of interest are significant predictors of general self-efficacy, with each variable explaining 16%, 20%, and 14% of the variance, respectively. These findings suggest that maintaining perceived social support and consistency of interest can enhance academic performance and boost students' self-efficacy. Perseverance efforts, which lead to poor outcomes, can negate the self-efficacy of undergraduate students. This can serve as a basis for interventions and school counseling programs that enrich students' general self-efficacy, fostering well-being and academic success.

Keywords: Counseling; General self-efficacy; Grit; Perceived social support; Undergraduate students.

1.0 Introduction

Obtaining support from others is extremely valuable for motivation. Recognition, validation, and satisfaction are reinforcers for students after achieving their goals. Undergraduate students have a wide range of life goals, and general self-efficacy is a key factor in their engagement and persistence in their studies. General self-efficacy is a key factor in persistently pursuing academic goals. Li et al. (2023) noted that it represents a student's belief in their

abilities and confidence when facing academic challenges. General self-efficacy is a drive that allows students to achieve academic goals, regardless of the predicaments that hinder students from accomplishing a particular goal. In addition, general self-efficacy is also associated with a positive lifestyle, which helps achieve academic goals. As asserted by Guo (2018), positive attitudes toward oneself are more prevalent among those who are more passionate and persistent in achieving academic goals, which strongly correlates with an assessment of life quality. General self-efficacy is a strong indicator of achieving academic goals.

Research indicates that lack of self-efficacy is a significant issue among undergraduate students. Hauzel et al. (2024) found that 70% of undergraduate students report low motivation. Another study revealed that 72% of students felt low engagement during online lectures, negatively impacting their learning experience. Most students indicated difficulty staying engaged with their peers and instructors (Hollister et al., 2022). These highlight the need for interventions to help students maintain enough levels of self-efficacy. In recent years, the number of undergraduate students has declined, resulting in fewer college graduates. Reysen et al. (2019) state fewer than 35% of students complete their degrees within five years of enrolling. For private enrollment, this percentage rises to just over 50%. Evidently, for most undergraduate students, the concept of a “four-year degree” is more elusive than ever. With undergraduates having a hard time completing a four-year degree in college, it is essential to investigate factors that may predict the general self-efficacy of the undergraduates, which can be positively associated with academic engagement and persistence (Hodge et al., 2018). This research informs the public regarding the importance of general self-efficacy, especially in academics.

Perceived social support and grit are present in an individual’s life and can help students achieve academic goals. Perceived social support is how individuals view friends, family, and significant others as a source of help during difficult times (Grey et al., 2020). This also pertains to how much support an individual receives and perceives (Harandi et al., 2017). Social ties are important for a person to achieve a healthy lifestyle with support from friends and family. Drageset (2021) mentioned that social support promotes health by enhancing a person's capacity for stress management, overall health, and quality of life. Research has also demonstrated that perceived social support serves as a protective factor against mental health challenges such as anxiety and depression, which can otherwise hinder academic persistence and success (Parungao, 2024). A recent study conducted among undergraduate working students verified that general self-efficacy and perceived social support had significant moderate positive correlations (Inigo et al., 2022). Meanwhile, grit positively influences students with academic performances aiming for high grades or outcomes in certain activities. Grit is a trait that allows a person to achieve a long-term goal consistently. In the view of Christopoulou et al. (2018), two aspects are the foundation of grit: Perseverance of Effort and Consistency of Interest. A study on grit exhibits that grit levels are higher in kids who are outstanding grade achievers than those who achieved lower grades (Elnaem et al., 2023). However, others argue that grits contribute little to academic performance (Hodge et al., 2017). This research recognizes students' perceived social support and grit as potential predictors of general self-efficacy. This study is focused on understanding students' levels of self-efficacy while considering the predictive roles of social support and grit.

Although specific research investigations have been conducted to determine the predictors of general self-efficacy among students, there is a lack of research on this topic in the local context, leaving inadequate data on how factors like grit and perceived social support distinctively influence Filipino undergraduate students' general self-efficacy. The researchers identified the following research questions: What is the demographic profile of respondents? What are the levels of perceived social support, grit, and general self-efficacy? Is there a significant relationship between perceived social support, grit, and general self-efficacy? Does perceived social support and grit predict general self-efficacy among undergraduate students? Understanding how perceived social support and grit influence general self-efficacy plays a vital role in promoting undergraduate students' academic success and mental health. By understanding the predictors of self-efficacy, school stakeholders could cultivate steps that boost students' development. This study can be used to develop counseling programs that support students' general self-efficacy and guide various professionals in creating strategies that foster academic success.

