



The Relationship Between Self-Regulated Learning and Demographic Characteristics among Undergraduate Nursing Students

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ABSTRACT

Introduction: Self-regulated learning is the ability of individuals to actively regulate thought, feeling, and behavior during the learning process to achieve academic goals. Self-regulated learning is important to support the academic success of nursing students, but there is a lot of literature showing that nursing students are faced with various problems in learning such as tight assignment deadlines, time management, too many assignments, and difficulties in understanding the material caused by not being able to control and regulate themselves during the learning process.

Objective: The purpose of this study was to determine the relationship between self-regulated learning and the demographic characteristics of nursing students. **Methods:** This study was a descriptive quantitative with cross sectional approach. The sample in this study is 276 respondents using a proportionate stratified random sampling technique. Self-Regulated Online Learning Questionnaire (SOL-Q) is used to measure the level of self-regulated learning. **Results:** The result of this study showed that there is a relationship between self-regulated learning and college years ($p < 0.05$). **Conclusion:** Final year students who have low self-regulated learning can be caused by a lack of ability to manage time and motivation, while first-year students have high enthusiasm and motivation to succeed in academic fields. Students need to pay attention and have supporting factors in order to have good self-regulated learning. The faculty is expected to be able to provide programs that help students develop self-regulated learning skills.

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1. INTRODUCTION

The need to produce quality professional nurses is important because the demand for quality nursing services is increasing. Improving nurses' productivity and quality of care with qualified human resources is the main goal of the health care system (Poortaghi et al., 2021). To produce qualified nurse resources with good academic and practical skills, nursing education has an important role in producing professional nurse graduates (Lestari, 2014). It is essential for undergraduate nursing education programs to provide a strong educational and skills foundation to ensure that all graduates are able to provide quality nursing care. (Salamonson et al., 2016). Therefore, it takes good learning skills in the learning process from the beginning in order to apply knowledge and improve basic abilities so that students can become professional graduates and be able to face the workplace challenges.

A lot of literature shows that there are problems faced by nursing students in learning. Nursing students are faced with various problems while studying such as tight assignment deadlines, time management, and facing internal demands (Bagcivan et al., 2015). Students felt overwhelmed in participating in learning because there were too many assignments without sufficient material (Argaheni, 2020). Students also complain of difficulties in understanding the material caused by not being able to control and organize themselves during the learning process. (Fitriani et al., 2022). This can be seen when learning is carried out online, many students do other activities simultaneously so they can't focus on listening to the material provided. Moreover, most students only receive information provided by the lecturer when learning takes place and only study the assignments given (Sustainable & Nurafifah, 2021). In line with the survey conducted by Kristiyani (2016) from elementary school students to university students, most of them only study when they have assignments and when preparing for exams. This can lead to a lack of sufficient understanding of the material, making it difficult to achieve the desired academic success.

One of the main factors that support successful learning is the ability to self-regulate learning. Self-regulated learning according to Zimmerman (1989) is the individual's ability to regulate thoughts, feelings, and behavior in the learning process. Students need the ability to independently plan, monitor, and evaluate the learning process while maintaining positive motivation to succeed academically (Balapumi, 2015). Having the ability to manage the learning process increases a person's chances of being able to better adapt to academic demands and be able to balance them with the social demands of the campus environment (Pintrich, 1995). According to Pintrich (1995) students who do not have self-regulation skills show difficulty in setting academic goals and are unable to identify appropriate learning strategies.

Self-regulated learning can help students achieve optimal learning outcomes. Sukmawansyah et al. (2019) states that there is a positive correlation between self-regulated learning and academic achievement, if students' self-regulated learning is high, their academic achievement will also be high. Metacognitive aspect is one of the useful aspects of self-regulated learning in influencing one's academic achievement. Metacognition can help manage a person's ability to design, control, and evaluate their learning. (Barida, 2017). Someone who has self-regulated learning will take the initiative and persevere in the learning process so that they can achieve their goals and satisfactory results. By having self-regulation when experiencing

difficulties during the learning process, students will not immediately give up but will improve their strategies and also evaluate their learning process. (Mulyadi et al., 2016).

