

STUDY Habits, Self-Efficacy, and Self-Directed Learning of Junior High School STUDENTS

Honey Joy L. Mapano¹, Lolly Jean C. Simbulas, PhD²

¹Teacher I, Bango National High School

honeyjoy.mapano@deped.gov.ph

²University of the Immaculate Conception, Davao City

lsimbulas@uic.edu.ph

ABSTRACT

This study explored the levels of study habits, self-efficacy, and self-directed learning among junior high school students. A sample of 197 students was selected using stratified random sampling from three public schools in the Compostela-East District, Davao de Oro. A quantitative descriptive-correlational research design was utilized to examine the relationship between the identified independent variables, study habits and self-efficacy, and the dependent variable, self-directed learning. The data used in this study were gathered through adapted questionnaires validated by experts. To analyze and interpret the data, the researchers used the statistical tools of mean, standard deviation, Pearson's *r*, and multiple regression analysis. The findings revealed a high level of study habits, self-efficacy, and self-directed learning, indicating that junior high school students often manifested these. Further, statistical analysis indicated that, although both study habits and self-efficacy had a significant positive relationship with self-directed learning, study habits had a stronger effect than self-efficacy.

KEYWORDS: *Education, study habits, self-efficacy, self-directed learning, Philippines.*

INTRODUCTION

The primary aim of this study is to assess levels of study habits, self-efficacy, and self-directed learning among junior high school students, and to investigate the extent to which study habits and self-efficacy influence their self-directed learning. In today's education system, academic success relies not only on instruction but also on the learner's study habits, self-efficacy, and ability to take charge of their self-directed learning. In the rapidly changing educational landscape, students are expected to take greater responsibility for their learning. This shift emphasizes key personal factors such as study habits, self-efficacy, and self-directed learning. These elements play an important part in determining academic performance and overall student development

Self-directed learning is the individual's ability to take initiative and regulate their life without seeking help from others (Khalid et al., 2020). However, self-directed learning can be challenging for students to achieve the necessary level of learning independently without their teacher's guidance (Esmail et al., 2024). Furthermore, the low level of self-directed learning presents obstacles, as it eventually leads to poor academic achievement, a decreased sense of accountability, and a lack of learning skills (Rydze, 2016).

In Oklahoma City, first-year students have faced many difficulties when implementing a self-directed learning activity (Hill et al., 2020). In the U.S., in a survey of 431 participants, only 25 percent of four-year college graduates rated themselves as excellent in self-directed learning; this low rate raises concerns about students' self-directed learning (Hew et al., 2016). In addition, fourth-year students at Tadulako University in Indonesia have encountered difficulties with self-directed learning due to a lack of initiative (Ramli et al., 2018).

Further, a study was conducted in the Northern Philippines regarding students enrolled in an alternative education program; they were assumed to have a low acquisition rate of 21st-century skills, including self-directed learning skills (Tindowen et al., 2017). Another study conducted in a public high school in General Santos City faced challenges in implementing self-directed learning environments (SDLEs) in the learning process (Tacogue, 2022).

Furthermore, only a few studies have investigated the relationship between study habits and self-directed learning (Mancheri et al., 2018). Most studies focused only on the relationship between study habits and academic performance (Jafari et al., 2019; Sakirudeen & Sanni, 2017; Rabia et al., 2017). On the other hand, a study concluded that study habits were significantly correlated with self-regulation and that everyone needs to practice effective self-regulation to learn and achieve learning objectives (Misa & Banamtuan, 2022). On the contrary, a study found no significant relationship between study habits and self-directed learning (Sangaji & Nona, 2024).

Moreover, many studies have examined the relationship between self-efficacy and self-directed learning (Saeid & Eslaminejad, 2017; Turan & Koç, 2018; Langshaw, 2017; Chen et al., 2023). The studies concluded that self-efficacy significantly correlated with self-directed learning. In addition, a study also stated that self-directed learning has a positive impact on self-efficacy (Turan & Koç, 2018).