2.0 Methodology

2.1 Research Design

This study implemented a Quantitative method, measuring the indicators of perceived social support, grit, and general self-efficacy. Specifically, this research used the Predictive Correlational design. Correlational designs

often visually depict the strength and direction of relationships between variables (Nesselroade & Grimm, 2018). In behavioral sciences, exploring the relationship between variables to predict the outcome is shaped through predictive correlation (Smith et al., 2022). This design, in turn, can identify the degree and direction of the association between perceived social support, grit, and general self-efficacy among undergraduate students. Furthermore, it can examine whether perceived social and grit are significant predictors of general self-efficacy. In this investigation, perceived social support and grit are the predictor variables, while general self-efficacy is the outcome variable.

2.2 Research Locale

The study was conducted in a state university in Pampanga, Philippines. This location was chosen because it has enough undergraduate students, making it well-suited for this research.

2.3 Research Participants

The researchers recruited undergraduate students from a state university in Pampanga, Philippines. A sample size 342 was determined using Raosoft software while observing the following parameters: a 5% margin of error and a 95% confidence level. In this case, there is a 95 percent probability that the actual value is within $\pm 5\%$ of the measured value. Moreover, a stratified proportionate sampling technique was employed to ensure that different subgroups within the population were represented in proportion to their size—allowing for more accurate and reliable results. The researchers utilized undergraduate students' college programs as the strata for this research undertaking. Specifically, 170 psychology students, 120 social work students, 28 human services students, and 24 sociology students gathered in this study, completing the needed 342 respondents.

2.4 Research Instrument

The researchers utilized three open-access survey questionnaires for this investigation. Additionally, these scales were converted into Google Forms after permission was granted by the developers. The first scale is the Multidimensional Scale of Perceived Social Support (MSPSS) developed by (Zimet et al., 1998). It is a widely used tool for assessing perceived social support from three sources: family, friends, and significant others. The scale comprises 12 items, with 4 items for each subscale, and rated on a 7-point Likert scale from "1 - Very Strongly Disagree" to "7 - Very Strongly Agree." Sun and Guo (2024) examined its psychometric properties wherein the scale showed high internal consistency with .91 (family), .87 (friends), and .85 (significant others) values for each subscale and ($\alpha=.88$) for the overall reliability estimate. The scores for each item were summed to get a total score, and to get the mean score, the test user needed to divide the total scores by 12. In this approach, a mean score ranging from 1 to 2.9 is considered low support, 3.5 is considered moderate support, and a score from 5.1 to 7 is considered high support.

The second scale used is the Short Grit Scale (SGS) developed by Duckworth and Quinn (2009), which measures perseverance of effort and consistency of interest. The scale is comprised of 8 items rated on a 5-point Likert scale. Items 2, 4, 7, and 8 have a point Likert scale ranging from "5 - very much like me" to "1 - not like me at all." On the other hand, items 1, 3, 5, and 6 have a point Likert scale ranging from "1 very much like me" to "5 - not like me at all." The scores for each item were summed and divided by 8. The SGS has demonstrated strong psychometric properties in many studies, including high internal consistency (0.73 to 0.83).

The third scale utilized is the General Self-Efficacy Scale (GSE) developed by Schwarzer and Jerusalem (1992), which assesses the strength of an individual's belief in his or her ability to respond to challenging situations and to deal with any associated obstacles. The scale comprises 10 items and is rated on a 4-point Likert scale ranging from "1 - Not at all true" to "4 - Exactly true". The scores for each item were summed up to get a total score that ranged from 10 to 40. The sample items are "I can always manage to solve difficult problems if I try hard enough" and "I can usually handle whatever comes my way." Higher scores indicate a stronger sense of self-efficacy. In comparison, lower scores indicate that the individual may feel less capable of managing complex tasks and overcoming obstacles. The GSE demonstrated good psychometric properties ($\alpha > 0.86$) across various populations.