The low self-regulated learning that students have can cause students to postpone the completion of academic assignments which will produce suboptimal results. In line with the results of the study by Muntazbim (2022) shows students with low self-regulation tend to procrastinate academically. Low self-regulated learning shows that students carry out their learning process without planning, monitoring, controlling, and evaluating their learning. This causes students to like to postpone work on assignments that cause assignments are collected beyond the allotted time. In addition, someone who does not apply self-regulated learning will experience academic stress, this is caused by the absence of strategies in dealing with difficult situations and cannot maintain optimum conditions in learning activities (Qalbu, 2018). Academic stress will occur if individuals lack discipline and readiness, and do not have the ability to manage their learning activities (Febriana & Simanjuntak, 2021). Stress will interfere with the learning process and affect academic achievement. If someone has high stress it will negatively affect learning performance. Research by Rahmalia (2019) conducted on students at UIN Sunan Gunung Djati Bandung showed that more than half of the respondents had low self-regulated learning (55%). Thus it can be seen that self-regulated learning in students is still quite low.

Self-regulated learning can be used as an effort to improve the competence of undergraduate nursing students during their education period and also support academic and professional success, thus they will have competence as a provision for and becoming professional nurses. According to Baars et al. (2017) self-regulated learning affects an individual's ability to solve a problem where problem-solving ability is one of the important things for nurses in making decisions and conducting clinical reasoning. Nurses who have problem solving skills are able to analyze and research health problems experienced by patients more effectively and can draw directed and effective solutions in planning and implementing interventions to overcome health problems.

Based on the description above, the author is interested in conducting research which aimed to determine the relationship between self-regulated learning and the demographic characteristics of nursing students.

2. METHODS

Research Design

This research was a quantitative descriptive with cross sectional approach. This research was conducted at Padjadjaran University and data was collected in February 2023.

Population and Sample

The population in this study is undergraduate nursing students of the Faculty of Nursing, Universitas Padjadjaran with a total of 889 students. The sample size was calculated through the Slovin Formula with standard error 5%. Based on the Slovin Formula, the total sample in this study is 276 respondents. The sampling technique used proportionate stratified random sampling. The samples were randomized using microsoft excel.

Instrument

This study used the Self-Regulated Online Learning Questionnaire (SOL-Q) instrument created by Jansen et al. (2017) to measure self-regulated learning among undergraduate students. SOL-Q consists of 36 items and have to be answered by Likert scale from 1 = “not at all true for me” to 7 = “very true for me”. SOL-Q has been translated into Indonesian using the back translation method by Sa’ban (2019). The SOL-Q instruments have been tested for validity, both the original version and the Indonesian version by Sa’ban (2019), and the results are declared valid. The reliability of the SOL-Q instrument by Jansen et al. (2017) obtained 0.902 while the Indonesian version carried out by Sa’ban (2019) obtained Cronbach's alpha of 0.752. In this study, the validity test was carried out by content validity and face validity. Content validity is carried out so that each questionnaire item can be adjusted to the needs of the research. There was a word change in the SOL-Q questionnaire in this study, the use of the word "online course" was changed to "lecture" and the word "instructor" was changed to "lecturer". Demographic instrument consists of name, gender, and college year.

Research Procedure

Researchers carried out a randomization process to obtain a sample size. Researchers randomly selected respondents based on their Student Identification Number using Microsoft Excel. The researcher distributed the questionnaire through Google Forms. After understanding and agreeing to participate, the respondents filled out a questionnaire.

Data Analysis

Data was analysed using IBM SPSS version 26. Data analysis in this study used univariate analysis presented in the form of distribution and frequency tables as well as percentages and bivariate analysis using the chi-square test.

Ethical Clearance

This research has received ethical approval from the Research Ethics Commission of Universitas Padjadjaran with the number: 159/UN6.KEP/EC/2023.