However, the majority of self-directed learning studies seem to have been conducted with college students (Kohan et al., 2017; Almomani et al., 2023; Hill et al., 2020; Monkaresi et al., 2015; Koirala et al., 2021). Above all, this study fills a research gap and underscores the importance of assessing junior high school students' current readiness to foster self-directed learning and enhance educational quality (Morris, 2019). Aside from the lack of research, the researcher did not identify any studies that examined the relationship between study habits and self-directed learning or that examined study habits, self-efficacy, and self-directed learning in a single setting.

Objectives of the Study. Building upon the foundations laid by previous studies, this research extended and refined our understanding of self-directed learning, emphasizing its ongoing relevance in the ever-evolving landscape of education. The study aimed to determine the levels of study habits, self-efficacy, and self-directed learning and to examine how junior high school students' self-directed learning is influenced by study habits and self-efficacy.

METHODOLOGY

Research Design. This study utilized a quantitative research design, specifically the descriptive correlational approach. This quantitative research explored the factors that impacted junior high school students' ability for self-directed learning, with a special emphasis on their study habits and self-efficacy. In addition, this research used a descriptive design study. This design was employed to explore the levels of study habits, self-efficacy, and self-directed learning among junior high students in public secondary schools within Compostela, Davao de Oro.

Respondents of the Study. In addition, a total of 197 respondents were needed to conduct the study based on the computation. Using ratio and proportion to determine the number of respondents per school: 49 respondents were selected from School A, 63 respondents from School B, and 85 respondents from School C. The selection process was guided by ethical considerations, including informed consent and voluntary participation, to uphold the integrity of the research.

Furthermore, to minimize potential power dynamics, the researcher explicitly emphasized that participation in this study was independent of any academic assessment, ensuring students felt free to participate without fear of repercussions or influence on their academic standing.

Research Instrument. Also, this study utilized three adapted questionnaires to assess students' study habits, self-efficacy, and self-directed learning. The instruments were validated by experts and pilot-tested to ensure reliability and clarity. The study habits questionnaire was taken from the study "The Learners' Study Habits and Its Relation to Their Academic Performances" by Tus et al. (2020), with a reliability coefficient of .88. For the self-efficacy questionnaire, it was taken from the study Journal of Psychopathology and Behavioral Assessment by Muris (2001), with a Cronbach's alpha of 0.88. Self-directed learning was adopted from the study "An Exploratory Study of Self-Directed Learning: The Differences between IT and Non-IT Employees in Thailand" by Malison and Thammakoranonta (2018), which reported a Cronbach's alpha of 0.996. The recorded Cronbach's alphas for the following questionnaires indicate the dependability and consistency of the chosen instruments. Each statement was measured on a 5-point Likert scale with the range 1 (strongly disagree) to 5 (strongly agree).

Data Collection. The researcher first obtained approval to conduct the study by formally requesting it from the Graduate School dean at the University of the Immaculate Conception (UIC) in Davao City. The UIC Research Ethics Committee forwarded a letter of permission to the Schools Division Superintendent of the Division of Davao de Oro. Upon approval, the researcher sent copies of the letter to the school principals and heads of the three public secondary high schools in the Compostela-East District to support the administration of the questionnaires to the respondents.

The parents must first sign the Informed Parent Consent before the respondents can sign. Face-to-face orientations were conducted to inform students; students who do not have a signed ICF will not be allowed to answer the questionnaire or participate in the survey. The vulnerable participants were informed of their absolute right to withdraw from the study at any time, without penalty or coercion.

In conducting the study, the respondents may have experienced certain risks or discomfort while answering the questionnaire. To lessen these risks, the researcher informed the respondents that participation was entirely optional, and they could skip any question that made them uncomfortable or withdraw at any time without consequences. If respondents had concerns or felt discomfort, they could contact the researcher for assistance, clarification, or additional support.

The study was conducted in March, the fourth quarter of the 2024-2025 school year. The administration of the three sets of survey questionnaires was done face-to-face. The researcher coordinated with classroom teachers to allocate 30-40 minutes for the activity and provided standardized instructions to students to clarify the purpose and process. To maintain privacy, the researcher ensured proper spacing of students during the survey. The respondents' responses were retrieved immediately after answering and collected directly from the participants. All completed questionnaires were then stored in a zipped organizer. Lastly, this study strictly adhered to the provisions of Republic Act 10173, also known as the Data Privacy Act of 2012, prioritizing the confidentiality and security of sensitive personal information, especially during data analysis. Results were compiled, tabulated, and kept confidential.