2.5 Data Gathering Procedure

The researchers commenced the research process by establishing validated and approved instruments, specifically the General Self-Efficacy Scale, the Multidimensional Scale of Perceived Social Support, and the Short Grit Scale,

comprising 30 items utilized in the study. Second, the researchers sought permission from the college dean and specific program chairpersons in the selected state university to proceed with the data-gathering process. The researchers also provided the administration with a letter requesting information about the population size of each program. Third, once the dean and program chairpersons had approved permission, the researchers computed the study's sample size using the Raosoft application, yielding 342 respondents. Fourth, the researchers utilized the proportionate stratified sampling formula to compute the number of respondents, ensuring that the strata (programs) of the undergraduate students were adequately represented within the study's sample size. After using the sampling method, the researchers approached the subjects and disseminated the questionnaire through Google Forms. While disseminating the Google Forms, the researchers provided instructions to voluntarily participating students and reassured them that identities and responses were kept private and confidential. The researchers also addressed the respondents' questions or concerns online and in person. Once the respondents answered the questionnaire, the researchers collected the datasets through a spreadsheet.

Lastly, the datasets were cleaned, coded, and analyzed using software. This study used descriptive, correlational, and regression analyses to address the problem statements. Researchers used JAMOV 2.4.14. throughout the data analysis to affirm accurate and reliable results. The software enables the evaluation of potential outcomes of the dependent variable, general self-efficacy, from the two indicated predictors: perceived social support and grit. It analyzed the relationship between perceived social support, grit, and general self-efficacy. The data analysis followed the following steps: First, raw scores were exported through Microsoft Excel to summarize the data gathered, and then datasets were cleaned and coded before transferring to JAMOV software. Second, the statistical application was used to identify the demographic profile of the respondents through frequency and percentages. Third, the means and standard deviations of perceived social support, grit, and general self-efficacy among undergraduate students were also computed to identify the levels of these variables. Fourth, Pearson's correlation was used for correlational analysis to determine the significant relationship between the independent and dependent variables. Lastly, multiple linear regression analysis was conducted to determine the coefficient of determination (R^2) and beta coefficient (B) to understand if general self-efficacy can be accurately predicted by perceived social support and grit. This enabled the researchers to determine how much percentage of perceived social support and grit predict general self-efficacy among undergraduate students.

2.6 Ethical Considerations

In conducting this study, the researchers prioritized the rights and well-being of the respondents by complying with the ethical standards. Prioritizing ethical norms entails gaining the respondents' informed consent to ensure an understanding of the study's objectives, participants' rights, and minimal risks. Voluntary participation was stressed to reduce the pressure or obligation of students to participate. The researchers adhered to the Data Privacy Act of 2012 to guarantee the confidentiality of all information obtained. The decision to make student names optional further emphasized the anonymity principle. All participants were made aware of this choice, which enabled them to choose how they wished to be recognized in the study. These identities will not be utilized in public reports or analyses to protect the participants' privacy. Furthermore, to guarantee that participants encounter no harm or discomfort throughout the completion of the survey questions, the researchers adhered to non-maleficence. Due credit was given to the study's participants for their contribution to completing this research and adding knowledge in Counseling and Human Services. Once finished, the researchers pledged to share the findings with interested participants.

3.0 Results and Discussion

3.1 Demographic Profile of Students in terms of Programs and Sex Assigned at Birth

Table 1 shows that undergraduate students in Psychology have the most respondents ($f=170$, $\%=49.7$), followed by the students in Social Work ($f=120$, $\%=35.1$). The respondents in Human Services have a frequency of 28, with 8.2%, and the remaining respondents in Sociology have a frequency of 24, comprising 7% of the total sample size. Additionally, the undergraduate student's assigned sex at birth was disclosed. Males have a frequency of 113, with 33%, followed by females with a frequency of 229, with 67%, making a total of 342 respondents. This data is aligned with the stratified proportionate sampling used in this study, making the results generalizable among undergraduate students. Probabilistic sampling techniques, such as stratified random sampling, are recommended because they can yield more accurate and dependable findings despite limited assumptions, according to Basti and Madadzadeh (2021).

Table 1. *Demographic profile of the undergraduate students*

Undergraduate Programs	Frequency	Percentage (%)
Human Services	28	8.20%
Psychology	170	49.7%
Social Work	120	35.1%
Sociology	24	7.00%
Sex Assigned at Birth		
Male	113	33.0%
Female	229	67.0%

3.2 Levels of Perceived Social Support among Undergraduate Students

Table 2 shows the levels of perceived social support among undergraduate students. Statement 5, "I have a special person who is a real source of comfort to me." shows a mean of 5.88 and a standard deviation of 1.41, indicating "Very Strongly Agree." Statement eight, "I can talk about my problems with my family." shows a mean of 4.31 and a standard deviation of 1.81, indicating "Mildly Agree." Statement 9, "I have friends with whom I can share my joys and sorrows." has a mean of 5.66 and a standard deviation of 1.33, indicating "Strongly Agree." The overall weighted mean is 5.55 with a standard deviation of 1.09, indicating that the undergraduate students' responses can be interpreted as "Strongly Agree" regarding their perceived social support.