3. RESULTS

Table 1. Demographic Characteristics of Respondent (n=276)

Category	Frequency (f)	Percentage (%)
Gender		
Female	256	92.8
Male	20	7.2
College year		
2017	15	5.4
2018	21	7.6
2019	50	18.1
2020	56	20.3
2021	61	22.1
2022	73	26.4

According to Table 1, the majority of respondents are female and first year student.

Table 2. Self-Regulated Learning level (n=276)

Self-Regulated Learning	Frequency (f)	Percentage (%)
High	133	48.2
Low	143	51.8

Table 2 shows that more than half undergraduate nursing students is in the low level of self-regulated learning (51.8%).

Table 3. Frequency Distribution of Self-Regulated Learning Components

Self-Regulated Learning Components	High		Low	
	f	%	f	%
Metacognitive skill	142	51.4	134	48.6
Time management	143	51.8	133	48.2
Environmental structuring	136	49.3	140	50.7
Persistence	141	51.1	135	48.9
Help seeking	148	53.6	128	46.4

Table 3 shows the components of self-regulated learning in undergraduate nursing students where the highest was help seeking and the lowest was environmental structuring.

Table 4. Correlation between Self-Regulated Learning and Demographic Characteristics

Demographic Characteristics	Self-Regulated Learning				p value
	High		Low		
	f	%	f	%	
Gender					
Female	124	48.4	132	51.6	0.767
Male	9	45	11	55	
College year					
2017	5	33.4	10	66.6	
2018	6	28.6	15	71.4	
2019	16	32	34	68	0.004
2020	26	46.4	30	53.6	
2021	35	57.4	26	42.6	
2022	45	61.6	28	38.4	

According to table 4, the results of data analysis showed that female students have higher self-regulated learning than male students. The results of statistical tests on the level of self-regulated learning based on gender using the chi square test obtained $p = 0,767 (> 0,05)$. This shows that there is no relationship between self-regulated learning and gender. Based on college year, class of 2022 students or first year students have the highest self-regulated learning, while class of 2018 students have the lowest. The results of the chi-square test obtained a value of $p = 0,004 (<0,05)$, there is a relationship between self-regulated learning and college years.

4. DISCUSSION

Based on the research results, as many as 143 students have self-regulated learning in the low category (51.8%). The results of this study are in line with Trisnawati (2018) research which shows that 47.06% of students have low self-regulated learning. Low self-regulated learning

indicates that students have not actively managed their thoughts, feelings, and behavior during the learning process to achieve their academic goals. Many students show difficulties in basic skills to regulate their learning, because students who are accustomed to waiting for learning instructions, have to determine their own learning goals and how they learn (Kesuma et al., 2021). According to Pravesti et al. (2022) low self-regulated learning can be caused by students' lack of understanding about the importance of self-regulated learning. This lack of understanding can be seen from the habits of students who study when asked to or when there is a exams, have not used learning strategies, and have not determined learning objectives, so that students can be said not all of them are equipped with self-regulated learning (Pravesti et al., 2022).

Help seeking in this study is the highest component of self-regulated learning (53.6%). This can be caused by the many problems and various academic demands that students have, such as a lot of assignments and busy schedules, causing students to tend to seek help (Suharweny et al., 2021). Help seeking can helps students in dealing with complex concepts that may not be fully understood, so help seeking behavior is a way that can be applied in obtaining information to solve problems in the learning process (Endah et al., 2021). Meanwhile, environmental structuring is the lowest component compared to the other four components of self-regulated learning. Thus it can be seen that students are unable to organize the learning environment which can cause student concentration and attention during learning is not optimal. This can happen because only a few students who have high determination and discipline to overcome all the disturbances in the learning environment (Ibem et al., 2017).