Statistical Tool. Data collected was analyzed and interpreted using the mean to describe the level of significance of study habits and self-efficacy in self-directed learning among junior high school respondents. Standard deviation is used to measure and describe how much a set of data values varies or is dispersed. Pearson's r was used to determine the significance of the relationship between study habits and self-efficacy in self-directed learning among junior high school students. Lastly, multiple regression analysis was used to determine which independent variable significantly predicted self-directed learning among junior high school students. Prior to running the Pearson's r and multiple regression analyses, the data were tested for normality to ensure they met the assumptions required for these parametric tests.

RESULTS AND DISCUSSION

Level of Study Habits of Junior High School Students

Table 1 reveals the level of study habits of junior high school students. Results show that the overall mean of 3.45, which is described as high, is often observed, and the overall standard deviation of 0.43 indicates that the responses are consistent.

Table 1
Level of Study Habits of Junior High School Students

	Mean	SD	Description
Budgeting Time	3.47	0.62	High
Physical Condition	3.54	0.56	High

Reading Ability	3.41	0.50	High
Note-taking	3.48	0.72	High
Learning Motivation	3.37	0.54	Moderate
Memory	3.47	0.61	High
Taking Examinations	3.48	0.56	High
Health	3.35	0.78	Moderate
TOTAL MEAN	3.45	0.43	High

The study habits in terms of time budgeting were 3.47, described as high, and the standard deviation of 0.62 was considered moderately consistent. The means of this indicator ranged from 3.27 to 3.62. The item *dividing time according to the matter to be answered and the number of questions helped them manage their exam better, with a mean of 3.62, and the item studying every day had a mean of 3.27.*

In terms of physical conditions, it was 3.54, described as high, and the standard deviation was 0.56, indicating high consistency. The means of this indicator ranged from 3.13 to 3.93. The statement, *realizing the importance of the subjects for their future career,* had a mean of 3.93, while the item about having all the required books and other relevant study materials with them had a mean of 3.13. Reading ability was 3.41, described as high, and the standard deviation of 0.50 was also high, indicating high consistency. The means of this indicator ranged from 2.82 to 3.92. The item *reading very carefully to understand every point had a mean of 3.92, while the item studying in the library regularly had a mean of 2.82.*

This lower mean for library usage might suggest challenges with facility accessibility or a preference for home-based study environments, highlighting a need for schools to ensure study spaces are conducive and accessible to junior high students.

The category mean for study habits regarding note-taking was 3.48, indicating that note-taking is often observed among junior high school students, and the standard deviation for note-taking was 0.72, indicating less consistency. The means of this indicator ranged from 3.20 to 3.63. The item *taking down notes very sincerely during classroom teaching had a mean of 3.63, while the item comparing their class notes with the notes from the textbooks at home had a mean of 3.20.* In terms of learning, motivation is 3.37 (moderate), indicating that junior high school learning motivation is sometimes evident, and the standard deviation is 0.54, which is considered highly consistent. The means of this

indicator ranged from 2.48 to 4.12. The item *'attending their classes regularly on time'* had the highest mean of 4.12, while the item *'frequently remaining absent from class'* had a mean of 2.48. In terms of memory, it was 3.47, described as high, indicating that the junior high school student's memory is often manifested, and the recorded memory standard deviation was 0.61, described as moderately consistent. The means of this indicator ranged from 2.98 to 3.83. The item *recalling the matter after reading it* had the highest mean of 3.83, while the item *cramming certain things without understanding* had a mean of 2.98.

It is notable that the item *'frequently remaining absent from class'* had a low mean of 2.48; this is a positive finding, suggesting that respondents generally do not exhibit chronic absenteeism and reflect a strong commitment to attending classes.

For examinations, the mean was 3.48, indicating that junior high school students' examination-taking is often observed, and the standard deviation was 0.56, indicating high consistency. The means of this indicator ranged from 3.13 to 3.98. The item *"Read the entire question paper very carefully before writing the answers to the questions in the examination."* While the item *"carefully recording their examination results"*, it got a mean of 3.13. In terms of health, the mean was 3.35, described as moderate, indicating that the junior high school student's health is sometimes manifested, and the standard deviation of health was 0.78, described as inconsistent. The means of this indicator ranged from 3.14 to 3.50. The item *"getting disappointed if the examination result is not favorable"* had the highest mean of 3.50, while the item *"getting guidance about proper study habits from their teachers"* had a mean of 3.14.