Table 2. *Levels of perceived social support among undergraduate students*

Indicators	Mean	SD	Interpretation
1. There is a special person who is around when I am in need.	5.82	1.34	Very Strongly Agree
2. There is a special person with whom I can share joys and sorrows.	5.85	1.34	Very Strongly Agree
3. My family really tries to help me.	5.35	1.58	Strongly Agree
4. I get the emotional help & support I need from my family.	5.78	1.38	Very Strongly Agree
5. I have a special person who is a real source of comfort to me.	5.88	1.41	Very Strongly Agree
6. My friends really try to help me.	5.53	1.16	Strongly Agree
7. I can count on my friends when things go wrong.	5.61	1.18	Strongly Agree
8. I can talk about my problems with my family.	4.31	1.81	Mildly Agree
9. I have friends with whom I can share my joys and sorrows.	5.66	1.33	Strongly Agree
10. There is a special person in my life who cares about my feelings.	5.83	1.41	Very Strongly Agree
11. My family is willing to help me make decisions.	5.68	1.52	Very Strongly Agree
12. I can talk about my problems with my friend	5.42	1.48	Mildly Agree
Overall Weighted Mean	5.55	1.09	Strongly Agree

However, some statements on this scale, such as "I can talk about my problems with my family" and "I can talk about my problems with my friends," have the lowest mean score among undergraduate students. These questions have something to do with the personal life of a particular person emotionally. As Morgan et al. (2017) suggested, it was primarily characterized by providing good treatment and enough understanding from peers or family members to have a specific person talk about their problem. Moreover, the findings indicate that undergraduate students generally have strong perceived social support from family and friends, particularly regarding emotional help and comfort. This finding was consistent with Aziz et al. (2024), who discovered that family support was the most important source of perceived social support, followed by friends. This support is essential for stress management and psychological well-being. However, there may be areas where communication and support systems might be further improved, particularly in addressing personal issues and decision-making among undergraduate students. This aligns with the conclusions of Ponikwer et al. (2022), who discovered that students are more inclined to seek assistance for academic concerns rather than personal ones, frequently favoring family and friends over university support services.

3.3 Levels of Grit among Undergraduate Students

Table 3 shows the Grit levels of undergraduate students for each indicator. Statement 4, "I am a hard worker," garnered the highest mean of 2.67 and a standard deviation of 1.00, indicating "somewhat like me." Statement 8, "I am diligent," garnered the lowest mean score of 2.11 and a standard deviation of 0.80, indicating that "mostly like me." The dimension for consistency of interest ($m=2.44$, $SD=0.69$) and the dimension for perseverance of effort ($m=1.95$, $SD=0.56$) both have a verbal interpretation of "mostly like me." The overall weighted mean is 2.75 with a standard deviation of 0.42, indicating that "somewhat like me" is the equivalent of undergraduate students' responses regarding grit. The findings proved that comparatively high grit levels in "perseverance of effort" and "diligence" indicate that students already have strong traits in these domains. Similar findings were established

by Burke et al. (2022), who discovered that graduate students exhibited high grit levels, with perseverance scores surpassing consistency of interest. Counselors and other stakeholders can acknowledge and reinforce these strengths by providing opportunities for students to cultivate these traits further to achieve better academic outcomes.

Table 3. *Levels of grit among undergraduate students*

Indicators	Mean	SD	Interpretation
1. New ideas and projects sometimes distract me from previous one.	2.89	1.10	Somewhat like me
2. Setbacks don't discourage me.	2.67	1.00	Somewhat like me
3. I have been obsessed with a certain idea or project for a short time but later lost interest.	2.91	1.11	Somewhat like me
4. I am a hardworker.	2.67	1.00	Mostly like me
5. I often set a goal but later choose to pursue a different one.	3.03	1.08	Somewhat like me
6. I have difficulty maintaining my focus on project that take more than a few months to complete.	3.37	1.29	Not like me at all
7. I finish whatever I begin.	2.31	0.95	Mostly like me
8. I am diligent	2.11	0.80	Mostly like me
Consistency of Interest	2.44	0.69	Mostly like me
Perseverance of Effort	1.95	0.56	Mostly like me
Overall Weighted Mean	2.75	0.42	Somewhat like me