Based on the results of the study, it was found that there is no relationship between self-regulated learning and gender. The results of this study are in line with Susilowati et al. (2020) which stated that gender differences did not affect self-regulated learning. Both male and female students have and show the same self-learning characteristics in each dimension namely cognition, motivation/affect, behavior and context (Runtak et al., 2018). This research contradicts with Bidjerano (2005 in Saputra et al., 2018) which stated that females tend to be better at time management, metacognition strategies, organization, effort, and elaboration than men.

In this study it can be seen that there is a relationship between self-regulated learning and college years. According to Zimmerman & Martinez-Pons, (1990) there are differences in the use of self-regulated learning strategies based on grade level. Final year students or those currently working on their thesis, namely class of 2019, 2018, and 2017 students, have a low level of self-regulated learning. This is in line with research by Sapa et al. (2021) which shows that students who are working on their thesis have self-regulated learning in the low category (53%). Final year students who have low self-regulated learning can be caused by a lack of ability to manage time and motivation. In line with the results of the survey conducted by Hadi (2020) which shows as many as 54% of students stated that they were lazy and could not manage time to work on their thesis. Meanwhile, class of 2022 students or first-year students have the highest self-regulated learning. The results of this study are in line with Dwi Pratiwi et al., (2021) which states that as many as 65.1% of first year nursing students have high self-regulated learning. The high level of self-regulated learning in first-year students can be caused by the high enthusiasm and motivation to succeed in the academic field that first-year students have.

Factors that can affect self-regulated learning are self-efficacy, motivation, goals, and social support (Azmi, 2016). High self-efficacy is able to ensure an individual's ability to organize and complete the tasks needed to achieve certain results at various levels of difficulty. Individuals who have motivation will involve self-regulated learning which is believed to be able to help the learning process to achieve goals (Lestari et al., 2022). Goals play an important role in enhancing self-regulated learning, because by having goals, individual behavior can be directed to achieve these goals. Social support provided by others in solving problems in learning can help individuals carry out self-regulated learning better. Therefore, students need to pay attention and have these supporting factors in order to have good self-regulated learning. In addition, the components of self-regulated learning which include metacognitive skills, time management, environmental structuring, persistence, and help seeking need to be optimized so all students have high self-regulated learning. By understanding these aspects, lecturers and students can maximize their chances of academic success.

Improving self-regulated learning can be done by developing student learning skills. Strategies that can support students to manage their learning according to Tower et al. (2021) which can be in the form of training that helps students to understand and develop good study habits such as note-taking skills, managing study loads, planning self-assessments, and evaluating their performance. Theobald (2021) revealed that self-regulated learning training affects student academic achievement. Self-regulated learning trainings improved various metacognitive and resource management strategies, and enhanced students motivation (Theobald, 2021).

5. CONCLUSION

The results showed that there is a relationship between self-regulated learning and college year, while gender in this study have no relationship with self-regulated learning. However, the results of this study indicate that female students and first-year students have a higher level of self-regulated learning. The faculty is expected to be able to provide programs that help students develop self-regulated learning skills.

6. CONFLICT OF INTEREST

The authors state no conflict of interest.

7. REFERENCES

- Argaheni, N. B. (2020). Sistematis Review: Dampak Perkuliahan Daring Saat Pandemi COVID-19 Terhadap Mahasiswa Indonesia. *PLACENTUM: Jurnal Ilmiah Kesehatan Dan Aplikasinya*, 8(2), 99.
- Azmi, S. (2016). Self regulated learning salah satu modal kesuksesan belajar dan mengajar. *Jurnal Pedagogi Dan Pembelajaran*, 5(1), 19–20.
- Baars, M., Wijnia, L., & Paas, F. (2017). The association between motivation, affect, and self-regulated learning when solving problems. *Frontiers in Psychology*, 8(AUG), 1–12.
- Bagcivan, G., Cinar, F. I., Tosun, N., & Korkmaz, R. (2015). Determination of nursing students'

expectations for faculty members and the perceived stressors during their education. *Contemporary Nurse*, 50(1), 58–71.