The general finding on the variable study habits aligns with Lawrence's (2014) statement that students' study habits are high, and this may be due to the freedom they are given to think and study. The results align with those of Shetty et al. (2022), who also examined students' study habits and reported high levels of them. Moreover, effective study habits include consistent assignment completion, active class participation, strong time management skills, focused attention, and dedicated effort (Fouche, 2017).

Level of Self-efficacy of Junior High School Students

Table 2 reveals the level of self-efficacy of junior high school Students. Results show that the overall mean of 3.46, which is considered high, indicates

that academic, social, and educational self-efficacy are often manifested. The overall standard deviation is 0.53, indicating that the responses are consistent. The category mean for academic self-efficacy was 3.53, which is considered high, indicating that junior high school students often demonstrate high academic self-efficacy. The standard deviation of academic self-efficacy was 0.63, which is classified as moderate. The means of this indicator ranged from 3.38 to 3.67. The item *that succeeded in passing all subjects had a mean of 3.67, while the item that was good at studying even when there were other interesting things to do had a mean of 3.38.*

Table 2
Level of Self-efficacy of Junior High School Students

	Mean	SD	Description
Academic Self-efficacy	3.53	0.63	High
Social Self-efficacy	3.98	0.66	High
Emotional Self-efficacy	3.41	0.69	High
OVERALL MEAN	3.46	0.53	High

In terms of social self-efficacy, it is 3.43, which is high, indicating that the junior high school student’s social self-efficacy is often demonstrated, and the standard deviation of health is 0.66, which is moderate. The means of this indicator ranged from 3.08 to 3.78. The item *being good at making friends with other children* had a mean of 3.78, whereas the item being skilled at chatting with an unfamiliar person had a mean of 3.08. The emotional self-efficacy is 3.41, indicating high levels, suggesting that the senior high school student’s educational self-efficacy is often demonstrated, and the standard deviation of emotional self-efficacy is 0.69, which is considered moderate. The means of this indicator ranged from 3.22 to 3.67. The item *“being good at controlling their feelings”* got a mean of 3.67, while the items *“succeeded in suppressing unpleasant thoughts”* and *“succeeded in not worrying about things that might happen.* Both got a mean of 3.22, categorized as moderate.

The moderate scores in these specific social and emotional self-efficacy items indicate that students might benefit from targeted socio-emotional learning (SEL) interventions or workshops designed to build interpersonal confidence and emotional regulation strategies.

The general finding on self-efficacy aligns with the study by Freire et al. (2020), which reported high levels of self-efficacy among undergraduate

students. Furthermore, Hayat et al. (2020) reported high levels of self-efficacy and found that students’ self-efficacy affects their learning.

Level of Self-directed Learning of Junior High School Student

Table 3 reveals the level of self-directed learning among junior high school students. Results show that the overall mean is 3.70, which is considered high, and the standard deviation is 0.54, indicating consistent responses. The mean for learning with intention is 3.69, indicating a high level, while the standard deviation of 0.56 suggests moderate variability. This indicates moderate variability among junior high school students in their approach to learning with intention. The means of this indicator ranged from 3.39 to 4.07. The item *that preferred setting their own goals* had a mean of 4.07, while the item *that was assertive* had a mean of 3.39. The category mean for open-mindedness is 3.84, which is high, and the standard deviation is 0.64, indicating moderate variability. The means of this indicator ranged from 3.57 to 4.14. The item *"learning from their mistakes"* got a mean of 4.14, whereas the item *"facing a problem they cannot solve, they will ask for assistance"* got a mean of 3.57.