Similarly, in a longitudinal study by Nishikawa et al. (2022), higher perseverance was associated with better baseline academic performance and increased long-term academic improvement. While students exhibit strong perseverance and diligence, the dimension of "consistency of interest" indicates the potential to develop this aspect of grit further. This supports the study of Herdian (2022) that while perseverance of effort generally remains high among students, consistency of interest appears to be a more variable factor. In online learning environments, undergraduate students demonstrated higher perseverance of effort compared to consistency of interest during the pandemic. Educational institutions could design programs to help students find and maintain a consistent interest or passion for their studies or extracurricular pursuits. Career counseling, mentorship programs, or activities focused on exploring and committing to long-term academic or career goals could help students cultivate consistent interests, enhancing their overall grit. Educational engagement, self-regulated learning, and psychological well-being positively correlate with harmonious passion (Sverdlik et al., 2021). A consistent drive also safeguards against psychological distress and academic procrastination (Peixoto et al., 2021).

3.4 Levels of General Self-efficacy among Undergraduate Students

Table 4 shows the levels of General self-efficacy among undergraduate students. Most of the statements are "moderately true" among the respondents. For instance, the first statement, "I can always manage to solve difficult problems if I try hard enough," has a mean of 3.36 and a standard deviation of 0.66, indicating "moderately true." Statement 2, "If someone opposes me, I can find the means and ways to get what I want," has a mean of 2.79 and a standard deviation of 0.72, indicating "moderately true." On the other hand, statement 6, "When I look at the story of my life, I am pleased with how things have turned out so far," garnered the highest mean of 3.41 and a standard deviation of 0.69, indicating "exactly true." The overall weighted mean is 3.10, with a standard deviation of 0.52. This indicates that "moderately true" is the equivalent response of the undergraduate students regarding their general self-efficacy.

Table 4. *Levels of general self-efficacy among undergraduate students*

Indicators	Mean	SD	Interpretation
1. I can always manage to solve difficult problems if I try hard enough.	3.36	0.66	Moderately true
2. If someone opposes me, I can find the means and ways to get what I want.	2.79	0.72	Moderately true
3. It is easy for me to stick to my aims and accomplish my goals.	3.13	0.72	Moderately true
4. I am confident that I could deal efficiently with unexpected events.	2.92	0.76	Moderately true
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.	3.01	0.73	Moderately true
6. When I look at the story of my life, I am pleased with how things have turned out so far.	3.41	0.69	Exactly true
7. I can solve most problems if I invest the necessary effort.	3.04	0.81	Moderately true
8. When I am confronted with a problem, I can usually find several solutions.	3.03	0.75	Moderately true
9. If I am in trouble, I can usually think of a solution.	3.10	0.75	Moderately true
10. I can usually handle whatever comes my way.	3.17	0.83	Moderately true
Overall Weighted Mean	3.10	0.52	Moderately true

This finding suggests students can overcome challenges and achieve their goals through self-efficacy. It shows that general self-efficacy helps students to perform academically, with the indicators being answered mostly

moderately true. This is aligned with Bouih et al. (2021) who stated that general self-efficacy is a student's belief in their ability to perform actions or learn at certain levels. It can impact how people feel, think, behave, and motivate themselves. It has a significant role in motivating people to do such things, and having determination can lead to good academic performance. Educational institutions could integrate self-efficacy-building strategies into academic support programs. Lin et al. (2022) found positive associations between self-efficacy, self-regulation strategies, and academic achievement. Moreover, Asyanova et al. (2024) suggested that to improve students' self-efficacy and academic outcomes, educational institutions can implement techniques such as developing positive thinking, setting realistic goals, and enhancing self-regulation and time management skills.

3.5 Relationship between Perceived Social Support and General Self-efficacy

Table 5 shows a p-value of <0.001, meaning a significant relationship exists between perceived social support and general self-efficacy among undergraduate students. Meanwhile, the magnitude of the relationship is weak ($R=0.41$), indicating a slight tendency for both variables to increase or decrease together.