- Balapumi, R. (2015). Factors and Relationships influencing Self-Regulated Learning among ICT students in Australian Universities. *Thesis, November*, 37–81.
- Barida, M. (2017). Keterampilan Metakognisi Mahasiswa Program Studi Bimbingan Dan Konseling Terhadap Mata Kuliah Statistik. *Jurnal Psikologi Pendidikan Dan Konseling*, 3(2), 46.
- Dwi Pratiwi, R., Ikhtiarini Dewi, E., & Hadi Kurniyawan, E. (2021). Relationships Self-Regulation Learning and Academic Stress First Year Students at Faculty of Nursing University of Jember. *Nursing and Health Sciences Journal (NHSJ)*, 1(1), 81–87.
- Endah, A. N., Lubis, F. Y., & Yudiana, W. (2021). Academic Help Seeking Terhadap Dosen Pada Mahasiswa Fakultas Psikologi Universitas Padjadjaran: Peran Fear of Failure. *Journal of Psychological Science and Profession*, 5(2), 106.
- Febriana, I., & Simanjuntak, E. (2021). Self Regulated Learning dan Stres Akademik Pada Mahasiswa. *Jurnal Experientia*, 9(2), 144–153.
- Fitriani, W., Asmita, W., Hardi, E., Silvianetri, S., & David, D. (2022). Kuliah Daring: Tingkat Stres Akademik pada Mahasiswa dan Faktor yang Mempengaruhinya. *Edukasi Islami: Jurnal Pendidikan Islam*, 11(01), 147.
- Hadi, S. N. (2020). Hubungan motivasi belajar dengan regulasi diri dalam belajar pada mahasiswa skripsi. *Jurnal Pendidikan Tambusai*, 4(3), 3169–3176.
- Ibem, E., Alagbe, O., & Owoseni, A. (2017). a Study of Students' Perception of the Learning Environment: Case Study of Department of Architecture, Covenant University, Ota Ogun State. *INTED2017 Proceedings*, 1(March), 6275–6286.
- Kesuma, A. T., Retnawati, H., & Putranta, H. (2021). Analysis of Self-Regulated Learning Skills in Senior High School Students: A Phenomenological Study. *TEM Journal*, 10(3), 1285–1293.
- Kristiyani, T. (2016). Self regulated learning konsep, implikasi, dan tantangannya bagi siswa di Indonesia. In *Sanata Dharma University Press, Yogyakarta*.
- Lestari, S. M. P., Supriyati, Achmad, F., & Lestari, B. I. (2022). Hubungan Motivasi Belajar dengan Self Regulated Learning (SLR) Pada Masa Pandemi Covid-19 Pada Mahasiswa Kedokteran Universitas Malahayati Angkatan 2019. *Jurnal Bimbingan Dan Konseling*, 19(12), 89–98.
- Lestari, T. R. P. (2014). Pendidikan Keperawatan: Upaya Menghasilkan Tenaga Perawat Berkualitas. *Jurnal DPR RI*, 5(1), 1–10.
- Lestari, W. D., & Nurafifah, L. (2021). Perkuliahan Hybrid Berbasis Self-Regulated Learning Strategies untuk Meningkatkan Kemandirian Belajar Mahasiswa. *AKSIOMA: Jurnal Program Studi Pendidikan Matematika*, 10(4), 2549–2560.
- Mulyadi, S., Basuki, H., & Rahardjo, W. (2016). *Psikologi Pendidikan Dengan Pendekatan Teori-Teori Baru Dalam Psikologi*. PT RAJA GRAFINDO PERSADA.
- Muntazbim, M. A. (2022). Hubungan Regulasi Diri dengan Prokrastinasi Akademik pada Mahasiswa yang Sedang Menyusun Skripsi. *Acta Psychologia*, 4(1), 21–28.
- Pintrich, P. R. (1995). Understanding Self-Regulated Learning. *New Directions for Teaching and*

Learning, 1995, 3–12.