Table 3
Level of Self-directed Learning of Junior High School Students

	Mean	SD	Description
Learning with Intention	3.69	0.56	High
Open-mindedness	3.84	0.64	High
Self-discipline	3.54	0.57	High
Self-Management	3.62	0.61	High
Desire to Learn	3.81	0.82	High
OVERALL MEAN	3.70	0.54	High

The category mean for self-discipline is 3.54, which is high, indicating that junior high school students’ self-discipline is often observed, and the standard deviation is 0.57. The means of this indicator ranged from 3.30 to 3.81. The item *that preferred setting their learning goals* had a mean of 3.81. In contrast, the item that set strict time frames had a mean of 3.30. In terms of self-discipline, it is 3.62 (high), with a standard deviation of 0.57. The means of this indicator ranged from 3.41 to 3.87. The item *"being a responsible person"* had a mean of 3.87, whereas the item *"being logical"* had a mean of 3.41. The desire to learn is 3.81, which is high, indicating that junior high school students often demonstrate this desire. The standard deviation of desire to learn is 0.82, indicating that students in this area exhibit relatively high variability. The means

of this indicator ranged from 3.61 to 4.03. The item “*having a need to learn*” had the highest mean of 4.03, whereas the item “*enjoying studying*” had the lowest mean of 3.61.

The general finding on self-directed learning aligns with Garcia et al.'s (2020) statement that self-directed learning serves as the decision-making center of a person’s mental framework and tends to take responsibility for their behavior, showing others that they can be dependable and trustworthy. Also, the findings of Tekkol and Demirel (2018), who examined students' levels of self-directed learning. The findings indicated the high levels of self-directed learning among the students.

Significance of the Relationship of Study Habits, Self-efficacy towards Self-directed Learning

Table 4 presents the results of the significance of the relationship between study habits, self-efficacy, and self-directed learning. The results show that study habits had a higher r-value (0.739) than self-efficacy (0.708). Also, as reflected in the p-value, both study habits and self-efficacy were reported as < 0.001, indicating that the probability of observing this strong relationship by chance is less than 0.1%. This shows that self-efficacy is significantly positively related to self-directed learning. Since the r-value is positive, the relationship between study habits and self-efficacy and self-directed learning is direct. It means that as study habits and self-efficacy increase, the level of self-directed learning of students significantly increases.

Table 4
Significance of the Relationship of Study Habits, Self-efficacy towards Self-directed Learning

Variables	r	p	Remarks
Study Habits and Self-directed Learning	0.739	< .001	Significant
Self-Efficacy and Self-directed Learning	0.708	< .001	Significant

Further, the above finding aligns with the study by Mutya et al. (2023), which found that study habits positively impact self-directed learning outcomes, specifically in learning through modules. Also, the study by Misa et al. (2022) found that study habits are significantly correlated with self-regulation and self-directed learning and that everyone needs to practice good self-regulation to accomplish the objectives they set.

This finding aligns with Brandt's (2020) research, which found that factors such as self-efficacy affect self-directed learning and that students' self-directed learning is enhanced by self-efficacy. Similarly, a study by Chen et al. (2023) supports the relationship between self-efficacy and self-directed learning. The study shows that raising students' self-efficacy can enhance their capacity for self-directed learning.

Significance of the Influence of Study Habits, Self-efficacy on Self-directed Learning

The regression results examine the influence of study habits and self-efficacy on self-directed learning. The findings demonstrate that both variables have a significant positive effect on self-directed learning, as indicated by their respective β (beta) coefficients, t-values, and p-values. The result shows that study habits have a strong, statistically significant influence on self-directed learning, with $\beta = 0.482$, $t = 8.334$, and $p < .001$. Study habits emerged as the dominant factor, with stronger predictive power ($\beta = 0.482$) and stronger statistical evidence ($t = 8.334$). A positive standardized beta value of 0.482 indicates that for every unit increase in the value of study habits, there is a corresponding increase of 0.482. Moreover, the data further show that self-efficacy significantly influences students' self-directed learning, with a $\beta = 0.390$, $t = 6.743$, and $p < 0.001$. The p-value is less than 0.05, indicating significance, and the positive standardized beta is 0.390. This means that for every unit increase in self-efficacy, there is a corresponding increase of 0.390 in students' self-directed learning.