Table 5. Relationship between perceived social support and general self-efficacy

Variables	R-value	p-value	Decision	Remarks
Perceived Social Support	0.41	<0.001	Reject Ho	Significant
General Self-efficacy				

Findings revealed that the individuals perceived to have higher social support are likely to have higher levels of general self-efficacy. This supports the study of Grey et al. (2020), who found that perceived social support can be beneficial because it buffers against stress and challenges and allows individuals to believe in their ability to manage challenging tasks. This perceived social support can lead to higher self-efficacy. According to El-Sayed et al. (2024), social support can allow people to acquire skills and gain mastery experiences, which may enhance self-efficacy.

3.6 Regression Analysis Between Perceived Social Support and General Self-efficacy

Table 6 shows the prediction of perceived social support on general self-efficacy. The regression coefficient for perceived social support is 0.19. The standard error is 0.02, and the t-value for the predictor is 8.16. Furthermore, the ANOVA for the regression model yields an F-value of 66.5 with a probability value of <0.001, suggesting that perceived social support explains a significant variance in general self-efficacy among undergraduate students. The coefficient of determination obtained ($R^2=0.16$) indicates that perceived social support can predict 16% of the variance in general self-efficacy.

Table 6. Regression estimate between perceived social support and general self-efficacy

Predictor	Estimate	SE	t-value	p-value	Remarks
Intercept	2.02	0.13	15.00	<0.001	Significant
Perceived Social Support Level	0.19	0.02	8.16	<0.001	Significant

Note. Criterion = General Self-efficacy, $R^2 = 0.16$, Adjusted $R^2 = 0.16$, F-value = 66.5

The findings highlight the relevance of social networks such as family, friends, and teachers in improving students' confidence to confront challenges and achieve goals. This highlights the necessity of fostering supportive education environments to boost students' belief in their abilities. Encouragement from family, friends, and teachers can help establish and sustain self-efficacy, leading to increased engagement and performance in various tasks and activities. This substantiates recent research that emphasizes the vital role of self-efficacy in students' academic performance and well-being. Social support from teachers and peers significantly predicts student engagement, well-being, and self-efficacy (Song, 2024). Educational environments greatly influence self-efficacy development, with more open and supportive practices fostering higher levels of self-efficacy (Lin & Chekal, 2024). Moreover, fostering a supportive social environment for individuals may enhance their belief in their abilities, improving their overall well-being and performance in various tasks. Moussa (2023) revealed that self-efficacy, defined as people's judgments of their capabilities, plays a crucial role in academic achievement and behavior among students. Research has shown a strong positive correlation between students' general self-efficacy and academic performance. Furthermore, in the review of Tripathi and Singh (2024), self-efficacy significantly impacts task approach, goal striving, and accomplishment in academic domains among students in higher education.

3.7 Relationship between Grit and General Self-efficacy

Table 7 shows the relationship between grit and general self-efficacy. Moreover, the subdomains of grit, which are perseverance of effort and consistency of interest, have also been correlated with general self-efficacy. The first column shows that grit garnered a p-value of 0.76, meaning there is no significant relationship between grit and general self-efficacy among undergraduate students. On the other hand, a p-value of <0.001 was obtained from both subdomains. The magnitude and direction of the relationship between perseverance of effort and general self-efficacy were negative and weak ($R=-0.44$). This indicates that as perseverance of effort increases, general self-efficacy tends to decrease, and vice versa. Furthermore, the magnitude and direction of the relationship between consistency of interest and general self-efficacy is positive and weak ($R=0.37$). This indicates a slight tendency for consistency of interest and general self-efficacy to increase together, although the relationship between them is not strong.

Table 7. *Relationship between grit and general self-efficacy*

Variables	r-value	p-value	Decision	Remarks
Grit	0.02	0.76	Fail to Reject H_0	Not Significant
Perseverance of Effort	-0.44	<0.001	Reject H_0	Significant
Consistency of Interest	0.37	<0.001	Reject H_0	Significant

Guo et al. (2019) argued that grit must be examined at the subdomain level because combining its components could obscure their distinct contributions. According to Credé et al. (2017), the perseverance of effort reported that persistence does not always lead to positive results. The negative correlation between perseverance of effort and general self-efficacy could be that students who persistently exert effort in the face of challenges may feel frustrated or discouraged if their efforts do not lead to external success, which can decrease their sense of self-efficacy. As suggested by Rossi et al. (2020), general self-efficacy positively correlates with intrinsic motivation and negatively correlates with extrinsic motivation among adolescents. Some persist through challenges, termed "movers," while others give up, called "stoppers." Understanding these persistent behaviors and emotional responses among undergraduate students can help educators support students' long-term persistence (Wert et al., 2021). Conversely, it can be suggested that undergraduate students who maintain consistent interests over time are more likely to build expertise and confidence in those areas, contributing to higher general self-efficacy. Clark and Malecki (2019) claimed that consistency of interest can improve belief in one's abilities through mastery experiences and self-regulation. Students with high stability of interests demonstrate greater satisfaction with their educational choices and a stronger sense of control over their lives (Shilova, 2023).