- Poortaghi, S., Shahmari, M., & Ghobadi, A. (2021). Exploring nursing managers' perceptions of nursing workforce management during the outbreak of COVID-19: a content analysis study. *BMC Nursing, 20*(1), 1–10.
- Pravesti, C. A., Mufidah, E. F., Farid, D. A. M., & Lathifah, M. (2022). Pentingnya Self-Regulated Learning pada Mahasiswa. *Prosiding Seminar Nasional Hasil Riset Dan Pengabdian, April*, 8–18.
- Qalbu, M. M. (2018). Hubungan Antara Self Regulated Learning dan Goal Orientation Dengan Stres Akademik. *Psikoborneo: Jurnal Ilmiah Psikologi, 6*(2), 180–187.
- Ruminta, R., Tiatri, S., & Mularsih, H. (2018). Perbedaan Regulasi Diri Belajar Pada Siswa Sekolah Dasar Kelas Vi Ditinjau Dari Jenis Kelamin. *Jurnal Muara Ilmu Sosial, Humaniora, Dan Seni, 1*(2), 286.
- Salamonson, Y., Ramjan, L. M., van den Nieuwenhuizen, S., Metcalfe, L., Chang, S., & Everett, B. (2016). Sense of coherence, self-regulated learning and academic performance in first year nursing students: A cluster analysis approach. *Nurse Education in Practice, 17*, 208–213.
- Sapa, Y. K., Rozali, Y. A., Psikologi, F., & Esa, U. (2021). Hubungan Antara Self-Regulated Learning dengan Optimisme Mahasiswa yang Sedang Mengerjakan Skripsi di Jakarta. *JCA Psikologi, 2*(2012), 169–177.
- Saputra, W. N. E., Alhadi, S., Supriyanto, A., Wiretna, C. D., & Baqiyatussolihat, B. (2018). Perbedaan Self-regulated Learning Siswa Sekolah Menengah Kejuruan berdasarkan Jenis Kelamin. *Jurnal Kajian Bimbingan Dan Konseling, 3*(3), 131–138.
- Suharweny, M., Wahyuningtyas, F., Anindya, P., & Dumpratiwi, A. N. (2021). Students Seeking Help Behavior During the Covid-19 Pandemic. *Proceeding of Inter-Islamic University Conference on Psychology, 1*(1), 3–7. <https://press.umsida.ac.id/index.php/iiucp/article/view/619>
- Sukmawansyah, A. T., Hakim, L., & Hartono, R. (2019). Hubungan Self-Regulated Learning dengan Prestasi Akademik Mahasiswa Fakultas Psikologi Universitas Teknologi Sumbawa. *Jurnal Diskursus Ilmu Psikologi & Pendidikan, 1*, 21–25.
- Susilowati, N., Lestari, S., Yuniarsih, D., & Maharani, D. H. (2020). Investigating Self-Regulated Learning Differences Based on Gender, Scholarship, and Student's Housing. *Jurnal Pendidikan Ekonomi Dan Bisnis (JPEB), 8*(1), 25–33.
- Theobald, M. (2021). Self-regulated learning training programs enhance university students' academic performance, self-regulated learning strategies, and motivation: A meta-analysis. *Contemporary Educational Psychology, 66*(July).
- Tower, M., Watson, B., & Bourke, A. (2021). Nursing Students ' Self-regulated Learning Skills for Online Learning. *Research Square, 1*–19. <http://dx.doi.org/10.21203/rs.3.rs-1014112/v1> <https://www.researchsquare.com/article/rs-1014112/v1>
- Zimmerman, B. (1989). A Social Cognitive View of Self-Regulated Academic Learning. *Journal of Educational Psychology, 81*, 329–339.
- Zimmerman, B. J., & Martinez-Pons, M. (1990). Student Differences in Self-Regulated Learning: Relating Grade, Sex, and Giftedness to Self-Efficacy and Strategy Use. *Journal of*

Educational Psychology, 82(1), 51–59.