Table 5
Significance of the Influence of Study Habits, Self-efficacy on Self-directed Learning

Variables		Self-directed Learning			Remarks
		β	t	p-value	
Study Habit		0.482	8.334	< .001	Significant
Self-Efficacy		0.390	6.743	< .001	Significant
<i>Holistic Model</i>					
r ²	0.632				
F-value	166.893				
p-value	< .001				Significant

Furthermore, the computed r^2 value of 0.632 indicates that 63.2% of the variance in self-directed learning can be explained by the combined effects of study habits and self-efficacy. The F-value of 166.893 and the associated p-value of $< .001$ confirm that the overall model is statistically significant. This indicates that the students' study habits and self-efficacy contributed significantly to the variability of student self-directed learning, accounting for 63 percent of the total variability. However, the remaining 37 percent may be attributed to other variables not included in this study and warrant further exploration in future research.

In addition, the finding about the influence of study habits on self-directed learning aligns with the study by Douglass and Morris (2014), which found that students' study habits were one of the dimensions that can affect self-directed learning. However, the result contrasts with the findings of Sangaji and Nona (2024), who emphasized that students' study habits have no significant influence on self-directed learning. The findings also contradict the study by Gadbury-Amyot et al. (2017), which found a questionable relationship between study habits and self-directed learning.

Similarly, the results on the influence of self-efficacy on self-directed learning are consistent with those of Asiyah et al. (2024), who found a clear relationship between students' self-efficacy and self-directed learning. The findings further support the study by Wijayati et al. (2022), which found that self-directed learning and self-efficacy growth are intrinsically connected aspects that contribute to creating an effective learning environment for students.

Also, Langshaw (2017) found in a study that there is a strong, statistically significant relationship between self-efficacy, as a learner personality characteristic, and self-directed learning. Lastly, the result contradicts the findings of Mufidah et al. (2021), who reported a positive relationship between self-efficacy and students' self-directed learning. The result also aligns with the findings of Asiyah et al. (2024), who found that self-efficacy strongly influences self-directed learning.

These findings offer empirical validation for the theoretical frameworks guiding this study. Bandura's (1997) self-efficacy theory posits that an individual's belief in their capability is a primary determinant of their motivation and persistence; our data confirms this, as self-efficacy emerged as a significant predictor of self-directed learning, suggesting that students who believe in their

competence are better equipped to navigate their own learning. Similarly, Garrison's (1997) model posits that self-directed learning is an iterative process requiring the coordination of self-management and monitoring. The significant influence of study habits found here provides concrete evidence that these routine practices are the behavioral manifestations of the self-regulation skills central to Garrison's model, thereby bridging the gap between theoretical constructs and observable academic behavior.

The Garrison's Self-Directed Learning Theory validates the finding of a significant connection between study habits and self-directed learning among students. According to Garrison (1997), self-directed learning is a multidimensional process that includes self-management, self-monitoring, and motivational control, all of which are supported by effective study habits. In addition, Bandura's self-efficacy theory supports the result showing a strong relationship between learners' self-efficacy and self-directed learning. According to Bandura (1997), self-efficacy, the belief in one's ability to succeed in specific situations, plays a critical role in how people approach goals, tasks, and challenges.

CONCLUSION

In summary, the study found that junior high school students often demonstrate effective study habits and self-efficacy. These two factors are positively correlated with and significantly influence self-directed learning, indicating that students with strong study habits and confidence in their academic abilities are more likely to initiate and manage their learning and improve their self-directed learning.

Based on the study's findings, it is recommended that parents, teachers, and school administrators work together to further enhance students' already strong study habits, self-efficacy, and self-directed learning. Strategies include promoting proactive learning routines, encouraging open communication, supporting emotional resilience, and creating environments that foster goal-setting and problem-solving. Schools should implement programs focused on organizational skills, time management, and self-regulation to strengthen students' autonomy in learning. Finally, further research is encouraged to explore other potential factors that may influence self-directed learning.

To translate these findings into practice, teachers can implement structured note-taking workshops or time-management drills to help students

better organize their academic routines. To boost self-efficacy, educators should provide scaffolded feedback that emphasizes effort and progress, allowing students to experience small successes that build confidence. Furthermore, teachers might introduce "choice boards" or personalized learning contracts, in which students set their own goals and identify the resources they need, thereby actively fostering autonomy in their learning journey.