3.8 Regression Estimates of Perseverance of Effort

Table 8 shows the regression analysis of perseverance of effort and general self-efficacy. The beta coefficient for perseverance of effort is -0.41. The standard error is 0.05, and the t-value is -9.11. The ANOVA for the regression model yields an F-value of 82.9 with a probability value of <0.001. The coefficient of determination ($R^2=0.20$) indicates that 20% of the variance in general self-efficacy can be predicted by perseverance of effort.

Table 8. *Regression estimates of perseverance of effort*

Predictor	Estimate	SE	t-value	p-value	Remarks
Intercept	3.90	0.09	42.41	<0.001	Significant
Perseverance of Effort	-0.41	0.05	-9.11	<0.001	Significant

Note. Criterion = General Self-efficacy, $R^2 = 0.20$, Adjusted $R^2 = 0.19$, F-value = 82.9

Furthermore, these findings may seem surprising because persistence is often crucial for success. However, it is possible that continuous effort without recognition or positive outcomes leads to frustration and decreased self-confidence. Unacknowledged effort can be exhausting, and research supports this view, showing that the absence of positive feedback can lead to burnout and reduced self-efficacy (Datu & Valdez, 2017). Moreover, these results emphasize that educators and academic systems must do more than encourage hard work. Positive reinforcement, acknowledgment of achievements, and validation of effort are vital for maintaining and amplifying students' self-efficacy. Providing timely feedback and celebrating small successes can remind students that their efforts are valued. This approach helps prevent the adverse effects of continuous, unrewarded effort and fosters motivation and confidence. This is similar to Macalisang and Bonghawan's (2024) findings, which indicate that teachers' learning reinforcement strategies elevate students' self-efficacy and academic performance. Moreover, automated

encouragement messages before exams can also increase students' self-efficacy. Integrating encouragement interventions into teaching practices can contribute to a more engaging school climate and better academic results (Keller & Szakál, 2021).

3.9 Regression Estimates of Consistency of Interest

Table 9 shows the regression analysis of the interest and general self-efficacy consistency. The beta coefficient is 0.28, while the standard error is 0.04. The t-value for the predictor is 7.44, and the F-value is 55.40 with a probability value of <0.001, suggesting that consistency of interest as a subdomain of grit can predict a significant variance in general self-efficacy among undergraduate students. The coefficient of determination ($R^2=0.14$) indicates that consistency of interest accounts for 14% of the variance in general self-efficacy.

Table 9. *Regression estimates of consistency of interest*

Predictor	Estimate	SE	t-value	p-value	Remarks
Intercept	2.41	0.10	25.0	<0.001	Significant
Consistency of Interest	0.28	0.04	7.44	<0.001	Significant

Note. Criterion = General Self-efficacy, $R^2 = 0.14$, Adjusted $R^2 = 0.138$, F-value = 55.40

This corroborates the findings of Credé et al. (2017), who discovered that sustained interests enhance self-efficacy by bolstering confidence in surmounting problems. Furthermore, Lee and Sohn (2017) explained that individuals with a high degree of consistency are more proficient in self-regulation, which is closely linked to increased self-efficacy. Therefore, cultivating consistent interests would enhance an individual's self-efficacy. Empowering students to identify and nurture consistent interests may enhance their self-efficacy and support their ability to achieve personal and academic goals. Consistency of interest significantly predicts exam attempts and study progress in online higher education (Neroni et al., 2022). Self-directed learning intervals that allow students to pursue their interests have increased interest and self-efficacy over time (Schweder & Raufelder, 2022). Individual interest plays a significant role in developing advanced self-efficacy skills, even predicting it more than proficiency in some cases (Kim, 2022).