REFERENCES

- Almomani, L. M., Halalsheh, N., Al-Dreabi, H., Al-Hyari, L., & Al-Quraan, R. (2023). Self-directed learning skills and motivation during distance learning in the COVID-19 pandemic (case study: The university of Jordan). *Heliyon*, 9(9).
- Asiyah, N., Fiteriani, I., & Dharin, A. (2024). Success of Social Sciences Learning in Fourth Grade Elementary School Students in Buay Madang Timur Sub-district: Is There a Connection Between Self-efficacy and Self-directed Learning?. *Jurnal Iqra': Kajian Ilmu Pendidikan*, 9(2), 280-294.
- Bandura, A., & Wessels, S. (1997). Self-efficacy (pp. 4-6). Cambridge: Cambridge University Press.
- Brandt, W. C. (2020). Measuring Student Success Skills: A Review of the Literature on Self-Directed Learning. 21st Century Success Skills. National Center for the Improvement of Educational Assessment.
- Chen, Z. H., Ma, Y. Y., Feng, X. H., & Lin, Y. (2023). Correlation analysis of self-directed learning ability, self-efficacy and academic burnout of junior nursing college students in closed management colleges. *Nursing Open*, 10(4), 2508-2518.
- Douglass, C., & Morris, S. R. (2014). Student perspectives on self-directed learning. *Journal of the Scholarship of Teaching and Learning*, 13-25.
- Esmail, A. A. A. H., Kiflee, D. N. B. A., Maakip, I., Halik, M., & Marshall, S. (2024). Psychosocial barriers to promoting self-directed and autonomous learning: The perception of students and lecturers in Malaysia. *Journal of Education and e-Learning Research*, 11(3), 464-472.
- Freire, C., Ferradás, M. D. M., Regueiro, B., Rodríguez, S., Valle, A., & Núñez, J. C. (2020). Coping strategies and self-efficacy in university students: A person-centered approach. *Frontiers in psychology*, 11, 841.
- Gadbury-Amyot, C. C., Redford, G. J., & Bohaty, B. S. (2017). Dental students' study habits in flipped/blended classrooms and their association with

- active learning practices. *Journal of Dental Education*, 81(12), 1430-1435.
- Garcia, D., Cloninger, K. M., Lester, N., & Cloninger, C. R. (2020). Self-directedness. In *Encyclopedia of personality and individual differences* (pp. 4705-4708). Cham: Springer International Publishing.
- Garrison, D. R. (1997). Self-directed learning: Toward a comprehensive model. *Adult education quarterly*, 48(1), 18-33.
- Hayat, A. A., Shateri, K., Amini, M., & Shokrpour, N. (2020). Relationships between academic self-efficacy, learning-related emotions, and metacognitive learning strategies with academic performance in medical students: a structural equation model. *BMC medical education*, 20, 1-11.
- Hew, K. F., Law, N., Wan, J., Lee, Y., & Kwok, A. (2016). Self-directed learning in science education: Explicating the enabling factors. Singapore: International Society of the Learning Sciences.
- Hill, M., Peters, M., Salvaggio, M., Vinnedge, J., & Darden, A. (2020). Implementation and evaluation of a self-directed learning activity for first-year medical students. *Medical education online*, 25(1), 1717780.
- Jafari, H., Aghaei, A., & Khatony, A. (2019). Relationship between study habits and academic achievement in students of medical sciences in Kermanshah-Iran. *Advances in Medical Education and Practice*, 637-643.
- Khalid, M., Bashir, S., & Amin, H. (2020). Relationship between Self-Directed Learning (SDL) and Academic Achievement of University Students: A Case of Online Distance Learning and Traditional Universities. *Bulletin of Education and Research*, 42(2), 131-148.
- Kohan, N., Arabshahi, K. S., Mojtahedzadeh, R., Abbaszadeh, A., Rakhshani, T., & Emami, A. (2017). Self-directed learning barriers in a virtual environment: a qualitative study. *Journal of advances in medical education & professionalism*, 5(3), 116.
- Langshaw, S. J. (2017). Relationship between the self-efficacy and self-directed learning of adults in undergraduate programs (Doctoral dissertation, Capella University).
- Lawrence, A. S. (2014). Relationship between study habits and academic achievement of higher secondary school students. *Online Submission*, 4(6), 143-145.
- Malison, K., & Thammakoranonta, N. (2018). An exploratory study of self-directed learning: The differences between IT and non-IT employees in Thailand. *Journal of Entrepreneurship Education*, 21(3), 1-16.