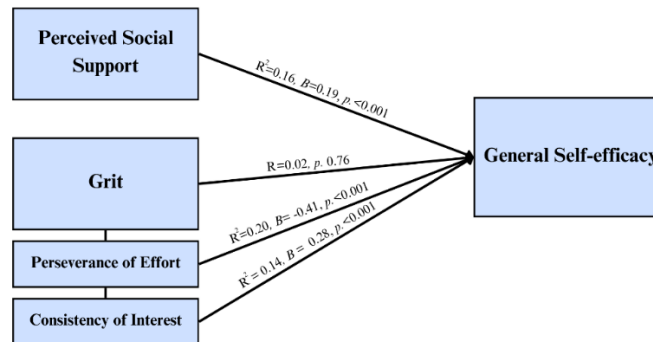


Figure 1. The multiple linear regression analysis

Figure 1 presents the multiple regression analysis between undergraduate students' perceived social support (x_1), grit (x_2), and general self-efficacy (y). This highlights the critical role of perceived social support and grit in explaining students' self-efficacy. Findings revealed that perceived social support predicts general self-efficacy. Social networks are essential in fostering students' belief in their abilities to overcome challenges (Grey et al., 2020) and gain mastery experience (El-Sayed et al., 2024). Research confirms that a supportive educational environment boosts students' self-efficacy, leading to better academic performance and well-being (Moussa, 2023; Song, 2024; Lin & Chekal, 2024). Additionally, it shows that general grit does not predict general self-efficacy. Therefore, subdomains were analyzed as suggested by (Guo et al., 2019). The perseverance of effort highlights a significant negative correlation with general self-efficacy. Although persistence is important, it can negatively affect self-efficacy (Credé et al., 2017) when not paired with recognition or positive outcomes, potentially leading to frustration and burnout (Datu & Valdez, 2017). Lastly, it shows that consistency of interest positively predicts general self-efficacy among undergraduate students. Promoting consistent interests and self-directed learning can further enrich self-efficacy, as students with better self-regulation (Lee & Sohn, 2017) and stable interests

(Schweder & Raufelder, 2022) tend to demonstrate greater satisfaction and achievement (Shilova, 2023; Neroni et al., 2022).

4.0 Conclusion

The researchers observed that general self-efficacy among undergraduate students is predicted by perceived social support and the subdomain of grit, namely the consistency of interest. However, a subdomain of grit, particularly perseverance of effort, negatively predicts general self-efficacy. Whereas grit itself does not predict general self-efficacy among undergraduate students. This study suggests that encouraging undergraduate students to maintain their perceived social support and consistency of interest can improve their academic engagement. Perceived social support is crucial for undergraduate students' well-being, as support from friends, family, and others helps improve their academic performance. It promotes health by improving students' ability to manage stress, boosting their overall well-being, and enhancing their quality of life. Perceived social support enables undergraduate students to strengthen their self-efficacy and maintain well-being in their academic pursuits. Furthermore, consistency of interest allows undergraduate students to achieve their long-term goals by maintaining their interest despite setbacks, obstacles, and failures. Consistency is crucial for achieving mastery and success, as it drives individuals to engage in deliberate practice and persevere through challenges over time. It is the determination to keep pushing forward despite the difficulties encountered in school. These findings significantly impact the lives and academic engagement of undergraduate students.

To increase their efficacy and enhance their academic success, the researchers recommend that undergraduate students embrace the support from their social networks, including family, friends, and significant others, and stay consistent in their academic interests. Additionally, the researchers recommend that school counselors initiate and develop programs that help strengthen undergraduate students' overall sense of self-efficacy, like social support and prolonged interest-building activities. Moreover, school stakeholders should recognize and provide healthy feedback on students' efforts to promote positive academic commitment. The results of this study can also help the human services field to guide future research and assist those with poor self-efficacy by leveraging perceived social support and promoting consistency of interest. Future researchers are encouraged to replicate this study across various educational levels, including elementary, secondary, and graduate learners. Furthermore, future studies may integrate qualitative research methods with quantitative analyses to enhance comprehension of the subjective experiences and mechanisms underlying these correlations. Emerging research may focus on exploring variables that influence the perseverance of efforts to gain a more comprehensive understanding of its dynamics. Thus, by taking a more holistic approach, researchers can increase their understanding of the factors influencing general self-efficacy among undergraduate students, laying the groundwork for developing interventions to improve educational outcomes.

5.0 Contributions of Authors

All the authors declare equal contributions to each section. The authors reviewed and approved the final work.

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7.0 Conflict of Interests

The authors declared no conflict of interest in the publication of this research.

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