- Mancheri, H., Kolagari, S., Modanloo, M., Abdollahi, H., & Aryaie, M. (2018). Effect of team-based learning on study habits of nursing students.
- Misa, J., Maniyeni, A., & Banamtuan, M. F. (2022). Correlation Of Self-Regulation And Learning Habits With Student's Thesis Writing Skills. *Journal Pendidikan Agama Kristen (JUPAK)*, 3(1), 50-62.
- Morris, T. H. (2019). Self-directed learning: A fundamental competence in a rapidly changing world. *International Review of Education*, 65(4), 633-653.
- Mufidah, E. F., Wahyuni, F., Pravesti, C. A., Setyaputri, N. Y., Ariyanto, R. D., & Dwiwana, A. (2021). Pengaruh efikasi diri dan motivasi berprestasi terhadap kesiapan belajar mandiri mahasiswa. *Nusantara of Research: Jurnal Hasil-Hasil Penelitian Universitas Nusantara PGRI Kediri*, 8(2), 120-129.
- Muris, P. (2001). A brief questionnaire for measuring self-efficacy in youths. *Journal of Psychopathology and Behavioral Assessment*, 23, 145-149.
- Mutya, R. C., Alcantara, G. A., Sala, A. M. V., Carascal, I. C., & Terana, C. C. (2023). Student's Attitudes, Study Habits, and Academic Performance in Science Using Self-Learning Modules. *Jurnal Pendidikan IPA Indonesia*, 12(3).
- Rabia, M., Mubarak, N., Tallat, H., & Nasir, W. (2017). A study on study habits and academic performance of students. *Int J Asian Social Sci*, 7(10), 891-897.
- Ramli, N., Muljono, P., & Afendi, F. M. (2018). External Factors, Internal Factors and Self-Directed Learning Readiness. *Journal of Education and e-Learning research*, 5(1), 37-42.
- Rydze, O. A. (2016). Characteristics of ten-year old self-directed learners. In *SHS Web of Conferences* (Vol. 29, p. 01060). EDP Sciences.
- Saeid, N., & Eslaminejad, T. (2017). Relationship between Student's Self-Directed-Learning Readiness and Academic Self-Efficacy and Achievement Motivation in Students. *International education studies*, 10(1), 225-232.
- Sakirudeen, A. O., & Sanni, K. B. (2017). Study habits and academic performance of secondary school students in mathematic: A case study of selected secondary schools in uyo local education council. *Research in pedagogy*, 7(2), 283-297.
- Sangaji, L. K. Y. S. E., & Nona, K. M. M. H. (2024). Exploring The Impact of Self-Directed Learning and Effective Study Routines on Science Proficiency in Fifth-Grade Students. *Hotimah Hotimah· Muhammad Amran· Rahmawati Patta· Musfirah Musfirah· Afdhal Fatawuri*

Syamsuddin· Bhakti Prima Hindiga Hermuttaqien Editors, 292.

- Shetty, S., Kamath, N., & Nalini, M. (2022). Academic stress and study habits of Health Science University students. *Journal of Health and Allied Sciences NU*, 12(01), 71-75.
- Tacogue, S. M. S., Protacio, A. V., Alocada, J. J. S., Gevero, G. A. T., Diama, B. G. Y., Denoy, D. L., ... & Oronce Jr, R. A. (2022). Learning in isolation: Exploring the lived experiences of students in self-directed learning in English. *Globus Journal of Progressive Education*, 12(1), 81-84.
- Tekkol, İ. A., & Demirel, M. (2018). An investigation of self-directed learning skills of undergraduate students. *Frontiers in psychology*, 9, 410879.
- Tindowen, D. J. C., Bassig, J. M., & Cagurangan, J. A. (2017). Twenty-first-century skills of alternative learning system learners. *Sage Open*, 7(3), 2158244017726116.
- Tus, J., Lubo, R., Rayo, F., & Cruz, M. A. (2020). The Learners' Study Habits and ITS Relation on Their Academic Performance. *International Journal Of All Research Writings*, 2(6), 1-19.